

# Graduate Bulletin

Spring 2018

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## Requirements for Admissions

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## Requirements for Admission

Admission to the Graduate School and School of Professional Development requires that the applicant have the preparation and ability that — in the judgment of the program and the Graduate School/School of Professional Development — are sufficient to enable satisfactory progress in the degree program or certificate. A U.S. bachelor's degree or the equivalent is required (for example, a four-year/120 credit hour accredited program) with a minimum overall grade point average of 3.0 on a 4.0 scale. The student must present evidence that such a degree will be awarded by the time graduate work is to begin.

Students who already hold an advanced academic degree from any university may not earn a second degree from Stony Brook University at the same level in the same disciplinary field (e.g., if you have an MS in Computer Science, you cannot also earn a Stony Brook MS in Computer Science).

Application for admission to the Graduate School/School of Professional Development is made to a specific program for a designated degree or certificate. Additional admission requirements are listed in each program's section of this publication. To be considered for admission, all applicants must submit a completed application online as well as the following documentation to the graduate program:

• One official copy of any transcript from any undergraduate college or university attended, **from which a degree was conferred**. Applicants must submit one official copy of any transcript relating to any graduate level work undertaken, **regardless of whether or not a degree was earned**. *(If transcripts are in a foreign language, authoritative English translations are required in addition to the original documents. See Academic FAQs under Transcripts for a list of acceptable translation services.)*

\*For Post-Master's Advanced Graduate Certificates an official transcript from a graduate college or university from which a master's degree was conferred will be accepted.

Note: Educational systems that cannot be compared to the United States must be evaluated by a US credentials evaluation service before admission can be finalized.

- Three letters of recommendation
- Scores for the Graduate Record Examination (GRE) General Test sent directly from ETS (photocopies are not acceptable)
- Documented proficiency in English for international students (see the English Proficiency Requirements for Non-Native Speakers of English below for details).

To fill out an application, students must go to [www.grad.sunysb.edu](http://www.grad.sunysb.edu) or [http://www.stonybrook.edu/commcms/spd/admissions/program\\_list.html](http://www.stonybrook.edu/commcms/spd/admissions/program_list.html) and create an online account. A nonrefundable application must be charged via credit card when submitting the online application. All applicants are required to pay the application fee. Exceptions can be found under Waiver of Application Fee.

Early application is suggested for students seeking financial support. To receive full consideration for admission with financial support, complete admission and financial aid applications should be filed by *January 15* for the fall semester and *October 1* for the spring semester. Admission decisions are made by programs. Late applications will be accepted but will be considered only by the programs where openings still exist.

An offer of admission to graduate study at Stony Brook is for a specific semester. An applicant who is accepted to a program and is unable to enroll for the semester specified should request a deferment of admission from the primary department or program. If the request is granted, the student will be sent a new offer of admission for the subsequent semester, and the Graduate School/School of Professional Development will be notified accordingly.

Students who do not enroll within 12 months of the original offer of admission must submit a new application and fee.

International students must submit a new "Request for Certificate of Eligibility and Declaration and Certification of Finances" form to request an updated Form I-20 or IAP-66 valid for the updated semester of admission. Unused Forms I-20 or IAP-66 must first be returned. For more information, please see the Visa and International Services site.

- Grade Point Average for Admission
- Graduate Record Examination GRE
- English Proficiency Requirements
- Health Records

## Graduate Record Examination

The GRE General Test is required of all prospective graduate students. Several programs also require an Advanced Area Test. Please refer to the admission requirements of the specific program of interest. Applicants who have taken the GRE should request that [Educational Testing Service](#) forward scores directly to the Graduate School (the Stony Brook code is 2548). Failure to submit GRE scores with the completed application will prevent the review of student applications by the program. Photocopies are not acceptable. To register for the GRE, please see [www.ets.org](http://www.ets.org).

Several graduate programs do not require the GRE, but some of these require a different examination. Please refer to information about your program. You can also view a list of these programs in Admissions FAQs under Test Scores. The GRE Examination is waived for students in approved Stony Brook accelerated, five-year bachelor's/master's programs.

## Grade Point Average for Admission

An applicant must have a minimum undergraduate cumulative grade point average of 3.00 on a 4.00 point scale, where A=4.00, A-=3.67, B+=3.33, B=3.00, B-=2.67, C+=2.33, C=2.00, C-=1.67 and D+=1.33, D=1.00, D-=.67 and F=0.00. If the student attends a college that only gives Passes or Credits for the first year of study then these grades will be evaluated as C for GPA admission purposes unless the student provides actual grades.

Non-matriculated students applying through the School of Professional Development must have a minimum undergraduate cumulative grade point average of 2.50 on a 4.00 point scale.

## English Proficiency Requirements for Non-Native Speakers of English

### English Language Requirements

All students who are not native or primary speakers of English must demonstrate proficiency in English to be admitted to the Graduate School. Stony Brook University has established overall minimum English language competency requirements for admission to graduate study and additional, more stringent **speak** competency requirements for PhD applicants as well as master's students who serve as Teaching Assistants. Students may be conditionally admitted without meeting some admission requirements, but *under no circumstances may students teach in a class or laboratory until they have met Stony Brook University's **speak** competency requirements.*

A native speaker of English is someone who learned English as a child and uses English as his or her primary language at home. A primary speaker of English may speak a language other than English at home but has developed native fluency as a result of using English exclusively in most social and educational contexts.

All students must declare their native language as part of the admission process. Intentional misrepresentation by a student of his or her native language is academic dishonesty and is grounds for dismissal from the graduate school.

### English Proficiency Requirements for Admission:

To be considered for admission, an applicant who is not a native or primary speaker of English must present a minimum score for either the TOEFL or IELTS tests, as defined below. Students who fail to meet this requirement must enroll in a course at the Intensive English Center (IEC) and achieve satisfactory grades before admission to graduate study. At the request of the program, conditional admission may be offered to students who do not meet minimal language requirements for admission. Note: Students whose scores on either of these tests are more than two years old must retake the test.

- IELTS: Overall score of 6.5, with no subsection recommended to be below 6
- TOEFL iBT: Overall score of 90 for doctoral applicants and 85 for master's applicants

Note: Master's students who have earned a degree from an English language university or college, where all instruction is in English, may be admitted without taking the TOEFL or IELTS tests, *but such students must still meet Stony Brook University's **English language** competency requirements in order to be a Teaching Assistant.*

### English Speaking Proficiency Requirements to Serve as a Teaching Assistant:

Supervised college-level teaching is required for the award of any doctoral degree at Stony Brook, and occasionally master's students serve as teaching assistants. Eligibility for any student serving as a Teaching Assistant is contingent upon the candidate's ability to speak English proficiently. All prospective Teaching Assistants who are not native or primary speakers of English must achieve a minimum score on the Speaking subsection of the Internet-based TOEFL or IELTS. The TOEFL iBT is administered at centers throughout the world several times each year; applicants should forward their scores directly to the Graduate School (the Stony Brook code is 2548). Further information is available by contacting the Education Testing Service, Princeton, New Jersey 08540, USA, or at [www.toefl.org](http://www.toefl.org). Information on the IELTS test can be found at [www.ielts.org](http://www.ielts.org).

All applicants who fail to achieve the minimum score on one of these tests will not be allowed to serve as a Teaching Assistant. This includes *all* doctoral students and all master's students who will be assigned as a Teaching Assistant.

Students who will have a teaching role at the University and whose speaking test scores do not meet our minimum standards for teaching will be assigned to an Oral Academic English (OAE) course.

| TOEFL iBT<br>Speak | IELTS<br>Speak | Course Requirement | Result                                                   |
|--------------------|----------------|--------------------|----------------------------------------------------------|
| 25-30              | 7.5 or Higher  | none               | Eligible to TA                                           |
| 22-24              | 6.5-7          | OAE 594            | Eligible to TA                                           |
| 19-21              | 6              | OAE 592            | Eligible to run recitation and lab sessions and/or grade |
| 15-18              | 5-5.5          | OAE 590            | Not eligible to TA                                       |

### Health Records

All accepted students are required by New York State law to file a completed health history and physical examination with the Student Health Service. Transfer students may submit copies of their health forms from their former schools provided they contain the information required by the Student Health Service and are less than two years old.

#### Offers

- Offers of Admission
- Offers of Financial Support

#### Offers of Admission

Offers of admission to a specific program for a specific semester and year are sent by graduate programs following the evaluation of applications. Offers of admission for a fall semester are not valid for a previous summer term. Such offers are limited to the conditions included and are subject to the final approval of the Dean of the Graduate School. If specific application documents are missing, the applicant has deficiencies to remove upon arrival, or the cumulative GPA is below 3.00 on a 4.00 scale, the offer will be conditional upon fulfilling all remaining requirements. Offer letters will indicate a deadline date for accepting or declining the offer. As a member of the Council of Graduate Schools, Stony Brook University gives all doctoral applicants until at least April 15th to reply to an offer of admission.

#### Offers of Financial Support

Offers of financial support may also be sent by graduate programs following the evaluation of applications. Such offers are always subject to approval by the Graduate School and are conditional on the existence of adequate funds to provide this support.

Financial support to a graduate student may be provided in form of a State appointment or a Research Foundation (RF) appointment. Teaching assistantships and Graduate assistantships are State appointments and are governed by the GSEU contract with the State of New York. Research assistantship appointments are made via the Research Foundation and are governed by the RA Union contract with the Research Foundation. Research Assistantships are funded by grants.

The campus establishes a minimum academic year stipend for state appointments. All appointments (TA, GA, RA) are subject to a campus maximum stipend level. In order for a stipend appointment amount to exceed the prescribed maximum, the employing department must obtain written approval from the Dean of the Graduate School.

Students are entitled to know the conditions under which offers of financial support are made, and to expect that explicit commitments of support will be honored, subject to conditions that are stated explicitly at the time of offer.

Consequently, both letters of admission with support and subsequent offers of renewed support should specify:

- Amount of financial support, including tuition scholarship if applicable.
- Nature of support - teaching assistant (TA), graduate assistant (GA), or research assistant (RA).
- Period for which support is given.
- Level of support - e.g., full, three-quarters, one-half.
- Time and/or effort involved at level of offered support for graduate or teaching assistant, or certifiable percent of effort for research assistant.
- Academic and assistantship obligations corresponding to the level of support. A written description should be provided before the obligations begin.
- Conditions for renewal of support.

## Renewal of Support

Subject to the University's policies on the maximum time for which a student may be supported, a department's first obligation for support must be to continuing graduate students in accordance with the conditions stated in the initial letter of offer and subject to the existence of adequate funding. These students must be making satisfactory academic progress, be in good academic standing, and have satisfactorily carried out their academic and assistantship responsibilities as teaching and graduate assistants. The same principles apply to graduate research assistants, recognizing also that reappointment is subject to available external funding and to applicable Research Foundation policies. Offers of continued appointment and support are to be made in writing.

Support may be terminated if a student's academic progress or performance of assistantship responsibilities is unsatisfactory. Support should not be terminated in the middle of an academic year unless student status is withdrawn, the student fails to meet the assigned responsibilities of the assistantship, or all degree requirements have been completed. In the event that external funds with which a graduate research assistant is supported terminated before the end of the period of appointment, departments should make their best efforts to identify alternative support sufficient to allow the student to complete the academic year.

It is the joint responsibility of each graduate student and his/her department or program director to expedite the progress of the student through his/her graduate career. That progress should not be delayed to meet instructional or professional needs of departments beyond those responsibilities assigned to the student.

Unless expected amounts, levels and terms of continuing support are specified in the initial letter of offer, amounts and levels beyond the first year are not to decrease below the original offer unless the reduction is requested by the student or is mutually agreed upon by the student and the department. Any such reductions below the institutional minimum will be accompanied by a corresponding reduction in the student's academic and assistantship obligations.

Financial support may be increased beyond the minimum level offered provided the increase does not derive from decreases in the amount of support already committed to other students below the institutional minimum. Any conditions, restrictions or limitations on increases above the University minimum are to be stated explicitly in the letter of offer or renewal.

## International Students

### F-1/J-1 International Student Documentation

Each person planning to study, teach or engage in research in the United States is required to have the appropriate immigration status for that activity. The immigration documents for F-1 and J-1 student status are issued by Visa and Immigration Services at Stony Brook University based on receipt of required supporting documentation, including evidence of admission, English language proficiency, and proof of financial support for the program of study. Non-immigrant students are responsible for obtaining and maintaining the appropriate immigration status for their stays in the United States.

Upon application to Stony Brook University, Visa and Immigration Services will email applicants information on how to log in to access VIS and submit the electronic request for a Form I-20/DS-2019. Requests are processed upon BOTH admission to the academic department and clearance by the Graduate School.

Government regulations require that international students attend the institution that issued the I-20/DS-2019 used for entry into the United States. Transfers between institutions may be possible if a student can show that he or she reported to the original institution with the appropriate clearance.

Please contact Visa and Immigration Services for any questions related to I-20/DS-2019 issuance or transfers.

### Non-Matriculated Status (GSP)

Any person holding a bachelor's degree, its equivalent, or an advanced degree from an accredited institution of higher learning is eligible to be considered for admission to the University as a non-matriculated graduate student. Such students may enroll in graduate courses through the School for Professional Development (SPD) as non-degree students after submitting a completed application to SPD. Contact SPD for additional information at (631) 632-7050 or at <http://www.stonybrook.edu/spd/graduate/nonmatric.html>. Non-degree students who later wish to pursue a graduate degree will need to make a formal application for admission and may transfer a maximum of 12 credits taken in non-matriculated status to the graduate degree program or 6 to a graduate certificate program.

School of Professional Development (SPD) students who are matriculated (eligible to enroll) with graduate non-matriculated program status, but who exceed the maximum number of allotted credits to be transferred into a master's program (12 credits) or a certificate program (6 credits), must petition through SPD for approval. Petitions must include a rationale for why students didn't matriculate prior to the petition. Approval of credits beyond the minimum is not guaranteed. If approved, a re-matriculation fee of \$50.00 will be charged and must be paid before your petition is processed.

### Transfer of Credit

A maximum of 12 credits may be transferred to a master's program and a maximum of 6 credits may be transferred to a certificate program at Stony Brook with the approval of the program and the Graduate School provided that they have not been used toward the satisfaction of any degree or certificate requirements here or at another institution. A candidate for the doctoral degree may transfer those graduate credits that are allowed by the appropriate departmental or program committee.

**Transfer from Non-Matriculated Status**

Students transferring from non-matriculated status are limited to a maximum of 12 graduate credits for master's degrees and 6 credits for certificates. Students must be formally matriculated into a degree program before the petition to transfer is submitted. All graduate courses completed in non-matriculated status will be counted as part of the total graduate grade point average (GPA).

**Transfer from Other Institutions**

A candidate for the master's degree may petition to transfer a maximum of 12 graduate credits from another institution toward their master's degree requirements. These credits must be from an institution authorized to grant graduate degrees by recognized accredited commissions and meet the following guidelines:

- Credits must not have been used to fulfill the requirements for either a baccalaureate or another advanced degree or certificate.
- Credits must not be more than five years old at the time the student is admitted to graduate study at Stony Brook. Acceptance of courses older than five years are contingent upon support of the program director and approval by the Graduate School or School of Professional Development.
- Credits must clearly be graduate level in order to be considered for transfer.
- Credits must carry the grades of A or B. "Pass" or "Satisfactory" grades are not transferable unless these grades can be substantiated by the former institution as B (3.0) or better.
- Grades earned in transferred courses are not counted as part of the overall GPA at Stony Brook.
- Work from one master's degree is not transferable to a second one.

**Transfer from Non-US institutions**

Courses taken at institutions outside the United States: College-level courses completed outside the United States and recorded on official transcripts will be evaluated for transfer credit, provided that the institution where the courses were taken is accredited by the Ministry of Education in that country. International transfer students who have completed college level courses outside the United States may be requested to submit proof of accreditation by the Ministry of Education or provide a WES evaluation.

**Transfer Between Primary and Secondary Programs**

A maximum of 12 graduate credits from Stony Brook, which were earned in a primary program prior to a student being accepted into a secondary program, can be applied to the secondary program. Credits applied to the degree requirements of a primary program cannot be applied toward the degree requirements of a secondary program.

**NOTE:** In rare instances, the transferring of credits may vary by program. Please refer to the program listing.

**Stackable Credentials (For School of Professional Development Programs Only)**

Graduate level credits earned and applied to a micro-credential (a university badge and/or an advanced graduate certificate program) can be also be applied toward a master's degree in the School of Professional Development. These credits may also be applied to another university badge, but they cannot be applied to another advanced graduate certificate program. Once a student has completed a master's degree, that student is no longer eligible to earn an Advanced Graduate Certificate that would lead to that same master's degree. The courses being applied cannot be more than 5 years old, and transfer credits from another institution cannot be applied in addition to the micro-credential credits.

**Special Circumstances**

- Waiver of Application Fee
- Readmission
- Conditional Admission
- Secondary Program

**Waiver of Application Fee**

To fill out an application, students must go to [www.grad.sunysb.edu](http://www.grad.sunysb.edu) (Graduate School programs) or [http://www.stonybrook.edu/commcms/spd/admissions/program\\_list.html](http://www.stonybrook.edu/commcms/spd/admissions/program_list.html) (School of Professional Development programs) and create an online account. A nonrefundable application fee will be charged when the online application is submitted.

All applicants are required to pay the application fee. Exceptions are limited to:

- Applicants who re-apply for admission within one academic year of declining an official offer of admission.
- Students who are U.S. citizens and have current documentation from a financial aid administrator of an appropriate college or university official substantiating that they are currently enrolled and that the payment of the application would create a financial hardship (complete financial information for the current academic year must be provided, including total cost of education and amount and types of financial

aid received). To qualify, applicants must request a waiver from the Graduate School Admissions Office before they submit their application for admission and should include the necessary documentation listed above.

- Current students who have a fellowship/scholarship through McNair, Project 1000, AGEP, CSTEP, LSAMP, and AMSNY. To qualify, applicants must have a letter or email from the appropriate agency sent to the Graduate School Admissions Office.
- Veterans of the United States Military Service, currently on Active Duty of members of the National Guard or Reserves are exempt from paying the graduate application fee. NOTE: Before fee waiver is applied, veterans must be vetted through the Office of Veteran Affairs at Stony Brook University.

Appropriate supporting documentation for the application fee waiver can be emailed to [gradadmissions@stonybrook.edu](mailto:gradadmissions@stonybrook.edu) (Graduate School) or [spd@stonybrook.edu](mailto:spd@stonybrook.edu) (School of Professional Development). Once the admissions office receives the appropriate documents, the fee will be waived for the applicant so they may submit their online application without paying. Application fees cannot be refunded so do not submit and pay the fee if you are requesting a waiver.

Note: Students who do not enroll within 12 months of the original offer of admission must submit a new application and fee.

#### Readmission

Graduate students who have interrupted their attendance at Stony Brook by withdrawing from the University or by taking a Leave of Absence must be readmitted to reactivate their graduate career. The student initiates the process by submitting a completed "Readmission" form to their program. The form can be downloaded at [www.grad.sunysb.edu](http://www.grad.sunysb.edu).

- Students returning from a currently approved Leave of Absence are generally guaranteed readmission.
- Students not on an official Leave of Absence must pay a \$500 readmission fee.
- International students must also submit a new financial affidavit and be cleared by an international student advisor before the readmission process can be concluded.

If the program approves the request, the readmission form is submitted to the Graduate School for final approval.

The program or the Graduate School may set specific requirements to be fulfilled by the readmitted student during the first year of their readmission. Readmission will be revoked for students who do not fulfill these requirements.

#### Conditional Admission

In exceptional cases where certain admission requirements are not met or the undergraduate preparation is inadequate, an applicant may be admitted conditionally. Such applicants will be considered on probation during the first semester. Program recommendation and Graduate School approval are required for conditional admission.

- Students admitted conditionally for a low cumulative GPA must earn an overall graduate average of at least a B (3.0) during the first semester of enrollment to be permitted to continue. In this case, the student is considered to have achieved regular status.
- A student admitted conditionally because of a low cumulative GPA who fails to earn a B (3.0) average in the first semester will not be permitted to reenroll. Both the student's program and the Graduate School/School of Professional Development may set conditions that the student must satisfy during the early period of graduate work.

#### Change of Graduate Program and/or Academic Level

Should a student wish to change programs or academic levels following admission and matriculation, a "Change of Graduate Program and/or Academic Level" form must be submitted to the Graduate School/School of Professional Development with original signatures by both prior and new department or program chairs and advisors. The form can be downloaded at [www.grad.sunysb.edu](http://www.grad.sunysb.edu). In addition, international students who seek to change their program must obtain approval of an international student advisor.

Students must submit this form to the Graduate School/School of Professional Development before the first day of classes of the first semester indicated for the New Degree Program/Level. Forms received after this date will be denied.

#### Secondary Program and Advanced Graduate Certificate

Should a student wish to add a secondary program or an Advanced Graduate Certificate to his or her primary program of study, a "[Permission to Enroll in a Secondary Degree or Secondary Certificate Program](#)" form must be submitted to the Graduate School/School of Professional Development with original signatures by both the primary and new Graduate Program Directors. Final approval rests with the Graduate School/School of Professional Development. International students are required to obtain approval of an international student advisor.

Students who complete the published requirements for a second degree/certificate without obtaining this approval in advance are NOT eligible to receive the degree.

A maximum of 12 graduate credits from Stony Brook, which were earned in a primary program prior to a student being accepted into a secondary program, can be applied to the secondary program. For Advanced Graduate Certificates, students can apply a maximum of 6 credits earned in a primary program prior to being accepted into the certificate program (with exception to Education Leadership which allows 12 credits). Credits applied to the degree requirements of a primary program cannot be applied towards the degree requirements of a secondary program. Credits applied to a primary program can be applied towards the requirements of an Advanced Graduate Certificate.



The time limit for a degree program remains the same when adding a secondary certificate. A student must complete the certificate within the time limit for the degree program completion.

Students accepted into two doctoral programs must complete two independent dissertations, with separate and independent examining committees and based on separate and independent research or scholarship, in order to earn both doctoral degrees.

#### Academic Level

#### Full-Time Students

Students admitted for full-time study to the Graduate School will usually register for either 12 or nine credit hours per semester based on their academic level. Responsibility for certifying the full-time status of graduate students rests with the Office of the Registrar. Incoming full-time graduate students are classified as G1, G2, G3, or G4 depending on the program to which they have been admitted and their previous graduate training.

- G1-First year master's or advanced graduate certificate student who has completed less than twenty-four graduate credits. G1 students must register for 12 credits per semester.
- G2-Advanced master's or advanced graduate certificate student who has completed twenty-four or more graduate credits. G2 students must register for 9 credits per semester.
- G3-First year PhD graduate student who has completed less than twenty-four graduate credits. G3 students must register for 12 credits per semester.
- G4-Advanced PhD graduate student who has completed twenty-four or more graduate credits. G4 students must register for 9 credits per semester.
- G5-Advanced graduate student enrolled in a doctoral degree program that has been advanced to candidacy for the doctoral degree by Day 10 of a semester or term. G5 students must register for 9 credits unless instructed otherwise.

To be considered full time, all students in any summer term must register for zero (0) or more credits. Students who do not register in a summer class with zero (0) or more credits cannot have full time status.

A G1 will be automatically converted to a G2 when the student has completed and received grades for 24 or more graduate credits at Stony Brook; a G3 will be automatically converted to a G4 when the student has completed and received grades for 24 or more graduate credits at Stony Brook; Incompletes are not completed credits. The conversion of G4 to G5 is an administrative change that is done by the program and the Graduate School upon advancement to candidacy.

The maximum number of credits a Graduate Student may register for is 18. If students wish to enroll for more than 18 graduate credits, they must get the permission of their Graduate Program Director and the Graduate School. Once they have received written permission they will be allowed to register for more than 18 graduate credits at the Registrar's Office.

#### Part-Time Students

Incoming part-time students admitted to the Graduate School will register for no more than 11 credit hours per semester. Programs may, in consultation with the dean of the Graduate School, regulate the proportion of part-time students in their graduate program.

Part-time students are classified as G1, G2, G3, or G4 depending on the program to which they have been admitted and their previous graduate training.

- The academic level of a G1 or G3 student who has completed 24 credits of coursework at Stony Brook is changed to G2 or G4, respectively.

#### Part-Time Enrollment

Graduate students may be eligible to register part-time in their last semester if the number of credits needed to complete the program is less than a full-time load. If part-time enrollment is authorized for this reason, the student MUST graduate at the end of that particular term.

International students should contact the Visa and Immigration Services office.

Domestic students who hold a Graduate/Teaching Assistantship on campus should have their Graduate Program Coordinator contact the Graduate School with a request for part-time enrollment.

#### Change of Primary Program

Should a student wish to change their graduate programs or academic levels following admission and matriculation, a [Change of Graduate Program and/or Academic Level](#) form must be submitted to the Graduate School with original signatures by both prior and new Graduate Program Directors and advisors. The form can be downloaded at [www.grad.sunysb.edu](http://www.grad.sunysb.edu). In addition, international students who seek to change their program must obtain approval of an international student advisor.

Students must submit this [form](#) to the Graduate School before the first day of classes of the first semester indicated for the New Degree Program/Level. Forms received after this date will be denied.

#### Accelerated Bachelor's/Master's Programs

Five-year bachelor's/master's programs are available in several academic departments. Some are joint programs between two departments or colleges. Students are allowed to take a specified number of graduate credits that will count towards both their undergraduate and graduate requirements; subsequently reducing the total time for completion of the master's degree.

The university allows undergraduate students enrolled in an accelerated program to use a maximum of 15 graduate credits toward the undergraduate portion of the accelerated degree. However, the approved maximum credit allowance varies by program. Please see the chart below, or consult with the appropriate program for approved maximum credit allowance.

| Undergraduate Academic Plan                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Graduate Academic Program                | Maximum # of Shared Credit Allotment |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|--------------------------------------|
| B.S. in Applied Mathematics & Statistics                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | M.S. in Applied Mathematics & Statistics | 6                                    |
| B.S. in Biochemistry                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | M.S. in Chemistry                        | 6                                    |
| B.E. in Biomedical Engineering                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | M.S. in Biomedical Engineering           | 15                                   |
| B.S. in Chemistry                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | M.S. in Chemistry                        | 6                                    |
| B.E. in Computer Engineering                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | M.S. in Computer Engineering             | 6                                    |
| B.S. in Computer Science                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | M.S. in Computer Science                 | 6                                    |
| B.E. in Electrical Engineering                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | M.S. in Electrical Engineering           | 6                                    |
| B.S. in Engineering Chemistry                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | M.S. in Chemistry                        | 6                                    |
| B.S. in Engineering Chemistry                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | M.S. in Material Science & Engineering   | 6                                    |
| B.E. in Engineering Science                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | M.S. in Material Science & Engineering   | 6                                    |
| B.A. in English                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | M.A. in English                          | 12                                   |
| B.A. in History                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | M.A. in History                          | 9                                    |
| B.A. in Linguistics                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | M.A. TESOL                               | 8                                    |
| B.S. in Marine Sciences                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | M.S. in Marine & Atmospheric Science     | 12                                   |
| B.E. in Mechanical Engineering                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | M.S. in Mechanical Engineering           | 9                                    |
| B.S. in Pharmacology                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | M.P.H. Public Health                     | 10                                   |
| B.A. in Political Science                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | M.A. in Public Policy                    | 6                                    |
| B.A. in Theatre Arts                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | M.A. in Theatre Arts                     | 15                                   |
| B.A. in Women's & Gender Studies                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | M.P.H. Public Health                     | 12                                   |
| B.A. in Africana Studies; Anthropology; Art History & Criticism; Asian & Asian American Studies; Chemistry; Cinema & Cultural Studies; Comparative Literature; Earth & Space Science; Economics; English; Environmental Studies; European Studies; French Language & Literature; Germanic Languages & Literature; History; Humanities; Italian Studies; Journalism; Linguistics; Multidisciplinary Studies; Music; Philosophy; Political Science; Psychology; Religious Studies; Russian Language & Literature; Sociology; Spanish Language & Literature; Studio Art; Sustainability Studies; Theatre Arts; Women's & Gender Studies. | Masters Business Administration          | 15                                   |
| B.E. in Chemical & Molecular Engineering; Engineering Science.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Masters Business Administration          | 15                                   |
| B.S. in Applied Mathematics & Statistics; Astronomy/Planetary Sciences; Atmospheric & Oceanic Sciences; Biochemistry; Biology; Chemistry; Computer Science; Engineering Chemistry; Geology; Information Systems; Marine Science - Biology; Marine Vertebrate Biology; Mathematics; Pharmacology; Physics; Psychology; Technological Systems Management.                                                                                                                                                                                                                                                                               | Masters Business Administration          | 15                                   |

**Applying to an Accelerated Bachelor's/Master's Program**

Students must apply and be admitted to an accelerated program. The minimum requirements to apply include completion of at least 60 credits of college coursework and a grade point average of 3.0 or higher as an undergraduate student. Additional requirements may vary by program; contact the Graduate program for more information. All applications require approval from both the undergraduate department and the corresponding Graduate Program Director.

**Matriculation into the Graduate Career**

When an accelerated student has completed a minimum of 105 undergraduate credits, has taken the maximum allotted number of graduate credits as an undergraduate student, and has less than a full-time (12 credits) undergraduate course load needed to complete their Bachelor's degree requirements, they should matriculate into their Graduate career. Matriculation requires submission of the "Application to Graduate School for the Accelerated Bachelors/Master's Degree" form and an admission letter signed by the Graduate Program Director to the Graduate School. Students should consult with both their Undergraduate Program Director and their Graduate Program Director for advising and guidance on matriculation.

As part of the Accelerated Program, students can continue working on their Bachelor's degree requirements as a Masters student. The Bachelor's degree will be awarded once all requirements are met. Degrees with distinction are awarded at the undergraduate level only. Undergraduate coursework taken during the graduate career will calculate into the undergraduate GPA to determine distinction for Accelerated Degree Program students.

As per Graduate School policy, undergraduate courses DO NOT count towards graduate degree requirements. Also, per state regulation, a student must spend at least one year in residency for the master's portion of the program. Students must earn a minimum of 30 graduate credits for the master's portion of the program.

Spring 2018

## Overview

It is possible to learn without being educated. Learning merely implies the amassing of knowledge. An educated person is much more than a receptacle for facts. He or she is able to present those facts to others with grace and clarity, and to manipulate and juxtapose them with a broader base of knowledge in order to gain new insights. Finally, an educated person never ceases to test his or her knowledge against the highest standards of scholarship and to develop new ways of thinking about the facts that he or she encounters or uncovers in the course of a lifetime.

Education at the graduate level clearly implies the amassing of knowledge beyond that gained in an undergraduate degree, but the nature of the knowledge and the ways in which it is gained and used are also significantly different. It is expected that graduate students will gain detailed knowledge about a more specialized field than at the undergraduate level. The process of acquiring that knowledge is also much more independent and more reliant upon the initiative of the student. In spite of the necessarily specialized nature of the new knowledge, at Stony Brook graduate students are expected to maintain a broad perspective on their studies, such that they are able to take part in scholarly discourses in the broadest possible range of disciplines. Graduate students are, therefore, responsible for extracurricular self-education within and beyond their own fields of study; the mere satisfaction of the technical requirements for a degree is not sufficient to make one an educated person. With education comes responsibility. Stony Brook demands the highest level of scholarly ethics from all members of the academic community. Graduate students must make themselves aware of the ethical issues of academia in general, and of their own fields in particular. No degree candidate can be considered fully educated who lacks an appreciation of these values and a dedication to upholding them.

The requirements in this section are the minimal ones mandated by the Graduate School; the individual graduate programs may set additional requirements. The Dean of the Graduate School in individual instances may choose to waive specified requirements. A petition for such a waiver must be submitted and endorsed by the Graduate Program Director, who shall append the reasons for believing that the requested waiver does not violate the spirit of the regulations.

Any changes in requirements will apply only to students who first matriculate in their particular program after the change is approved and communicated to students at the time of admission. The University reserves the right to alter these regulations without notice.

## Advanced Graduate Certificate

- Introduction
- Courses and Grade Point Average
- Language Proficiency
- Enrollment Requirements
- Certificate Completion
- Degree Application
- Registration
- Program Recommendation
- Time Limit
- Standards

## Advanced Graduate Certificate

The Graduate School and School of Professional Development offer a wide variety of Advanced Graduate Certificates. These can be taken after completing a bachelor's, master's, or other advanced degree. Certificates are designed around specialized areas of focus for targeted study within a field. Certificate programs can be taken concurrently with another program or some are stand alone programs (see program page for details). A certificate is a good option for someone who may not want to complete the full credit requirements for a degree program, but would like to develop a solid background and skills in a specialized field.

## Courses and Grade Point Average

A student must achieve a 3.0 overall GPA in all graduate courses taken at Stony Brook to receive a certificate.

Calculation of the grade point average (GPA) includes all courses numbered 500 and above taken at Stony Brook. Temporary grades (I and NR), missing grades and those grades for which no numerical equivalents are defined (P, S, U, and R) are excluded from the computation. Grading System: See Academic Regulations/Grading System

A graduate student who has changed primary program may request a restart of GPA in considering possible waiver of academic probation. The GPA for the new program will be calculated from the beginning of the semester in which the change of program became effective. A graduate student who has graduated and is readmitted into a new degree or certificate program may request a restart of GPA. Program approval is necessary before any restart request is submitted to the Graduate School. Courses taken before the restart of GPA cannot be used towards a second degree or certificate.

## Language Proficiency

Although the Graduate School does not require proficiency in a foreign language for certificate programs, programs oversee their own foreign language requirements and the evaluation of proficiency. Students must comply with program requirements.

To be granted an advanced graduate certificate at Stony Brook, a student must have been admitted to and enrolled in the appropriate certificate program for at least one semester.

Students must apply for graduation via SOLAR in accordance with published deadlines. If degree/certificate requirements are not met, students must reapply for any subsequent awarding periods using the Change of Graduation Date form found on the Graduate School web site.

**Registration**

Degree candidates must be registered in the semester they intend to graduate. Students who intend to graduate in the spring or fall must register for at least one graduate credit. Students who intend to graduate in the summer can register for zero credits, but it still must be a graduate-level course.

**Program Recommendation**

When all program requirements are completed, the graduate program director may recommend to the dean of the Graduate School that the Advanced Graduate Certificate be granted.

**Time Limit**

The Graduate School and School of Professional Development have no established time limits for advanced graduate certificates. However, programs offering certificates may choose to enforce time limits for completion (most are 3 years maximum). Please see the program page directly for information on time limits for specific advanced graduate certificates. There are no enforced time limits for

In the event a program enforces a time limit, the [Request for Waiver of Graduate Time Limit](#) form can be found by selecting the forms link from the [Graduate School](#) Web site; SPD students should submit the Academic Petition form found on the SPD Web site. These petitions require the approval of the student's advisor and graduate program director. Requests for a time limit extension must be filed before the limit is exceeded and must contain a significant justification. The final decision rests with the dean of the Graduate School, who may impose additional requirements.

**Standards**

Appreciation of the ethical questions and adherence to the highest ethical standards of the discipline are required.

**Masters**

- Introduction
- Courses and Grade Point Average
- Language Proficiency
- Teaching
- Enrollment Requirements
- Thesis and Comprehensive Examination
- Degree Application
- Registration
- Program Recommendation
- Time Limit
- Standards

**The Degrees of Master of Arts, Master of Business Administration, Master of Fine Arts, Master of Music, and Master of Science**

Master of Arts, Master of Business Administration, Master of Fine Arts, Master of Music, and Master of Science are advanced degrees implying the acquisition of knowledge and skills beyond those required for a baccalaureate.

- Some of these degrees may be taken en route to a doctoral degree, while others are terminal.
- All master's degrees imply the recognition of their holders as skilled practitioners of their disciplines.
- In order to be awarded a master's degree, it is necessary to demonstrate a grasp of advanced knowledge through coursework and the ability to learn independently and to communicate effectively with one's peers.
- The granting of the master's degree is based upon the completion of any special program requirements in addition to the items listed below.

**Courses and Grade Point Average**

A student must achieve a 3.0 overall GPA in all graduate courses taken at Stony Brook to receive a degree. A minimum of 30 to 60 credits of graduate work is required to receive a master's degree.

Calculation of the grade point average (GPA) includes all courses numbered 500 and above taken at Stony Brook. Temporary grades (I and NR), missing grades and those grades for which no numerical equivalents are defined (P, S, U, and R) are excluded from the computation.

Grading System: See Academic Regulations/Grading System

A graduate student who has changed primary program may request a restart of GPA in considering possible waiver of academic probation. The GPA for the new program will be calculated from the beginning of the semester in which the change of program became effective. A graduate student who has graduated and is readmitted into a new degree or certificate program may request a restart of GPA. Program approval is necessary before any restart request is submitted to the Graduate School. Courses taken before the restart of GPA cannot be used towards a second degree or certificate.

**Language Proficiency**

Although the Graduate School does not require proficiency in a foreign language for the master's degree, programs oversee their own foreign language requirements and the evaluation of proficiency. Students must comply with program requirements.

### Teaching

All doctoral students at Stony Brook University must complete at least one semester of practicum in teaching under supervision, however some departments also require at least one semester of practicum in teaching under supervision for master's students. The form this practicum takes may differ by discipline. The experience might include making seminar or class presentations, assisting in laboratories, or leading discussion sessions. Grading experience by itself will not be considered sufficient for satisfaction of this requirement. Faculty are responsible for providing informal feedback and formal evaluation.

Following (or in some cases, concurrent with) proper training through a teaching practicum and after having fulfilled other requirements for teaching (e.g., demonstration of spoken English proficiency for non-native speakers of English), a graduate student may serve as a teaching assistant (TA) in courses at Stony Brook University, where the instructor of record is a faculty member.

Graduate students at G4 level or below cannot be designated as the Instructor of Record for any course offered at Stony Brook University. They will be appointed as Teaching Assistants. In addition, there must be a designated faculty supervisor who serves as the Instructor of Record for the course. In the absence of any other faculty Instructor of Record for a course, this designation shall revert to the department Chair.

To be granted a master's degree at Stony Brook, a student must have been admitted to and enrolled in the appropriate degree program for at least one semester.

### Thesis and Comprehensive Examination

- The requirement for the thesis and comprehensive examination varies from program to program. Some programs require a thesis and others require a comprehensive examination, while some require only a master's paper.
- For specific requirements, refer to each program's section of the Graduate Bulletin.
- Masters students should confirm with their program if they are required to file their thesis with the Graduate School.
- If a thesis is to be filed with the Graduate School, it must be prepared according to the [Guidelines for the Preparation of Theses and Dissertations](#) available on the [Graduate School](#) website and it must be submitted to the Graduate School by the posted deadline.
- Multiple authorship of a thesis is not permissible.

### Degree Application

Students must apply for graduation via SOLAR in accordance with published deadlines. Doctoral students who intend to receive a master's degree during the course of their doctoral career must apply for graduation online at the [Graduate School](#) web site. If degree requirements are not met, students must reapply for any subsequent awarding periods using the Change of Graduation Date form found on the Graduate School web site.

### Registration

Degree candidates must be registered in the semester they intend to graduate. Students who intend to graduate in the spring or fall must register for at least one graduate credit. Students who intend to graduate in the summer or winter can register for zero credits, but it still must be a graduate-level course.

### Program Recommendation

When all program requirements are completed, the graduate program director may recommend to the dean of the Graduate School that the master's degree be granted.

### Time Limit

The following guidelines apply to all first-time matriculated students enrolled in the Graduate School.

- Full-time students must complete all degree requirements within three years.
- Part-time and School of Professional Development students must complete all degree requirements within five years.

In exceptional cases where the program cannot be completed within these periods, students may petition for an extension of the time limit. Petitions forms are available on the [Graduate School](#) Web site and require the approval of the student's advisor and graduate program director. Requests for a time-limit extension must be filed before the limit is exceeded and must contain a significant justification. The final decision rests with the dean of the Graduate School, who may impose additional requirements.

The [Request for Waiver of Graduate Time Limit](#) form can be found by selecting the forms link from the [Graduate School](#) Web site; SPD students should submit the Academic Petition form found on the SPD Web site. These petitions require the approval of the student's advisor and graduate program director. Requests for a time limit extension must be filed before the limit is exceeded and must contain a significant justification. The final decision rests with the dean of the Graduate School, who may impose additional requirements.

### Standards

Appreciation of the ethical questions and adherence to the highest ethical standards of the discipline are required.

**Ph.D.**

- Introduction
- Courses and Grade Point Average
- Language Proficiency
- Preliminary Examination
- Advancement to Candidacy
- Dissertation
- Dissertation Examining Committee
- Dissertation Defense
- Teaching
- Residence Requirements
- Degree Application
- Registration
- Program Recommendation
- Time Limit
- The Master of Philosophy Degree

**Introduction to The Ph.D. Degree**

The degree of Doctor of Philosophy was historically the first degree to be conferred by universities. It is granted in recognition of a candidate's high level of scholarly competence and demonstrated ability to conduct and report significant research independently and effectively. "Doctor" is the Latin Word for "teacher." "Philosophy" in its broadest definition means "all knowledge." The modern sense of the title "Doctor of Philosophy" refers to one who comprehends all knowledge in his or her chosen field and has mastered an area of specialization. He or she has added in a significant way to that body of knowledge and has transmitted the new knowledge, thus teaching the world something new. A person who has received the doctorate has mastered appreciation of the ethical questions and has adhered to the highest ethical standards of the discipline. It is further expected that the future work of the candidate for the Ph.D. will maintain and uphold the same standards of scholarship demanded for the degree, so the title and its meaning continue to apply.

The three requirements for the Ph.D. are assessed in the final defense of a dissertation.

- The dissertation should demonstrate significant original work.
- The final dissertation should be presented with clarity of thought and excellence of exposition that make it suitable for publication as a book or a series of papers in learned journals.
- The dissertation should demonstrate a breadth and depth of the candidate's knowledge beyond the confines of his or her own research and is also critically assessed in the defense and at various examinations during the student's studies.

Admission to the Graduate School does not automatically qualify a student as a candidate for the Ph.D. degree. Formal recommendation of advancement to candidacy for the Ph.D. degree must be made to the Graduate School by the program after a review of the student's performance in courses, independent study, and program examinations. A candidate for the Ph.D. degree engages in research leading to a dissertation. Listed below are the minimal requirements mandated by the Graduate School. The individual programs may set additional requirements.

**Courses and Grade Point Average**

The student will follow an approved program of courses determined to meet his or her needs and to satisfy program requirements. A student must achieve a minimum 3.0 overall GPA in graduate courses taken at Stony Brook in order to receive a doctoral degree.

Calculation of the grade point average (GPA) includes all courses numbered 500 and above taken at Stony Brook. Temporary grades (I and NR), missing grades and those grades for which no numerical equivalents are defined (P, S, U, and R) are excluded from the computation.

Grading System: See Academic Regulations/ Grading System

A graduate student who has changed primary program may request a restart of GPA in considering possible waiver of academic probation. The GPA for the new program will be calculated from the beginning of the semester in which the change of program became effective. A graduate student who has graduated and is readmitted into a new degree or certificate program may request a restart of GPA. Program approval is necessary before any restart request is submitted to the Graduate School. Courses taken before the restart of GPA cannot be used towards a second degree or certificate.

**Language Proficiency**

Although the Graduate School itself does not require proficiency in a foreign language for the Ph.D. degree, programs oversee their own foreign language requirement and evaluation of proficiency. Students must comply with program requirements. The proficiency examination must usually be passed before permission is given to take the preliminary examination.

**Preliminary Examination**

The purpose of the preliminary examination is to ascertain the breadth and depth of the student's preparation and to appraise readiness to undertake significant original investigation.

- At the discretion of the program, the preliminary examination may be oral, written, or both, and may consist of a series of examinations.
- The committee is appointed by the Graduate Program Director.
- The preliminary examining committee must include at least two faculty members from the program and may include one or more members from outside the University or program.
- Results of the preliminary examination will be communicated to the student as soon as possible and to the Graduate School within one week of the completion of the examination.
- A repetition of the preliminary examination, upon failure, may be scheduled at the discretion of the program. The dean of the Graduate School must approve a second repeat.

### **Advancement to Candidacy**

Admission to the Graduate School does not automatically qualify a doctoral student as a candidate for the Ph.D. degree. Formal recommendation, executed by the Graduate Program Director, of advancement to candidacy for the Ph.D. degree must be made to the Graduate School after a review of the student's performance in courses, independent study, and program examinations. A candidate for the Ph.D. degree engages in research or scholarship leading to a dissertation. Listed below are the minimal requirements mandated by the Graduate School. The individual programs may set additional requirements.

A student may be advanced to candidacy (G5 status) after completing Graduate School and program requirements other than the dissertation or its equivalent, with the following restrictions.

- Students on academic probation cannot be advanced to candidacy.
- Students must be G4 at the time of request.
- Students must not have any blank grades.
- Advancement to candidacy is granted by the dean of the Graduate School upon recommendation of the graduate program director.
- Students must advance to candidacy at least one academic year before the beginning of the semester in which they plan to defend their dissertation. An academic year is defined as the Fall and Spring semesters, in either order, that immediately precede the semester of defense. Students in the DMA program may be advanced for one semester prior to their final recital and graduation semester. Summer terms do not count as semesters for purposes of advancement to candidacy.
- Requests for advancement to candidacy must be received by the Graduate School from the program by day 5 of classes for the advancement to take effect that same semester.
- Advancements received by the Graduate School after the published deadline date will not take effect until the next semester or term.
- In exceptional circumstances, a student's Graduate Program Director may submit a written petition for a waiver of this requirement to the Dean of the Graduate School.

### **Dissertation**

A dissertation is required for the Ph.D. degree. It must convey in a clear and convincing manner the results of an original and significant scholarly investigation.

- Depending on the character of the student's research, the graduate program director and the student will select an appropriate advisor or supervisory committee in consultation with whom the student will conduct an investigation and write a dissertation.
- The dissertation must be prepared according to the [Guidelines for the Preparation of Theses and Dissertations](#) available on the [Graduate School Web site](#).
- All dissertations should be written in English. Exceptions will be considered if it is integral to the purpose of that dissertation that it be in a language other than English. Requests for exceptions should come directly in writing from the dissertation advisor, the program director, or the department chair to the dean of the Graduate School. Please note: The dissertation abstract and the dissertation defense must be in English.
- Multiple authorship of a dissertation is not permissible.

Please also see Residency Requirements for information on Residency for Dissertation Work.

### **Dissertation Examining Committee**

The dissertation must be approved by a dissertation examining committee, appointed by the dean of the Graduate School upon recommendation of the graduate program director. The dissertation examining committee should be constituted such that it can provide both independent evaluation and expert advice on the dissertation. The overriding purpose for service on a dissertation examining committee is the development of the student and their dissertation project. Other professional interests that committee members may have in the dissertation work of students (including intellectual property or publication interests) must be secondary to the interests of the student.

- The Dissertation Examining Committee must include, but is not limited to, the following:
  - Two faculty members internal to the program (e.g. the dissertation advisor and defense chairperson)
  - One member external to the program
  - One member who may be either internal or external to the program



- The outside member should have expertise in the student's research field so as to be able to understand, criticize, and contribute to the dissertation, as well as to judge the quality and significance of the research.
- The dissertation advisor cannot serve as chairperson of the examining committee nor as the external member of the examining committee.
- The chairperson must be a member of the program.
- In order to provide an objective evaluation of the dissertation, no member of the dissertation committee may have a personal relationship with the student, such as a family or romantic relationship.
- When a financial, professional, or intellectual property relationship exists between the student and a committee member(s) that may pose a conflict of interest, written explanation must be sent to the Dean of the Graduate School for review and approval.
- Changes to the committees must be approved in writing.
- A faculty member who leaves a program may continue to serve as an inside member on any dissertation committees to which they were already appointed prior to leaving the program.
- A faculty member or former student who leaves a program can serve as an outside member for any student who matriculates into the program after the faculty member or former student has left the program.

If a student's dissertation advisor leaves Stony Brook, that person may continue the research direction of the dissertation or thesis. Advisors who have left must still comply with the policies of Stony Brook University, including the requirement that their service on the dissertation committee serves the interests of the student. In such cases, a co-advisor should be appointed from the academic department. The student will then have two advisors, one an official member of the Stony Brook faculty who will be available to the student for research and administrative matters, and the ex-Stony Brook advisor.

Individuals who are listed as members of the faculty of the graduate program in the Graduate Bulletin may serve as internal members of the committee. Committee members who are not listed as program faculty but are affiliated with a graduate program may be classified either as internal or external members of a Dissertation Examining Committee. It is the decision of the graduate program to determine whether these individuals should be considered an internal or external committee member, but such individuals may serve only one of these roles for all committees within any one program.

At the program's discretion, committee members may participate in a dissertation defense using Skype or video conferencing. However, a minimum of three committee members must be physically present at the defense, one of whom **MUST** be the chair. Additionally, the student should be physically present at their dissertation defense. A list of those members who will be Skyping in must be indicated on the Defense Committee Appointment form and sent to the Graduate School prior to the defense date. No extensions or exceptions will be granted to the signature page submission deadline due to a Skyping committee member. Students should plan their dissertations accordingly and with ample time to obtain all committee member signatures to meet this deadline.

Requests for the committee approval must be sent to the Graduate School four weeks prior to the date of the defense. Dissertation Examining Committee forms are completed and submitted by programs.

### Dissertation Defense

Examination of the dissertation involves a formal oral defense. This event will be conducted by the dissertation examining committee and will not be chaired by the advisor of the dissertation.

- The formal defense must be announced at least three weeks in advance and is open to all interested members of the University community.
  - All candidates must provide the Graduate School with a dissertation abstract or recital program, as well as other relevant details, at least three weeks in advance of the proposed event. The [Doctoral Defense Announcement form](#) is available on the [Graduate School](#) Web site.
  - The Graduate School will be responsible for advertising the defense to the University community.
  - All dissertation defenses shall take place on campus and require the full attendance of the dissertation examining committee. Any exceptions from this practice will require approval from the dean of the Graduate School.
  - The examination that follows the public defense may be either open to the public or closed, at the discretion of the dissertation examining committee.
  - The signatures on the dissertation original signature page will indicate approval of the defense of the dissertation itself.
  - The student has three months following a successful defense to submit the final version of their dissertation to the Graduate School. The semester the student submits the dissertation will be the semester that the degree will be awarded.
  - A student may register for no more than one additional semester following the successful defense of the dissertation.
- Information on the Doctoral Hooding Ceremony and eligibility, can be found at: <http://grad.stonybrook.edu/CurrentStudents/faq.shtml>

### Teaching

All doctoral students at Stony Brook University must complete at least one semester of practicum in teaching under supervision. Some departments also require at least one semester of practicum in teaching under supervision for master's students. The form this practicum takes may differ by discipline. The experience might include making seminar or class presentations, assisting in laboratories, or leading discussion sessions. Grading experience by itself will not be considered sufficient for satisfaction of this requirement. Faculty are responsible for providing informal feedback and formal evaluation.

Following (or in some cases, concurrent with) proper training through a teaching practicum and after having fulfilled other requirements for teaching (e.g., demonstration of spoken English proficiency for non-native speakers of English), a graduate student may serve as a teaching assistant (TA) in courses at Stony Brook University, where the instructor of record is a faculty member.

An advanced graduate student may act as the instructor of record for an undergraduate course offered at Stony Brook University only if he or she is appointed to an adjunct faculty position as a lecturer. No student shall be appointed to such a position until he or she has been advanced to candidacy in a doctoral degree program. It is not required that such students be enrolled in full time status, although this is recommended. Appointment procedures follow the same process as regular faculty appointments.

Graduate students at G4 level or below cannot be designated as the Instructor of Record for any course offered at Stony Brook University. They will be appointed as Teaching Assistants. In addition, there must be a designated faculty supervisor who serves as the Instructor of Record for the course. In the absence of any other faculty Instructor of Record for a course, this designation shall revert to the department Chair.

### **Residence Requirements**

At least two consecutive semesters of full-time graduate study at Stony Brook University in the program granting the degree are required. The purpose of the residence requirement is to ensure that the graduate student participates in the professional life of the program beyond class attendance. Some program residence requirements may vary from the Graduate School norm and are described in the individual program requirements for the degree. Unless specified, however, the Graduate School regulation takes precedence.

Research for the dissertation will normally be conducted at Stony Brook under the direct guidance of the faculty of the student's PhD program. Facilities at Stony Brook University, Brookhaven National Laboratory, Cold Spring Harbor Laboratory, regional hospitals, other institutions on Long Island, or the libraries of New York City are all considered to be on-campus for the purposes of dissertation work. For on-campus dissertation research, Students should register for #### 699 (where #### refers to their program designator).

When a student's research would be facilitated at an off-campus location not covered under the preceding paragraph, he or she must obtain approval from the dissertation advisor, Graduate Program Director, and the Dean of the Graduate School. When a major portion of a student's research will take place off-campus but in the United States and/or U.S. territories they should register for #### 700 for the relevant semesters. When a major portion of their research will take place outside of the United States and/or U.S. territories they should register for #### 701. Other information and requirements regarding these courses may be obtained from the Graduate School.

### **Degree Application**

The student must apply for graduation online at the [Graduate School](#) Web site in accordance with published deadlines. This includes doctoral students who intend to receive a master's degree during the course of their doctoral career. If degree requirements are not met, students must reapply for any subsequent awarding periods using the Change of Graduation Date form found on the Graduate School web site.

### **Registration**

Degree candidates must be registered in the semester they intend to graduate. Students who intend to graduate in the spring or fall must register for at least one graduate credit. Students who intend to graduate in the summer or winter can register for zero credits, but it still must be a graduate-level course.

### **Program Recommendation**

When all program requirements are completed, the graduate program director may recommend to the dean of the Graduate School that the Ph.D. degree be granted.

### **Time Limit**

- The time limit for a doctoral degree is seven years for a student who has a previous graduate degree or 24 credits of graduate study in such a degree program.
- For all other students, the time limit for a doctoral degree is seven years after completion of 24 graduate level credits at Stony Brook University.

In exceptional cases where the program cannot be completed within these periods, students may petition for an extension of the time limit. The [Request for Waiver of Graduate Time Limit form](#) can be found by selecting the forms link from the [Graduate School](#) Web site. These petitions require the approval of the student's advisor and graduate program director.

Requests for a time limit extension must be filed before the limit is exceeded and must contain a significant justification. The final decision rests with the dean of the Graduate School, who may impose additional requirements.

### **The Master of Philosophy Degree**

The degree of Master of Philosophy is intended as a formal recognition of what is informally known as "ABD" status. This degree is normally reserved for students who have advanced to candidacy in a Ph.D. program but are unable to complete the remaining requirements. The degree implies educational achievements well beyond those required for a regular master's degree.

The Master of Philosophy degree is available in every program that awards the Ph.D. Requirements for the M. Phil. are identical to those for the Ph.D., except that the submission and defense of the dissertation are not required.

Students must be advanced to candidacy for one full year before receiving a Master of Philosophy. Degree.

## Doctorate of Musical Arts

- Introduction
- Course and Grade Point Average
- Contract Towards Candidacy
- Language Proficiency
- Advancement to Candidacy
- Doctoral Recital
- Teaching
- Residence Requirement
- Degree Application
- Registration
- Program Recommendation
- Time Limit

### Introduction to the Doctor of Musical Arts Degree

The degree of Doctor of Musical Arts is the only nonclinical doctoral degree offered at Stony Brook other than the Ph.D. The fundamental requirements for the D.M.A. are essentially those for the Ph.D. with the exception that the scope of the original work and the scale of the research are somewhat reduced.

The requirements for expertise within the subject area and for clear exposition are equal to those for the Ph.D. In the case of the D.M.A., clarity of exposition is demonstrated through the medium of recital.

Admission to the Graduate School does not automatically qualify a student as a candidate for the D.M.A. degree. Formal recommendation of advancement to candidacy for the D.M.A. degree must be made to the Graduate School by the Music program after a review of the student's performance in courses, independent study, and program examinations.

The requirements listed below are the minimal ones mandated by the Graduate School. The Music program may set additional requirements.

### Course and Grade Point Average

The student will follow a program of courses determined to meet his or her needs and to satisfy the program requirements. A student must achieve a minimum 3.0 overall GPA in graduate courses taken at Stony Brook in order to receive the D.M.A. degree

Calculation of the grade point average (GPA) includes all courses numbered 500 and above taken at Stony Brook. Temporary grades (I and NR), missing grades and those grades for which no numerical equivalents are defined (P, S, U, and R) are excluded from the computation.

Grading System: See Academic Regulations/ Grading System

A graduate student who has changed primary program may request a restart of GPA in considering possible waiver of academic probation. The GPA for the new program will be calculated from the beginning of the semester in which the change of program became effective. A graduate student who has graduated and is readmitted into a new degree or certificate program may request a restart of GPA. Program approval is necessary before any restart request is submitted to the Graduate School. Courses taken before the restart of GPA cannot be used towards a second degree or certificate.

### Contract Towards Candidacy

The student must fulfill the specific requirements of an approved contract toward candidacy.

### Language Proficiency

Although the Graduate School does not require proficiency in a foreign language, the Music program oversees their own foreign language requirements and the evaluation of proficiency. Students must comply with their program requirements (see the Music section of the Graduate Bulletin).

### Advancement to Candidacy

A student may advance to candidacy after completion of the following requirements:

- Completion of three of the four public recitals;
- Completion of the two graduate seminars or proseminars required for the generation of doctoral essays and completion of two MUS 695 courses with a grade of B or better to work on revisions for each essay;
- Completion of requirements C through I of the Music section of the Graduate Bulletin.
- Students on academic probation cannot be advanced to candidacy.
- Students must be classified as a G4 at the time of request.
- Advancement to candidacy is granted by the Dean of the Graduate School upon recommendation of the Graduate Program Director.
- DMA students may advance to candidacy one semester prior to graduation.

**Doctoral Recital**

The student must demonstrate a distinguished level of performance in the doctoral recital. A recording of the recital is to be kept permanently in the University Library.

Please also see Residency Requirements for information on Residency for Doctoral Recitals.

**Teaching**

All doctoral students at Stony Brook University must complete at least one semester of practicum in teaching under supervision. The form this practicum takes may differ by discipline. The experience might include making seminar or class presentations, leading discussion sessions or grading. Grading experience by itself will not be considered sufficient for satisfaction of this requirement. Faculty are responsible for providing informal feedback and formal evaluation.

Following (or in some cases, concurrent with) proper training through a teaching practicum and after having fulfilled other requirements for teaching (e.g., demonstration of spoken English proficiency for non-native speakers of English), a graduate student may serve as a teaching assistant (TA) in courses at Stony Brook University, where the instructor of record is a faculty member.

An advanced graduate student may act as the instructor of record for an undergraduate course offered at Stony Brook University only if he or she is appointed to an adjunct faculty position as a lecturer. No student shall be appointed to such a position until he or she has been advanced to candidacy in a doctoral degree program. It is not required that such students be enrolled in full time status, although this is recommended. Appointment procedures follow the same process as regular faculty appointments.

Graduate students at G4 level or below cannot be designated as the Instructor of Record for any course offered at Stony Brook University. They will be appointed as Teaching Assistants. In addition, there must be a designated faculty supervisor who serves as the Instructor of Record for the course. In the absence of any other faculty Instructor of Record for a course, this designation shall revert to the department Chair.

**Residence Requirement**

At least two consecutive semesters of full-time graduate study at Stony Brook University in the program granting the degree are required. The purpose of the residence requirement is to ensure that the graduate student participates in the professional life of the program beyond class attendance. Some program residence requirements may vary from the Graduate School norm and are described in the individual program requirements for the degree. Unless specified, however, Graduate School regulation pertains.

Research for the dissertation will normally be conducted at Stony Brook under the direct guidance of the faculty of the student's PhD program. Facilities at Stony Brook University, Brookhaven National Laboratory, Cold Spring Harbor Laboratory, regional hospitals, other institutions on Long Island, or the libraries of New York City are all considered to be on-campus for the purposes of dissertation work. For on-campus dissertation research, Students should register for ### 699 (where ### refers to their program designator).

When a student's research would be facilitated at an off-campus location not covered under the preceding paragraph, he or she must obtain approval from the dissertation advisor, Graduate Program Director, and the Dean of the Graduate School. When a major portion of a student's research will take place off-campus but in the United States and/or U.S. territories they should register for ### 700 for the relevant semesters. When a major portion of their research will take place outside of the United States and/or U.S. territories they should register for ### 701. Other information and requirements regarding these courses may be obtained from the Graduate School.

**Degree Application**

The student must apply for graduation online at the [Graduate School](#) website in accordance with published deadlines. If degree requirements are not met, students must reapply for any subsequent awarding periods. .

**Registration**

Degree candidates must be registered in the semester they intend to graduate. Students who intend to graduate in the spring or fall must register for at least one graduate credit. Students who intend to graduate in the summer can register for zero credits, but it still must be a graduate level course.

**Program Recommendation**

When all program requirements are completed, the Graduate Program Director may recommend to the Dean of the Graduate School that the D.M.A. degree be granted.

**Time Limit**

The candidate must satisfy all requirements for the D.M.A. degree within seven years after completing 24 graduate level credits at Stony Brook University.

- The [Request for Waiver of Graduate Time Limit form](#) can be found by selecting the forms link from the [Graduate School](#) website. These petitions require the approval of the student's advisor and graduate program director.
- Requests for a time-limit extension must be filed before the limit is exceeded and must contain a significant justification.
- The final decision rests with the Dean of the Graduate School, who may impose additional requirements.

**Awarding Degrees**

Degree candidates must be registered in the semester they intend to graduate. Students who intend to graduate in the spring or fall must register for at least one graduate credit. Students who intend to graduate in the summer can register for zero credits, but it still must be a graduate-level course.

When all requirements have been completed, the Graduate Program Director will certify to the Dean of the Graduate School and recommend that the degree be awarded. Degrees are awarded three times a year: May, August, and December. A formal ceremony, however, takes place only at the May commencement. To be eligible for a degree, a student must have completed all University requirements, all program degree requirements, satisfied any provisional admission requirements, submitted the appropriate manuscripts, obtained all University clearances, and have maintained matriculation according to the regulations outlined under the section "Maintaining Matriculated Status," elsewhere in this Bulletin.

**Degrees Awarded Posthumously**

Upon request, the University may award a degree posthumously. Any such request requires the following for consideration:

1. The parent, legal guardian, partner, relative or legal equivalent must provide a written request to the University Registrar.
2. The student must have been enrolled and in good disciplinary and academic standing at the time of passing.
3. Masters students must have been in their last semester; PhD students must have been advanced to candidacy.
4. The graduate program director and the dissertation committee for PhD students must provide a letter of recommendation in support of the request.

The Vice Provost of Graduate Education will have final authority for the approval and awarding of a posthumous degree.

**Waiver of Regulations**

The Dean of the Graduate School in individual instances may waive specified requirements. A petition for such a waiver must be endorsed by the Graduate Program Director, who shall append the reasons for believing that requested waiver would not result in a breach of the spirit of the regulations.

## Overview

- Organization of Graduate Education at Stony Brook
- The Graduate Council
- The Department/Program
- Graduate Program Directors
- Maintenance of Public Order
- University Student Conduct Code
- Bias-Related Crime Prevention
- Tobacco-Free University

All programs, regulations, and schedules of dates are subject to change or withdrawal depending on the availability of funds and the approval of programs by appropriate state authorities. It is the student's responsibility to be aware of University, Graduate School, and SPD regulations, policies, and procedures as set forth in this Bulletin and in all official campus publications and notices.

## Organization of Graduate Education at Stony Brook

Under the direction of the provost, Graduate School administration rests with the dean and the administrative staff of the Graduate School in conjunction with the Graduate Council.

### The Graduate Council

The membership of the council includes one representative from the library, one professional employee, and two representatives each from the faculty of the Health Sciences Center, the College of Engineering and Applied Sciences, the Division of Humanities and Fine Arts, the Division of Social and Behavioral Sciences, and the Division of Natural Sciences. One of the two Health Sciences Center representatives must be from Basic Health Sciences. Additional members include two graduate students chosen by the Graduate Student Organization. Elected faculty members serve for three years with staggered terms. The chairperson and the secretary of the Graduate Council are elected by the council. Among other duties detailed in the "Faculty By-Laws," the council must approve all graduate programs before their submission to the SUNY System Administration Office and the State Department of Education.

### The Department/Program

Each department exercises a large measure of responsibility for its graduate programs. Under the general responsibility of the departmental chairperson, each department has a graduate program director who administers graduate activities. Each program also has an appeals and grievances committee comprised of equal numbers of faculty and graduate student members. Individual programs select graduate applicants and recommend them for admission to the dean of the Graduate School. The programs are responsible for the nomination of students and applicants for fellowships, traineeships, assistantships, and tuition scholarships, as well as for the administration of graduate programs, including coursework, supervised research, teaching assistantships, and graduate examinations. It is the program that certifies to the Graduate School that the student has completed all degree requirements. Graduate programs not housed in specific departments are governed by interdepartmental faculty committees chaired by a graduate program director. For purposes of graduate education, they function as do departments in other disciplines.

### Graduate Program Directors

It is the prerogative of the faculty members of any graduate program at the Stony Brook University to choose their own Graduate Program Director. It is the policy of the Graduate School, however, that the Graduate Program Director shall be chosen from the tenured faculty of the program. In cases where there is an associate director or its equivalent, that position shall also be filled from among the tenured faculty. The Dean of the Graduate School will consider requests for exceptions to this policy.

### Maintenance of Public Order

The University wishes to maintain public order appropriate to a university campus without unduly limiting or restricting the freedom of speech or peaceful assembly. The State University Board of Trustees' Rules for the Maintenance of Public Order (Part 535 of Title VIII—Compilation of Codes, Rules, and Regulations of the State of New York) are printed in the Student Conduct Code brochure. For the Rules of Public Order, please visit <http://studentaffairs.stonybrook.edu/jud/order.shtml>.

Questions regarding the Conduct Code, the hearing process, procedures for filing a complaint, or volunteering to become a student hearing board member can be directed to:

Office of University Community Standards  
348 Administration Building  
(631) 632-6705

### University Student Conduct Code:

The University Student Conduct Code provides students, faculty, staff, and visitors with a procedural guide to initiate a complaint against a student when their rights as members or visitors to the University community have been allegedly violated. For all students, the Conduct Code supports compliance with state and federal laws pertaining to drugs, alcohol, weapons, physical assault, harassment, sexual harassment, sexual assault or abuse, acquaintance (date) rape, relationship violence, discrimination, and racial and sexual preference harassment.

Intervention by the Office of University Standards addresses inappropriate conduct and also serves to educate students on how their conduct affected themselves, others, and the University community.

University expectations for student conduct as outlined in the University Student Conduct Code are reviewed through the Rules Revision Committee that includes student participation.

To obtain a copy of the Conduct Code or Alcohol Policy, see:

<https://studentaffairs.stonybrook.edu/ucs/docs/universitystudentconductcode.pdf>

Students (undergraduate and graduate, resident and commuter) can apply to become Administrative Hearing Board volunteers. When selected, Hearing Board members are trained to hear evidence and render fair and objective decisions on allegations brought to the formal hearing process.

Questions regarding the Conduct Code, the hearing process, procedures for filing a complaint, or volunteering to become a student hearing board member can be directed to:

Office of University Community Standards  
348 Administration Building  
(631) 632-6705

### **Bias-Related Crime Prevention**

For more information please visit the University Police Department website at:

<http://www.stonybrook.edu/police/>

[http://naples.cc.sunysb.edu/Admin/HRSForms.nsf/pub/UPDD0006/\\$file/UPDD0006.pdf](http://naples.cc.sunysb.edu/Admin/HRSForms.nsf/pub/UPDD0006/$file/UPDD0006.pdf)

### **Tobacco-Free University**

Effective January 1, 2016, Stony Brook University will become 100 percent tobacco free. This includes all tobacco and smoke/vapor-producing products. For more information regarding the policy, please visit:

<http://www.stonybrook.edu/commcms/tobaccofree/>

### **Registration Requirements**

- Registration
- Course and Credit Enrollment
- Course Changes
- Graduate students in Undergraduate courses
- Undergraduate students in Graduate courses

#### **Registration**

All students enrolled in the Graduate School in any program, whether in residence or absentia, must register each fall and spring for at least one graduate credit until all degree requirements have been met. A student is not considered to have registered until enrollment is posted on SOLAR and arrangements regarding tuition and fees have been made with the Bursar's Office.

- Students who hold a TA, GA, RA, fellowship, or tuition scholarship must be registered as full-time students by day 15 of classes each semester.
- Students failing to register before the first day of classes or before late registration begins may still register during the first 15 days of the semester, but will be charged a late fee.
- Students who have not been granted an official Leave of Absence by the dean of the Graduate School and have not yet registered will be considered to have withdrawn from the University.
- Students are responsible for making sure they are registered on time. Programs or individual faculty members do not have authority to waive these rules.

#### **Course and Credit Enrollment**

The majority of credits taken during any semester must apply toward a student's primary degree program. Failure to comply with the guidelines below will result in the tuition scholarship being rescinded for the semester, and the student will be responsible to pay the tuition for that semester.

- All students must have prior permission from their department/program to take any courses outside of their primary degree plan.
- Tuition scholarships only apply to courses that fulfill degree requirements in the program providing the scholarship. A student with a full-time nine-credit tuition scholarship from a primary program may take a course in a secondary program. However, if a student with a nine-credit tuition scholarship from their primary program wishes to take a course in a secondary program, it must be in addition to the nine credits applying toward the primary program during the same semester.

## Graduate Non-Matriculated Students

Graduate Non-Matriculated students may be eligible to enroll in up to 18 credits per term depending on the level of the courses. Requests to enroll in credits in excess of 12 per term must be submitted in writing to SPD@stonybrook.edu for consideration.

## Course Changes

The add/drop period to have no "W" recorded begins on the first day of classes and ends at the close of business (4PM) on the tenth business day of classes of the fall or spring semester, the fifth business day of classes of six-week summer sessions, or the first day of classes of three-week winter sessions.

For SPD online students, the add/drop period to have no "W" recorded begins on the first day of classes and ends at the close of business (4PM) on the fifth business day of classes of the fall or spring semester. However, SPD online students have access in SOLAR to withdrawal from individual courses through the fifteenth day of classes (4PM).

When a student withdraws from a class or the semester after the posted academic calendar deadline date, tuition is charged based on the Tuition Liability schedule found on the academic calendar. This information is available on the Registrar's website. Tuition liability starts after the seventh day of the semester counting Saturday and Sunday.

Before the first day of classes, all classes can be dropped via SOLAR. After the first day, a withdrawal form is required. See the entries "Withdrawal from the University" in this Bulletin for more information withdrawing from all courses.

At the end of the add/drop period, from days 11 to 15, students may swap courses by petition through the Graduate School or SPD. A "W" and tuition liability will not be incurred only if an even number of credits are added and dropped in a single transaction (i.e., a swap of 12 credits for 12 credits). NOTE: This is not for SPD online students.

After the registration deadlines pass, all registration related matters require a "[Retroactive Add, Drop, or Registration](#)" form to be submitted and approved by the Graduate School or SPD.

## Graduate Students Registering for Undergraduate Classes

Graduate students may take undergraduate courses with the approval of their adviser and Graduate Program Director and the approval of the appropriate undergraduate faculty and Director of Undergraduate Studies. Undergraduate courses do not count towards a graduate student's full-time status and are not counted for credit. Undergraduate credits cannot be used towards graduate degree requirements for any graduate level program. Since tuition scholarships do not cover the tuition for undergraduate courses, all graduate students are responsible for undergraduate tuition costs.

Additional requirements may apply for international students. Undergraduate coursework does not count towards full-time enrollment for international graduate students. All international graduate students should contact Visa and Immigration Services before enrolling in an undergraduate course.

## Undergraduate Students Registering for Graduate Classes

Upon request of the Graduate Program Director and with the approval of the instructor of a graduate course, the Dean of the Graduate School may authorize the admission of undergraduates of exceptional ability to graduate courses. Graduate courses taken while an undergraduate remain part of the undergraduate record except for students in approved accelerated, five-year bachelor's/master's programs, or students who have already been accepted for future graduate study at Stony Brook University.

Undergraduate students who have been admitted to the Graduate School at Stony Brook may apply a maximum of six credits toward the graduate degree for courses taken with advance approval and future offer of admission to the Graduate School. These credits may *not* be applied to the undergraduate degree.

Courses numbered 500 and above cannot be used to satisfy distribution or proficiency requirements for undergraduates. See [Permission for Undergraduate Students to enroll in Graduate Courses](#) if you are not in an accelerated, five-year bachelor's/master's. See [Permission for Undergraduate Students an Accelerated Bachelors/Masters Degree Program to Enroll in Graduate Courses](#) if you are in an accelerated, five-year bachelor's/master's program. Requests must be processed by the fifth day of classes for the semester of enrollment.

## Graduate Financial Support

- Offers of Financial Support
- Graduate Tuition Scholarship Eligibility
- Graduate Student Employment Limitations

## Graduate Tuition Scholarship Eligibility

Graduate students must be full time, matriculated students to be eligible to receive Graduate Tuition Scholarship (GTS) funds. Enrollment in undergraduate level courses does not contribute to full time status and tuition charges relating to undergraduate courses are not covered by GTS funds. Students must be enrolled full time by Day 15 of classes or will result in loss of GTS.

In order to minimize GTS expenditures, all eligible graduate students are required to obtain New York State residency in order to benefit from in-state tuition rates. Generally, NYS residency can be achieved **by the start of your second year of study** for domestic students who previously



resided outside NYS. Failure to obtain NYS residency status in the timeframe outlined above may result in tuition liability for students since GTS awards will be limited to the NYS tuition rate after the **first year of study**. Beginning in the second **year** of study, GTS recipients who are eligible to receive New York State residency but who do not obtain NYS residency will be billed for the difference between the in-state and out-of-state rates. Students who are not eligible for NYS residency, including most international students, will not be billed for the tuition difference.

**To be eligible for resident tuition in your second year, it is important that you take steps to make New York State your documented residence as soon as you arrive in New York.** <http://www.stonybrook.edu/commcms/bursar/residency/index.php>

Students who neglect to submit their tuition scholarship and TAP forms by the published deadlines will be held liable for the entire tuition.

Graduate tuition scholarships may be offered according to the following schedule only.

- Doctoral students with full stipend support will receive a full tuition scholarship at in-state or out-of-state rate, subject to the residency requirements described above.
- Doctoral students with partial stipend support will receive a partial tuition scholarship that is pro-rated to their level of support at in-state or out-of-state rate, subject to the residency requirements described above.
- Master's students with full stipend support will receive full GTS at in-state rate only.
- Master's students with partial stipend support will receive a partial tuition scholarship that is pro-rated to their level of support at in-state rate.
- Graduate students who do not receive stipend support are not eligible for tuition scholarships.

When a graduate program's annual tuition scholarship allocation is not sufficient to provide maximum tuition scholarship support, partial tuition scholarship awards are permitted. When graduate programs award partial tuition scholarships, such awards must be made in an equitable manner among all students within the same academic status.

## Leaves and Withdrawals

- Leave of Absence
- Unofficial Leave of Absence
- Withdrawal from the University
- Unauthorized Withdrawal

### Leave of Absence

Graduate students (\*except those programs under the School of Professional Development - see below\*) may request a leave of absence by submitting a Request for Leave of Absence form to the graduate program director. This form can be downloaded at [www.grad.sunysb.edu](http://www.grad.sunysb.edu). If the graduate program director approves the request, the form is then forwarded to the Graduate School. The final decision on all leave of absences is made by the Dean. Leaves of absence are subject to the following conditions.

- They may be granted for one semester or year at a time, and are renewable upon request for a maximum of two years. At the end of this two-year period, a leave of absence will be terminated and the student will be considered to have withdrawn from the university.
- Leaves should be requested prior to the beginning of the semester.
- The student must have been registered for the previous semester.
- International students must obtain approval of an international student advisor.
- Any semester in which a student is on an approved leave of absence does not count in the calculation of the student's time limit for degree completion.
- A student on leave will not be able to use University facilities, submit any work towards a degree, or consult with their advisor.
- Military leaves of absence will be granted for the duration of obligated service to students in good standing.
- A student on academic probation may be granted a leave of absence with the understanding that reenrollment is subject to conditions imposed by the Graduate School and the program. These conditions will be specified in writing at the time the leave is approved.
- Students planning to return from leaves should complete a Readmission Form for Graduate Students, which can be downloaded at [www.grad.sunysb.edu](http://www.grad.sunysb.edu). Students should submit this form to their program for departmental approval by the chair or director. The program then forwards this form to the Graduate School for final approval and processing. Students are advised to begin the readmission process preferably two months in advance of the term for which they wish to register.
  - Students returning from a currently approved Leave of Absence are generally guaranteed readmission.
  - Students not on an official Leave of Absence must pay a \$500 readmission fee.
  - International students must submit a new financial affidavit and be cleared by an international student advisor before readmission can be approved.

The program or the Graduate School may set specific requirements to be fulfilled by the readmitted student during the first year of their readmission. Readmission will be revoked for students who do not fulfill these requirements.

More information regarding access to systems after taking a leave of absence or withdrawal from the University can be found [here](#).

**School of Professional Development Students**

*\*School of Professional Development (non-matriculated and matriculated) students do not need to request a leave of absence if they do not plan to enroll in a given semester.*

*Non-matriculated students will be discontinued after three semesters (fall and spring only) of no enrollment.*

*Matriculated masters students will be discontinued after five semesters (fall and spring only).*

**Unofficial Leave of Absence**

A student who does not enroll consecutively each fall and spring semester and does not submit the Request for Leave of Absence form prior to the start of the semester they do not intend to enroll, will be placed on an unofficial leave of absence and endanger prospects of readmission to the Graduate School. The student will be placed on an unofficial leave of absence and if approved for readmission, will be required to pay the \$500 readmission fee before they become eligible to enroll.

Part-time students are allowed one year (two consecutive semesters: Fall and Spring) of no enrollment before they are placed on an unofficial leave of absence.

**Withdrawal from the University**

The process of withdrawing from the University is a formal procedure that the student must initiate. A student finding it necessary to withdraw from the University must submit a letter of intention to the graduate program director and the Graduate School.

- Students may withdraw from the University up to the last day of classes; however, financial liability to the University still remains. Permission may be granted by the Graduate School by submitting a completed Retroactive Withdrawal form, which can be downloaded at [www.grad.sunysb.edu](http://www.grad.sunysb.edu).
- Students are urged to discuss all withdrawals with their graduate program director and academic advisor before such an action is taken. International students must discuss withdrawals with an international student advisor before initiating the process as a withdrawal may jeopardize their immigration status.
- A student who leaves the University without obtaining an official withdrawal may forfeit the privilege of honorable withdrawal and endanger prospects of readmission to the Graduate School. Such students will be reported as having failed all courses for which they were registered the semester they left the University.

More information regarding access to systems after taking a leave of absence or withdrawal from the University can be found [here](#).

**Unauthorized Withdrawal**

A student who leaves the University without obtaining an official withdrawal may forfeit the privilege of honorable withdrawal and endanger prospects of readmission to the Graduate School. Such students will be reported as having failed all courses for which they were registered the semester they left the University.

**Grading Policies**

- Grading System
- I (Incomplete)
- S/U (Satisfactory/Unsatisfactory)
- R (Registered)
- NR (No Record)
- Change of Grade
- Auditing

**Grading System**

The following grading system will be used for graduate students: A (4.0), A- (3.67), B+ (3.33), B (3.00), B- (2.67), C+ (2.33), C (2.00), C- (1.67), F (0.00). Graded/Pass/No Credit (G/P/NC) and grades of D are not approved grades for graduate students.

- A student's permanent academic record must reflect a final grade or a withdrawal grade for each course in which he or she is enrolled.
- If a student receives an incomplete (I) grade and the final grade has not been reported by the scheduled deadline, or if the deadline has not been appropriately extended, an I/F grade will be recorded. This will calculate towards the term and cumulative GPA's as an F.
- Courses that are designated in the Bulletin as "may be repeated for credit" may be taken more than once for credit and all grades earned will be used to calculate in the GPA for probation or graduation purposes.

All other courses can only be repeated at the discretion of the instructor of the course and the student's Graduate Program Director, and they may only be repeated once. A permission form is required to enroll in a course that is being repeated. Only the most recent attempt/grade will count towards the grade point average, but both attempts and both grades will appear on the official transcript.

- A student's official transcript will show all grades received. A student's transcript shall reflect the cumulative GPA as calculated for probation and graduation.

Final grades for all courses are the responsibility of the instructor of the course and represent his or her best judgment of the performance of the individual student. While the judgment of the instructor is not an academically appealable matter, there may be circumstances in which a student may appeal to have a grade re-evaluated. In all such cases, the request for re-evaluation must be made in writing within four calendar weeks of the notification of the final grade by the Registrar.

### **I (Incomplete)**

An I is an interim grade given at the discretion of the instructor at the student's request and upon evidence that good cause, such as serious illness, prevented the student's completion of course requirements. In granting a grade of I, the instructor signifies a willingness to receive student work and submit grades in accordance with official deadlines and policies.

- Auditing a subsequent offering of the course may not make up an Incomplete.
- Final grades for students granted temporary grades of Incompletes "I", must be submitted by the subsequent term. The deadline for "I" grade completion is listed on the academic calendar each semester and is published by the Registrar's Office. However, the instructor may require that the work be completed at any time prior to the end of the Incomplete extension period. Students should confer with their instructors to establish the deadline for the work to be completed.
- An instructor may request an extension of the original Incomplete by sending written notification to the Office of Records/Registrar before the Academic Calendar deadline date. Any extension will usually be limited to the last day of classes of the semester following that in which the course was taken. Any subsequent extensions beyond the deadline must be approved by the Graduate School.
- If final grades are not reported to the Office of Records/Registrar by the specified dates, the grade of I will automatically change to I/F.

### **S/U (Satisfactory/Unsatisfactory)**

A grade of S (Satisfactory) indicates passing work (equivalent to the grade of B or higher) in those courses so designated by the program and approved by the Graduate Council where the usual mode of evaluation is impractical. A grade of U (Unsatisfactory) indicates unsatisfactory work. S/U grades are not calculated as part of a student's cumulative or semester GPA. Courses that are usually offered on a S/U basis are so indicated in the graduate class schedule published for each term.

### **R (Registered)**

R is assigned to indicate attendance during the first semester in a year-long course. The final grade will be assigned after the completion of two semesters.

### **NR (No Record)**

An instructor may assign a grade of NR only for students who have never, to the instructor's knowledge, participated in the course in any way. A NR grade can remain on the students record or may be resolved through either the formal petition process to withdraw the course from a student's record or an assignment of a different grade by the instructor.

### **Change of Grade**

Grades appearing on a student's academic record may not be changed after one calendar year from the start of term in which the grade was incurred.

- A final grade may not be changed on the basis of work completed after a term has ended.
- A final grade appearing on a student's academic record at the time of graduation cannot be changed to any other grade subsequent to the awarding of the degree. This includes processing a course withdrawal or cancellation. This rule includes students who have been awarded a master's degree while in the process of obtaining a PhD. No grades associated with any prior earned master's, certificate or other SBU degree can be changed once the degree has been awarded.

Grade changes that involve changing one grade to another, changing an incomplete to a letter grade after the first day of classes, or changing an incomplete to a letter grade after an extension has expired, must be approved by the Graduate School.

### **Auditing**

Auditing is permitted by special arrangement between student and instructor. No record is kept of such courses.

### **Education Opportunities**

- Inter-University Doctoral Consortium
- SUNY Exchange Program

### **Inter-University Doctoral Consortium**

The Inter-University Doctoral Consortium (IUDC) is comprised of several universities in and around New York City, including Columbia, CUNY, Fordham, New School University, Princeton, and Rutgers. Eligible graduate students in the arts and sciences will be able to register for

some courses at these institutions for Stony Brook credit, and library privileges will also be extended to participants while registered. Interested students should contact their graduate program director.

- Students may only register for courses not available at their home institution.
- Students will pay appropriate tuition and fees at their home institution.
- Consortium registration is intended for advanced doctoral candidates and is restricted to graduate courses.

### **SUNY Exchange Program**

When the special educational needs of a doctoral student at one SUNY institution or the graduate center of CUNY can be served best by taking courses at another unit of the SUNY system or at the Graduate Center of CUNY, the student should obtain an application from the program director to apply for admission to take the desired courses at the host institution.

- The recommendation from the program should state that the student has the proper prerequisites and that, if the courses are successfully completed, credit for them will be accepted toward the degree.
- The statement from the program director requires approval from the dean of the Graduate School. The approval will then be sent to the dean of the Graduate School of the host institution, who will clear it with the department concerned.

When approval is obtained, the student will be admitted to take the courses requested.

- The student will pay appropriate tuition and fees at the host institution. If the student has a tuition scholarship at Stony Brook, that scholarship will be recognized by the host institution. At the completion of courses, the host institution will, on request, send a transcript to Stony Brook.

### **Evaluation**

- Academic Evaluation
- Assistantship Evaluation

### **Academic Evaluation**

While graduate students are expected and encouraged to work in a progressively independent manner, they are entitled to periodic assessment of their progress in a manner that contributes to their academic and professional growth. The Graduate Program Director is responsible to ensure this evaluation takes place. The evaluation is particularly necessary for students whose continued financial support depends on maintaining satisfactory academic progress under conditions where formal courses are no longer required. To facilitate this process, each department or program is to establish, with graduate student participation, clear criteria in writing for evaluating graduate student progress.

The appropriate Dean is to ensure that the criteria are established and put into effect. Because the criteria will vary among programs and will change as students' advance toward their degrees, the relationship of these criteria to academic and professional achievement at each stage of development should be clear. With criteria in place, the academic progress of all students, beyond formal course work, is to be evaluated at least once during each academic year. This applies to all students, including those who have advanced to candidacy.

To optimize the benefits of the process, a written report is to be prepared. The report is to be signed by both the evaluator(s) and the student to acknowledge that both have reviewed the report. A student who has failed to achieve reasonable progress is to be notified in writing in a timely manner of specific deficiencies, acceptable remedies, and the consequences of not remedying the deficiencies. The student may submit a formal response that will be attached to the evaluation. A copy of the signed report is to be given to the student and the original placed in the student's departmental file.

### **Evaluation of Assistantship Performance**

The appropriate academic and assistantship obligations of teaching and graduate assistants as they relate to levels of support are defined by the departments and, in the case of graduate research assistants, faculty advisors.

For reasons analogous to those given for the need for academic evaluations, graduate students are entitled to periodic assessment of their performance in their assistantship roles. Departments are to make the criteria for assessing assigned responsibilities available in writing to students in these positions (teaching assistants, graduate assistants, and graduate research assistants). To optimize the benefits of the process a written report is to be prepared for each student. The report is to be signed by both the evaluator(s) and the student to acknowledge that both have reviewed the report. A student who has inadequately fulfilled assistantship responsibilities is to be notified in writing in a timely manner of specific deficiencies, acceptable remedies, and the consequence of not remedying the deficiencies. The student may submit a formal response that will be attached to the evaluation. A copy of the signed report is to be given to the student and the original placed in the student's departmental file. The absence of a report will be construed as a positive evaluation.

### **Advancement and Degree Candidacy**

- Advancement to Candidacy
- Degree Candidacy

### **Advancement to Candidacy**

Admission to the Graduate School does not automatically qualify a doctoral student as a candidate for the Ph.D. degree. Formal recommendation, executed by the Graduate Program Director, of advancement to candidacy for the Ph.D. degree must be made to the Graduate School after a review of the student's performance in courses, independent study, and program examinations. A candidate for the Ph.D. degree engages in research or scholarship leading to a dissertation. Listed below are the minimal requirements mandated by the Graduate School. The individual programs may set additional requirements.

A student may be advanced to candidacy (G5 status) after completing Graduate School and program requirements other than the dissertation or its equivalent, with the following restrictions.

- Students on academic probation cannot be advanced to candidacy.
- Students must be G4 at the time of request.
- Students must not have any blank grades.
- Advancement to candidacy is granted by the dean of the Graduate School upon recommendation of the graduate program director.
- Students must advance to candidacy at least one academic year before the beginning of the semester in which they plan to defend their dissertation. An academic year is defined as the Fall and Spring semesters, in either order, that immediately precede the semester of defense. Students in the DMA program may be advanced for one semester prior to their final recital and graduation semester. Summer terms do not count as semesters for purposes of advancement to candidacy.
- Requests for advancement to candidacy must be received by the Graduate School from the program by day 5 of classes for the advancement to take effect that same semester.
- Advancements received by the Graduate School after the published deadline date will not take effect until the next semester or term.
- In exceptional circumstances, a student's Graduate Program Director may submit a written petition for a waiver of this requirement to the Dean of the Graduate School.

### **Degree Candidacy**

All fall and spring degree candidates must register for at least one graduate credit in their degree program in the semester in which the degree is awarded. Summer degree candidates may register for a zero credit course, but it still must be graduate level. Students on approved Leaves of Absence do not register for those semesters for which a leave has been granted; however, they must be readmitted and register for the semester in which the degree is awarded.

### **Probation, Conduct and Grievances**

- Academic Probation
- Standards of Academic Conduct
- Academic Honesty and Scholarly Misconduct
- Appeals and Grievance Procedures
- Academic Dismissal
- Claims of Discrimination

### **Academic Probation**

#### **Matriculated Students**

When a student's cumulative graduate GPA falls below B (3.0) for grades earned in courses numbered 500 and above taken at Stony Brook, the student shall be placed on probation.

- If the student's overall GPA has been raised to B (3.0) by the end of the next semester of enrollment after being first notified of probation, the student will be returned to regular status.
- Students may be on probation for a maximum of two semesters.
- A student on academic probation who fails to achieve a 3.0 cumulative GPA by the end of the second semester on probation will usually not be permitted to re-enroll.
- A student who has changed a registered area of graduate studies may, upon the request of the new program, have their record treated as two separate records. The GPA for the new area of graduate studies may be calculated from the beginning of the semester in which the change became effective.
- A student enrolled part time who has accumulated six semester credits with a cumulative average below 3.0 will have two semesters, or six additional credits (whichever comes first) to bring their cumulative GPA to 3.0.
- Temporary grades (I and NR), missing grades and those grades for which no numerical equivalents are defined (P, S, U, and R) are not calculated in determining the eligibility for academic probation.

Programs may have additional requirements as specified in program literature. Failure to meet these requirements may result in academic probation.

### **Non-Matriculated Students**

#### *Academic Warning*

After completing at least 3 credits, when a student's cumulative graduate GPA falls below 2.5 for grades earned in enrolled courses and above taken at Stony Brook, the student shall be placed on an academic warning.

- If the student's overall GPA has been raised to 2.5 by the end of the next semester of enrollment after being first notified of the warning, the student will be returned to regular status.
- A student on an academic warning who fails to achieve a 2.5 cumulative GPA after completing 6 credits will be academically dismissed from the School of Professional Development.
- A student who changes from non-matriculated status to matriculated status, upon the request of the new program, may have their record treated as two separate records. The GPA for the new area of graduate studies may be calculated from the beginning of the semester in which the change became effective.
- Temporary grades (I and NR), missing grades and those grades for which no numerical equivalents are defined (P, S, U, and R) are not calculated in determining the eligibility for academic warning.

#### *Academic Dismissal*

When a student on academic warning, cumulative graduate GPA falls below a 2.5 after completing 6 credits in courses taken at Stony Brook, the student shall be dismissed from the School of Professional Development.

#### *Conditional Reinstatement from Dismissal*

Non-matriculated students who have been dismissed may petition for a conditional reinstatement. However, there is no guarantee a petition will be granted. Petitions should address the reason why the student's GPA is below a 2.5 and actions that will be taken to ensure the problem(s) will be addressed and not impede success in future classes.

If approved, returning students are placed on conditional reinstatement (a \$50 administrative fee must be paid for the petition). Conditionally reinstated students are required to earn at least a 2.5 semester GPA after 6 credits.

### **Standards of Academic Conduct**

The University expects all students to cooperate in developing and maintaining high standards of scholarship and conduct. Graduate students come under rules and regulations outlined in the Grievances and Appeals section of the online Bulletin.

Students are expected to meet academic requirements outlined in this Bulletin and financial obligations as specified in Financial and Residential Information in order to remain in good standing. Certain non-academic rules and regulations must also be observed. The University wishes to emphasize the policy that all students are subject to the rules and regulations of the University currently in effect, or which, from time to time, are put into effect by appropriate authorities. Students, in accepting admission, indicate their willingness to subscribe to, and be governed by, these rules and regulations. They also acknowledge the right of the University to take such disciplinary action, including suspension and/or expulsion, as may be deemed appropriate. University authorities will take action in accordance with due process. For detailed information about the University's Conduct Code and Maintenance of Public Order, visit:

<http://studentaffairs.stonybrook.edu/stu/policies.html>

### **Academic Honesty and Scholarly Misconduct**

The University expects all students to cooperate in developing and maintaining high standards of scholarship and conduct. Graduate students come under rules and regulations outlined in the Grievances and Appeals section of the Bulletin.

Students are expected to meet academic requirements outlined in this Bulletin and financial obligations as specified in Financial and Residential Information in order to remain in good standing. Certain non-academic rules and regulations must also be observed. The University wishes to emphasize that all students are subject to the rules and regulations of the University currently in effect, or which, from time to time, are put into effect by appropriate authorities. Students, in accepting admission, indicate their willingness to subscribe to, and be governed by, these rules and regulations. They also acknowledge the right of the University to take such disciplinary action, including suspension and/or expulsion, as may be deemed appropriate. University authorities will take action in accordance with due process.

Intellectual honesty is the cornerstone of all academic and scholarly work. Therefore, the University views any form of academic or scholarly dishonesty as a serious matter. Instructors are required to report all allegations of academic or scholarly dishonesty to their Graduate Program Director and the student's home Graduate Program Director if different. Furthermore, Graduate Program Directors must report all incidents in which a student is found guilty to the Graduate School. Additional details on procedures for hearings and other functions at the judiciary processes are available in the Grievances and Appeals section of the Bulletin.

Graduate students must strictly observe professional standards, academic honesty, and proper scholarly conduct in coursework, examinations, research, written reports and in proper professional treatment of laboratory animals, research subjects, clients, or patients encountered in the process of graduate education.

For more information, please visit <http://www.stonybrook.edu/policy/policies.shtml?ID=210>

### **Grievance and Appeals Procedure**

A variety of appeals and grievance procedures are available to Graduate School students and School of Professional Development students, however grievances should be considered first at the program level. Any appeals of a program's ruling on a case must be made in writing within two weeks to the Vice Provost of Graduate Education. When warranted, the VP will pass the matter on to the Graduate Council Appeals Committee (GCAC). The VP is responsible for making and implementing a final decision.

Grievances against a person that involve allegations of employment misconduct must be adjudicated by Human Resource Services.

For graduate students in both schools, these appeals and grievance procedures complement other means to address and resolve concerns such as the [Graduate Student Organization](#), Graduate Student Employees Union, the [Graduate Student Advocate](#), and for graduate research assistants the Research Foundation and the RA Union. Students encountering difficulties with programs, Graduate School or SPD policy or procedure, or with faculty or staff, should discuss the problem with their advisors and their graduate program directors whenever possible.

#### **Grievances for Graduate School Program Students**

##### **Program Grievance and Appeals Committee (GAC)**

Each graduate program, with active graduate student participation, is to establish a grievance and appeals committee under the following guidelines. Any departmental guidelines beyond these must be made available to graduate students.

- Equal proportion of graduate students and faculty.
- Faculty chosen in any way that accords with general policy of the program, but may not include faculty named in an individual grievance case or party to it in some compromising way.
- Student members chosen by the students in the program without faculty interference, but may not include students named in the grievance case or party to it in some compromising way.
- The committee may be of any reasonable size but not fewer than four members.
- Typically the grievance committee will be an ad hoc committee, distinct from the Graduate Studies Committee or a standing sub-committee of the Graduate Studies Committee.

Allegations of academic or professional misconduct including plagiarism, cheating, disallowed collaborations on academic class assignments and take home exams, and/or faculty and student disputes pertaining to authorship, will be adjudicated within the relevant program in the following manner. An initial conference or hearing should occur within two weeks of receipt of a written grievance.

- A resolution of the alleged grievance should be sought through a conference between the relevant parties and the graduate program director. If it is inappropriate or impossible for the graduate program director to mediate the dispute, this responsibility will be assumed by the department chair.
- If the matter cannot be resolved through direct mediation, then the graduate program director or department chair will convene a hearing of the program's grievance committee. The program's grievance committee will receive written documentation of the alleged violation, and the relevant parties will be given the opportunity to respond. After a thorough investigation, the committee's decision on the disposition of the case will be sent to the relevant parties and to the program director or department chair. The committee can also make recommendations concerning penalties for violations but is not required to do so.
- The department chair or program director will accept the disposition of the case rendered by the committee and will determine and implement penalties in cases so decided.

#### **Grievances for School of Professional Development Program Students**

Students should first communicate with the instructor of the course, if appropriate. If that conversation does not result in a mutually-acceptable agreement, students should communicate with the director of the appropriate program.

In the case that a student finds an academic decision made by a faculty member or program director in SPD is unfair, s/he may appeal the decision. The student should inform the SPD Manager for Records and Admission in writing ([spd@stonybrook.edu](mailto:spd@stonybrook.edu)). At this time, the Dean will convene an Academic Standing Committee, which will be made up of an equal number of faculty/staff and SPD students (generally two of each); the members of the committee (other than the Dean) will not be from the program from which the appeal has come. The Academic Standing Committee will review the student's appeal, ask for input from the relevant instructor and/or program director, and request any additional information required from the student. When the committee has come to a decision, the Dean will alert the student, the relevant faculty member and/or program director as to the result.

#### **Appeals for Graduate School and School of Professional Development Students**

If the relevant parties wish to appeal either the process, disposition or the penalties in a case of alleged academic or professional misconduct, a written appeal of the program's decision must be presented to the Vice Provost of Graduate Education within two weeks. The VP may choose to forward the case to the Graduate Council Appeals Committee (GCAC), who will then advise the VP on the disposition of the case and possible

penalties. The Vice Provost of Graduate Education will determine and implement penalties for academic or professional misconduct. The VP's disposition of the case will be forwarded in writing to the relevant parties and to the program director or department chair.

### **Graduate Council Appeals Committee (GCAC)**

The Graduate Council Appeals Committee (GCAC) will consist of an equal number of graduate students and faculty. Faculty members, including the committee chair, will be appointed by the Graduate Council. Graduate student members will be appointed by the Graduate Student Organization.

The goal of the GCAC is to resolve and/or adjudicate grievances and appeals as fairly and expeditiously as possible. The GCAC may consider appeals either on technical issues of procedure or substantive conclusions of the program's grievance committee and may suggest other resolutions of the problem. In addition to addressing specific appeals brought to it by the Dean of the Graduate School, the GCAC may recommend changes in policies of the program or University.

The GCAC will consider all appeals addressed to it unless the committee unanimously denies standing. The person who is appealing a program grievance decision is responsible to state clearly and concisely the nature of the grievance and the cause for request of an appeals hearing. Criteria for assessing the initial standing of an appeal include those policies addressed in this Bulletin or in published and approved program handbooks or guidelines.

Cases of academic or professional misconduct that are referred to the GCAC will be adjudicated in the following manner.

- Upon receiving a written appeal, the chair of the GCAC will convene a meeting of the full committee. This initial full meeting of the GCAC must occur within two weeks of receipt of the appeal, or as soon as the committee can be convened if classes are not in session.
- All GCAC members will have equal access to all documents and information. The Graduate School will appoint a faculty/staff member to assist the GCAC in obtaining, reproducing and disseminating the relevant information.
- The proceedings of the GCAC are confidential. Since information concerning an appeal may be of sensitive, highly personal and confidential nature, such information must not be disseminated outside the committee, except as necessary to the Graduate Student Advocate.
- The person who is filing the appeal must communicate with the GCAC only through its chair, and all such communications must be written. The GCAC will arrange for an interpreter or similar assistance if it deems that such aid would be useful.
- The GCAC should attempt to reach a consensus on all issues. Upon reaching a decision, the GCAC will issue a single written report to the Dean of the Graduate School, who will make recommendations on all points raised in the formal appeal that the committee has agreed to consider. The report should present the rationale for its decision(s). The substance of any dissent must be included in the text of the report.

### **The Vice Provost of Graduate Education's Decision**

The disposition of the Vice Provost of Graduate Education is final.

Research Misconduct (Office of the Vice President for Research - OVPR)

The Research Integrity Officer within OVPR must be contacted regarding allegations of research misconduct. Such cases will be reviewed in accordance with University Policy P210 (<http://www.stonybrook.edu/policy/policies.shtml?ID=210>).

Keywords - Academic dishonesty, Stony Brook University, Grievance and Appeals, Graduate Bulletin, Research misconduct.

### **Academic Dismissal**

Dismissal from the Graduate School can be requested by Departments or Programs in cases where there exist requirements beyond those of the Graduate School for the maintenance of good academic standing. In any such case the following requirements are made of the program:

- All such requirements must be stated clearly in writing and given to each student enrolled in the program. Any requirements not so publicized may not be enforceable.
- No student may be dismissed for poor academic or research performance by any program unless he or she has been on program probation or has received two consecutive semesters of unsatisfactory performance evaluations from the program immediately preceding the dismissal.
- Students must be notified in writing when they are placed on program probation, with a copy of the letter sent to the Graduate School. The letter of notification must be received by the student before the first day of classes of the semester in which the probation takes effect, and it must state the reason(s) for the probation, the possible consequences of the probation and the possible remedies for it.
- Students may be dismissed without having been placed on probation as described above, only in cases where they fail to pass required examinations or milestones as stated in published departmental policy, or in cases of proven academic dishonesty.
- Notifications of dismissal must be made to the student in writing, explaining the reasons for the dismissal. A copy of this letter must be sent to the Graduate School. The Dean of the Graduate School will then send a certified letter to the student informing them of their dismissal from the University. The student will have seven days to respond to this letter before the dismissal is processed and the student is blocked from further registration.



- Students may be dismissed or placed on probation by programs for reasons of academic or research performance only. All other disciplinary matters must be referred to the appropriate office of the University.

A graduate degree may be revoked in cases of academic or professional misconduct by a student during the course of his or her studies. The results of departmental/program hearings are forwarded to the department chair/program director who will forward this to the Dean of the Graduate School with a recommendation concerning any penalties. The Dean of the Graduate School will consult as needed with the Graduate Council. The Dean will determine and implement penalties and may recommend to the President that the degree be revoked. The Board of Trustees of the State University of New York revokes the degree. If the degree is revoked, the degree notation on the official transcript will be removed and replaced by a statement explaining the reason of the revocation.

### Claims of Discrimination

If a graduate student feels that she or he has been discriminated against on the basis of race, color, national origin, religion, age, sex, disability, marital status, or sexual orientation, that person should refer to the Grievance Procedure for Review of Allegations of Discrimination. Contact the University Affirmative Action Office for information and documentation of these procedures.

### Transcripts and Records

- Transcripts
- Student Educational Records

#### Transcripts

Students who wish to have Stony Brook transcripts forwarded to another institution or agency, or to themselves for their own use, must visit [How to Order Official Transcripts](#) on the Registrar's website for instructions. *Students in the School of Medicine or the School of Dental Medicine must order transcripts by contacting their school. School of Medicine at (631) 444-2341; School of Dental Medicine (631) 632-8901.*

All financial obligations to the University must be satisfied before a transcript can be released. A request for a transcript must be made by the student. Students who have both an undergraduate and a graduate transcript and want only one of them sent should specify it in their request. Partial transcripts of either the undergraduate or graduate academic records are not issued.

#### Student Educational Records

The Family Educational Rights and Privacy Act allows current or former students to inspect and review their educational records. Students are also accorded the right to a hearing in order to question the contents of their educational records. Written consent of students may be required before personally identifiable information about them will be released from their educational records as provided by law. Specific guidelines and procedures are contained in the Policy Manual of the University, T-507, Family Educational Rights and Privacy Act. A copy of this manual is available in the Reference Room of the Melville Library. After administrative remedies available at the University have been exhausted, inquiries or complaints may be filed with the Family Educational Rights and Privacy Act Office, Department of Health and Human Services, 330 Independence Avenue, S.W., Washington, DC 20201. Applicants or students may waive their rights to inspect confidential letters or statements of recommendation.

### Calendar and Absences

- Academic Calendar
- Equivalent Opportunity/Religious Absences

#### Academic Calendar

Stony Brook University operates on a semester system, with fall registration occurring during the last week of August. The fall semester usually starts the first week of September and finishes before December 25. The spring semester usually begins the last week of January and finishes the third week of May. The last week of each semester is devoted to final examinations. In addition to these two semesters, classes are offered during a January Winter Session term and two Summer Session terms. Visit the [Registrar's Office](#) Web site for a detailed academic calendar.

#### Equivalent Opportunity/Religious Absences

As students may be unable to attend classes on certain days because of religious beliefs, section 224-a of the Educational Law provides that:

- No person shall be expelled from or be refused admission as a student to an institution of higher education for the reason that he or she is unable, because of religious beliefs, to attend classes or to participate in any examination, study, or work requirements on a particular day or days.
- Any student in an institution of higher education who is unable, because of religious beliefs, to attend classes on a particular day or days, be excused from any examination or any study or work requirements.
- It shall be the responsibility of the faculty and of the administrative officials of each institution of higher education to make available to each student who is absent from school, because of religious beliefs, an equivalent opportunity to make up any examination, study, or work requirements that he or she may have missed because of such absence on any particular day or days. No fees shall be charged by the institution for making available to the said student such equivalent opportunity.
- If classes, examinations, study, or work requirements are held on Friday after 4:00 pm or Saturday, similar or makeup classes, examinations, study or work requirements shall be made available on other days, where it is possible and practicable to do so. No special fees shall be charged to the student for these classes, examinations, study, or work requirements held on other days.

- It shall be the duty of the faculty and of the administrative officials of each institution of higher education to exercise the fullest measure of good faith. No adverse or prejudicial effects shall result to any students because of their availing themselves of the provisions of this section.
- Any student who is aggrieved by the alleged failure of any faculty or administrative official to comply in good faith with the provisions of this section shall be entitled to maintain an action or proceeding in the supreme court of the county in which such institution of higher education is located for the enforcement of his or her rights under this section.
- As used in this section, the term “institution of higher education” shall mean schools under the control of the Board of Trustees of the State University of New York, the Board of Higher Education of the City of New York, or any community college.

Spring 2018

College of Business

**Dean**

Manuel London, Harriman Hall (631) 632-5787

**Associate Dean and Graduate Program Director**

Dmytro Holod, Harriman Hall (631) 632-7183

**Assistant Dean for Administration**

Amy Milligan, Harriman Hall (631) 632-5708

**Assistant Dean**

Joyce Wellinger, Harriman Hall

**Director of the Center for Human Resource Management**

Manuel London, Harriman Hall (631) 632-7159

**Office of Student Services**

Harriman Hall Room 109 (631) 632-7171

**Web Site**

<http://www.stonybrook.edu/business>

**Advanced Graduate Certificates Awarded**

Health Care Management, Human Resources Management, Finance

**Degrees Awarded**

M.B.A., M.B.A. in Accounting, M.B.A. in Finance, M.B.A. in Marketing, M.B.A. in Health Care Management, M.S. in Accounting, M.S. in Finance, M.S. in Technology Management (in Korea)

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-gs](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-gs)

Effective for Fall 2015, applicants with an awarded Bachelor's degree in Business are eligible for a 36 credit track MBA in Accounting, MBA in Finance, MBA in Marketing or MBA with concentrations. All other applicants with an awarded Bachelor's degree, regardless of undergraduate major, are eligible for a 48 credit track in MBA in Accounting, MBA in Finance, MBA in Marketing, MBA in Health Care Management or MBA with concentrations. The available concentrations are Human Resources (HR), Innovation, Management, or Management Operations.

All students admitted prior to the Fall 2015 semester must follow the MBA track for the term they were admitted under. Please refer to the Graduate School Bulletin archives to find your program plan for your admit term.

**Description of the MBA Program**

In today's world of constant change and extraordinary opportunity, the need for business education has never been greater. Our MBA degree program is taught by leading Stony Brook faculty. They are complemented by key executives recruited as visiting professors from throughout the tri-state region—industry leaders who have built stellar careers in today's global business world.

Our students participate in a vibrant learning environment where they gain the knowledge, skills, and insights necessary to manage complex organizations. Our dedicated faculty has both academic and business experience, and teaches not only the broad principles of management, finance, and marketing but also the more intangible aspects of leadership, communications, and business strategy.

The College of Business offers flexible full and part time programs with day, evening, and Saturday courses at our beautiful main campus in Stony Brook, Long Island, which is located 60 miles east of New York City. We also offer some courses for the MBA program in an online format. As a result of our relationship with business schools overseas, our programs extend to the far corners of the globe.

Full-time students are encouraged to spend a summer session or a semester in the study abroad program to learn about business in Africa, China, Europe, India, Korea, Greece, or the Middle East. These experiences provide students with a competitive edge in the job market as businesses increasingly look for employees with overseas experience. Today most businesses are global in nature, whether they are multinational corporations or small local businesses with overseas suppliers, customers, or a diverse international workforce.

By focusing on strategic, managerial, analytical, and technical processes and outcomes critical to success in a broad spectrum of industries, Stony Brook University's MBA program helps students recognize ways in which they can add value to their firms and advance their careers.

**Superior Teaching in a Nurturing Learning Environment:** The Stony Brook program prides itself on its superior teaching and its dedication to working with each student to develop his or her business and managerial skills. We seek to bridge the gap between theory and practice by selecting faculty members who can clearly communicate the practical benefits of managerial knowledge.

**Placement and Career Services****Career Services**

The Career Center, located on the ground floor of the Melville Library at the foot of the Zebra Path, provides a variety of career and life planning services to MBA students. These services include: online listings of on- and off-campus jobs and internships, resume referrals, on-campus interviews, job and internship fairs, workshops on topics including resume preparation and interviewing, individual counseling, and additional resources online and in print.

**Job & internship listings, applications, and resume referrals** (when the Career Center forwards appropriate resumes to interested employers) happen through Handshake - to access it, visit [www.stonybrook.edu/career](http://www.stonybrook.edu/career).

Many companies visit the campus to conduct **one-on-one interviews** with MBA students. It is suggested that graduate students contact the Career Center at the beginning of their first semester for more details.

**Job and internship fairs**, in which employers visit the campus to discuss their organizations and share available job openings, are held regularly. These fairs provide graduate students with unique opportunities to meet, have brief interviews with, and leave resumes with a significant number and variety of employers. For dates and details, visit [www.stonybrook.edu/career](http://www.stonybrook.edu/career) and look under Career Center Upcoming Events.

### Workshops

For those who are about to begin the process of searching for a job, writing a resume, and/or interviewing, group workshops are offered which provide information on these and related topics. Other workshops offer networking opportunities and insight into particular careers & employers. For dates and details, visit [www.stonybrook.edu/career](http://www.stonybrook.edu/career) and look under Career Center Upcoming Events.

### Individual Counseling

Professional career counselors are available to assist with questions pertaining to any facet of the career decision-making process, from deciding on a specific business path to finding out how to effectively search for a job. Topics which are frequently discussed include: selecting a specialization, researching companies, obtaining experience through volunteer and internship positions, job search strategy, and marketing the value of a graduate degree. Those interested in discussing these or other issues are encouraged to drop by or set up appointments by calling or visiting the Career Center.

### Website and Career Resource Library

The Career Center's website and Career Resource Library contain a wealth of information on a variety of topics related to the career planning process. Materials include information on occupations, labor market trends, salary levels, job hunting, resume writing, employment interviewing, and many other areas. Those MBA students interested in pursuing doctoral study can look through directories and information on entrance tests required. Detailed information on potential employers, including annual reports and related documents, is included in what's available

### Admission Requirements of the MBA Program

The College of Business graduate programs are designed for ambitious and analytical students who are capable of applying what they learn toward the solutions of organizational problems. New students can begin the Stony Brook MBA in the Fall or Spring semester. The MS in Accounting and MS in Finance programs can be started in the Fall semester only.

All graduate applications are submitted online through the following Website: <https://app.applyyourself.com/?id=sunysb-gs>. Applicants are encouraged to submit a current resume along with their online application and personal statement. The requirements for the business graduate programs include:

A. A bachelor's degree with a minimum grade point average of 3.0. In exceptional cases, students not meeting the GPA requirement may be considered for admission on a conditional basis. Official transcripts can be mailed directly to the College of Business or sent electronically to [CoBadmissions@stonybrook.edu](mailto:CoBadmissions@stonybrook.edu). We strongly encourage foreign transcripts to be evaluated by World Education Services (WES) or another NACES member association.

B. Aptitude for quantitative analysis, demonstrated through previous coursework, standardized tests, or practical experience. All applicants must have successfully completed an introductory calculus course (MAT 123 or equivalent) with a grade of C or higher.

C. Submission of Graduate Management Admission Test (GMAT) scores or GRE scores

D. Three letters of recommendation, one of which, if possible, should be from a professional working in a private company or public agency who is capable of evaluating the applicant's motivation and potential. The three letters of recommendation should also include at least one from a college faculty member, counselor, or administrator. Letters of recommendation should be submitted through ApplyYourself.

E. Applicants whose first or primary language is not English, must submit one of the following:

A TOEFL internet-based score of 85 or above

An IELTS test with an overall score of 6.5 or above, with no sub-scores below 6.0. Acceptance by both the College of Business and the Graduate School.

G. \$100 application fee.

In addition to the criteria stated above, the MBA in Accounting and MS in Accounting programs have further requirements. Applicants to these programs must have completed 21 credits of accounting prerequisites and one 3 credit law course. In addition, applicants to the MS in Accounting

program must have completed 30 credits in general business (non-accounting) coursework. Please refer to the program website for detailed prerequisite information.

#### Application Deadlines:

Application deadline for MBA Programs for the Spring semester is November 15th; International Applicants should apply by October 15th. Application deadline for MS Programs for the Fall semester is May 15th; International Applicants should apply by March 15th. Application deadline for MBA Programs for the Fall semester is June 15th; International Applicants should apply by March 15th. Applications may be considered after these dates, as long as space is available.

For additional information, please visit [www.stonybrook.edu/business](http://www.stonybrook.edu/business) or email [CoBadmissions@stonybrook.edu](mailto:CoBadmissions@stonybrook.edu)

Office of Student Services  
Harriman Hall, Room 109  
College of Business  
Stony Brook University  
Stony Brook, New York  
11794-3775  
(631) 632-7171  
E-mail: [CoBadmissions@stonybrook.edu](mailto:CoBadmissions@stonybrook.edu)

#### Certificate Programs

Applications for the Advanced Graduate Certificate Programs are available through the School of Professional Development, with the exception of the Health Care Management Certificate, which is available through the School of Health Technology and Management. Admission into an AGC does not guarantee admission into the MBA program. Students must submit a separate application directly to the MBA program or MS in Finance Program to be considered for admission. Students who are accepted into a Master's program may apply up to 12 credits towards their degree program. Students must declare their decision to matriculate into a master's program before the completion of 12 credits.

Note that, although it is a valuable academic credential, an Advanced Graduate Certificate is not a degree.

#### Certificate Program in Finance

The 18-credit Advanced Graduate Certificate (AGC) in Finance prepares students for careers in financial management, including financial analysis, portfolio management, investment banking and corporate financial associate positions. The curriculum places an emphasis on developing financial analytical skills. It offers in-depth knowledge of the principles and techniques of finance and accounting needed to understand how corporate financial objectives are developed, measured and reported, as well as the central issues in government regulation, taxation and financial reporting.

The AGC in Finance is a part-time program designed for working professionals. Courses are scheduled in the evening, and several of them are offered completely online

#### Certificate Program in Human Resource Management

The Advanced Graduate Certificate in Human Resource Management is a program for private- and public-sector managers, labor relations specialists, and union representatives, human resources/personnel managers, and employee training professionals. The program, leading to the New York State Advanced Certificate in Human Resources Management, requires a bachelor's degree from an accredited college. This program is administered by the School for Professional Development. For further information and to apply, please refer to the following Web site: <http://ws.cc.sunysb.edu/spd/graduate/hrm.html>

#### Certificate Program in Health Care Management

The Advanced Graduate Certificate Program in Health Care Management is a professional development program intended for health practitioners who require management training and for managers who require specific training in the health care field. It offers participants a comprehensive understanding of health care and management and helps them develop the analytical capabilities to be effective managers. The Advanced Certificate Program in Health Care Management is a joint program of the School of Health Technology and Management and the College of Business.

The program is designed to meet the needs of (1) working professionals who are part-time students and (2) full-time graduate students at the University. Many courses are offered in the late afternoon or early evening. Certificate program students are required to complete the program within a three-year period. Graduate students who pursue either the Master of Science in Health Sciences in the School of Health Technology and Management or the MBA in the College of Business may obtain the certificate as they earn credits toward graduation. For further information and to apply, please refer to the following Web site: <http://www.hsc.stonybrook.edu/shtm/programs/hcpm/hcpm.html>

#### Facilities of the MBA Program

#### Research

Faculty members in the College of Business are strongly committed to teaching and fostering working relationships with students inside and outside the classroom, while maintaining their involvement in research.

In their research, Business professors examine complex issues and problems confronting today's managers and decision makers. They analyze businesses and other institutions as well as the economic, regulatory, and technological forces underlying decision-making processes and ongoing changes within these organizations. They keep close contact not only with other researchers in the United States and abroad, but also with regional, national, and international businesses by conducting applied research projects and working as consultants.

Students at the College of Business benefit from this high-caliber research in several ways. Faculty members often revise and develop new course materials to incorporate current research into their teaching and instruction. Exposing students to the latest knowledge and management skills best prepares them for future challenges and, at the same time, makes the classroom experience dynamic and stimulating. Business students work closely with professors and all students are invited to participate in seminars conducted by the school's researchers.

The College houses Centers for Human Resource Management, Health Services Research Management, Information Systems Management, Center for Operational Excellence, and the Innovation Center. Quality research conducted by the centers contributes significantly to the College's academic programs. In addition, the centers' applied and interdisciplinary research promotes valuable interactions with industry, government, and nonprofit organizations and provides hands-on experience to students.

#### Behavioral Research Lab

The College of Business Behavioral Research Lab provides a space for faculty to conduct experiments and test theories that will help consumers, managers, and organizations make better decisions. The lab is equipped with computers and recording equipment to support the growing number of researchers who serve as principle investigators in areas such as behavioral finance, consumer behavior, and organizational behavior. The space may be reserved by faculty in the College of Business and students conducting research studies under the supervision of a faculty member in the College of Business.

#### Requirements for the Masters Degree in Business Administration

The MBA curriculum prepares students for careers in management in business, government, and nonprofit organizations. The MBA may be pursued either full-time or part-time. Full-time students require two years of coursework with an internship in the summer between the two years. Part-time students may follow the same curriculum over a longer period, not to exceed five years. Admission is available in the fall and spring.

Students in the 5 year, 60-credit, Combined BA/BS/BE + M.B.A program complete the first year of the MBA after their junior year and prior to their fifth year at Stony Brook.

The College of Business offers MBA 3 different credit track options for the MBA in Accounting, MBA in Finance, MBA in Health Care, MBA in Marketing and MBA with options to concentration in either Human Resources, Innovation, Management, or Management Operations.

**60 Credit MBA Track:** The 60 credit track is required for students in the BA/BS + MBA program, as well as students who would like the option to take additional elective courses to gain a more in depth knowledge of their field of study. The 60-credit program is comprised of 18 three-credit courses plus a six-credit industry project. The 18 courses include 11 required core courses plus 7 electives. Four of the seven elective courses must be taken in the respective degree subject area or a student's field of concentration, (Human Resources, Innovation, , or Management). This 60-credit program is completed over a two-year period. Students in the 60 credit program are required to complete an internship. The internship is typically completed during the Summer after the first year of the program.

#### Internship Requirement

The College of Business internship program provides full time students with important practical training in business management. Ideally the internship is a paid eight-to twelve-week full-time summer position in a business, government, or nonprofit organization. Students must write a faculty-approved internship report in the semester following the internship. All 60 credit students must enroll in MBA 599, Internship Practicum, for zero to one credit in the term during which they are participating in their internships.

**48 Credit MBA program:** All students who have earned a Bachelor's Degree (regardless of the major), are eligible for the 48 credit track. The curriculum includes curriculum requires 16 three-credit courses (MBA 501-MBA 507; MBA 511; MBA 512; MBA 522; MBA 589; MBA 592). Within the 16 three-credit courses, students take 12 required core courses, including a 3 credit industry project (MBA 522) and 4 electives, which must be in the area of your degree program or from one of the areas of concentration..

**36 Credit MBA Track:** Students who have earned a Bachelor's degree in business are eligible for a 36 credit MBA. Students will take 12 three-credit courses, which includes seven required core courses (MBA 501; MBA 503; MBA 506-507; MBA 511; MBA 512; MBA 522 - a 3 credit industry project) and five elective courses. Four of the 5 elective courses must be taken in the respective degree subject area or from one of the concentrations. Students will not have to take the following core courses: MBA 502, 504, 505, 589, or 592.

**Part-time MBA:** Offering a flexible evening and Saturday course schedule to accommodate work schedules, this program can be completed between two and five years. We also offer convenient summer courses to help accelerate program completion.

#### Core Courses

Our core courses cover a broad range of topics in the first year, including finance, accounting, marketing, leadership, team building, communications, decision-making, economics, innovation, ethics, law, operations research and organizational behavior. In the second year, students focus on an area of concentration such as information management, finance, marketing, human resources, health system management or general management. Students also engage in an industry project in the second year to get hands-on experience in applying the knowledge from the classroom to the business world. Finally, students take a capstone course in business strategy.

**Concentrations:**

Students must take 4 electives from their specific area of concentration in order to earn that concentration.

36 credit track: Students in the 36 credit track will take a total of five 500-level MBA elective courses, four of these must be in their area of concentration.

48 credit program: Students in the 48 credit program must take four elective courses in their area of concentration.

60 credit program: Students in the 60 credit program will take seven (7) 500-level MBA elective courses, four of these must be in their area of concentration.

Innovation Concentration Electives: BUS 554, BUS 567, FIN 552, MBA 509, MBA 538/HRM 538, MBA 530, MBA 540, MBA 563, MBA 570, MBA 571, MBA 574, MKT 535, MKT 565, MKT 567

Human Resources Concentration Electives: HRM 532, HRM 533, HRM 537, HRM 538, HRM 541, HRM 545, HRM 547, MBA 530

Management Concentration Electives: MBA 509, MBA 515, MBA 517, MBA 530, HRM 538/MBA 538, MBA 540, MBA 543, MBA 560, MBA 563, MBA 566, MBA 570, MBA 571, MBA 574, MBA 588, BUS 554, BUS 567, FIN 536, FIN 549, FIN 552, FIN 541, MKT 516, MKT 518, MKT 535, MKT 555, MKT 575, MKT 564, HRM 532, HRM 533, HRM 547

Operations Management Concentration Required Course: MBA 543; Electives: MBA 509, 517, 540, 574, 587, 595

**MBA in Finance**

Finance lies at the heart of both corporate and governmental success. Critical financial decisions involving the creation of capital, its day-to-day management, and its redeployment into more productive areas of companies and the economy are central to the continued prosperity of businesses and nations around the world. Stony Brook's MBA in Finance will prepare students for positions in corporate finance, investment banking, financial management, broker-dealer firms, consulting firms, commercial banks, financial markets, securities firms and government agencies.

**The 60-credit MBA in Finance track** curriculum comprises 18 three-credit courses plus a six-credit industry project (MBA 521). Within the 18 three-credit courses, students take 11 required core courses plus 7 electives, 4 of which must be finance electives. We strongly encourage students to take all \*\*7 electives in the area of finance. Students in the 60-credit program are also required to complete an internship (MBA 599).

**The 48-credit MBA in Finance track** curriculum requires 16 three-credit courses. Within the 16 three-credit courses, students take 12 required core courses, including a 3-credit industry project (MBA 522) and 4 finance electives.

**The 36 credit MBA in Finance track** requires 12 three-credit courses. Within the 12 courses, students take 7 required core courses including a 3 credit industry project (MBA 522), and 5 elective courses. Four of these electives must be Finance electives. \*Students will not have to take the following core courses: MBA 502, 504, 505, 589, or 592.\*

**Course Requirements for the MBA in Finance**

MBA 501 - Management Economics

\*MBA 502 - Finance

MBA 503 - Data Analysis & Decision Making

\*MBA 504 - Financial Accounting

\*MBA 505 - Marketing

MBA 506 - Leadership & Team Effectiveness

MBA 507 - Ethics & Law

MBA 511 - Technological Innovations

MBA 512 - Bus Planning & Strat Mgt

MBA 521/522 - Industry Project

\*MBA 589 - Operations Management

MBA 592 - Organizational Behavior

**Elective courses:**

36 credit track: Students in the 36 credit track will take a total of five 500-level MBA elective courses, four of these must be FIN courses.

48 credit program: Students in the 48 credit program must take four FIN elective courses.

60 credit program: Students in the 60 credit program will take seven 500-level MBA elective courses, four of these must be FIN courses.

### **MBA in Marketing**

In today's competitive business environment a strong knowledge of marketing is necessary since one must understand how to stand out and effectively compete against other companies who are targeting the same population. Marketing is a discipline which relies on psychology, sociology and others and applies this knowledge to the exchange process where a company or individual is completing a sale. One must understand consumer behavior, the competitive environment, the company and the culture in which one operates. At the more micro level, the effective marketer must regulate elements of the marketing mix in bringing their product to market. Understanding how to price, promote, distribute and create the right product is essential if one is to achieve success. Understanding how consumers think and what motivates them to purchase is essential in an environment where everyone is competing for the same sale. The M.B.A. in Marketing will prepare students for careers in Brand Management, Product Management Advertising and/or Marketing Research.

**The 60-credit MBA in Marketing track** curriculum comprises 18 three-credit courses plus a six-credit industry project (MBA 521). Within the 18 three-credit courses, students take 13 required core courses plus \*\*5 electives, 2 of which must be marketing electives. We strongly encourage students to take all 7 electives in the area of marketing.

**The 48-credit MBA in Marketing track** curriculum requires 16 three-credit courses. Within the 16 three credit courses, students take 14 required core courses, including a 3 credit industry project (MBA 522) and 2 Marketing electives.

**The 36 credit MBA in Marketing track** requires 12 three-credit courses. Within the 12 courses, students take 9 required core courses, including a 3 credit industry project (MBA 522), and 3 elective courses. Two of these electives must be marketing electives. \*Students will not have to take the following core courses: MBA 502, 504, 505, 589, or 592.\*

### **Course Requirements for the MBA in Marketing**

MBA 501 - Management Economics

\*MBA 502 - Finance

MBA 503 - Data Analysis & Decision Making

\*MBA 504 - Financial Accounting

\*MBA 505 - Marketing

MBA 506 - Leadership & Team Effectiveness

MBA 507 - Ethics in Management

MBA 511 - Technological Innovations

MBA 512 - Bus Planning & Strat Mgt

MBA 521/522 - Industry Project

\*MBA 589 - Operations Management

MBA 592 - Organizational Behavior

\*MBA 565 - Marketing Reserach

\*MBA 567 - Marketing Strategy

### **Elective courses:**

36 credit track: Students in the 36 credit track will take a total of five 500-level MBA elective courses, two of these must be MKT elective courses.

48 credit program: Students in the 48 credit program must take two MKT elective courses.

60 credit program: Students in the 60 credit program will take seven 500-level MBA elective courses, two of these must be MKT courses.

### **MBA in Health Care Management**

The College of Business offers an MBA in Health Care Management Degree. This degree prepares students for careers in the exciting and tremendously growing field of health care. From industries such as hospitals, insurance and health services, to pharmaceuticals, biotech, and consulting, there is a huge demand for business professionals with health care acumen. This program will provide students with knowledge in health management, regulations, delivery systems and various industry segments that span the health systems of the 21st century. Courses in this program are offered in collaboration with Stony Brook's School of Health Technology and Management and the College of Business. In addition to health care management expertise, the degree will equip students with broad skills and knowledge in business, accounting, finance, marketing, operations, management, and leadership. It allows for 4 classes in the health care management area, allowing students exposure to various aspects of health care management functions across various types of health care organizations.



**The 60-credit MBA in Health Care Management track** curriculum comprises 18 three-credit courses plus a six-credit industry project (MBA 521). Within the 18 three- credit courses, students take 11 required core courses plus \*\*7 electives, 4 of which must be Health Care Management electives. We strongly encourage students to take all 7 electives in the area of Health Care Management. Students in the 60-credit program are also required to complete an internship (MBA 599).

**The 48-credit MBA in Health Care Management track** requires 16 three-credit courses. Within the 16 three- credit courses, students take 12 required core courses, including a 3 credit industry project (MBA 522) and 4 Health Care Management electives.

**The 36 credit MBA in Health Care Management track** requires 12 three-credit courses. Within the 12 courses, students take 7 required core courses, including a 3 credit industry project (MBA 522), and 5 elective courses. Four of these electives must be Health Care Management electives. \*Students will not have to take the following core courses: MBA 502, 504, 505, 589, or 592.\*

#### **Course Requirements for the MBA in Health Care**

MBA 501 - Management Economics

\*MBA 502 - Finance

MBA 503 - Data Analysis & Decision Making

\*MBA 504 - Financial Accounting

\*MBA 505 - Marketing

MBA 506 - Leadership & Team Effectiveness

MBA 507 - Ethics & Law

MBA 511 - Technological Innovations

MBA 512 - Bus Planning & Strat Mgt

MBA 521/522 - Industry Project

\*MBA 589 - Operations Management

MBA 592 - Organizational Behavior

#### **Elective courses:**

36 credit track: Students in the 36 credit track will take a total of five 500-level MBA elective courses, four of these must be HAS elective courses.

48 credit program: Students in the 48 credit program must take four HAS elective courses.

60 credit program: Students in the 60 credit program will take seven 500-level MBA elective courses, four of these must be HAS courses.

#### **MBA in Accounting**

The College of Business is committed to providing students with a high quality education in accounting with a combined emphasis on theory and practical application. The MBA in Accounting is designed to provide students with the theoretical knowledge and analytical tools necessary to function in public accounting or private industry. The program will meet the education requirements for the Uniform Certified Public Accounting exam and licensing in New York State. We have designed the MBA in Accounting to accommodate a variety of students by establishing three paths of study. All three paths require the completion of accounting prerequisites prior to acceptance into the program

#### **Traditional 60 Credit MBA in Accounting Program**

Requires 18 three-credit courses plus a six-credit industry project (MBA 521). Within the 18 three- credit courses, students take 10 required core courses plus 8 accounting courses: ACC 542, ACC 562, ACC 590, ACC 591, ACC 594, ACC 596, ACC 597 and ACC 598. Students in the 60-credit program are also required to complete an internship (MBA 599).

#### **48 Credit MBA in Accounting Program**

Requires 16 three-credit courses. Within the 16 three- credit courses, students take 11 required core courses, including a 3 credit industry project (MBA 522) and 5 accounting courses: ACC 542, ACC 562, ACC 596, ACC 597, ACC 590.

#### **36 Credit MBA in Accounting Track**

Requires 12 three-credit courses. Within the 12 courses, students take 7 required core courses, including a 3 credit industry project (MBA 522), and the following 4 Accounting courses: ACC 562, ACC 596, ACC 597, ACC 590. Students 36 credit track will also take one additional MBA elective. \*Students in the 36 credit track will not have to take the following core courses: MBA 502, 504, 505, 589, or 592.\*

#### **Accounting/Prerequisite Requirements**

ACC 210 – Financial Accounting

ACC 214 – Managerial Cost Analysis and Applications

ACC 310 – Intermediate Accounting I

ACC 311 – Federal Income Taxation I

ACC 312 – Financial Statement Reporting and Analysis

ACC 314 – Federal Income Taxation II

ACC 400 – External Auditing

BUS 325 – Legal Environment of Business

### **MBA in Accounting Core Course Requirements**

MBA 501 – Managerial Economics

MBA 502 - Finance

MBA 503 – Data Analysis and Decision Making

MBA 505 – Marketing

MBA 506 – Leadership and Team Effectiveness

MBA 507 - Ethics and Law

MBA 511 – Technological Innovations

MBA 512 – Business Planning and Strategic Management

MBA 522 – Industry Project

MBA 589 – Operations Management

MBA 592 – Organizational Behavior

### **MBA Accounting Courses**

ACC 542 – Accounting for the Small Business Entrepreneur

ACC 562 – Accounting Information Systems

ACC 590 – Advanced Auditing & Assurance

ACC 591 – Internal Auditing

ACC 594 – Governmental and Not-For-Profit Accounting

ACC 596 – Financial Accounting Theory

ACC 597 – Advanced Accounting Problems

ACC 598 – Forensic Accounting

**Accelerated "Fast Track" BA/BS/BE + MBA:** A 48-credit accelerated MBA program for high achieving current Stony Brook undergraduate students. This program permits students to begin taking graduate credits during their undergraduate career. In their fifth year, students typically go directly into the second year of the MBA program. Students have opportunities for a summer study abroad and an internship. Contact the College of Business for a complete list of eligible majors and admissions criteria.

### **Dual Degree Programs**

- Combined MBA/ MA in Art History
- Combined MBA / MS in Mechanical Engineering Combined MBA / MS in Computer Science
- Combined MBA / MS in Biomedical Engineering Combined MBA / MS in Public Policy
- Combined MPH (Public Health)/ MBA
- Combined MD / MBA

### **MS in Accounting**

The Master of Science in Accounting is designed to provide students with the theoretical knowledge and analytical tools necessary to function in public accounting or private industry. The program will meet the education requirements for the Uniform Certified Public Accounting exam and licensing in New York State. This is a 30 credit program designed to be taken full time over the course of two semesters. Students must meet all prerequisites to be considered for this program. This program offers only Fall admission.

Prerequisites: 30 general business credits; 3 law credits; accounting specific prerequisites: ACC 210, ACC 214, ACC 310, ACC 311, ACC 312, ACC 314, ACC 400

### **Course Requirements for the MS in Accounting**

ACC 542 – Accounting for the Small Business Entrepreneur ACC 562 – Accounting Information Systems

ACC 590 – Advanced Auditing & Assurance ACC 591 – Internal Auditing

ACC 594 – Governmental and Not-For-Profit Accounting ACC 596 – Financial Accounting Theory

ACC 597 – Advanced Accounting Problems ACC 598 – Forensic Accounting

ACC 580 – Accounting Capstone

MBA 506 – Leadership, Team Effectiveness

MBA 507 – Ethics and Law

### **MS in Finance**

The Master of Science in Finance is a unique opportunity to further your education in the field of finance. This 30 credit program is well suited to financial professionals who seek advanced finance skills, as well as students from other disciplines who seek to strengthen their finance expertise.

The Master of Science in Finance focuses on finance-specific topics, requiring ten finance based courses culminating in an expertise of the discipline. This program will focus on developing an understanding of financial concepts and applications, preparing students to work in various areas of commercial finance such as, banking, investments and corporate finance.

### **Course Requirements for the MS in Finance**

MBA 502 Finance

FIN 536 Financial Management

FIN 539 Investment Analysis

FIN 540 Probability & Statistics for Finance

FIN 541 Bank Management

FIN 545 Capital Markets

FIN 549 Risk Management

FIN 552 Merger and Acquisitions

FIN 578 Behavioral Finance

FIN 580 Finance Capstone Course

### **MS in Technology Management - Korea**

The Master of Science in Technology Management (MS – TM) is offered jointly by the College of Business and the School of Integrated Sciences & Technologies (aSSIST). This program was created with an emphasis on business and technology to meet the needs of Korea's working professionals.

Students will take a total of 36 credits of TMP courses. Each course is 1.5 credits. The program is offered in a lock-step cohort over the course of one year. Exact courses and schedule of classes will be determined prior to the commencement of each new cohort. The majority of instruction for this program will take place in Korea with a three-week summer study at Stony Brook University's main campus.

Faculty of the MBA Department

Dean

London, Manuel, also Director of the Center for Human Resource Management. Ph.D., 1974, Ohio State University: Performance management programs; training & development; team learning.

Associate Dean

Holod, Dmytro., Ph.D. 2005, University of Kentucky: Economics; banking and financial intermediation; financial markets and institutions; monetary policy; economic growth.

## Professors

Kamins, Michael A., Ph.D., 1984, New York University: Marketing.

Laskowski, Richard, Ed.D., 1982, St. Johns University: Sports management; introduction to business.

Skorin-Kapov, Jadranka, Ph.D., 1987, University of British Columbia, Canada, Ph.D., 2007, Stony Brook University: operations management; operations research; decision sciences.

Sexton, Thomas R., Ph.D., 1979, Stony Brook University, Applied Math & Statistics, research focus on productivity and efficiency theory and analysis

Wolf, Gerrit, Ph.D., 1967, Cornell University; Entrepreneurship; Organizational behavior; human resources management; international management.

## Associate Professors

Holod, Dmytro., Ph.D. 2005, University of Kentucky: Economics; banking and financial intermediation; financial markets and institutions; monetary policy; economic growth.

Jiang, Danling, Ph.D., 2006, Ohio State University: Finance

Kim, Francis, Ph.D., 1994, Baruch College: Accounting

Lewis, Herbert F., Ph.D., 1996, Stony Brook University, Applied Math & Statistics: focus in Operations Research

Yang, Zhifeng, Ph.D., 2006, University of Alberta: Finance

## Assistant Professors

Amin, Keval Ph.D., 2014, Temple University Fox School of Business: Accounting

Connell, Paul M., Ph.D., 2008, University of Arizona: Marketing; consumer psychology related to identity; attitudes and behavior; public policy.

Bear, Julia, Ph.D., 2010, Carnegie Mellon University: Organizational Behavior and Theory

Buhrau, Denise, Ph.D. 2010, Tulane University, consumer behavior; particularly in the context of health behaviors.

Cao, Jiyin, Ph.D., 2015, Northwestern University Kellogg School of Management: Management & Organization

Caprariello, Peter, Ph.D. 2012, University of Rochester, consumer behavior; specifically specifying the relationship context of life experiences versus material possessions affords a more complete understanding of how money can be spent in the pursuit of happiness

Chan, Richard (Chien-Sheng), Ph.D., 2010, University of Washington Seattle: Management & Organization with a focus on technology entrepreneurship, behavioral decision theory and research methods.

Cushenbery, Lily, Ph.D., 2012, Pennsylvania State University, University Park: Industrial Organizational Psychology.

Delton, Andrew W., Ph.D., 2010, University of California Santa Barbara: Psychology

Feng, Qian (Cecilia), Ph.D. Candidate (expected 12/2014), Temple University Fox School of Business: Accounting

Huang, Julie Y., Ph.D., 2011, Yale University: Social Psychology

Kim, Aaron, Ph.D., 2005, Sogang University, Seoul, Korea: Mathematics.

Liu, Ting, Ph.D. 2008, Boston University, Economics, in the areas of industrial organization, health economics, and applied microeconomic theory.

Pew, Ethan, Ph.D. 2012, University of Colorado, consumer behavior, in the context of investment decision making

Robertson, Theresa E., Ph.D., 2011, University of California Santa Barbara: Psychology

Sherman, Gary, Ph.D., 2011, University of Virginia: Social Psychology

Torna, Gokhan, Ph.D., 2013, University of Kansas: Finance Xiao, Keli, Ph.D., 2013, Rutgers University: Finance

Xiao, Keli, Ph.D., 2013, Rutgers: Finance

Zhou, Yiyi, Ph.D., 2012, University of Virginia, Economics, in the areas of dynamic pricing and the video game market

## Research Professors

Barragto, Charles A., Ph.D., 2002 Baruch College: Business

Comunale, Christie, Ph.D., 1999, University of South Florida: Accounting

Pitocco, Christine, Ph.D., 2013, CW Post Long Island University: Philosophy

Stoyanov, Stoyan, Ph.D., 2005, Karlsruhe Institute of Technology, Germany: Mathematical Finance

#### Lecturers

*Abbruscato, Camille; M.B.A, Dowling College: Marketing, marketing strategy, marketing research, brand management, new product development.*

*Allocca, Carl, Director of Undergraduate Studies, MST, CPA, Long Island University: Public and private accounting; auditing; taxation; internal control, systems development.*

*Ettl, Robert., M.B.A., Iona College; M.C.A., New York Institute of Technology; M.B.A., Penn State: Marketing; strategic planning; government relations; public relations.*

*Lekacos, Aristotle T. M.S., Polytechnic Institute of New York: Information systems; business strategic; entrepreneurship; innovation; simulations.*

*Nugent, Michael., M.B.A., Dowling College: Financial Engineering; derivatives; international finance; capital markets and institutions; foreign exchange markets; investment analysis; corporate finance; business strategy.*

*Palermo, Mark R., J.D., Hofstra University School of Law; M.B.A., Adelphi University: Finance; strategy; economics; law; general business.*

#### Affiliate Faculty

*Brusco, Sandro, Ph.D., 1993, Stanford University: Economic Analysis & Policy.*

*Pittinsky, Todd, Ph.D., 2001, Harvard University.*

*Tauman, Yair, Ph.D., 1979, The Hebrew University of Jerusalem, Israel: Mathematics.*

#### Adjunct Faculty

*Aguayo, Rafael, M.B.A, Finance and International Business*

*Coverdale, John, Human Resources Delgaizo, Edward, Ph.D., Human Resources Feinberg, Ronald, Management*

*Higuera, Michael Shane, Ed.D., Management and Business Analytics*

*Kerr Daniel, Ph.D., C.P.A., Accounting and Auditing*

*Mager, Thomas, M.B.A*

*Mone, Edward, M.A., Human Resource Management*

*Pack, Lori, J.D., M.B.A., Marketing and Human Resources*

*Rosner, Lee, Real Estate Finance*

*Tallerico, Thomas, M.S.; M.B.A., Finance*

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

## Africana Studies

**Chairperson:** Tracey L. Walters, Ward Melville Social & Behavioral Sciences Bldg., S-245 (631) 632-7470

**Graduate Program Director:** E. Anthony Hurley, Melville Social & Behavioral Sciences Bldg., S-239 (631) 632-7470

**Assistant-to-the-Chair:** Ann Berrios, Ward Melville Social & Behavioral Sciences Bldg., S-249 (631) 632-7470

**Program Coordinator:** Ann Berrios

**Degree Awarded:** M.A., Graduate Certificate in Africana Studies

**Website:** [www.stonybrook.edu/afs](http://www.stonybrook.edu/afs).

## Application

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-gs](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-gs)

## Africana Studies

The Department of Africana Studies (AFS) in the College of Arts and Sciences (CAS) offers a program of interdisciplinary studies leading to a Master of Arts or a Graduate Certificate in Africana Studies. Our graduate program is for anyone who wants to have a more profound understanding of the contemporary globalized world. The M.A. in Africana Studies is intended to develop an understanding of the experiences of people of African descent in all regions of the globe and across time. This unique program presents approaches and knowledges radically and fundamentally different from those encountered in traditional disciplines, by applying the symbolic potential of Africa and African ideas and ways of being and thinking as a prism for enhancing human understanding and knowledge. In so doing, the M.A. and Graduate Certificate (GC) meet the need for academic inquiry and excellence at the graduate level spanning the experiences, history and perspectives of African heritage peoples (United States, Caribbean/Latin America, Africa) and enhance professional development in a range of careers and professions where knowledge and increased understanding of Black communities past and present are important. Included among these areas are education, law, management, medicine, public health, public service, social welfare, museum curatorship, cinema studies and teaching. Our graduate programs also increases marketability in a range of traditional doctoral programs including Cultural Studies, English, History, Philosophy, Social Welfare, Sociology, and others.

The graduate program in Africana Studies offers a broad inquiry into the ideas and experiences of African peoples in the Americas, the continent of Africa, and elsewhere around the globe. The focus of the program is interdisciplinary, organized around a comparative perspective of the African Diaspora. Emphasis is placed on the intersection between African, the Caribbean-Latin American, and African American experiences. Students will examine the Diaspora with particular attention focused on African American, Caribbean-Latin American, and continental African cultures, histories, literatures, political systems, religions, and economies in the overlapping context of developing African communities initially linked by the waterways of the Atlantic.

M.A. students pursuing M.A.T. and MLS degrees in academic and professional programs outside of Africana Studies may gain approval from their academic units if seeking to designate Africana courses as a cognate area.

Gainful Employment Regulation Disclosure

## Admission

Student admissions standards and selection procedures are identical to those followed by the Graduate School of Stony Brook University. In addition to the minimum Graduate School requirements, the Africana Studies Department has specific degree requirements.

1. A bachelor's degree is required with a 3.00 (B) in all social science and humanities courses.
2. Two official copies of previous college transcripts must be submitted.
3. Three letters of recommendation that address the applicant's potential to succeed in a program of graduate study.
4. Submission of scores from the Graduate Record Examination (GRE) General Test.

## Facilities

The Department of Africana Studies possesses in-house library facilities. The Richard B. Moore Library was established years ago with a generous gift of several thousand books from Joyce and Burghardt Turner. Dr. Turner was a former Stony Brook professor, after whom the W. Burghardt Turner Fellowship for Underrepresented Students is named. Some of the donations from the Turner family include irreplaceable early editions of items not found even in the general or special collection of the university. They have also donated photographic and art work on display in the library. In addition, the Richard B. Moore Library houses sculpture and paintings donated by AFS alumni. Book and art items in our unit's library are supplemented by a valuable tape collection, housed in a separate Media Laboratory and Archives. In this collection are tapes made by students of lectures, symposia, cultural events, demonstrations and other happenings held on campus during past years. Also, AFS professor emeritus and poet Amiri Baraka deposited in our media archives copies of his invaluable video holdings dealing with key political and literary events with which he had been involved. (These Baraka tapes will eventually become part of the holdings of the Schomburg Center for Black History and Culture). Our Richard B. Moore Library maintains regular daytime hours during the week, and is used by students from various parts of the campus.

AFS also has a Computer Lab, maintained by the Division of Instructional Technology, with several terminals, available for use by students.

## Requirements

The M.A. degree requires a total of 30 graduate course credits with an overall minimum GPA of 3.0. Eighteen (18) of these credits will be in the Africana Studies Graduate Core Curriculum. Twelve (12) of thirty (30) credits may be part of an elective mix of AFS graduate courses and AFS approved graduate courses taken outside the Africana Studies Department in academic areas approved by AFS. Included within the twelve (12) credits are a research thesis project (6 credits). Students may arrange at their own initiative an opportunity to earn six (6) credits in a study abroad program conducted in Africa and/or the Caribbean-Latin America with Stony Brook's International Academic Programs Office (IAP) which regularly commits to travel-study programs particularly in Africa both in the summer months and during the university's winter session in efforts to widen the range of approaches to international understanding. Importantly as well, a small number of the courses offered by the M.A. Program in Africana Studies can be taken by students in the M.A.T.(Master's of Arts in Teaching) Program in Social Studies Education to fulfill the requirements of that program.

The Department of Africana Studies (AFS) has a tradition of interdisciplinary teaching and research, as reflected in the themes, and the theoretical and historical perspectives of the master's degree courses. The foundation courses are required of all students pursuing the M.A. degree. The two-semester sequence introduces students to the theoretical and methodological issues of the African Diaspora. A required research seminar introduces students to the historiography of the African Diaspora.

The Graduate Certificate requires a total of 15 graduate course credits found in the Africana Studies core curriculum. Students must maintain an overall minimum GPA of 3.0. Students applying to pursue the GC should also have a 3.0 during their undergraduate years. Six(6) of the credits for the GC are in foundational courses listed as 500/501 and 502. The remaining 9 credits may be selected from a mix of seminar classes approved by an AFS Department graduate advisor. The application process can be started online by clicking "Admissions" on the main SBU web page and following the appropriate instructions.

## Requirements for the M.A in Africana Studies

1. Foundations in Africana Studies, I, II  
AFS 500; AFS 501 (6 credits)
2. Research Methods in Africana Studies  
AFS 502 (3 credits)
3. 3 courses (9 credits) from the following courses:  
AFH 520, AFH 524, AFH 528, AFS 530, AFS 433, AFS 536, AFS 540, AFS 550, AFS 555, AFS 570
4. Additional 12 credits chosen in consultation with the student's advisor:  
include a thesis research project, AFS/AFH 599 (6 credits);  
electives chosen in consultation with advisor and oral exam (6 credits);  
or study abroad research (6 credits)

## Faculty

The Department of Africana Studies (AFS) provides academic excellence in teaching and research on African Diasporic life and culture as part of its mission at Stony Brook University. The M.A. Faculty of the Department of Africana Studies is composed of AFS core faculty, and Affiliate faculty from other departments. A listing of Affiliate faculty is available in the AFS main office.

## Core Faculty

Asare, Abena, Ph.D., New York University; Philosophy and History; History of Ghana, (Truth, Reconciliation and Human Rights in Post Independence Africa).

Fouron, Georges, Ed.D., Columbia University; Social studies education; bilingual education; identity; Haiti; immigrants' experience in America; transnationalism.

Gulema, Shimelis Bonsa, Ph.D., University of California; African History (Post Colonial Formations, Migration Economy, Identification, Urbanization and Ethnicity).

Harris, Dawn, Ph.D., York University; Caribbean History and Culture

Hurley, E. Anthony, Ph.D., Rutgers University; Francophone literature of the Caribbean and Africa; Caribbean poetics; Afro-Caribbean culture; Caribbean American literature.

Walters, Tracey, Ph.D., Howard University; African American literature, Caribbean literature, African literature; Pan-African literature; Black British literature and culture; 20<sup>th</sup> Century American and British literature; journalism.

Frank, Barbara, Ph.D., Indiana University; African Mesoamerican, and African Diaspora art history.

Oyewumi, Oyeronke, Ph.D., University of California, Berkeley; Gender; race; family; cultures; social inequalities; globalization.

## Professor Emeritus

Amiri Baraka, Playwriting, Pan-Africanism; contemporary affairs; literature.

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

## Anatomical Sciences

**Chairperson**

Randall Susman, Health Sciences Center T-8, Room 040 (631) 444-3125

**Graduate Program Director**

Maureen A. O'Leary, Health Sciences Center T-8, Room 088 (631) 444-3730

**Staff Associate**

Christine Johnson, Health Sciences Center T-8, Room 040 (631) 444-3114

**Degree Awarded**

Ph.D. in Anatomical Sciences

**Web Site**

<https://medicine.stonybrookmedicine.edu/anatomy>

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-gs](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-gs)

## Multidisciplinary Graduate Program in Anatomical Sciences

The Department of Anatomical Sciences, within the Health Sciences Center, offers a multidisciplinary graduate program leading to the Ph.D. degree. Students receive comprehensive training to prepare them for teaching and research in the areas of evolutionary morphology, systematics, functional morphology, musculoskeletal biology, and vertebrate paleontology. Graduate students are guided through a program of courses designed for their particular needs. In this regard, the Department of Anatomical Sciences interacts not only with other departments in the School of Medicine but also with those in the College of Arts and Sciences (e.g., Anthropology, Geosciences, and Ecology and Evolution), as well as other regional doctoral programs (City University of New York, American Museum of Natural History, Richard Gilder Graduate School).

The program trains students in the analysis and interpretation of gross vertebrate structure with the goal of testing hypotheses in systematics, paleoecology and adaptation. Training and research focus on applying an evolutionary perspective to the study of morphology, including functional morphology and phylogenetic systematics. Field-based projects for the discovery of new fossils are typically underway every year. Both the locomotor and the craniodental anatomical systems are regions of current interest and investigation within the program. Several faculty in the department specialize in the application of experimental and quantitative techniques to the analysis of the relationship between form and function. Studies of skeletal adaptations are also facilitated by collaboration with the Musculoskeletal Research Laboratory of the Department of Orthopaedics. Questions of systematics are approached at different levels, ranging from alpha taxonomy to higher-order relationships and we provide training and contemporary methods for phylogenetic systematics and biogeography. Students in the program have the opportunity to master a variety of research methods and analytical strategies: electromyography, cineradiography, kinematics and kinetics, in vivo bone strain measurement, quantitative morphology including scaling (allometry) and multivariate morphometrics, phylogenetic systematics, biogeography, scanning electron microscopy and tandem-scanning, CT-based anatomical reconstructions, reflected-light microscopy, behavioral ecology, and principles of paleontological fieldwork.

## Admission Requirements of Anatomical Sciences Department

In addition to the minimum Graduate School requirements, the following are required:

- A. A bachelor's degree typically in a field with ties to research in our department.
- B. Letters of reference.
- C. Results of the Graduate Record Examination (GRE) General Test and TOEFL for non-native speakers of English.
- D. Acceptance by the Department of Anatomical Sciences and by the Graduate School.

**Important Note:**

Anatomical Sciences has an application deadline in early December each year (please check the website for the exact date). Please note that this is earlier than the typical University Graduate School deadline of January 15. All applicants must submit by the December deadline to be considered.

## Facilities of Anatomical Sciences Department

The department has exceptionally well-equipped research facilities. These include facilities for experimental study in animal locomotion such as telemetered electromyography; cinematographic and cineradiographic motion analysis equipment; force-plates; scanning and transmission electron microscopes; tandem-scanning, reflected-light microscopes; three-dimensional reflex microscopes; and two-dimensional and three-dimensional sonic digitizers. For students with a focus on paleontology, the department has a state of the art Vertebrate Fossil Preparation laboratory with contemporary equipment for preparation, molding and casting original fossil material. The department also has original fossil



collections, extensive cast collections, and several ongoing paleontological field projects in the western interior of North America, North Africa, and Asia.

Anatomical Sciences does not accept students whose goal is a master's degree. In exceptional instances, a student already in the program may be awarded an M.S. degree upon completing an approved course of study, including a minimum of 30 graduate credit hours, and either passing a comprehensive examination, or submitting and defending a master's thesis.

Graduate Studies in Anatomical Sciences does not accept students whose goal is a master's degree. In exceptional instances, a student already in the program may be awarded an M.S. degree upon completing an approved course of study, including a minimum of 30 graduate credit hours, and either passing a comprehensive examination, or submitting and defending a master's thesis.

### **Requirements for the Ph.D. Degree in Anatomical Sciences**

In addition to the minimum requirements of the Graduate School, the following are required:

#### **A. Formal Course Requirements**

The following courses are required for all students in the program:

1. Evolutionary Anatomy (Anatomy and Embryology ) HBA 541 (8 credits, fall)
2. Statistics course approved by the advisor or department.
3. Integrity in Science GRD 500 (1 credit, spring), required by the Graduate School
4. Practicum in Teaching (HBA 695, 1-4 credits)

In addition, students are required to take three elective courses chosen in consultation with the student's advisor. These are typically selected from among those given by the Department of Anatomical Sciences or other departments at Stony Brook University. However, with approval of the student's advisor and the Graduate Program Director, elective courses may also be taken at other institutions. Click here to see a what a typical schedule might look like

Examples electives include:

#### **Anatomy Department Electives**

1. Studies in Functional Morphology HBA 566 (2 credits, spring, even years)
2. Primate Evolution HBA 564 (4 credits, spring, even years)
3. Human Evolution HBA 565 (4 credits, fall, even years)
4. Comparative Anatomy of Primates HBA 582 (4 credits, spring)
5. Aspects of Animal Mechanics HBA 563 (2 credits, spring, odd years)
6. Vertebrate Evolution HBA 550 (4 credits, spring, odd years)
7. Systematics, Biogeography and Comparative Methods HBA 551, (4 credits, spring, even years)

#### **Example Non-Anatomy Department Electives:**

1. Principles of Evolution BEE 551 (4 credits, fall),
2. Macroevolution BEE 561 (3 credits, spring, odd years),
3. Geometric Morphometrics BEE 564 (3 credits, fall, even years)
4. Molecular Evolution BEE 565 (3 credits, spring, odd years)
5. Multivariate Analysis in Biology BEE 553 (3 credits, fall)
6. Graduate Genetics BGE 510 (3 credits, spring)
7. Principles of Development MCB 657 (3 credits, fall)

Depending on a student's area of specialization, he/she may be required to take additional courses, to be determined in consultation with the advisor. A student must achieve a grade of B or higher in each of the required courses, and must maintain a B average or higher in all elective courses (note, as stated above, 3 electives are a required component of the Ph.D. program).

#### **B. Preliminary Examination**

Upon completion of formal courses (normally at the beginning of the fourth semester), each student is given an oral preliminary examination. Depending on the area of concentration, the examination covers human anatomy, embryology and one or more elective topics (e.g., vertebrate evolution).

#### **C. Advancement to Candidacy**

The faculty will recommend a student to the Graduate School for advancement to candidacy upon satisfactory completion of all required coursework and the preliminary examination. The student then becomes a formal candidate for the Ph.D.

#### **D. Dissertation Proposal Examination**

Following advancement to candidacy a student must select a dissertation committee consisting of at least three members of the Department of Anatomical Sciences (one of whom is the student's advisor), and at least one person from outside the department (either at Stony Brook University or another institution). Students must formally present a list of his/her committee members to the Graduate Program Director.

In consultation with this committee the student prepares a dissertation proposal. The dissertation proposal examination consists of an oral presentation of this proposal to the department as a whole, followed by an oral defense before the dissertation committee. The student must make the proposal available to the committee at least three weeks prior to the defense and to the faculty at large (by depositing it with the Graduate Program Coordinator), two weeks prior to the defense. This examination must occur no later than twelve months after passing the oral preliminary examination. Change to this deadline requires a formal petition to the faculty and is only granted under extenuating circumstances.

#### **E. Ph.D. Dissertation**

Students complete their dissertation research in Years 4 and 5. Students, under the supervision of his/her Dissertation Committee, perform the research leading to the preparation of their written dissertation. The dissertation must contain the results of an original and significant investigation.

#### **F. Dissertation Defense**

Following completion of the dissertation, and with the approval of the dissertation committee, a student must present his/her findings in a formal public oral defense. The student must make the written dissertation available to the dissertation committee at least 3 weeks prior to the defense and to the faculty at large (by depositing it with the Graduate Program Coordinator), 2 weeks prior to the defense. The defense is not chaired by the student's advisor, but rather by another member of the dissertation committee. Following the oral presentation of results and questioning by the audience, the student defends his/her results before the dissertation committee.

#### **G. Teaching Requirement**

Every student is required to teach medical human gross anatomy (HBA 531) at least once before graduation. In addition, students receiving a teaching assistantship are required to teach.

#### **H. Residence Requirement**

The University requires at least two consecutive semesters of full-time graduate study. Generally, the demands of the course of study necessitate a longer period of residence. However, pursuit of a degree on a part-time basis will be considered under special circumstances.

#### Faculty of Anatomical Sciences

##### Distinguished Professor

Fleagle, John G., Ph.D., 1976, Harvard University: Evolutionary biology of higher primates; vertebrate paleontology; behavioral and experimental analysis of comparative musculoskeletal anatomy; skeletal growth and development.

##### Emeritus Distinguished Service Professor

Krause, David W.<sup>4</sup>, Ph.D., 1982, University of Michigan: Vertebrate paleontology; mammalian evolution; functional morphology of masticatory and locomotor systems.

##### Emeritus Distinguished Teaching Professors

Jungers, William L., Ph.D., 1976, University of Michigan: Paleoanthropology; comparative primate anatomy; biomechanics; primate paleontology and systematics.

Emeritus Stern, Jack T., Jr., Chairperson. Ph.D., 1969, University of Chicago: Functional gross morphology; relationship between primate locomotor behavior and structure; human muscle function in relation to athletic activity and orthopaedics; radiotelemetered electromyography.

##### Emeritus Professors

Demes, A. Brigitte, Ph.D., 1982, University of Bochum, Federal Republic of Germany: Biomechanics; functional morphology; scaling effects on locomotion.

##### Professors

Larson, Susan G., Ph.D., 1982, University of Wisconsin: Functional morphology of human and nonhuman primate locomotor systems; human and primate evolution; telemetered electromyography.

O'Leary, Maureen A.<sup>4</sup>, Ph.D., 1997, Johns Hopkins University: Vertebrate paleontology; phylogenetic systematics; mammalian evolution.

Susman, Randall L., Ph.D., 1976, University of Chicago: Functional morphology and behavior of primates; evolution of apes and humans; gross anatomy.

##### Associate Professors

Kley, Nathan J., Ph.D., 2001, University of Massachusetts Amherst: Functional morphology and evolution of feeding and locomotor systems in vertebrates. Phylogenetic origin, interrelationships and early evolution of snakes.

Turner, Alan H., Ph.D., 2008, Columbia University: Vertebrate paleontology; phylogenetic systematics, biogeography, archosaur evolution.

#### Assistant Professors

Eric Wilberg, Ph.D., 2012, University of Iowa: Vertebrate paleontology, crocodilian biology.

Stephanie Maiolino, Ph.D., 2015 Stony Brook University: Physical anthropology, primate evolution.

#### Adjunct and Joint Faculty

Brink, Peter R.<sup>2</sup>, Ph.D., 1976, University of Illinois: Physiology and biophysics of junctional and excitable membranes.

Doran-Sheehy, Diane M.<sup>1</sup>, Ph.D., 1989, University at Stony Brook: Behavior and ecology of African apes; relationship of positional behavior and morphology.

Grine, Frederick E.<sup>1</sup>, Ph.D., 1984, University of Witwatersrand, South Africa: Hominid evolution; functional morphology of the masticatory system; vertebrate paleontology; dental structure and comparative odontology.

Leakey, Maeve, Ph.D., 1968, University of North Wales: Evolution of hominoids; evolution of Late Cenozoic faunas in East Africa.

Martin, Lawrence B., Dean of the Graduate School.<sup>1</sup> Ph.D., 1983, University of London, England: Primate evolution; thickness, development, and microstructure of dental enamel; neogene vertebrate paleontology.

Mittermeier, Russell, Ph.D., 1977, Harvard University: Ecology and behavior of primates; primate conservation.

Rubin, Clinton T.<sup>3</sup>, Ph.D., 1982, Bristol University, England: Structural adaptation in bone; skeletal remodeling and morphology.

Number of teaching, graduate, and research assistantships annually: 4-6

- 1) Joint appointment, Department of Anthropology
- 2) Joint appointment, Department of Physiology
- 3) Joint appointment, Department of Orthopaedics
- 4) Joint appointment, Department of Earth and Space Sciences

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

## Doctoral Program in Anthropological Sciences

**Director**

Andreas Koenig, Ward Melville Social and Behavioral Sciences Building, S-517, (631) 632-1513

**Academic Program Coordinator**

Tara Powers, Ward Melville Social and Behavioral Sciences Building, S-503, (631) 631-7606

**Degree Awarded**

Ph.D. in Anthropology

**Web Site**

<http://www.stonybrook.edu/commcms/idpas/index.html>

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-gs](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-gs)

## Doctoral Program in Anthropological Sciences

The Interdepartmental Doctoral Program in Anthropological Sciences (IDPAS), in the College of Arts and Sciences, is an interdisciplinary and interdepartmental program leading to the Ph.D. degree that draws upon faculty and resources from the departments of Anatomical Sciences, Anthropology, Asian and Asian American Studies, Ecology & Evolution, Geosciences, History, Sustainability Studies Program and the Turkana Basin Institute. The goal of the IDPAS is to train students for careers in research and teaching in physical anthropology, archaeology, and cultural anthropology. Students in the Ph.D. program who have already been advanced to candidacy may, upon petition, receive a master's degree without submitting a master's thesis. The IDPAS is not accepting any applications for cultural anthropology at present.

## Admission Requirements for Doctoral Program in Anthropological Sciences

Application procedures and requirements determined by the University at Stony Brook, as set forth in this bulletin, must be followed. Applications will be reviewed by the admissions committee of the IDPAS, and successful applicants will be considered for financial assistance through the award of a teaching assistantship (TA) by the TA committee of the IDPAS. All rules, regulations, and requirements of the Graduate School, Stony Brook University, must be satisfied in addition to those described in this section. Interested students should request information as early as possible, especially if they plan to apply for financial aid.

In addition to the admission requirements of the Graduate School, the IDPAS requires:

- A. A bachelor's degree from an accredited college. A minimum grade point average of 3.0 (B) in all undergraduate coursework and 3.25 in the major field of concentration;
- B. Results of the Graduate Record Examination (GRE) General Test;
- C. Test of English as a Foreign Language for non-native speakers of English. Minimum score: 550 (paper exam) or 213 (computer-based exam) or 90 (internet-based exam);
- D. Acceptance by the IDPAS and the Graduate School.

**Facilities of the Anthropology Department**

Extensive laboratory space as well as desk space is available for all graduate students. The archaeology and physical anthropology labs housed in the Department of Anthropology provide facilities for the analysis of artifact collections, especially stone tools, faunal and botanical remains, application of remote sensing and Geographic Information Systems (GIS), analysis of primate or human remains, and advanced electron microscopy (EM), and primate endocrinology. Housed in the department are archaeological collections from Africa and the Near East. A fully equipped preparation lab provides opportunities for state-of-the-art mineralized tissue research. Laboratories also contain 3D state-of-the-art scanning/ and digitizing equipment and analysis software, for example for the analysis of micro-Computed tomography (uCT). The laboratory for endocrine analyses contains a gamma counter and a plate reader necessary for most immunoassays.

Outside of the Anthropology Department, interested students have access to the research facilities for comparative primate morphology, human anatomy, and human and primate evolution housed in the Department of Anatomical Sciences, which are at present unparalleled at any other institution. The collections include primate fossils; primate osteological material from Africa, Asia, and South America; and living nonhuman primates, including New and Old World monkeys and lemurs.

Students interested in experimental animal models for the study of functional morphology or morphogenesis have access to core facilities, including modern small animal facilities, micro-Computed tomography (uCT) imaging, and confocal imaging systems.

The Department of Geosciences houses several mass spectrometers capable of measuring many isotopes and elemental abundances, as well as petrographic and dissecting microscopes with digital cameras. Students have access to excellent libraries and collections and to campus computing services.

Field work opportunities are available in primate behavioral ecology, paleontology, and archaeology. Primate behavior research is conducted in Ecuador, Ethiopia, Kenya, Madagascar, Peru, Sri Lanka, and Tanzania. Paleontological field research is current in Argentina, Kenya.

Madagascar, South Africa, and Zambia. The archaeology faculty have active field sites in Maine, Bolivia, Ethiopia, Iraq, Kenya, Madagascar, Sudan, and Turkey. The Turkana Basin Institute provides IDPAS students with access to field opportunities for paleontology and archaeology in northern Kenya.

## Requirements of the Ph.D. Degree in Anthropological Sciences

For a full description of IDPAS requirements and deadlines, please request "IDPAS Rules, Regulations, Requirements, and Procedures" from the Academic Programs Coordinator or download the description at <http://www.stonybrook.edu/commcms/idpas/rules.html>

### A. Course Requirements

Completion of a minimum of 48 graduate credits, maintaining a minimum 3.0 average in all graduate courses. Not more than four credits of SPD or equivalent coursework may be applied toward the satisfaction of IDPAS course requirements. All first-years are required to enroll in DPA 525 Research Areas in Anthropological Sciences.

**1. Physical Anthropology:** Required courses are (a) DPA 564 Primate Evolution, (b) DPA 565 Human Evolution, (c) DPA 567 Primate Behavior and Ecology. Other required courses toward completion of study in the Evolutionary Morphology track include (a) BEE 551 Principles of Evolution, (BEE 561 Macroevolution, may be substituted for BEE 551 with the permission of the faculty in the student's track), (b) BEE 552 Biometry (an equivalent statistics course, e.g., PSY 501 and PSY 502 may be substituted with permission of the physical anthropology faculty), and (c) DPA 541 Human Evolutionary Anatomy. Students on the Primate Behavior track must take (1) BEE 551 Principles of Evolution, (2) BEE 552 Biometry (an equivalent statistics course, e.g., PSY 501 and PSY 502) may be substituted with permission of the physical anthropology faculty), and (3) BEE 550 Principles of Ecology or BEE 586 Evolutionary Ecology. Additional elective courses may be completed during the second and third years of study under the supervision of the Guidance Committee.

**2. Archaeology Program:** Required courses that form the basis of the qualifying examination are (a) DPA 515 Theory and Method in Archaeology and (b) a Graduate-level Statistics course, (c & d) two survey courses chosen from DPA 511 Paleolithic Archaeology, DPA 513 Origins of Agriculture, DPA 512 Comparative Civilizations. Additional requirements include (a) DPA 516 Research Design in Archaeology, (b) one laboratory methods course chosen from DPA 517 Primitive Technology, DPA 518 Lithic Technology, DPA 519 Zooarchaeology, DPA 526 Remote Sensing and GIS, or additional laboratory course approved by committee, (c) one area course chosen from DPA 560 Ancient Mesopotamia, DPA 562 Long Island Archaeology, DPA 564 African Stone Age, DPA 585 Prehistoric Peoples of the Americas, or DPA 650 Research Seminar in Archaeology (with committee approval). Students must also take one elective course outside the archaeology subdiscipline (e.g. DPA 565 Human Evolution, DPA 566 Hunters and Gatherers, DPA 582 Human Demography, ARH 541 Topics in Ancient Art, or GEO 521 Isotopes and Trace Element Geology). Students must have had one season of archeological fieldwork (with committee approval) before advancing to candidacy.

**3. Cultural Anthropology:** Required courses that form the basis of the qualifying examination are (a) DPA 501 Development of Anthropological Theory, (b) DPA 540 Readings in Ethnography and Ethnology, and (c) DPA 520 Principles of Social and Cultural Anthropology. Other courses required for completion of the cultural anthropology program include (a) DPA 620 Research Seminar in Topical Problems, (b) DPA 640 Research Seminar in Ethnography and Ethnology, and (c) three additional credits of DPA 540 Readings in Ethnography and Ethnology. Other courses that may be taken at the discretion of the student's guidance committee include DPA 509 Seminar in European Ethnography, DPA 561 Peasant Societies and Cultures, and a statistics course.

### B. Qualifying Exam

The qualifying examination must be taken after two or three semesters of study (depending upon sub-field) and passed at an appropriate level. The qualifying examination is administered to each student by the examination committee of the IDPAS. The examination varies by subfield. Students in Physical Anthropology are required to develop a publishable research paper, students in archaeology take an oral exam, while students in cultural anthropology take a written exam. The material covered in the qualifying examination comprises that covered in the courses specified above as well as that covered by the prescribed reading list for the selected field.

### C. Language Requirement

The language requirement is optional as determined by each student's advisory committee. The student must select the suitable language(s) necessary for the chosen field of specialization with the approval of the guidance committee. Language tests must be passed prior to advancement to candidacy. We accept a passing grade in a University course in academic reading in a foreign language (e.g., GER 500 or FRN 500), or internal language tests may be administered by program faculty. Before recommending that a student be permitted to engage in fieldwork, the guidance committee may ask the student to demonstrate ability to speak the language required for fieldwork.

### D. Preparation of Dissertation Research Proposal

The dissertation proposal is prepared under the direction of the dissertation guidance committee which is composed of at least three IDPAS faculty members and an external member. The dissertation proposal will be defended orally at a seminar open to the academic community and to which all IDPAS faculty and students are invited at least two weeks in advance. Students should aim to complete and defend their dissertation proposal during their third year in the program. Upon successful defense of the proposal, the student may be advanced to candidacy. The M.A. may be awarded at this point. Dissertation research, writing, and examination are supervised by the dissertation guidance committee.

### E. Teaching Requirement

In accordance with Graduate School regulations, every student must gain some teaching experience. This may involve the presentation of a number of lectures in a course offered by a member of the IDPAS faculty. Upon advancement to candidacy, a student may be assigned greater teaching responsibility in the form of an undergraduate course to be prepared and taught under the supervision of an IDPAS faculty member. This arrangement will be made in consultation with the student and with the approval of the TA committee and the student's advisor. No student will be required to teach more than one course per year, and credit for teaching assignments will be given under the aegis of DPA 600.

**F. Written Dissertation and Defense**

The approval of a written thesis and its successful oral defense to the committee and the University community at large are required.

**G Time Limit**

The candidate must satisfy all requirements for the Ph.D. degree within seven years after completing 24 credit hours of graduate courses at the University at Stony Brook department or program in which the candidate is to receive his or her degree.

**Doctoral Program in Anthropological Sciences****Distinguished Professors**

Fleagle, John G.,<sup>1</sup> Distinguished Professor, Ph.D., 1976, Harvard University: Primate and human evolution; primate behavior and ecology; functional morphology; growth and development.

Grine, Frederick E.,<sup>2</sup> Distinguished Professor, Ph.D., 1984, University of the Witwatersrand, South Africa: Hominid evolution; functional morphology of the masticatory apparatus; diet reconstruction; dental anthropology; mineralized tissues.

Jungers, William L.,<sup>1</sup> Distinguished Teaching Professor, Ph.D., 1976, University of Michigan: Primate and human evolution; functional morphology; biomechanics.

Wright, Patricia C.,<sup>2</sup> Distinguished Service Professor, Ph.D., 1985, City University of New York: Primate behavior and ecology; rainforest conservation; Madagascar.

**Professors**

Demes, Brigitte,<sup>1</sup> Ph.D., 1982, Ruhr University, Bochum, Germany: Biomechanics; functional morphology; allometry; primates.

Hicks, David,<sup>2</sup> D.Phil., 1973, Oxford University, Great Britain: Politics; ritual; literature; East Timor; Insular Southeast Asia.

Koenig, Andreas,<sup>2</sup> Ph.D., 1992, Georg-August University, Göttingen, Germany: Primate behavioral ecology; social evolution; reproductive strategies; Asia.

Martin, Lawrence B.,<sup>3</sup> Director of TBI, Ph.D., 1983, University of London, Great Britain: Hominoid evolution; enamel thickness; enamel microstructure and development.

O'Leary, Maureen A.,<sup>1</sup> Ph.D., 1997, Johns Hopkins University: Origin of primates and anthropoids; vertebrate paleontology; mammalian systematics; functional morphology; pattern of evolution.

Shea, John J., Ph.D.,<sup>2</sup> 1991, Harvard University: Old World paleolithic archaeology; lithic analysis; Near East; Africa.

Stone, Elizabeth C.,<sup>2</sup> Ph.D., 1979, University of Chicago: Old World archaeology; state formation; ancient economy and society; remote sensing and GIS; Near East.

Susman, Randall L.,<sup>1</sup> Ph.D., 1976, University of Chicago: Functional morphology and behavior of primates; evolution of apes and humans; gross anatomy.

Zimansky, Paul E.,<sup>4</sup> Ph.D., 1980, University of Chicago: History and archaeology of the Near East; ancient imperialism; Urartian, Anatolian and Mesopotamian civilizations. Research Professor

Leakey Meave G.,<sup>3</sup> Ph.D., 1968, University of North Wales: Primate evolution; palaeoecology and evolution of African mammals.

**Associate Professors**

Davalos, Liliana M.,<sup>5</sup> Ph.D., 2004, Columbia University: Phylogenetics, tropical deforestation.

Harmand, Sonia,<sup>2,3</sup> Ph.D., 2005, Paris X, France: Early stone age archaeology; lithic technology; cognition; primate archaeology; Africa.

Hildebrand, Elisabeth,<sup>2,3</sup> Ph.D., 2003, Washington University: Origins of agriculture; paleoethnobotany; ethnoarchaeology; Africa.

Newman, Elizabeth Terese,<sup>4</sup> Ph.D., 2008, Yale University: Zooarchaeology; historical archaeology; household archaeology; gender; Mexico.

Rasbury, Troy, E.,<sup>6</sup> Ph.D., 1998, Stony Brook University: Sedimentary geochemistry; chronostratigraphy; geochronology.

Rossie, James B.,<sup>2</sup> Ph.D., 2003, Yale University: Primate evolution; miocene hominoids; cranial anatomy; East Africa.

Ruf, Gregory A.,<sup>7</sup> Ph.D., 1994, Columbia University: Social organization; politics and history; cultural ecology; ethnographic methods and writing; China.

Seiffert, Erik R.,<sup>1</sup> Ph.D., 2003, Duke University: Evolution of primates and other placental mammals.

Turner, Alan H.,<sup>1</sup> Ph.D., 2008, Columbia University: Phylogenetic methods, dinosaur and crocodylomorph evolution, morphological data, paleontology

Twiss, Kathryn C.,<sup>2</sup> Ph.D., 2003, University of California, Berkeley: Zooarchaeology; origins of agriculture and social complexity; anthropology of food; Southwest Asia. Research Associate Professor

#### **Research Associate Professor**

Borries, Carola,<sup>2</sup> Ph.D., 1989, Georg-August University, Göttingen, Germany: Socio-ecology; reproduction; life history; Asian primates.

#### **Assistant Professors**

Henkes, Gregory A.,<sup>6</sup> Ph.D., 2014, Johns Hopkins University: Stable isotope geochemistry, paleoclimatology, biogeochemistry.

Lu, Amy,<sup>2</sup> Ph.D., 2009, Stony Brook University: Behavioral endocrinology, socioecology, sexual selection, growth and development, life history

Maiolino, Stephanie A.,<sup>1</sup> Ph.D., 2015, Stony Brook University: primate evolution, comparative morphology, hands and feet, locomotion

Markham, A. Catherine,<sup>2</sup> Ph.D., 2012, Princeton University: Behavioral ecology; maternal care; spatial ecology; wild primates.

Percival, Christopher J.,<sup>2</sup> Ph.D., 2013, Penn State University: Skull development and evolution, craniofacial disease, geometric morphometrics, computed tomography image analysis

Russo, Gabrielle A.,<sup>2</sup> Ph.D., 2013, University of Texas at Austin: Functional morphology of the axial skeleton, primate and human evolution, locomotion, ontogeny.

Smaers, Jeroen B.,<sup>2</sup> Ph.D., 2009, Cambridge University, Great Britain: Brain evolution, phylogenetic comparative methodology, macroevolutionary morphology.

Veeramah, Krishna R.,<sup>5</sup> Ph.D., 2008, University College London, Great Britain: Primate Evolution; Genomics; Population Genetics; sub-Saharan Africa, Ancient DNA.

Yager, Karina A.,<sup>8</sup> Ph.D., 2009, Yale University: Pastoralism; cultural ecology; remote sensing; climate change and society; Andean studies.

Number of teaching assistants/graduate assistants/research assistants, fall 2016: 22 Number of graduate fellows, fall 2016: 13

1. Department of Anatomical Sciences
2. Department of Anthropology
3. Turkana Basin Institute
4. Department of History
5. Department of Ecology and Evolution
6. Department of Geosciences
7. Department of Asian and Asian American Studies
8. Sustainability Studies Program

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

Anthropology Department

**Chairperson**

David Hicks, Ward Melville Social and Behavioral Sciences Building, N-501, (631) 632-7617,

**Co-Directors of M.A. Program**

Amy Lu, Ward Melville Social and Behavioral Sciences Building, S-529, (631) 632-7621

Gabrielle Russo, Ward Melville Social and Behavioral Sciences Building, S-541, (631) 632-7619

anthropologyma@stonybrook.edu

**Academic Program Coordinator**

Tara Powers, Ward Melville Social and Behavioral Sciences Building, S-503, (631) 632-7606

**Degree Awarded**

M.A. in Anthropology

**Web Site**

<http://www.stonybrook.edu/commcms/anthropology/graduate/masters-program.php>

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-gs](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-gs)

Anthropology Department

The Department of Anthropology, within the College of Arts and Sciences, offers a graduate program leading to the M.A. degree. In the M.A. program candidates may study toward a master's in anthropology with a concentration in archaeology, sociocultural anthropology, or physical anthropology. Admission and degree requirements are the same but the course of study differs.

The M.A. Program in Anthropology is designed for students who wish to pursue anthropological training for careers in education or for those whose undergraduate training did not prepare them for doctoral level work in Anthropology. Full-time or part-time attendance is possible. Students are expected to choose their subfield (archaeology, social/cultural anthropology or physical anthropology) and contact the Anthropology faculty member with whom they wish to study prior to application. However, the admissions committee, not individual faculty members, make admissions decisions. By the time they have completed 15 credits of graduate work, students are expected to request a guidance committee consisting of three faculty members, at least two of whom must be members of the Anthropology Department, who will guide them through the preparation of a thesis proposal and the completion of the M.A. thesis.

**Admission Requirements of Anthropology Department**

In addition to the admission requirements of the Graduate School, the Department of Anthropology requires:

- A. A bachelor's degree from an accredited college with a minimum grade point average of 3.0 (B) in all undergraduate coursework and 3.25 (3.0=B) in the major field of concentration;
- B. Results of the Graduate Record Examination (GRE) General Test;
- C. Test of English as a Foreign Language for non-native speakers of English, with a minimum score of 550 (paper), 220 (computer based), or 90 (iBT).
- D. Acceptance by the Department of Anthropology and the Graduate School.

**Facilities of Anthropology Department**

Research and teaching facilities are maintained for the study of human and primate anatomy and evolution, lithic technology, zooarchaeology, paleoethnobotany, Remote Sensing and Geographic Information Systems (GIS), dental structure and microwear, and primate endocrinology. The archaeology and physical anthropology laboratories contain 3D scanning/digitizing equipment and analysis software. The GIS Laboratory contains eight networked Pentium computers configured to run ArcGIS 9 software. The laboratory for endocrine analyses contains a gamma counter and a plate reader necessary for most immunoassays.

Teaching collections include primate and hominin fossil cast collections as well as modern human skeletons; Near Eastern ceramics; stone tools from North America, Europe, the Middle East and Africa; and faunal assemblages from North America and Southwest Asia.

Students may be invited to participate in ongoing archaeological, ethnographic, paleontological, or primatological field research conducted by the faculty in North America, Africa, Madagascar, Europe and the Mediterranean, East and Southeast Asia, and Southwest Asia (the Middle East).

**Requirements for the M.A. in Anthropology with Concentrations in Archaeology, Social/Cultural Anthropology, and Physical Anthropology**

In addition to the requirements of the Graduate School, the following are required:

- A. Completion of a minimum of 30 graduate credits, maintaining a 3.0 average;



B. A course of study planned and carried out with the approval of the student's M.A. guidance committee (this may require examinations, library research, laboratory study, and/or fieldwork as the basis of the M.A. thesis, which must be accepted by a committee appointed by the program—no final defense is required);

C. Minimum residence of one year.

The requirements for the three tracks in Anthropology differ, but students may take courses in the other sub-disciplines as electives. The requirements are as follows:

#### Archaeology

1. ANT 515 Theory and Method in Archaeology: 4 credits
2. ANT 527 Field Methods and Techniques in Archaeology\*: 6 credits
3. Graduate Statistics Course (Approved by Committee): 3 credits
4. ANT 599 M.A. Thesis Research: 6 credits
5. Electives chosen from among ANT 510, ANT 511, ANT 512, ANT 513, ANT 514, ANT 516, ANT 517, ANT 518, ANT 519, ANT 526, and other courses offered in Anthropology, History, Ecology and Evolution, Marine Sciences, or other programs chosen with the approval of the student's guidance committee: 11 credits

Total: 30 credits

\* In some instances equivalent courses may be accepted if they have been previously approved by the student's guidance committee.

#### Social/Cultural Anthropology

1. ANT 520 Principles of Social and Cultural Anthropology: 4 credits
2. ANT 540 Readings in Ethnography and Ethnology: 3 credits
3. ANT 599 M.A. Thesis Research: 6 credits
4. Electives chosen from among ANT 500, ANT 501, ANT 509, ANT 561, ANT 602, ANT 620, ANT 640, and other courses offered in Anthropology, Sociology, Psychology, or other programs chosen with the approval of the student's guidance committee: 17 credits

Total: 30 credits

#### Physical Anthropology

1. ANT 564 Primate Evolution: 4 credits
2. ANT 565 Human Evolution: 4 credits
3. ANT 567 Primate Behavior and Ecology: 4 credits
4. BEE 552 Biometry: 4 credits
5. ANT 599 M.A. Thesis Research: 6 credits
6. Electives chosen from among other courses in Anthropology, Ecology and Evolution, Anatomy, or other programs chosen with approval of the student's guidance committee: 8 credits

Total: 30 credits

Faculty of Anthropology Department

#### Professors

Grine, Frederick E., Distinguished Professor, Ph.D., 1984, University of Witwatersrand, South Africa: Hominid evolution; functional morphology of the masticatory system; vertebrate paleontology; dental structure and comparative odontology.

Hicks, David, Recipient of the State University Chancellor's Award for Excellence in Scholarship and Creative Activities, 2005; Recipient of the President's Award for Excellence in Scholarship and Creative Activities, 2005; Ph. D (London), 1971; D.Phil., 1972, Oxford University: oral literature, ritual and belief, mythology, kinship, politics, Southeast Asia, East Timor.

Koenig, Andreas, Ph.D., 1992, University of Göttingen, Germany: Primate behavioral ecology; social evolution; community ecology; Asia.

Martin, Lawrence B., Director of TBI, Ph.D., 1983, University of London, Great Britain: Hominoid evolution; enamel thickness; enamel microstructure and development.

Shea, John J., Ph.D., 1991, Harvard University: Old World Paleolithic archaeology; lithic analysis; Near East; Europe; Africa.

Stone, Elizabeth C., Ph.D., 1979, University of Chicago: Old World archaeology; state formation; ancient economy and society; Near East; remote sensing and GIS.

Wright, Patricia C., Distinguished Service Professor, Ph.D., 1985, City University of New York: Primate behavior and ecology; rain forest conservation; Madagascar.

**Associate Professors**

Harmand, Sonia., Ph.D., 2005, Paris X, France: Early stone age archaeology; lithic technology; cognition; primate archaeology; Africa.

Hildebrand, Elisabeth, Ph.D., 2003, Washington University in St. Louis: Archaeology; early farming; Africa; paleoethnobotany; ethnoarchaeology.

Rossie, James B., Ph.D., 2003, Yale University: Primate evolution; miocene hominoids; cranial anatomy; East Africa.

Twiss, Katheryn C., Ph.D., 2003, University of California, Berkeley: Old World archaeology; zooarchaeology; transition to agriculture; food; southwest Asia

**Research Associate Professor**

Borries, Carola, Ph.D., 1989, University of Göttingen, Germany: Primate reproductive strategies; behavioral ecology; social structure; Asia.

**Assistant Professors**

Lu, Amy, Ph.D., 2009, Stony Brook University: Behavioral endocrinology, socioecology, sexual selection, growth and development, life history

Markham, Catherine, Ph.D., 2012, Princeton University: Behavioral ecology; maternal care; spatial ecology; wild primates.

Russo, Gabrielle, Ph.D., 2013, University of Texas at Austin: Functional morphology of the axial skeleton, primate and human evolution, locomotion, ontogeny.

Smaers, Jeroen B., Ph.D., 2009, Cambridge University: Brain evolution, phylogenetic comparative methodology, macroevolutionary morphology.

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

Applied Mathematics and Statistics

**Chairperson**

Joseph Mitchell, Mathematics Building P-134A (631) 632-8366

**Graduate Program Director (PhD)**

Xiangmin Jiao, Mathematics Building 1-115 (631) 632-4408

**Graduate Program Director (MS, AGC)**

Wei Zhu, Mathematics Building 1-116 (631) 632-8374

**Graduate Secretary**

Christine Rota, Mathematics Building P-141 (631) 632-8360

**Advanced Graduate Certificate Awarded**

Advanced Graduate Certificate in Operations Research; Advanced Graduate Certificate in Quantitative Finance

**Degrees Awarded**

M.S. in Applied Mathematics and Statistics; Ph.D. in Applied Mathematics and Statistics

**Web Site**

<http://www.ams.stonybrook.edu/>

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-gs](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-gs)

Applied Mathematics and Statistics Department

The Department of Applied Mathematics and Statistics, within the College of Engineering and Applied Sciences, offers programs in computational applied mathematics, operations research, quantitative finance, statistics, and computational biology leading to the M.S. and Ph.D. degrees. The department offers an integrated series of courses and seminars, supervised reading, and facilities for research. Emphasis is on the study of real-world problems, computational modeling, and the development of necessary analytical concepts and theoretical tools. A state-of-the-art, computational laboratory is operated for student education and research, with access available to university--based high-performance computing facilities. It also features a network of advanced Unix workstations and modern printing facilities. The laboratory's full-time staff is available to help students become familiar with the laboratory facilities.

Students participate in joint research with 5 national laboratories, several industrial groups and various sciences, biomedical, and engineering programs. Students, who receive a broad training, find themselves excellently prepared for careers in government and industry in which mathematics is used as a computational or conceptual tool.

Faculty research programs receive significant external funding and provide students with an opportunity for active participation in a variety of projects in all areas of the department. Faculty interests include applied graph theory, biostatistics and computational biology, structure-based drug design, computational fluid dynamics, combinatorial optimizations, computational statistics, data analysis, flow through porous media, fracture mechanics, inverse problems, mixed-boundary value problems, nonlinear conservation laws, quantitative finance, reliability theory, risk management, robust estimation, nonparametric statistics, stochastic modeling and sequential decision making and structure-based drug design. Most doctoral students are supported through either a research or teaching assistantship.

The Ph.D. program normally takes about four to five years for students with a strong analytical and computing background. The M.S. programs, when pursued on a full-time basis, may be completed in three or four semesters. Students who have taken graduate courses before enrolling at Stony Brook may request transfer of up to twelve credits. If such a request is approved, it may be possible to complete the M.S. degree in two semesters. It is strongly urged that all applicants develop some facility in computer programming.

A more detailed description of the graduate program is available from the departmental office. This includes specific distribution requirements, fields of specialization, and information on the preliminary and qualifying examinations. Interested students should request information and application forms as early as possible, especially if they plan to apply for financial aid.

**Advanced Graduate Certificate Program in Operations Research**

This advanced certificate program of 18 credits, consisting of six three-credit courses, trains students in the fundamental mathematical tools for working in the operations research profession. Operations research is the field of applied mathematics related to efficient management of the activities of private companies, government agencies and nonprofit organizations. The following courses are required for certificate: AMS 507 Introduction to Probability, AMS 540 Linear Programming, AMS 550 Stochastic Models, AMS 553 Simulation and Modeling, AMS 572 Data Analysis I, plus one (3 credit) elective chosen by student in consultation with an advisor.

**Advanced Graduate Certificate Program in Quantitative Finance**

This advanced certificate program of 15 credits, consisting of five three-credit courses, trains students in the fundamentals required for the application of quantitative methods in the financial world. The certificate is open to students in related graduate programs at Stony Brook, as well as to non--matriculated students registered through the School of Professional Development. The following courses are required for certificate: AMS 511 Foundations of Quantitative Finance, AMS 512 Capital Markets & Portfolio Theory, AMS 513 Financial Derivatives & Stochastic Calculus, one elective chosen from AMS 514-523, plus one additional (3--credit) elective chosen by the student with the approval of an advisor.

**Combined B.S./M.S. Degree**

Undergraduate applied mathematics majors, with strong academic credentials may apply for admission to the special Bachelor of Science-Master of Science program in Applied Mathematics and Statistics at the end of the junior year. The combined B.S./M.S. program in applied mathematics and statistics allows students with superior academic records to use up to six graduate credits toward the B.S. and M.S. requirements. In essence, those six credits count toward two goals simultaneously. Normally, it would take six years to complete two separate degrees, but with the combined B.S./M.S. program, there is only a 5 year commitment (10 semesters). The advantage of the combined program is that the M.S. degree can be earned in less time, thus costing less money than that required by the traditional course of study. A minimum cumulative GPA of 3.3 in all courses, as well as a GPA of 3.5 in required courses for the AMS major, is typically required to apply for the combined degree program; exceptions may be made for students with significantly improved

Students apply to the program during their junior year. In the first semester of the senior year, students in the B.S./M.S. program are granted permission to take up to six graduate credits which will be applied towards the Masters degree requirements. In the second semester of the senior year, they become enrolled as graduate students. Because students in this program only need to earn 114 undergraduate credits, they are usually finished with undergraduate coursework by the first semester of their senior year. If needed, however, they may enroll in up to twelve credits of undergraduate coursework during the second semester of senior year. The undergraduate degree is issued at the end of the senior year, and the student continues in the graduate program through the fifth year. The requirements stated in the Graduate Bulletin must be earned to qualify the student for the master's degree; this includes a total of at least 30 graduate level credits (including the six taken as an undergraduate). Further information about the combined program may be obtained from either the graduate program director or the undergraduate program director.

**Part-Time Graduate Studies**

In addition to the full-time graduate program leading to the M.S. and Ph.D. degrees, the department conducts a part-time program on campus. The part-time program is governed by regulations governing the resident full-time program with the exception that students in the part-time program have greater flexibility in choosing the time for the qualifying examination if they are contemplating pursuing the Ph.D.

The purpose of the part-time program is to provide an opportunity for men and women who are employed full time to pursue graduate study leading to advanced degrees in applied mathematics, statistics, and operations research. Applicants who hold a bachelor's degree in applied mathematics, mathematics, engineering, physical sciences, life sciences, or social sciences with a strong background in undergraduate mathematics will be considered for admission to this program. Qualified students may continue beyond the master's degree for the Ph.D. degree.

Additional information, including the scheduling of courses for part-time students, may be obtained from the graduate program director.

**Admission Requirements of Applied Mathematics and Statistics Department**

For admission to graduate study, the minimum requirements are as follows:

- A. A bachelor's degree in engineering, mathematics, the physical sciences, or in the life or social sciences with a strong mathematics background.
- B. A minimum overall grade point average of at least 3.00, as well as a minimum grade point average of 3.00 in all courses with a significant mathematical or quantitative component.
- C. Results of the Graduate Record Examination (GRE) General Test.
- D. Three letters of reference.
- E. Official transcripts for all undergraduate study completed.
- F. Acceptance by both the Department of Applied Mathematics and Statistics and the Graduate School.
- G. In some circumstances, a student may be admitted provisionally although they are missing some of the above requirements. Students admitted provisionally must follow an approved course sequence and maintain a cumulative GPA of at least 3.0 during the first year of graduate study before being admitted to full degree candidacy.

**Requirements for the M.S. Degree in Applied Mathematics and Statistics**

In addition to the minimum Graduate School requirements, the following are required:

**A. Course Requirements**

The M.S. degree in the Department of Applied Mathematics and Statistics requires the satisfactory completion of a minimum of 30 graduate credits in letter-graded (A,B,C,F) graduate courses, with some specializations requiring up to 36 credits.

All credits in satisfaction of the degree must be at the graduate level. The department may impose additional requirements as described below. In addition, the cumulative grade point average for all courses taken must be B or higher, and at least 18 credits of all courses taken must carry a grade of B or above, and the grade point average over all core (nonelective) requirements must be 3.0 or higher.

The student pursues a program of study planned in consultation with an academic advisor. The program and any subsequent modifications require approval by the graduate program director.

**Core Requirements for the M.S. Degree**

1. Computational Applied Mathematics

AMS 501 Differential Equations and Boundary Value Problems

AMS 503 Applications of Complex Analysis

AMS 510 Analytical Methods for Applied Mathematics and Statistics

AMS 526 Numerical Analysis I

AMS 527 Numerical Analysis II

AMS 528 Numerical Analysis III

AMS 595 Fundamentals of Computing (1 credit)

Four elective courses (12 credits total) chosen in consultation with advisor

## 2. Computational Biology

AMS 507 Introduction to Probability

AMS 510 Analytical Methods for Applied Mathematics and Statistics

MCB 520 Graduate Biochemistry OR

CHE 541 Biomolecular Structure and Analysis

AMS 531 Laboratory Rotations in Computational Biology (two semesters, 0 credit)

AMS 532 Journal Club in Computational Biology (two semesters, 0 credit)

AMS 533 Numerical Methods and Algorithms in Computational Biology

AMS 535 Intro to Computational Structural Biology & Drug Design

AMS 537 Biological Networks & Dynamics

AMS 539 Introduction to Physical & Quantitative Biology (0 credit)

CSE 549 Computational Biology

Three elective courses (9 credits total) chosen in consultation with advisor

## 3. Operations Research

AMS 510 Analytical Methods for Applied Mathematics and Statistics

AMS 507 Introduction to Probability

AMS 540 Linear Programming

AMS 550 Stochastic Models

AMS 553/CSE 529 Simulation and Modeling

One course in statistics (AMS 570 - 586)

AMS 595 Fundamentals of Computing (1 credit)

Four elective courses (12 credits total) chosen from AMS 542--556; one of these may be substituted by an additional statistics course (AMS 570--586), and one may be substituted by a quantitative finance course (AMS 511--523)

## 4. Statistics

AMS 510 Analytical Methods for Applied Mathematics and Statistics

AMS 507 Introduction to Probability

AMS 570 Mathematical Statistics I

AMS 572 Exploratory Data Analysis

AMS 573 Design & Analysis of Categorical Data

AMS 578 Regression Theory

AMS 582 Design of Experiments

AMS 597 Statistical Computing

Two elective courses (6 credits total) chosen in consultation with advisor

#### 5. Quantitative Finance

AMS 507 Introduction to Probability

AMS 510 Analytical Methods for Applied Mathematics and Statistics

AMS 511 Foundations of Quantitative Finance

AMS 512 Capital Markets & Portfolio Theory

AMS 513 Financial Derivatives and Stochastic Calculus

AMS 514 Computational Finance

AMS 516 Statistical Methods in Finance

AMS 517 Quantitative Risk Management

AMS 518 Advanced Stochastic Models, Risk Assessment & Portfolio Optimization

AMS 572 Data Analysis I

FIN 539 Investment Analysis

One elective course (3 credits total) chosen in consultation with advisor

#### *Elective Requirements for the M.S. Degree*

Unless otherwise specified, any graduate-level AMS or other graduate-level courses in a related discipline approved by the graduate program director may be used to satisfy the credit requirement beyond the core course requirement.

#### **B. Final Recommendation**

Upon the fulfillment of the above requirements, the faculty of the graduate program will recommend to the dean of the Graduate School that the Master of Science degree be conferred or will stipulate further requirements that the student must fulfill.

#### **C. Time Limit**

All requirements for the Master of Science degree must be completed within three years of the student's first registration as a full-time graduate student.

Requirements for the Ph.D. Degree in Applied Mathematics and Statistics

#### **A. Course Requirements**

The course of study prescribed for the M.S. degree provides basic guidelines for doctoral study. The student pursues a program of study planned in consultation with an academic advisor. The program and any subsequent modifications require approval of the graduate program director.

#### **B. Qualifying Examination**

A student must pass a two-part qualifying examination to be allowed to continue toward the Ph.D. degree. Each component of the qualifying examination is given twice a year at the beginning and the end of the Spring semester and is designed to test the student's preparation to do research in applied mathematics. Each student must demonstrate competency in linear algebra and analysis and in-depth knowledge in one of the following areas:

Computational Applied Mathematics

Computational Biology

Operations Research

Quantitative Finance

Statistics

#### **C. Research Advisor**

After completion of at least one year of full-time residence and prior to taking the preliminary examination, the student must select a research advisor who agrees to serve in that capacity.

#### **D. Preliminary Examination**

This is an oral examination administered by a committee and given to the student when he or she has developed a research plan for the dissertation. The plan should be acceptable to the student's research advisor.

### **E. Mathematical Writing Requirement**

The mathematical writing requirement is associated with the preliminary oral examination. The student must submit a document, typically 20 to 25 double-spaced pages long, containing the research plan for the dissertation, including a well-referenced synopsis of the relevant background literature, as well as a summary of research work accomplished to date. It must be given to the members of the Preliminary Examination committee at least one week before the oral presentation.

The document must be approved for satisfactory written style and use of technical English as well as for intellectual content; this will be assessed by the Preliminary Examination Committee, who is appointed by the graduate program director. International students may need extensive writing assistance from the ESL Tutoring Center established to provide exactly this kind of technical writing tutorial support.

Tutorial assistance in writing, if needed, will also be provided to native students.

### **F. Advancement to Candidacy**

After successfully completing all requirements for the degree other than the dissertation, the student is eligible to be recommended for advancement to candidacy. This status is conferred by the dean of the Graduate School upon recommendation from the graduate program director.

### **G. Dissertation**

The most important requirement of the Ph.D. degree is the completion of a dissertation, which must be an original scholarly investigation. The dissertation must represent a significant contribution to the scientific literature and its quality must be comparable with the publication standards of appropriate and reputable scholarly journals.

### **H. Dissertation Defense**

The student must defend the dissertation before an examining committee. On the basis of the recommendation of this committee, the Department of Applied Mathematics and Statistics will recommend acceptance or rejection of the dissertation to the dean of the Graduate School. All requirements for the degree will have been satisfied upon successful defense of the dissertation. There must be at least one year between advancing to candidacy and scheduling a dissertation defense.

### **I. Minimum Residence**

At least two consecutive semesters of full-time study are required.

### **J. Time Limit**

All requirements for the Ph.D. degree must be completed within seven years after the completion of 24 graduate credits in the program. The time limits for the qualifying and preliminary examinations and advancement to candidacy are described in the departmental *Graduate Student Handbook*.

### **K. Teaching Requirement**

One academic year long teaching experience required.

Faculty of Applied Mathematics and Statistics Department

Distinguished Professor

Feinberg, Eugene, Ph.D., 1979, Vilnius State University, Lithuania: Probability theory and statistics; control theory and applications in communication systems; transportation; computer networks and manufacturing.

Glimm, James, Director, Institute for Multiscale Studies. Ph.D., 1959, Columbia University: Nonlinear equations, conservation laws; computational fluid dynamics; mathematical physics; quantitative finance.

Mitchell, Joseph<sup>7</sup>, Chairman, Ph.D., 1986, Stanford University: Operations research; computational geometry; combinatorial optimization.

Tannenbaum, Allen, Ph.D., 1976, Harvard University: Medical image analysis; computer vision; image processing; systems and control; controlled active vision; mathematical systems theory; bioinformatics; computer graphics.

Distinguished Teaching Professor

Tucker, Alan, Ph.D., 1969, Stanford University: Graph theory; combinatorial algorithms.

Professors

Ahn, Hongshik, Ph.D., 1992, University of Wisconsin, Madison: Biostatistics; tree-structured regression

Arkin, Esther<sup>5</sup>, Undergraduate Program Director, Ph.D., 1986, Stanford University: Combinatorial optimization; network flows; computational geometry.

Chapman, Barbara, Ph.D., 1998, Queens University of Belfast: Computational Applied Mathematics

Coutsias, Evangelos, Ph.D., 1979, California Institute of Technology: computational biology; methods for study of protein structure.

Deng, Yuefan, Ph.D., 1989, Columbia University: molecular dynamics; parallel computing.

Douady, Raphael, Professor, QF Frey Endowed Chair for Quantitative Finance, Ph.D. 1982 C.N.R.S. (French National Centre for Scientific Research): Financial mathematics; chaos theory

Finch, Stephen, Ph.D., 1974, Princeton University: Robust estimation and nonparametric statistics.

Harrison, Robert, Ph.D., 1984, University of Cambridge, theoretical and computational chemistry; high-performance computing; parallel programming; multi-resolution analysis; numerical methods.

Li, Xiaolin, Ph.D., 1987, Columbia University: Computational fluid dynamics; numerical analysis.

Rizzo, Robert, Ph.D., 2001, Yale University: Computational Biology, Structure-based Drug Design.

Samulyak, Roman, Ph.D., 1999, New Jersey Institute of Technology; mathematical physics, computational applied mathematics

Zhu, Wei, Ph.D., Deputy Chair, 1996, University of California, Los Angeles: Biostatistics; optimal experimental design; linear models; structural equation modeling.

#### Associate Professors

Balazsi, Gabor<sup>15</sup>, Associate Professor, Ph.D., 2001, University of Missouri: Synthetic gene circuits

Green, David, Ph.D., 2002, MIT: Computational biology, protein structure.

Gu, Xianfeng<sup>3</sup>, Associate Professor, Ph.D., 2003, Harvard University: Computational conformal geometry

Hu, Jiaqiao, Ph.D., 2006, University of Maryland; stochastic optimization, dynamic programming.

Jiao, Xiangmin, Ph.D., 2001, University of Illinois; numerical analysis, computational geometry.

Xing, Haipeng, Ph.D. 2003, Stanford University: Statistical methods in finance, change-point detection.

Wu, Song, Ph.D., 2008, University of Florida: Statistics

#### Assistant Professors

Colosqui, Carlos<sup>16</sup>, Assistant Professor, Ph.D., 2009, Boston University: Microfluidics, Nano/Micro-Electromechanical Systems

Kozakov, Dmytro, Ph.D., 2006, Boston College: Computational Biology

Kuan, Pei Fen, Ph.D., 2009 University of Wisconsin, Madison: Biostatistics; cancer genomics; hierarchical mixture modeling.

Liu, Zhenhua, Ph.D., 2014, California Institute of Technology: Smart energy/sustainable Information Technology (IT) and IT for sustainability; big data platforms; optimization; algorithms.

MacCarthy, Thomas, Ph.D., 2005, University College London: Computational Immunology; Evolutionary Systems Biology.

Reuter, Matthew, Ph.D., 2011, Northwestern University: Computational chemistry, mathematical physics

#### Research Professors

Frey, Robert, Ph.D., 1986, Stony Brook University: Quantitative finance

Mullhaupt, Andrew, Ph.D. 1984, New York University: Quantitative finance.

#### Research Assistant Professors

Yu, Yan, Ph.D., 2005, Stony Brook University: Numerical analysis and computational fluid dynamics.

Lim, Hyunkyung, Ph.D., 2009, Stony Brook University: Computational Applied Mathematics

#### Adjunct Faculty

Atwal, Gurinder, Assistant Professor, Ph.D., 2002, Cornell University: theoretical biophysics.

Bender, Michael<sup>3</sup>, Associate Professor, Ph.D., 1996, Harvard University, combinatorial algorithms.

Donaldson, Nora, Professor, Ph.D., 1988, University of Maryland: biostatistics.

Dubey, Pradeep<sup>1</sup>, Professor, Ph.D., 1975, Cornell University: Game theory; mathematical economics.

Gao, Yi, Assistant Professor, Ph.D., 2010, Georgia Institute of Technology.

Grove, John<sup>4</sup>, Professor. Ph.D., 1984, Ohio State University: Conservation laws; front tracking.



Hou, Wei, Assistant Professor, Ph.D., 2006, University of Florida: Statistics.

Kim, Aaron, Assistant Professor, Ph.D., Sogang University: Finance and Statistics.

Lindquist, Brent, Professor, Ph.D., 1981, University of Manitoba: 3D Image analysis; geostatistics and conditional simulation; front tracking.

Nemesure, Barbara, Associate Professor, Ph.D., 1993, SUNY @ Stony Brook: Statistical genetics.

Powers, Scott<sup>13</sup>, Adjunct Professor, Ph.D., 1982, Columbia University: Genetic basis of cancer.

Reinitz, John<sup>14</sup>, Ph.D., 1988, Yale University: Theory of fundamental biological processes; bioinformatics; optimization, developmental biology and gene regulation.

Saltz, Joel, Professor, Ph.D., 1985, Duke University: biomedical engineering.

Sharp, David<sup>4</sup>, Professor, Ph.D., 1963, California Institute of Technology: Mathematical physics; computational fluid dynamics.

Shatz, Michael, Assistant Professor, Ph.D., 2010, University of Maryland: computational biology; genomics; genome assembly and validation; sequence alignment; statistical modeling; high performance and multicore computing; parallel algorithms; cloud computing.

Simmerling, Carlos<sup>9</sup>, Associate Professor, Ph.D., 1995, University of Illinois at Chicago: Protein structure.

Skiena, Steven<sup>3</sup>, Professor, Ph.D., 1988, University of Illinois: Combinatorial algorithms; computational geometry; data structures.

Wang, Jin<sup>9</sup>, Assistant Professor, Ph.D., 1991, University of Illinois: bio-molecular folding and recognition: protein - protein interactions.

Wang, Xuefeng, Assistant Professor, Ph.D., 2012, Case Western Reserve University: epidemiology and biostatistics.

Yang, Jie, Assistant Professor, Ph.D., 2006, University of Florida: Statistics.

Number of teaching assistant and research assistants, fall 2014: 90

- 1) Department of Economics
- 2) College of Business
- 3) Department of Computer Science
- 4) Los Alamos National Laboratory
- 5) Recipient of the State University Chancellor's Award for Excellence in Teaching, 2008
- 6) Recipient of the State University Chancellor's Award for Excellence in Teaching, 2002
- 7) Recipient of the State University Chancellor's Award for Excellence in Teaching, 1996
- 8) Department of Technology and Society
- 9) Department of Chemistry
- 10) Department of Electrical and Computer Engineering
- 11) Department of Preventive Medicine
- 12) Advanced Acoustical Concepts
- 13) Cold Spring Harbor Laboratory
- 14) University of Chicago Statistics Department

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

## Art History and Criticism

**Chairperson**

Barbara Frank, Staller Center 4219 (631) 632-7250

**M.A./Ph.D. Graduate Program Director**

Shoki Goodarzi, shoki.goodarzi@stonybrook.edu

**Advanced Certificate Graduate Director**

Brooke Belisle, brooke.belisle@stonybrook.edu

**Graduate Secretary**

Lisa Perez, Staller Center 2228 (631) 632-7270

**Degrees Awarded**

M.A. in Art History and Criticism; Ph.D. in Art History and Criticism; Certificate in Media, Art, Culture, &amp; Technology

**Website**<http://art.stonybrook.edu>; <http://mact.stonybrook.edu>**Application**[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-gs](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-gs)

## Art History and Criticism Department

The Graduate Program in Art History & Criticism at Stony Brook University focuses on modern and contemporary art in its global context, and in relationship with media, technology and material culture. At both the M.A. and Ph.D levels, we offer a dynamic, interdisciplinary curriculum along with individual mentoring from faculty whose work has won national and international recognition. Our proximity to New York City offers extensive opportunities for research, collaboration, and professional networking at world-class museums and galleries, and allows our students to take courses at other schools in the New York Inter-University Doctoral Consortium including Columbia, NYU, CUNY and Princeton. Our students have been successful in securing tenure-track academic positions at universities around the world, and at earning internships, fellowships, curatorial positions, and teaching roles at major New York institutions such as the Whitney Museum, Creative Time, and The Museum of Modern Art.

Under the visionary leadership of Lawrence Alloway, the Program in Art History & Criticism was one of the first programs in the world to support graduate level study of modern and contemporary art, and we pride ourselves on engaging emerging, interdisciplinary, and comparative methodologies. As a small and selective program in a large, public institution we are able to offer graduate training with low tuition costs, with teaching experience in a highly diverse undergraduate population, and with the full resources of major research university. Students benefit from the Department of Art's MFA program and from affiliates of Art who teach continental philosophy and aesthetics in the Department of Philosophy, global film studies in the Department of Comparative Literature and Cultural Studies, sound art and sound studies in Music, and at the intersection of art and science in the Consortium for Digital Arts, Culture and Technology. M.A. and Ph.D students may take advantage of an additional credential through the Advanced Graduate Certificate in Media, Art, Culture, and Technology housed in Art, and through the Advanced Graduate Certificate in Art and Philosophy. Ample opportunities for curatorial theory and practice are available in conjunction with regular exhibitions at the University's Zuccaire, Alloway, and Simons Center art galleries

## Degree Programs

**M.A. in Art History and Criticism**

The M.A. in Art History and Criticism is a two year 36-credit degree program with a strong emphasis on modern and contemporary art and visual and material culture. The program aims to produce scholars, critics and curators who can address artistic production through contemporary issues and paradigms. Media aesthetics, art and technology, globalization, public art and social practice, politics of the avant-garde, and critical curatorial studies are currently active areas of departmental research. The program culminates in the preparation of a written thesis. Part-time study is allowed in this degree program. The M.A. in Art History and Criticism can be considered appropriate preparation for Ph.D. degrees in art history or other fields. Students also move on to careers in arts education, or gallery and museum work.

**Ph.D. in Art History and Criticism**

Stony Brook's Ph.D. program in art history and criticism is designed to encourage students to apply what they have learned at the master's level towards more intense and individual research. The emphasis of the program is on integrating historical and theoretical study into a curriculum focused on an interdisciplinary approach to modern and contemporary art and visual and material culture. The program culminates in the oral defense of a substantial written dissertation on an original topic. Students are not accepted into the Ph.D. program on a part-time basis. This degree is considered essential for those intending to engage in advanced academic research, teaching, and publishing in the field of art history and criticism, and may provide a significant advantage to those entering the professional art world of museums and galleries.

## Advanced Graduate Certificate (AGC) in Art and Philosophy (ArtPHIL)

For information about this advanced certificate program, please go to <http://www.stonybrook.edu/commcms/philosophy/docs/artscert.html>.

### **Advanced Graduate Certificate (AGC) in Media, Art, Culture, and Technology**

The Advanced Graduate Certificate Program in Media, Art, Culture, and Technology (MACT) offers graduate students an interdisciplinary grounding in the historical and theoretical study of media, art, culture, and technology. The MACT graduate certificate is designed to complement a graduate student's primary degree by supporting research that traverses traditional academic methods and objects of inquiry in the humanities. Combining **faculty** with diverse expertise in media, art, culture, and technology, MACT supports work at the dynamic intersections of these evolving fields. Students enrolled in MACT are encouraged to join the **MACT email list** and to consult the **MACT website** for ongoing support and information as they move toward completion of the certificate.

### **Admission to the M.A. and Ph.D. Programs in Art History and Criticism**

In addition to the requirements of the Graduate School, the following information and prerequisites should be noted:

Admission for full-and part-time study is for the Fall semester. Part-time study is permissible for qualified M.A. candidates only. Admission into the M.A. and Ph.D. programs is at the discretion of the art history and criticism faculty with the final approval of the Graduate School. Admission to the program assumes a minimum of a B average in undergraduate work, meeting the standards of admission to the Graduate School, and taking the Graduate Record Examination (GRE) General Test, as required for all applicants to the Graduate School. The minimum TOEFL score for admission is 550 (paper), or 213 (computer), or 90 (internet-based test); OR an IELTS total score of 6.5. In order to teach, any graduate student whose native language is not English must score 55 or above on the TSE or SPEAK test OR obtain a score of 7.0 or better in the speaking component of the IELTS test. The website for ETS (TOEFL & GRE) is [www.ets.org](http://www.ets.org).

It is recognized that M.A. and Ph.D. applicants may come from a wide variety of backgrounds that will require individual structuring of their programs to suit their needs. Applicants will ordinarily have a bachelor's degree with an art history major or minor; however, this requirement may be waived at the discretion of the graduate faculty. Those without a demonstrated background in art history may be advised to take the two-part undergraduate art history survey, plus at least four upper-division undergraduate courses in art history (with at least two of those being in art history post 1800), prior to admission to the program. Undergraduate courses will not count toward your graduate degree. All applicants are encouraged to submit a sample of written work with their application.

### **Facilities of Art History and Criticism Department**

Since 1976, the Department of Art has enjoyed the resources of the Staller Center for the Arts. This 226,026-square-foot building includes the Departments of Art, Music, and Theatre and is a vibrant hub of lectures, concerts, performances, and other cultural activities. The complex includes faculty and staff offices, art history classrooms, and a graduate lounge. The first floor of the Art wing features a magnificent art gallery space devoted primarily to exhibitions of contemporary art. In addition, the department has substantial graduate studio space available at other locations on campus. Studio facilities in the Staller Center include full foundry, metals, and wood shops; a ceramics and ceramic sculpture studio; spacious painting, drawing, and studio classrooms; printmaking studios with etching, stone lithography and photo plate making and screen printing facilities; extensive digital facilities; and a shooting studio with gang and individual darkrooms. Art history classrooms are equipped with slide projectors and data projectors. The main library houses extensive collections of scholarship on the arts, including recent exhibition catalogues and the most important art history and criticism journals. Proximity to New York City makes available the numerous libraries, museums, galleries, ateliers, and publishing institutions of the greater metropolitan area. Classes, lectures, and conferences are also now offered at Stony Brook's Manhattan facility, conveniently located at 28th Street and Park Avenue South, and easy to reach by bus, train, and subway. Finally, the Pollock-Krasner House and the Pollock-Krasner Study Center, in East Hampton and Southampton, Long Island, are affiliated with the University. Once the home and studio of Jackson Pollock and Lee Krasner, the Pollock-Krasner House is now a both a landmark museum and a forum for lectures, seminars, and other academic activities. The Study Center comprises extensive reference materials and archives, including books, photographs, oral histories, and journals available for research.

### **Requirements for the M.A. Degree in Art History and Criticism**

#### **A. Course Requirements**

The student will be required to complete successfully 36 credits of graduate work, as outlined in the list of courses below. A student must achieve a 3.0 overall grade point average to receive a degree from Stony Brook.

##### **1. Required Courses (6 credits)**

ARH 540 Methodologies of Art History (3 credits)

ARH 592 Teaching Practicum (3 credits)

##### **2. Art History and Criticism Electives (15-21 credits)**

ARH 501 Theory and Criticism: From Antiquity through the Renaissance (3 credits)

ARH 502 History of 19th Century Art Criticism and Theory (3 credits)

ARH 503 History of 20th Century Art Criticism and Theory (3 credits)

ARH 541 Topics in Ancient Art (3 credits)

- ARH 542 Topics in Medieval Art (3 credits)
- ARH 543 Topics in Renaissance Art (3 credits)
- ARH 544 Topics in Early Modern Art (3 credits)
- ARH 545 Topics in 19th-Century Art (3 credits)
- ARH 546 Topics in 20th-Century Art (3 credits)
- ARH 547 Topics in Global, Colonial and Diasporic Art (3 credits)
- ARH 548 Museum Studies Seminar (3 credits)
- ARH 549 Topics in American Visual Culture (3 credits)
- ARH 550 Inquiries into Art Criticism and Theory (3 credits)
- ARH 551 Topics in Performance (3 credits)
- ARH 552 Topics in Contemporary Art (3 credits)
- ARH 554 Topics in Visual Culture (3 credits)
- ARH 570 Issues in Architectural History and Criticism (3 credits)

3. Humanities and Social Sciences Electives (3-9 credits)

One to three courses in the humanities and/or social sciences, to be chosen in consultation with a faculty advisor and with the approval of the M.A./Ph.D. Graduate Director. These may be in relevant aspects of literary studies or criticism, history, musicology, philosophy, dramaturgy, sociology, anthropology, etc., but cannot be in studio art.

4. Other (0-12 credits)

- ARH 580 Art Criticism or Gallery Internship (0-3 credits)
- ARS 580 Visual Arts seminar or other studio class (0-3 credits)
- ARH 591 Practicum in the Writing of Art Criticism (0-3 credits)
- ARH 595 Directed Readings (0-3 credits)
- ARH 598 Thesis (0-6 credits).

**B. Comprehensive Examination**

This test of basic competency, offered in early September of each academic year, is designed to assess the student's knowledge of individual artists and works of art, and of particular periods and dates in the history of art. It will include slide identifications and definitions of terms relevant to the history of art and art criticism. Student must take this examination in their third semester of study in order to continue in the program. An extension will be permitted for part-time students.

**C. Foreign Language**

A reading knowledge of French or German must be acquired before graduation. Students planning to advance to doctoral work will be encouraged to master both of these languages.

**D. Teaching Requirement**

All graduate students will be expected to assist in teaching a minimum of one semester, usually during their second year of residency. The course in which the student will assist shall ordinarily be an upper-level undergraduate course, under the supervision of a professor. Competency in teaching will be judged on the basis of a guest lecture, class discussion sessions, and other classroom assignments observed by the course's faculty supervisor, as well as on the basis of the assistant's overall performance..

**E. Thesis**

At the beginning of the third semester at the latest, the student, together with the Director of Graduate Studies, will jointly agree on a thesis topic, based upon an paper that s/he has written for a seminar in fall or spring semester of the first year. The student will at that time submit a prospectus outlining the nature and aims of the thesis. Over the course of the third and fourth semesters, in light of recommendations provided by a faculty advisor, this paper will be reworked into a significant original work relevant to art history, criticism, and/or theory. The advisor will be selected by the student at the beginning of the third semester or before that, in consultation with the Director of Graduate Studies. A faculty reader, appointed by the Director of Graduate Studies early in the third semester, will also read the thesis. (The student may request a member of the affiliate faculty as his or her second reader, if said individual is willing to serve. Affiliated faculty may not serve as primary advisor, however.). The thesis is to be completed and approved by the end of the fourth semester.

Requirements for the Ph.D. Degree in Art History and Criticism

**A. Course Requirements**

The student will be required to complete successfully 60 credits of graduate work, as outlined in the list of categories and courses below. Credits for the Ph.D. will total 24 beyond the entering Master's degree or its equivalent, as determined by the Director of Graduate Studies, for a total of 60 credits. A student must achieve a 3.0 overall grade point average to receive a degree from Stony Brook.

## Required Courses (6-9 credits)

ARH 540 Methodologies in Art History (3 credits)

ARH 602 Practicum in Teaching (3-6 credits)

## 2. Electives in Art History, Visual Culture, and Criticism (24-36 credits)

ARH 501 Criticism, Theory, Practice: From Artes Mechanicae to Artes Liberales (3 credits)

ARH 502 History of 19th Century Art Criticism and Theory (3 credits)

ARH 503 History of 20th Century Art Criticism and Theory (3 credits)

ARH 541 Topics in Ancient Art (3 credits)

ARH 542 Topics in Medieval Art (3 credits)

ARH 543 Topics in Renaissance Art (3 credits)

ARH 544 Topics in Early Modern Art (3 credits)

ARH 545 Topics in 19th Century Art (3 credits)

ARH 546 Topics in 20th Century Art (3 credits)

ARH 547 Topics in Global, Colonial and Diasporic Art (3 credits)

ARH 548 Museum Studies (3 credits)

ARH 549 Topics in American Visual Culture (3 credits)

ARH 550 Inquiry in Art Criticism and Theory (3 credits)

ARH 551 Topics in Performance (3 credits)

ARH 552 Topics in Contemporary Art (3 credits)

ARH 553 Contemporary Art in New York (3 credits)

ARH 554 Topics in Visual Culture (3 credits)

ARH 570 Issues in Architectural History and Criticism (3 credits)

## 3. Humanities and Social Science Electives (6-12 credits)

## 4. Other electives

ARH 580 Art Criticism of Gallery Internship (0-3 credits)

ARS 580 Visual Arts Seminar (0-3 credits)

ARH 598 MA thesis (0-6 credits)

ARH 591 Practicum in the Writing of Art Criticism (0-3 credits)

ARH 690 Directed Readings (0-6 credits)

## 5. PhD Thesis Credits (after being advanced to doctoral candidacy and G5 status)

ARH 699 Dissertation Research on Campus

ARH 700 Dissertation Research off Campus - Domestic

ARH 701 Dissertation Research off Campus - International

Credits for thesis preparation and research may be used to complete the total of 60 credits for the Ph.D.

**B. Teaching Requirement**

All doctoral students will be expected to assist in teaching a minimum of one year regardless of previous experience. Students without Teaching Assistantships will either teach stand-alone sections of the introductory undergraduate courses in the history of art; or assist in upper-division (300 level) undergraduate courses, taught by a supervising faculty member. During their first and third years of study, students with Teaching Assistantships will assist in upper-division (300 level) undergraduate courses, taught by the supervising faculty member. During the student with Teaching Assistantship's second and fourth year (if supported), s/he will teach a stand-alone section of the introductory undergraduate course in the history of art. Some may also assist in or teach an undergraduate course at the 300 level. Competence in teaching will be judged through teacher evaluation questionnaires, by classroom or lecture hall visits by the course's faculty supervisor, and by faculty supervisor assessments of the Teaching Assistant's overall performance.

### **C. Comprehensive Examination**

Information about the required comprehensive examination is found above under degree requirements for the M.A. Degree in Art History and Criticism. All Ph.D. students who enter the program without a master's degree in art history must take this examination before the end of the third semester of study in order to continue in the program. Ph.D. students who enter the program with an M.A. degree in art history will be exempted from taking the comprehensive examination.

### **D. M.A. Thesis**

At the beginning of the third semester at the latest, the student, together with the Director of Graduate Studies, will jointly agree on a thesis topic, based upon an paper that s/he has written for a seminar in fall or spring semester of the first year. The student will at that time submit a prospectus outlining the nature and aims of the thesis. Over the course of the third and fourth semesters, in light of recommendations provided by a faculty advisor, this paper will be reworked into a significant original work relevant to art history, criticism, and/or theory. The advisor will be selected by the student at the beginning of the third semester or before that, in consultation with the Director of Graduate Studies. A faculty reader, appointed by the Director of Graduate Studies early in the third semester, will also read the thesis. (The student may request a member of the affiliate faculty as his or her second reader, if said individual is willing to serve. Affiliated faculty may not serve as primary advisor, however.) The thesis is to be completed and approved by the end of the fourth semester.

### **E. Foreign Language Requirement**

A reading knowledge of German and French is required for advancement to candidacy. In consultation with the candidate's advisor, the student may petition the Director of Graduate Studies to replace one of these two languages with a different language more suitable for the student's projected area of research. Mastery of a third language may also be recommended if it is deemed necessary for the student's research.

### **F. Qualifying (Preliminary) Examination**

The Qualifying Examination will be administered on or about March 1st of each year to PhD students in their third year of coursework (second year for those entering with a prior master's degree), prior to the beginning of dissertation research. It will be a written exam covering a major and minor.

The content of the exam will vary according to the student's interests and their choice of major and minor fields, but exam preparation should ideally begin during the student's second year of coursework. The student will be expected to select two faculty members to serve as major and minor advisors, and to seek guidance from them on appropriate focus and bibliography in preparation for the exams. The Qualifying Exam committee consists of three members of the department faculty (including major and minor advisors), and is appointed upon the recommendation of the M.A./Ph.D. Graduate Director, in consultation with the student. The format of the exam will be five questions for the major, from which the student shall choose three; and three questions for the minor, from which the student shall choose two to answer. Responses are in essay form.

### **G. Advancement to Candidacy**

To be advanced to Ph.D. candidacy, the student must have:

1. Completed at least 54 graduate credits and all other degree requirements (see A-F listed above), other than the dissertation and dissertation research credits.
2. Submitted and defended a proposal outlining the nature and aims of the dissertation. The proposal must be approved by a faculty dissertation committee and by the Director of Graduate Studies (see below). When all of these requirements have been completed satisfactorily, the Director of Graduate Studies will submit a request to the Dean of the Graduate School to advance the candidate to candidacy.

### **H. Dissertation**

No later than eight weeks before the beginning of the seventh semester, (fifth semester for those entering with a prior master's degree), but preferably by the end of the sixth semester, the student will prepare a written prospectus, outlining the scope, method, and aims of the dissertation. The student will submit the proposal to the dissertation advisor and two other members of the faculty who will serve as readers, as members of the departmental dissertation committee; one of those readers (but not the advisor), a member of the art history faculty, will serve as Chair of the dissertation defense. After the student's advisor has conferred with the other departmental committee members and the departmental committee has approved the proposal, the advisor will submit the proposal and names of the committee members to the Director of Graduate Studies for approval. (The student may be advanced to candidacy at this point.) The student will then give a digital and hard copy of the proposal and the approval sheet to the Graduate Coordinator. At least six months before the dissertation defense, the Graduate Studies Director, in consultation with student and the student's dissertation committee, will name a reader from outside the department who has specialized in related areas. The Graduate Director must then request approval of the Dissertation Examining Committee by the Graduate School.

At least ten to twelve weeks before the Graduate School's deadline for submitting the completed dissertation, the student will submit to the Dissertation Examining Committee what is intended to be the final draft of the dissertation. No more than four weeks after that, if the readers have agreed that the dissertation is ready to be defended, the dissertation committee chairperson will schedule the defense, an oral examination open to interested faculty and graduate students. The date of the defense must be approved by the Graduate School. All four readers on the dissertation committee must recommend acceptance of the dissertation before it can be approved by the Graduate School.

**I. Time Limit**

All requirements for the Ph.D. degree must be completed within seven years after completing 24 hours of graduate courses in the department. In rare instances, the dean of the Graduate School will entertain a petition to extend this time limit, provided it bears the endorsement of the department chairperson.

Requirements for the Advanced Graduate Certificate (AGC) in Media, Art, Culture, and Technology

**15- Credit Requirement:** The Certificate is awarded upon completion of five MACT-eligible courses, or fifteen-credits, which may also be counted toward degree requirements in the student's home department. Eligible courses must use humanistic methods of critical inquiry to engage topics at the intersection of media, art, technology, and culture. Any instructor may submit a syllabus to the Director to request that his or her course be considered eligible for credit toward the MACT certificate; eligibility is approved by the MACT executive committee. \*A maximum of six credits (two courses) taken prior to enrolling in MACT can be credited toward the completion of the certificate.\*

**Interdisciplinary Requirement:** Students may count a maximum of three courses listed within their home department/program toward the graduate certificate; at least two of the five courses counted for credit in MACT must be listed outside the graduate student's home department or program. Also, at least three different departments or programs must be represented among the five courses that are counted for credit toward the MACT certificate. (Cross-listed courses can be counted for any one of the departments/programs designated).

**Curriculum:** To be eligible for credit toward the certificate, a course 1) must be taught in a CAS department or program, 2) must engage in critical inquiry through the lens of the arts and humanities (for example, courses in the practice of physical science would be precluded), 3) must significantly address intersections of media, art, culture, and technology, 4) must be open to enrollment by students outside the listing department/program, 5) cannot be a required course for a departmental degree. Courses are approved as eligible by the MACT executive committee. Any faculty member may request a course be listed as MACT eligible by submitting a syllabus and written request no later than one month before enrollment opens for the term. More information, and an archive of MACT-eligible courses with titles, instructors, and descriptions is maintained on the MACT website: <http://mact.stonybrook.edu/>

MACT relies largely on "topics" courses that affiliate faculty offer on changing subjects close to their current research. Therefore, a list of eligible courses is updated each term. Courses may have their own pre-requisites, and are open to MACT students by permission of the instructor.

**Eligible Courses:**

*Fall 2016:* ARH 541, ARH 549, ARH 552, (CLT/CST 609 Tan), MUS 555

*Spring 2016:* ARH 546, ARH 549, ARH 552, ARH 550, EGL 555, MUS 536, MUS 555, WRT 617

*Fall 2015:* ARH 549, ARH 551, MUS 536

*Spring 2015:* ARH 546, ARH 552, EGL 608, CLT/CST 609 (August), CLT/CST 609 (Gaboury), MUS 541, MUS 555

**Faculty of Art History and Criticism****Professors**

Bogart, Michele H., Ph.D., 1979, University of Chicago: American Art and Visual Culture.

Lutterbie, John, Ph.D., 1983, University of Washington: Performance and Theatre Studies.

Rubin, James H., Ph.D., 1972, Harvard University: 18th- and 19th-century Art; Art and Politics.

Siegel, Katy, Ph.D., 1995, University of Texas at Austin: Art Criticism, Postwar and Contemporary Art, Curatorial Studies.

**Associate Professors**

Frank, Barbara E., Ph.D., 1988, Indiana University: African, Mesoamerican and African Diaspora art history.

Patterson, Zabet, Ph.D., 2007, University of California, Berkeley: Core Faculty for the Consortium for Digital Arts, Culture, and Technology; Contemporary European and American Art & Criticism; History & Theory of Computational Media, Performance & Cybernetics.

Uroskie, Andrew V., Ph.D., 2005, University of California, Berkeley: History And Criticism of Late Modernism, Experimental Film, Video and Performance.

**Assistant Professors**

Belisle, Brooke, Ph.D., 2012, University of California, Berkeley: Core Faculty for the Consortium for Digital Arts, Culture, and Technology; Visual Culture, Media Art, Comparative History and Theory Of Photography, Cinema, and Digital Media.

Gaboury, Jacob, PhD, 2014, New York University: History and Theory of Digital Media, Visual Culture, Queer Theory, and Media Studies.

Lee, Sohl, Ph.D., 2014, University of Rochester: Contemporary East Asian Art and Visual Culture, Critical Theory and Globalization.

Mather, David S., Ph.D., 2012, University of California, San Diego: Early Twentieth-Century and Interwar European Art.

## Lecturers

Goodarzi, Shoki, Lecturer. Ph.D., 1999, University of California at Berkeley: Contemporary Middle Eastern Art & Cinema; Near Eastern Art & Archaeology; Greek & Roman Art and Archaeology; Curatorial Studies.

## Arts Administration

Harrison, Helen, Director of the Pollock-Krasner House and Study Center.

Levitov, Karen, Director and Curator, Paul W. Zuccaire Gallery, Staller Center for the Arts.

Walsh, Lorraine, Art Director and Curator of The Simons Center for Geometry and Physics.

## Affiliated Faculty

Craig, Megan, Assistant Professor of Philosophy. Ph.D., 2006, New School: Levinas and aesthetics; phenomenology; painting.

Kaplan, Elizabeth Ann, Distinguished Professor of English and Comparative Literary and Cultural Studies; Director, Humanities Institute at Stony Brook. Ph.D., 1970, Rutgers University: Film and cultural studies; women's studies; psychoanalysis.

Munich, Adrienne, Professor of English. Ph.D., 1976, City University of New York: Victorian literature and culture; feminist theory; material culture; fashion theory.

See STUDIO ART FACULTY: <http://www.stonybrook.edu/sb/graduatebulletin/current/academicprograms/ars/faculty.php>

Number of teaching, graduate, and research assistants, Fall 2013: 20

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*



## Studio Art

**Chairperson**

Barbara Frank, Staller Center 4219 (631) 632-7250

**M.F.A. Graduate Program Director**

Nobuho Nagasawa, Staller Center 2225 (631) 632-7250

**Graduate Secretary**

Lisa Perez, Staller Center 2228 (631) 632-7270

**Degrees Awarded**

M.F.A. in Studio Art

**Website**<http://art.stonybrook.edu>**Application**[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-gs](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-gs)

## Studio Art

The Department of Art's master's of fine arts program in studio art occupies a unique position among graduate programs in art studies. The department's programs have been built with a strong emphasis on modern art and contemporary visual culture, comprising a range of critical, theoretical, and interdisciplinary interests. Rather than being isolated at a special or autonomous art institute or school, these programs have all the advantages associated with the intellectual environment of a major research university. Art history students also have the opportunity to gain valuable experience as managing and business editors for the respected semi-annual journal, *Art Criticism*, published by the department under the editorship of Donald Kuspit.

Because of the Art Department's extensive undergraduate programs, Stony Brook is the only major university in the New York metropolitan area to offer teaching experience to first- and/or second-year graduate students. Such experience is an invaluable asset in today's job market.

Graduate studies are facilitated by Stony Brook's ideal location half-way between the art centers of New York City and the Hamptons, along the beautifully wooded North Shore of Long Island. Classes, lectures, and conferences are also offered at the Pollock-Krasner House in East Hampton, administered under the auspices of the Art Department and the Stony Brook Foundation, and at the Pollock-Krasner Study Center at Stony Brook Southampton. All curricula are designed to take advantage of the full range of museums, galleries and libraries of the metropolitan region as well as the facilities of a major research university campus. Thanks to the well-established ties of Stony Brook faculty to the professional art world, our students are regularly placed in internship and apprenticeship programs with artists, galleries, museums, arts agencies and other cultural institutions throughout the metropolitan area. Art history students also have the opportunity to gain valuable experience as managing and business editors for the respected semi-annual journal, *Art Criticism*, published by the department under the editorship of Donald Kuspit.

## M.F.A. in Studio Art

The M.F.A. in Studio Art at Stony Brook is a flexible 60-credit terminal degree program combining studio work, academic studies, and theory. Although the degree requirements concentrate primarily on studio practice, the program requires several liberal arts courses as well as a teaching practicum. The program culminates in a one-person thesis show accompanied by a written thesis, as well as participation in a M.F.A. group exhibition in the University Art Gallery. Normally, the M.F.A. requires three years of full-time residency. Students are not accepted into the M.F.A. program on a part-time basis. The degree is especially suitable for students who plan professional involvement in the making of art as artists, and may also be the degree of choice for those preparing for careers in arts administration, art education, or gallery and museum work.

## Admission to the M.F.A. Program in Studio Art

In addition to the requirements of the Graduate School, the following information and prerequisites should be noted:

Admission for full-time study will be granted to begin in the Fall semester only. Admission into the M.F.A. program is at the discretion of the graduate faculty with final approval of the Graduate School. Admission to the program assumes a minimum of a B average in undergraduate work, meeting the standards of admission to the Graduate School. The minimum TOEFL score for admission is 550 (paper), or 213 (computer), or 90 (internet-based test); OR an IELTS total score of 6.5. In order to teach, which is a requirement for the MFA, any graduate student whose native language is not English must score 55 or above on the TSE or SPEAK test OR obtain a score of 7.0 or better in the speaking component of the IELTS test. The Web site for ETS (TOEFL & GRE) is [www.ets.org](http://www.ets.org).

All candidates for the M.F.A. program must enter with a minimum of 40 semester hours of credit or the equivalent of undergraduate work in studio art in a B.A., B.S., B.F.A., or similar program. The candidate must submit with his or her graduate application 15 to 20 images of work **and/or** other appropriate materials by on-line submission using <https://www.wetransfer.com> only. Go to <http://art.stonybrook.edu/graduate/g-ars/> to follow the full application procedure. Applicants should also have a minimum of 15 semester hours of credit in art history, theory, or criticism. At the discretion of the graduate faculty, those without sufficient background may be advised to complete further undergraduate coursework prior to acceptance and admission to the program. Decisions by the graduate art faculty on these matters are in addition to, and not in lieu of, the general requirements of the Graduate School.

<http://www.stonybrook.edu/sb/graduatebulletin/current/academicprograms/ars/index.pdf>

**M.F.A. in Studio Art** The M.F.A. in Studio Art at Stony Brook is a flexible 60-credit terminal degree program combining studio work, academic studies, and theory. Although the degree requirements concentrate primarily on studio practice, the program requires several liberal arts courses as well as a teaching practicum. The program culminates in a one-person thesis show accompanied by a written thesis, as well as participation in a M.F.A. group exhibition in the University Art Gallery. Normally, the M.F.A. requires three years of full-time residency. Students are not accepted into the M.F.A. program on a part-time basis. The degree is especially suitable for students who plan professional involvement in the making of art as artists, and may also be the degree of choice for those preparing for careers in arts administration, art education, or gallery and museum work. Admission to the M.F.A. Program in Studio Art In addition to the requirements of the Graduate School, the following information and prerequisites should be noted: Admission for full-time study will be granted to begin in the Fall semester only.

Admission into the M.F.A. program is at the discretion of the graduate faculty with final approval of the Graduate School. Admission to the program assumes a minimum of a B average in undergraduate work, meeting the standards of admission to the Graduate School.

The minimum TOEFL score for admission is 550 (paper), or 213 (computer), or 90 (internet-based test); OR an IELTS total score of 6.5. In order to teach, which is a requirement for the MFA, any graduate student whose native language is not English must score 55 or above on the TSE or SPEAK test OR obtain a score of 7.0 or better in the speaking component of the IELTS test. The Web site for ETS (TOEFL & GRE) is [www.ets.org](http://www.ets.org). All candidates for the M.F.A. program must enter with a minimum of 40 semester hours of credit or the equivalent of undergraduate work in studio art in a B.A., B.S., B.F.A., or similar program. The candidate must submit with his or her graduate application 15 to 20 images of work and/or other appropriate materials **by on-line submission using** <https://www.wetransfer.com> **only**. Go to <http://art.stonybrook.edu/graduate/g-ars/> to follow the full application procedure. Applicants should also have a minimum of 15 semester hours of credit in art history, theory, or criticism. At the discretion of the graduate faculty, those without sufficient background may be advised to complete further undergraduate coursework prior to acceptance and admission to the program. Decisions by the graduate art faculty on these matters are in addition to, and not in lieu of, the general requirements of the Graduate School.

**Can we add this in** <http://www.stonybrook.edu/sb/graduatebulletin/current/academicprograms/ars/index.pdf> **to make it clear.**

**Following should be submitted directly to the Art Department:**

1. **Statement of Purpose / Artist Statement:** (250-500 words) describing the applicant's reason for pursuing graduate study.
2. **Resume/CV:** Applicants must submit a resume which should include professional experience as well as related activities, such as research, awards and exhibitions.
3. **Visuals:** 20 visual images with short project description (100 words). Still images should be less than 5 MB and videos should not exceed 60MB.

All applicants must submit these files to <[jomy.muttathil@stonybrook.edu](mailto:jomy.muttathil@stonybrook.edu)> **using** <https://www.wetransfer.com>.

Please do not email directly.

#### Art Department Facilities

Since 1976, the Department of Art has enjoyed the resources of the Staller Center for the Arts. This 226,026-square-foot building includes the Departments of Art, Music, and Theatre and is a vibrant hub of lectures, concerts, performances, and other cultural activities. The complex includes faculty and staff offices, art history classrooms, and a graduate lounge. The first floor of the Art wing features a magnificent art gallery space devoted primarily to exhibitions of contemporary art, including the annual M.F.A. show. In addition, the department has substantial graduate studio space available at other locations on campus. Each M.F.A. student is provided individual studio space and there are large common spaces used regularly for discussion, temporary exhibitions or installations, and documentation of work. The Lawrence Alloway Gallery provides exhibition space with media exhibition equipment and network connection for M.F.A. students, and there are several other on-campus locations where students have opportunities to exhibit their work. Studio facilities in the Staller Center include full foundry, metals, and wood shops; a ceramics and ceramic sculpture studio; spacious painting, drawing, and studio classrooms; printmaking studios with etching, stone lithography and photo plate making and screen printing facilities; extensive digital facilities; and a shooting studio with gang and individual

darkrooms. Art history classrooms are equipped with slide projectors and data projectors. The main library houses extensive collections of scholarship on the arts, including recent exhibition catalogues and the most important art history and criticism journals. Proximity to New York City makes available the numerous libraries, museums, galleries, ateliers, and publishing institutions of the greater metropolitan area. Finally, the Pollock-Krasner House and the Pollock-Krasner Study Center, in East Hampton and Southampton, Long Island, are affiliated with the University. Once the home and studio of Jackson Pollock and Lee Krasner, the Pollock-Krasner House is now a both a landmark museum and a forum for lectures, seminars, and other academic activities. The Study Center comprises extensive reference materials and archives, including books, photographs, oral histories, and journals available for research.

#### Requirements for the M.F.A. in Studio Art

The Department accepts only full-time students into the M.F.A. program.

#### A. Course Offerings

Courses are offered in painting, drawing, sculpture, printmaking, computer and electronic media, photography, ceramics, and ceramic sculpture. In addition, studio courses offered through other departments may satisfy area of concentration requirements, subject to approval by the studio art faculty and the Director of Graduate Studies.

#### B. Liberal Arts Requirement

Students are required to take three or four graduate liberal arts courses (in art history and criticism, literature, history, anthropology, philosophy, musicology, dramaturgy, cultural studies, among others).

#### C. Demonstrations of Studio Proficiency

All M.F.A. candidates should demonstrate proficiency through the development of a comprehensive body of work. Proficiency is determined by the faculty through periodic evaluation of the work, including mid-term and final critiques each semester, and thesis exhibition review by the student's thesis committee in the third year.

#### D. Final Year and One-Person Exhibition

During the final year, in addition to regular coursework, the student will prepare a one-person thesis exhibition for the Graduate Library Gallery or some other suitable venue on campus. As part of the thesis requirement, the student will submit to the department appropriate visual documentation (color slides, photographs, digital images, videos) of the exhibition and a written commentary which conforms to the Graduate School's requirements for master's theses. The written thesis should complement the visual work as an articulation of the student's thoughts and objectives within the broader context of arts and ideas. Third-year students will also participate in the University Art Gallery's annual M.F.A. group exhibition.

#### E. Teaching Requirement

All graduate students are required to assist in teaching a minimum of one semester; this course offers three credits toward the M.F.A. degree under ARS 531. In addition, the Art department requires a preliminary semester of observing in the course to be taught under faculty supervision during the following semester. The semester of observation offers an optional three credits toward the degree. Beyond the three or six credits teaching practicum applied toward the degree, all other teaching by students with Teaching Assistantships is part of their obligation and is done without academic credit.

#### F. Course Requirements

The student will be required to complete successfully 60 credits of graduate work, as outlined in the list of courses below. No graduate studio course may be taken for more than three credits per semester.

1. ARS 550 In Process Critique (3 credits) to be taken during the first year. May be repeated and counted toward studio credits.
2. At least nine graduate studio courses (27 credits).
3. Two semesters of ARS 580 Visual Arts Seminar (6 credits). Additional Visual Arts Seminars are encouraged.
4. Three courses in graduate liberal arts, e.g., art history, languages, literature, philosophy, etc. (9 credits).
5. ARS 531 Graduate Teaching Practicum (see item E, above) (3-6 credits).
6. ARS 532 Thesis Project (up to 6 credits).

#### Faculty of Studio Art Department

##### Faculty of Studio Art

##### Professors

Buonagurio, Toby, M.A., 1971, City College of New York: Ceramics; ceramic sculpture; drawing.

Levine, Martin, M.F.A., 1972, California College of Arts and Crafts: Printmaking.

Nagasawa, Nobuho, M.F.A., 1985, Hochschule der Kunste Berlin, Germany: Sculpture, social sculpture, installation, public art

Pekarsky, Melvin H., Emeritus, M.A., 1956, Northwestern University: Drawing; painting; public art.

Pindell, Howardena, M.F.A., 1967, Yale University: Painting and drawing.

##### Associate Professors

Dinkins, Stephanie, M.F.A., 1997, Maryland Institute College of Art: Digital media; installation; photography.

Erickson, Christa, M.F.A., 1995, University of California, San Diego: Director, Consortium for Digital Arts, Culture, and Technology. Electronic installation, digital media, video art.

#### Assistant Professors

Berbic, Isak, Assistant Professor, M.F.A., 2007, School of Art and Design, College of Architecture and the Arts, University of Illinois at Chicago: Photography.

#### Lecturers

Salcedo-Watson, Lorena, Lecturer, M.F.A., 2008, Stony Brook University; Printmaking, Lithography and Drawing

Clarke, Melissa, Adjunct Lecturer. M.P.S., 2006, New York University, Tisch School of the Arts; Digital Arts

#### Arts Administration

Harrison, Helen, Director of the Pollock-Krasner House and Study Center.

Levitov, Karen, Director and Curator, Paul W. Zuccaire Gallery, Staller Center for the Arts.

Walsh, Lorraine, Art Director and Curator of The Simons Center for Geometry and Physics.

#### Technicians and Professional Staff

Ide, Takafumi, M.F.A., 2007, Stony Brook University: Photo/Digital technician and studios manager.

Richholt, Dan, Sculpture Technician and Lecturer, M.F.A., 1994, Stony Brook University, Sculpture Technician and Studios Manager.

#### Affiliated Faculty

Schedel, Margaret, Associate Professor of Composition and Computer Music, D.M.A., University of Cincinnati College.

Jeanette Oi-Suk Yew, Lecturer, Theatre Arts, M.F.A. in Design, California Institute of the Arts: Lighting Design and Technology

See ART HISTORY & CRITICISM FACULTY: <http://www.stonybrook.edu/sb/graduatebulletin/current/academicprograms/arh/faculty.php>  
Number of teaching, graduate, and research assistants, Fall 2013: 20

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

**Asian American Studies****Chairperson**

Agnes He, Humanities Building 1046 (631) 632-4041

**Graduate Program Director**

Gregory A. Ruf, Humanities Building 1114

**Graduate Administrator**

Darlene Prowse, Humanities Building 1046, (631) 632-7690

**Graduate Secretary**

Lynne Forester, Humanities Building 1046 (631) 632-4030

**Degrees Awarded**

M.A. in Contemporary Asian and Asian American Studies

**Web Site**

stonybrook.edu/aaas

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-gs](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-gs)

**M.A. in Contemporary Asian and Asian American Studies**

The Department of Asian and Asian American Studies, within the College of Arts and Sciences, was established in 2002. It is one of the few departments in the U.S. that integrates the study and teaching of both Asian and Asian American studies. It focuses on Asian and Asian American languages, cultures, and intellectual histories over time and in contact with other global cultures.

This Master's program focuses on contemporary Asian and Asian-American cultures, politics and societies, contemporary philosophical and religious orientations in Asia, as well as the role of global processes in the transformation of Asia and Asian America.

The following individuals are encouraged to apply:

1. Undergraduate majors or minors in Asian Studies and/or Asian American Studies who would like to pursue a graduate degree to enhance their employment prospects;
2. Individuals with an academic background in Art, Business, Education, Journalism, Health Professions, Engineering and other fields who would like to develop expert knowledge about Asia and Asian America;
3. Individuals who are planning a career in Arts and Culture, Business, Advertising, Education, Journalism, Diplomacy, International Relations, Health Sciences, and Industry in today's globalized job market;
4. Mid-career professionals who would like to enhance their job prospects by building expert knowledge about Asia and Asian America;
5. Teachers of ESL, EFL, Chinese, Korean, Japanese, Spanish, French, Italian, and other global languages who would like to seek relevant advanced professional training.

**Admission to the M.A. Program in Contemporary Asian and Asian American Studies**

Applicants for admission to the Master's program are expected to hold a Bachelor's degree (in any field) and have basic proficiency (two years of formal study or equivalent) in at least one Asian language. Applicants are required to submit the following materials:

- Undergraduate transcript
- Official report of GRE scores
- Statement of purpose (500-1000 words)
- Three letters of recommendation
- Official report of TOEFL scores (for international applicants from non-English speaking countries)

The Asian language requirement may be met in the following ways:

- A. Equivalent course-work: Students who have completed at least two years (12 credits) of college-level course-work in an Asian language will be deemed to have met the language eligibility requirement.
- B. Individualized Plan: Students who do not meet the language eligibility requirement through previous course-work must, upon entering the program, consult with the Graduate Director to develop an individualized plan to establish basic Asian language proficiency through one of the following four options:
  1. By passing a Challenge Exam in an Asian Language
  2. By passing another examination approved by the Graduate Director.
  3. By completing Asian Language Coursework after admission (NB: Such course credits are remedial, however, and as such will NOT count toward completion of the M.A. degree)

4. By participating in a semester-long or year-long academic Study Abroad program in an Asian country

C. Special Reading Courses (reading course credits will NOT count toward completion of the M.A. degree)

Program faculty and students will be able to draw upon a wide range of academic, professional, and cultural resources. These include academic programs in Asian & Asian American Studies, China Studies, Japanese Studies, Korean Studies, and South Asian Studies, as well as Cultural Analysis and Theory, Business, Journalism, Media Studies, Linguistics, Religious Studies, Philosophy, History, and various social sciences. In terms of professional development, PEP (Professional Education Program) coordinates with the Department of Asian and Asian American Studies and Foreign Language Teacher Preparation Program to offer teacher certification programs for Chinese, Japanese and Korean. Moreover, the Language Learning and Research Center (LLRC) offers a state-of-the-art multimedia language center at Stony Brook University, with a wide variety of materials and technologies to assist scholars and students of Asian languages. The Center for Multilingual and Intercultural Communication (MIC) provides opportunities for research across languages and cultures. Master's students seeking to pursue a study abroad opportunities during their graduate training will work with the Office of the International Academic Programs and Services. In addition, there are a variety of social and cultural activities and services offered through the Mattoo Center for India Studies, the Japan Center at Stony Brook, the Center for Korean Studies, the Charles B. Wang Center, as well as the diverse student organizations represented on campus.

### **Requirements for the M.A. Degree in Contemporary Asian and Asian American Studies**

30-credits, including 24-credits of course work and 6-credits of thesis/project work, over two semesters. More specifically, students are required to take the following:

- 1) a fall pro-seminar in research methods (3 credits)
- 2) one course in each of five categories (15 credits):
  - Language and Cross-Cultural Communication
  - Religions and Philosophies of Asia
  - Culture and Heritage
  - Politics and Society
  - Contemporary Asian Diaspora
- 3) two elective courses in any field of interest, chosen in consultation with and subject to approval of the Graduate Director (6 credits)
- 4) a thesis or final project (6 credits)

An optional Asian language track is provided for students with a strong background and interest in a particular Asian language. These students may take graduate level Asian language courses as their two elective courses for the MA program.

### **Distinguished Professors**

Sridhar, Shikaripur N., SUNY Distinguished Service Professor, Ph.D., 1980, University of Illinois: South Asian Linguistics; Kannada Grammar and Sociolinguistics; Multilingualism; Psycholinguistics; second Language Acquisition and Teaching; World Englishes; India Studies; Kannada Literature and Translation of Indian Literacy Classics.

### **Full Professors**

Chittick, William C. Ph.D., 1973, University of Tehran: Islamic intellectual history, Sufism, Persian literature.

He, Agnes Weiyun, Department Chair, Ph.D., 1993, UCLA: discourse and communication, language socialization, heritage language, Chinese.

Murata, Sachiko, Ph.D., 1971, University of Tehran: Islamic thought in the Chinese language, Islamic law, Islamic cosmology.

### **Associate Professors**

Balce, Nerissa S., Ph.D., 2002, UC Berkeley: postcolonial theory and the cultures of 1898; race, American visual culture and feminist epistemologies; state violence and Filipino culture; and Asian American literature and culture.

Kim, Hongkyung, Ph.D., 1993, Sungkyunkwan University in Seoul, South Korea: Korean Intellectual History, Confucianism and Daoism.

Nicholson, Andrew J., Ph.D., 2005, University of Chicago: philosophies of India; Hinduism; Indian intellectual history: philosophy of religion; Sanskrit.

Ruf, Gregory. Ph.D. 1993 Columbia University: cultural anthropology, Gender & Social Organization, Historical Anthropology, Cultural Ecology & Environmental History, Maritime Studies, Social Theory, Ethnographic Methods, Research Design, Ancient China, Modern China.

Sridhar, Kamal K., Ph.D. 1980, University of Illinois at Urbana-Champaign: Applied Linguistics, TESOL, Sociolinguistics, Bilingualism, World Englishes.

### **Assistant Professors**

Sato, Eriko, Ph.D., 1996, The State University of New York at Stony Brook: linguistics; second language acquisition; translation studies.

**Lecturers**

Christoff, Peggy Spitzer, Ph.D., 1984, American University: US-China scientific and technological relations; women's oral history; Asian American Pacific Islander voting patterns.

Diaz, Mary Ph.D. 2002, Stony Brook University: Japanese Literature and Religious Studies.

Hwang, Jiwon, Ph.D., 2011, Stony Brook University: Second Language Acquisition, Korean linguistics, language processing

Nagase, Eva, Ph.D. candidate, Stony Brook University: Japanese language, culture studies, material culture, travelogue, Japanese literature, Japanese art.

Sohn, Heejeong, Ph.D., 2014, Stony Brook University: Modern Korea, visual culture, representational techniques, gender, Korean language and culture.

Zeng, Dongmei, Provost's Outstanding Lecturer, D.A., 1997, SBU: Chinese language maintenance and shift, second language acquisition and pedagogy, Chinese linguistics.

**Affiliate Faculty**

August, Timothy K., Ph.D., 2014, University of Minnesota: Critical refugee studies, Asian American studies, Diasporic Vietnamese literature and film, Postcolonial theory and criticism.

Lim, Shirley Jennifer, Ph.D., 1998, UCLA: Asian American history, race/ethnicity, gender, film, popular culture.

Santa Ana, Jeffrey, Ph.D., 2004, University of California, Berkeley: Associate Professor of English, Asian American and Asian-Pacific diaspora studies, postcolonial literature and criticism, gender and sexuality (queer studies), environmental humanities and ecocriticism, memory studies.

Tan, E.K., Ph.D., 2007, University of Illinois at Urbana-Champaign: Sinophone Studies, Modern Chinese Literature, Culture and Film, Postcolonial Studies, Southeast Asian Studies, Cultural Translation.

Wilson, Nicholas Hoover, Ph.D., 2012, UC-Berkeley: Assistant Professor. Empire and Imperialism, Corruption, Sociology of Knowledge and Culture, Historical Sociology.

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

## Biochemistry and Cell Biology (BCB) MS Program

**Chairperson**

Aaron Neiman, Life Sciences Building 332 (631) 632-1543

**BCB MS Graduate Program Director**

Neta Dean, Life Sciences Building 310, (631) 632-9309

**Program Administrator**

Pam Wolfskill, Life Sciences Building 450, (631) 632-8585

**Degree awarded**

Master of Science (MS) in Biochemistry and Cell Biology

For information about the Department of Biochemistry and Cell Biology, please visit

<http://www.stonybrook.edu/commcms/biochem/education/graduate/bcbms.html>

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-gs](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-gs)

## Biochemistry and Cell Biology Description

The graduate program leading to the MS degree in Biochemistry and Cell Biology is intended to provide a sound scientific foundation for those planning to pursue a career in research, teaching, entry into a career in biotechnology, or further graduate studies in the life sciences. In addition, for students interested in attending medical, dental, veterinary or other health-related schools, the MS degree program can complement and enhance their background in the biochemical sciences including biochemical, biomedical, and molecular biology research. Core concepts and skills are taught through a series of required core courses, with the remaining coursework consisting of advanced electives and special topics courses selected in consultation with the student's advisory committee. The curriculum is comprised of 24 credit hours earned in biochemistry, cellular biology and molecular genetics courses that are complemented by hands on laboratory research and exposure to advanced methods in biochemistry and cell biology. The remaining credits may be selected from elective courses, special seminar courses, and courses in experimental design, data analysis and laboratory techniques. Both research-based and literature-based thesis options are available and can be completed by fulltime students in three semesters. The program includes faculty from the Departments of Biochemistry and Cell Biology, Chemistry, Physiology and Biophysics, and the Pharmacological Sciences, as well as from Brookhaven National Laboratory.

For more detailed information, visit the BCB Web site at <http://www.stonybrook.edu/commcms/biochem/education/graduate/bcbms.html>

## Biochemistry and Cell Biology (BCB) MS Program Admissions

Application Deadline: April 15

Applications are considered from September until April 15 every year.

Applicants do not need to send their official transcripts until they are offered admission into the program.

In addition to the minimum requirements of the Graduate School, the following are suggested requirements:

- BS or BA degree in a life science related field, with a minimum undergraduate grade point average of 3.00. Pre-requisites include mathematics through one year of calculus, chemistry (including organic chemistry and laboratory), general physics, and one year of biology (including laboratory). It is highly recommended that students will have taken two semesters of biochemistry, and one semester each of genetics, cell biology, physical chemistry, and English composition. Students accepted into the program without a pre-requisite may be asked to take the appropriate upper level undergraduate course prior to undertaking specific graduate level courses.
- **Personal Statement:** What would you consider your special qualifications to be? What do you propose to do with your advanced degree professionally? Discuss briefly your experience in biochemistry and cell biology outside the classroom.
- Three letters of recommendation from people who can evaluate the applicant's potential for graduate work and independent research.
- **International Students:** A proficiency in the English language is required. If your native or primary language is not English, you must take an English proficiency test. To be considered for admission, an applicant must present an acceptable score on the TOEFL or IELTS test. IELTS: Overall score of 6.5 with no subsection below 6. TOEFL: Paper-based test: 550; computer based test: 213; or Internet-based test: 90. Under special circumstances, lower scores may be considered.

Acceptance by the Graduate Program in Biochemistry and Cell Biology and by the Graduate School.

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**FACILITIES**

The Biological Sciences Division and Health Sciences Center are well equipped for work in biochemistry and cellular biology. Individual faculty laboratories and central services provide a full array of state-of-the-art equipment. These include the Flow Cytometry Facility, the Cell Culture and Hybridoma Facility, the Transgenic Mouse Facility, the University Microscopy Imaging Center, and the Center for Analysis and Synthesis of Macromolecules. The Health Sciences Library contains a comprehensive collection of biomedical journals and books and is complemented by the Melville Library on the main campus.



## Degree Requirements for Biochemistry and Cell Biology (BCB) MS Program

**Research-based thesis option (30 credits)**

The research-based thesis option requires 30 credits comprised of 24 credits in core courses, at least 2 credits of MS Thesis in Biochemistry and Cell Biology in addition to the Research Practicum course included in the core curriculum, and 6 elective credits. Thesis research can be conducted in the laboratory of Biochemistry and Cell Biology faculty, in the research laboratories of faculty from other Departments at Stony Brook, and at Brookhaven National Laboratory, or through research internships under the guidance of approved mentors at local biotechnology firms. This option requires completion of a written, research-based project.

**Literature-based thesis option (30 credits)**

The literature-based thesis option requires 30 credits comprised of 24 credits in core courses, including 4 credits of MS Research practicum, 2 credits of MS Thesis in Biochemistry and Cell Biology, and 6 elective credits. This option requires completion of a written, literature-based project.

**Core Course Requirements (24 credits)**

- MCB 503 Molecular Genetics (Fall, 3 credits)
- MCB 520 Graduate Biochemistry I (Fall, 3 credits)
- MCB 656 Cell Biology (Spring, 4 credits)
- BCB 551 Introduction to Research in Biochemistry and Cell Biology, Integrity in Science (Fall, 2 credits)
- BCB 552 Advanced Laboratory Methods in Biochemistry and Cell Biology (Fall, 3 credits)
- BCB 559 MS Research Practicum in Biochemistry and Cell Biology (Fall, Spring & Summer, 0-4 credits)
- BCB 599 MS Thesis in Biochemistry and Cell Biology (Fall, Spring & Summer, 0 – 6 credits)
- MCB 601 Colloquium in Molecular and Cellular Biology (Fall, 1 credit)
- MCB 602 Colloquium in Molecular and Cellular Biology (Spring, 1 credit)

## FACULTY

**Department of Anesthesiology**

[Martin Kaczocha](#)

Role of fatty acid binding proteins in pain, inflammation, and related pathophysiologies: Endocannabinoid pharmacology and development of novel therapeutics.

**Department of Biochemistry and Cell Biology**

Paul M. Bingham

Genetic control of development and gene expression in animals

Deborah Brown

Cholesterol/sphingolipid-rich domains in membrane signaling

Vitaly Citovsky

Nuclear targeting and intercellular communication in plants

Neta Dean

Glycosylation; fungal pathogenesis

Dale G. Deutsch

Marijuana; molecular neurobiology of anandamide

Jarrold B. French

Structure and function of protein complexes involved in cellular metabolism

J. Peter Gergen

Gene expression and development in *Drosophila*

Steven Glynn

Structure and mechanism of protein-unfolding machines in mitochondria

Robert Haltiwanger

Glycobiology; biosynthesis, structure, and function

Bernadette C. Holdener

Genetic regulation of early mammalian development

Nancy Hollingsworth

Meiotic synapsis, recombination, and segregation in yeast

Wali Karzai

Structure and function of RNA-binding proteins and biochemical studies of the SmpB•tmRNA quality control system

Sasha Levy

Evolutionary dynamics, network dynamics, yeast genomics, high-throughput technology development

Huilin Li

Structure and function of large protein machines

Erwin London

Membrane protein structure/translocation/folding

Ed Luk

Chromosome biology and genome regulation

Benjamin Martin

Stem cell maintenance and differentiation, Developmental mechanisms of cancer pathogenesis

|                   |                                                                                                                             |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------|
| David Q. Matus    | Evolutionary, cell and developmental biological approaches to studying nematode uterine-vulval attachment and morphogenesis |
| Aaron Neiman      | Vesicle trafficking and membrane/cytoskeletal interactions                                                                  |
| Sanford Simon     | Extracellular degradation by neutrophil proteases                                                                           |
| Steven Smith      | Structure and function of membrane proteins                                                                                 |
| Rolf Sternglanz   | Chromatin structure and function; gene expression; HATs                                                                     |
| Gerald H. Thomsen | Growth factors /signal transduction in early vertebrate development                                                         |

**Department of Chemistry**

Elizabeth Boon

Nitric oxide regulation of quorum sensing and biofilm formation in bacteria

Isaac Carrico

The research in our group centers around the concept of chemical biology. In particular, we introduce unnatural monomers into the biopolymers of life (proteins, oligosaccharides, oligonucleotides) for the purpose of tracking or perturbing biological processes.

Liang Gao

Super-resolution fluorescence microscopy, 3D live fluorescence imaging and quantitative analysis of 3D image data sets

Carlos Simmerling

Development of tools for efficient and simulation of chemical systems and using them to study the structure and dynamics of molecules involved in biological processes.

Peter Tonge

Spectroscopic insights into enzyme mechanisms and structure

**Department of Medicine**

Berhane Ghebrehiwet

Biochemistry; function of the complement system

Yusuf Hannun

Bioactive lipids in cancer pathogenesis and therapeutics

Richard Lin

Kinase signaling and cell proliferation

Cungui Mao

Bioactive sphingolipids in cell growth, differentiation, apoptosis, and autophagy

Lina M. Obeid

Bioactive lipids in Inflammation, Aging and Cancer

William Van Nostrand

Vascular functions of Alzheimer's disease amyloid beta-protein

Vincent Yang

Biology and pathobiology of intestinal epithelial stem cells and colorectal cancer.

**Department of Molecular Genetics & Microbiology**

Jorge Benach

Pathogenesis of spirochetal infections and their host responses

Nicolas Carpino

Positive and Negative Regulation of T cell Receptor Signaling

Bruce Futcher

Cell cycle, cyclins, and yeast genetics

Michael Hayman

Viral/cellular oncogenes; differentiation of erythroid cells

Patrick Hearing

Adenovirus regulation of cellular proliferation and gene expression; adenovirus vectors for human gene therapy

James Konopka

Signal transduction, morphogenesis and genetics of pathogenic fungi

Laurie Krug

My lab's research interests lie in understanding the molecular determinants of virus-host interactions during chronic gammaherpesvirus infections using a mouse model pathogen.

Janet Leatherwood

Cell cycle control and DNA replication in fission yeast

Erich R. Mackow

Viral Pathogenesis, Regulation of Innate Immunity, Hantavirus, Dengue Virus and Rotavirus Regulation of Cell Signaling Responses, miRNAs and Endothelial cell functions.

Nancy Reich

Cytokine and Innate Immune Responses

Brian Sheridan

Mucosal Immunology, T cell memory, Vaccine design, Host-pathogen interactions

David Thanassi

Secretion of virulence factors by bacterial pathogens; pilus biogenesis by uropathogenic *Escherichia coli*

Adrianus. W.M. van der Velden

Infectious Diseases Immunology; Host Interactions with Bacterial Pathogens; Bacterial Immune Subversion

Eckard Wimmer

RNA virus genetics, replication, pathogenicity, cellular receptors

**Department of Neurobiology and Behavior**

Simon Halegoua

Molecular control of the neuronal phenotype

Maurice Kernan

Molecular basis of mechanical senses

Joel Levine

Cell-surface molecules of the developing nervous system

David McKinnon

Molecular physiology of sympathetic neurons and cardiac muscle

Howard Sirotkin

Genetic and molecular analysis of early vertebrate development

Lonnie Wollmuth

Molecular mechanisms of synaptic transmission

**Department of Oral Biology and Pathology**

Soosan Ghazizadeh

Epithelial stem cell biology; Skin bioengineering and gene therapy.

**Department of Pathology**

Jiang Chen

Skin and hair follicle development, maintenance and malignancy

Howard B. Fleit

Leukocyte Fc receptors; macrophage differentiation

Martha Furie

Host inflammatory response to bacterial infections.

Jingfang Ju

Post-transcriptional control of non-coding RNAs and RNA binding proteins in cancer

Richard R. Kew

Leukocyte chemotaxis/inflammation

Yupo Ma

Stem cell reprogramming and therapy, genome engineering, blood and marrow transplantation

Ute Moll

Tumor suppressor genes; mechanism of p53 inactivation

Kenneth Shroyer

Cancer biomarkers as diagnostic adjuncts in cervical pathology and cytopathology; cervical cancer and HPV

Eric Spitzer

Molecular biology of *Cryptococcus neoformans***Department of Pharmacological Sciences**

Adan Aguirre

Stem cell biology in the central nervous system and neurobiology in health and disease

Daniel Bogenhagen

Mitochondrial DNA; DNA repair

Holly Colognato

Extracellular matrix in the brain; roles during development and during neurodegeneration.

Michael A. Frohman

Lipid signaling pathways in immune responses, Alzheimer's disease, cardiovascular disease, and cancer.

Miguel Garcia-Diaz

Genetic Toxicology/Mechanisms of mitochondrial gene expression

Craig C. Malbon

Heterotrimeric G-proteins in development and cancer

Joav Prives

Cytoskeletal membrane interactions in muscle cells

Jessica C. Seeliger

We are applying biochemical, microbiological and biophysical methods to fundamental questions in bacterial membrane biogenesis

Markus Seeliger

Orlando Schärer

Ken-Ichi Takemaru

Styliani-Anna Tsirka

as they relate to *Mycobacterium tuberculosis*, the bacterium that causes tuberculosis, and to bacterial pathogenesis in general: How is lipid biosynthesis accomplished at the cytosol-membrane interface? What are the molecular mechanisms underlying bacterial membrane assembly? How can we subvert lipid biosynthesis and membrane assembly pathways for antimicrobial therapy?

Mechanism of Protein kinases and Ubiquitin Ligases in Cancer and Aging

Chemical Biology of DNA damage and repair.

Wnt Signaling in Development and Disease

Neuronal-microglial interactions in the central nervous system

### Department of Physiology and Biophysics

Mark Bowen

W. Todd Miller

Suzanne Scarlata

Ilan Spector

Hsien-yu Wang

Thomas White

Single molecule spectroscopy; Coordination of post-synaptic glutamate receptor signaling by the MAGUK family of scaffolds

Tyrosine phosphorylation and signal transduction

Cell signaling through heterotrimeric G proteins

Neuronal differentiation and microfilaments

Our research group focuses on Wnt signaling in 1) regulation of cell signaling and 2) differentiation of embryonic stem cells.

Molecular biology and physiology of gap junction channels

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

## Biochemistry and Structural Biology

**Chairperson, Department of Biochemistry and Cell Biology**

Aaron Neiman, Life Sciences Building 450 (631) 632-8550

**Graduate Program Coordinator**

Amy Saas, Life Sciences Building 338 (631) 632-8613

**Graduate Program Director**

Steven Smith, 138 Centers for Molecular Medicine (631) 632-1210

**Degree Awarded**

Ph.D. in Biochemistry and Structural Biology; MS in Biomedical Science and MA in Biological Sciences (Biochemistry and Structural Biology tracks)

**Web Site**<http://www.stonybrook.edu/biochem/bsb/>**Application**[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-gs](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-gs)

## Biochemistry and Structural Biology

The Biochemistry and Structural Biology Graduate Program stresses biochemical, structural, and computational approaches to solving complex biological problems. Training is offered in a broad range of research areas leading to the Ph.D. degree. Research in biochemistry and structural biology includes structure-function studies of proteins and nucleic acids, the molecular basis of gene expression, the chemical basis of enzyme action, as well as membrane and carbohydrate biochemistry. The aim of structural biology is to obtain high-resolution structures of biological macromolecules and molecular complexes through experimental techniques such as nuclear magnetic resonance (NMR) spectroscopy and X-ray diffraction in order to provide a view of biology at the molecular and atomic levels. High-resolution structures combined with biochemical studies represent the blueprints for understanding enzyme catalysis, cell signaling and transport, gene expression and regulation, and numerous other cellular processes. Advances in instrumentation and computational analysis have laid the groundwork for structure determination of proteins discovered through genome sequencing efforts and have opened up structural studies on membrane proteins and large complexes of proteins and nucleic acids.

The program includes faculty from the Departments of Biochemistry and Cell Biology, Chemistry, Applied Mathematics and Statistics, Physiology and Biophysics, and the Pharmacological Sciences, as well as from Brookhaven National Laboratory.

For more information visit the BSB Web site at [www.stonybrook.edu/biochem/bsb/](http://www.stonybrook.edu/biochem/bsb/).

## Admission requirements of Biochemistry and Structural Biology Department

Graduate studies in Biochemistry and Structural Biology require the following in addition to the Graduate School admissions requirements:

- A. A bachelor's degree with the following minimal preparation: mathematics through one year of calculus; chemistry, including organic chemistry; general physics; and one year of biology.
- B. Letters from three previous instructors.
- C. Graduate Record Examination (GRE) General Test scores.
- D. Acceptance by the Graduate Program in Biochemistry and Structural Biology and by the Graduate School.

In special cases, students not meeting all of the requirements listed in item A above may be admitted, but deficiencies must be remedied.

## Facilities of Biochemistry and Structural Biology Department

State-of-the-art facilities are available for biochemistry and structural biology. The Center for Structural Biology has several high-field NMR instruments and facilities for X-ray crystallography. With close ties to the Brookhaven National Laboratory, Stony Brook takes advantage of the high-energy beam lines for diffraction studies. Throughout the program there is state-of-the-art equipment for protein purification and analysis, including Raman, infrared, fluorescence, and CD spectrophotometers. The biological sciences complex also has tissue culture facilities, a transgenic mouse facility, and a centralized *Drosophila* facility. These facilities are supported by a wide range of instrumentation for cell and molecular biology including transmission and scanning electron microscopes, confocal microscopes, and phosphoimagers.

## Requirements for the Ph.D. Degree in Biochemistry and Structural Biology

**A. Course Requirements**

Core courses:

- 1. Graduate Biochemistry I (MCB 520)
- 2. Biomembranes (MCB 517)

3. Computational Methods in Biochemistry and Structural Biology (BSB 515)
4. Structural Biology and Spectroscopy (BSB 512)
5. Cell Biology (MCB 656) or Molecular Genetics (MCB 503)
6. Experimental Projects in Biochemistry and Structural Biology (BSB 509/BSB 510), a two-semester course in which the students spend 2-3 months in each of three different faculty laboratories actively participating in the research work of the laboratory.
7. Enrollment every semester in Colloquium in Biochemistry and Structural Biology (BSB 601/BSB 602), a series of invited lectures by visiting scientists from other institutions.
8. Two electives from an approved list of biochemistry, chemistry, molecular, and cell biology courses.
9. Enrollment for one semester of Journal Club (BSB 532) in the first and second years.
10. Enrollment for one semester of Student Seminar (BSB 603/BSB604) in the third, fourth and fifth years.
11. Enrollment in the second year in Ethics (GRD500)

### **B. Qualifying Examination**

At the beginning of the fourth semester, all students take a written qualifying examination covering the material from the core courses. This examination tests the student's ability to integrate basic concepts and information from the core courses.

### **C. Research Proposal**

After passing the qualifying examination, each student is required to prepare and defend a research proposal based on their own research. The student prepares a detailed writeup of the background and logic of the proposition, and how the research will be carried out, which then forms the basis for an oral proposition examination. The qualifying examination and the proposition examination together constitute the preliminary examination specified in the regulations of the Graduate School.

### **D. Advancement to Candidacy**

When the above requirements have been satisfactorily completed, a recommendation for advancement to candidacy for the Ph.D. will be forwarded to the Graduate School.

### **E. Dissertation**

During the second year, the student initiates a dissertation research project in the laboratory of a particular member of the program faculty. After the student has passed the proposition examination, a research committee is appointed to guide the dissertation research, and when the research nears completion, a dissertation examining committee is approved by the dean of the Graduate School.

### **F. Dissertation Defense**

The dissertation defense, which completes the requirements for the Ph.D., consists of a public seminar presentation of the dissertation work followed by an oral examination before the dissertation examining committee.

### **G. Teaching Experience**

All students in molecular biology and biochemistry, whether or not they are supported by teaching assistantships, are required to gain experience in teaching by assisting in laboratory sections, leading discussion sections, or helping to formulate and grade examination papers. The teaching experience may be in either undergraduate or graduate courses, and generally extends over a period of two semesters.

### **H. Residence Requirement**

The University requires at least two consecutive semesters of full-time graduate study. The demands of the course of study necessitate a longer period of residence.

#### Requirements for the MS in Biomedical Science

Completion of this track will require 30 credits from the approved PhD curriculum in Biochemistry and Structural Biology and a thesis.

#### Requirements for the MA in Biomedical Sciences

Completion of this track will require 30 credits from the approved PhD curriculum in Biochemistry and Structural Biology and a thesis.

Faculty of Biochemistry and Structural Biology Department

Distinguished Professors

Citovsky, Vitaly<sup>1</sup>, Ph.D., 1987, Hebrew University, Jerusalem: Nuclear targeting and intercellular communication in plants.

Grollman, Arthur, P.<sup>4</sup>, M.D., 1959, Johns Hopkins Medical School: Mechanisms of chemical mutagenesis/carcinogenesis.

London, Erwin<sup>1</sup>, Ph.D., 1979, Cornell University: Membrane protein structure/translocation/folding. Structure and function of sphingolipid/cholesterol rafts in membranes.

Sternglanz, Rolf<sup>1</sup>, Ph.D., 1967, Harvard University: Chromatin structure and function in yeast; histone modifying enzymes.

#### Professors

Brown, Deborah<sup>1</sup>, Ph.D., 1987, Stanford University: Structure and function of caveolae and cholesterol/sphingolipid-rich membrane domains.

Dean, Neta<sup>1</sup>, Ph.D., 1988, UCLA: Protein glycosylation, fungal cell wall biosynthesis; fungal pathogenesis

de los Santos, Carlos<sup>2</sup>, Ph.D., 1987, Buenos Aires, Argentina: Solution structures of damaged DNA; structural basis of chemical mutagenesis, lesion recognition, and DNA repair.

Deutsch, Dale<sup>1</sup>, Ph.D., 1972, Purdue University: Metabolism and uptake of the endocannabinoids (anandamide and 2-AG).

Gergen, J. Peter<sup>1</sup>, Ph.D., 1982, Brandeis University: Transcriptional regulation in development; structure and function of Runt domain proteins.

Green, David, F.<sup>6</sup>, Ph.D. 2002, MIT: Protein design; computational glycobiology; specificity of protein interaction networks.

Haltiwanger, Robert<sup>1</sup>, Ph.D., 1986, Duke University: Glycobiology: Role of protein glycosylation in signal transduction and development.

Hollingsworth, Nancy<sup>1</sup>, Ph.D., Meiotic synapsis, recombination, and segregation in yeast

Hannun, Yusuf, <sup>1,7</sup>, MD, <sup>1</sup>, Bioactive lipids in cancer pathogenesis and therapeutics

Li, Huilin<sup>1,5</sup>, Ph.D., 1994, University of Sciences and Technology, Beijing China: Structural biology of macromolecular assemblies and membrane proteins by cryo-electron microscopy.

Miller, W. Todd<sup>3</sup>, Ph.D., 1989, Rockefeller University: Tyrosine phosphorylation and signal transduction.

Neiman, Aaron<sup>1</sup>, Ph.D., 1994, University of California, San Francisco: Vesicle trafficking and intracellular signaling in yeast.

Obeid, Lina, <sup>7</sup>, Ph.D Bioactive lipids in Inflammation, Aging and Cancer

Raleigh, Daniel P.<sup>4</sup>, Ph.D., 1988, Massachusetts Institute of Technology: Experimental studies of protein folding and amyloid formation.

Rizzo, Robert<sup>6</sup>, Ph.D 2001, Yale University: Computational biology; drug design.

Sampson, Nicole<sup>4</sup>, Ph.D., 1990, University of California, Berkeley: Structure and function of enzymes in mycobacterial sterol metabolic pathways and their role in pathogenesis; Chemical biology of mammalian fertilization; new polymer synthesis.

Scarlata, Suzanne<sup>2</sup>, Ph.D., 1984, University of Illinois: Structure/oligomerization of membrane proteins.

Simmerling, Carlos L.<sup>4</sup>, Ph.D., 1991, University of Illinois: Development of tools for efficient simulation of chemical systems and using them to study the structure and dynamics of molecules involved in biological processes.

Simon, Sanford R.<sup>1</sup>, Ph.D., 1967, Rockefeller University: Proteinases and their inhibitors in invasiveness, inflammation and tumor metastasis; Inhibition of bacterial metalloproteinases.

Smith, Steven O.<sup>1</sup>, Ph.D., 1985, University of California, Berkeley: Structure and function of membrane proteins.

Thomsen, Gerald H.<sup>1</sup>, Ph.D., 1988, Rockefeller University: Regulation of early vertebrate development by growth factor signals, ubiquitin modification, and T box family transcription factors.

Tonge, Peter J.<sup>4</sup>, Ph.D., 1986, University of Birmingham, England: Tuberculosis pathogenesis and drug discovery; Enzyme mechanisms and rational inhibitor design; Fluorescent proteins.

Wang Jin<sup>4</sup>, Ph.D., 1991 University of Illinois: Fundamental mechanism of biomolecular folding and recognition. Especially protein folding and protein-protein/protein-DNA interactions.

#### Associate Professors

Holdener, Bernadette<sup>1</sup>, Ph.D., 1990, University of Illinois: The role of protein folding in WNT signal transduction and development.

Karzai, Wali<sup>1</sup>, Ph.D., Johns Hopkins University, 1995. Structure-Function studies of RNA-protein interactions.

Schärer, Orlando D.<sup>4,9</sup>, Ph.D., 1996, Harvard University: Chemistry and Biology of DNA damage and repair.

Assistant Professors

Boon, Elizabeth M.<sup>4</sup>, Ph.D., 2003, California Institute of Technology: Nitric oxide signaling in bacteria.

Bowen, Mark E.<sup>3</sup>, Ph.D., 1998, University of Illinois, Chicago;

Carrico, Isaac<sup>4</sup>, Ph.D. 2003, California Institute of Technology: Site-specific protein labeling; glycoproteins.

Czapinski, Kevin<sup>1</sup>, Ph.D., 1999, UMDNJ-Robert Wood Johnson Medical School: Post transcriptional control of gene expression in the nervous system.

Garcia-Diaz, Miguel<sup>2</sup>, Ph.D., 2003, UAM University (Madrid, Spain): Structural Enzymology of eukaryotic DNA/RNA transactions.

Glynn, Steven<sup>1</sup> Ph.D Structure and mechanism of protein-unfolding machines in mitochondria

Luk, Edward<sup>1</sup> Ph.D Chromosome biology and genome regulation

Martin, Benjamin<sup>1</sup> Ph.D Stem cell maintenance and differentiation, Developmental mechanisms of cancer pathogenesis

Seeliger, Jessica<sup>2</sup> Ph.D Stanford University:infectious disease, tuberculosis, lipid biosynthesis, membrane biology, enzymology

Seeliger, Markus<sup>2</sup> Ph.D Cambridge University Mechanism of Protein kinases and Ubiquitin Ligases in Cancer and Aging

Scientists

Allaire, Marc<sup>5</sup>, 1992, University of Sherbrooke: Synchrotron-based techniques and structural biology.

Fu, Dax<sup>5</sup>, 1996, Mayo Graduate School of Medicine: X-ray crystallography of membrane protein transporters and channels.

Liu, Chang-Jun<sup>5</sup>, Ph. D. 1999, Shanghai Institute of Plant Physiology, the Chinese Academy of Sciences.

Schwender, Jörg<sup>5</sup>, Ph. D., 1999, University of Karlsruhe, Germany: Experimental and theoretical analysis of plant metabolic networks.

Shanklin, John<sup>5</sup>, Ph.D., 1988, University of Wisconsin-Madison: Structure-function relationships of lipid modification enzymes.

Subramanyan Swaminathan<sup>5</sup>, Ph.D., 1980 University of Madras, India: Structure-function relationships of bacterial toxins.

Number of teaching, graduate, and research assistantships, fall 2010: 27

1) Department of Biochemistry and Cell Biology

2) Department of Pharmacological Sciences

3) Department of Physiology and Biophysics

4) Department of Chemistry

5) Brookhaven National Laboratory

6) Department of Applied Mathematics and Statistics

7) Department of Medicine

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*



Biomedical Engineering Department

**Interim Chair**

Stefan Judex, Dept. of Biomedical Engineering, Bioengineering Bldg., 213 (631) 632-1549

**Graduate Program Director**

David A. Rubenstein, Dept. of Biomedical Engineering, Bioengineering Bldg., 101 (631) 632-1480

**Assistant to the Chair; Graduate Program Coordinator**

Jessica Kuhn, Graduate and Undergraduate Program Coordinator, Dept. of Biomedical Engineering, Bioengineering Bldg., 102 (631) 632-8371

**Degrees Awarded**

M.S. in Biomedical Engineering; Ph.D. in Biomedical Engineering

**Web Site**

<http://www.bme.stonybrook.edu/>

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-gs](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-gs)

**Biomedical Engineering**

Biomedical engineering is at the forefront of medicine's technologic revolution; its many successes have raised expectations for the prevention, diagnosis, and treatment of disease. Faculty at Stony Brook University have been active contributors to the cutting edge of this technology, and our University is building on internationally acclaimed strengths in Bioelectromagnetics, Biomechanics, Biomaterials, Biotechnology, Tissue Engineering, Instrumentation and Medical Imaging. These disciplines thrive through active interdisciplinary collaborations among the faculty in the College of Engineering and Applied Sciences, the School of Medicine, and the College of Arts and Sciences, all of which are in close proximity. This ongoing biomedical research, combined with unique facilities at the University, Brookhaven National Laboratory, and Cold Spring Harbor Laboratory have helped distinguish Stony Brook as a superb resource for education in both the engineering and health sciences. With these intellectual and physical resources, the program in Biomedical Engineering is positioned to provide a rigorous, cross-disciplinary graduate training and research environment for our students.

This is a very exciting time for Biomedical Engineering. New areas are opening each day, ranging from the engineering of tissues to making outer space habitable for mankind. It is an excellent time to begin your studies in Biomedical Engineering and we believe you will find Stony Brook a superb place to train. Our faculty is diverse, our commitment is high, and our facilities are unique. If there are any questions which we might address, please do not hesitate to contact us directly.

The Graduate Program in Biomedical Engineering at Stony Brook University trains individuals with baccalaureate degrees in engineering, applied mathematics, and the sciences to provide them with the synthesis, design, and analysis skills necessary to contribute effectively to the advancement of technology in health and medical care. The M.S. and Ph.D. degree programs are specifically designed to provide graduate students and engineering professionals with the knowledge and skills necessary to transfer recent developments in the basic sciences into commercially viable products and processes. Training of the student is accomplished by exposing the individual to the biology, engineering, and business concepts critical to succeeding in the biomedical research and development environment.

Training in Biomedical Engineering is directed by faculty from the College of Engineering and Applied Sciences, the School of Medicine, the College of Arts and Sciences, the Health Sciences Center, as well as from the Brookhaven National Laboratory and Cold Spring Harbor Laboratory. These diverse faculty provide a spectrum of research opportunities. Breadth and depth of exposure is a hallmark of the program, and one which we believe emphasizes the importance of multidisciplinary, collaborative approaches to real-world engineering problems in biology and medicine. Graduate training includes course instruction, participation in seminar courses, and extensive involvement in selected projects emphasizing synthesis and design skills. The graduate program is based in the Bioengineering Building, on West Campus, and in close proximity to the University Hospital, the Basic Sciences, Engineering, and Business Schools.

**Admission Requirements of Biomedical Engineering Department**

Students may matriculate directly into either the M.S. or Ph.D. programs. For admission to the Program in Biomedical Engineering, the following are normally required:

- A. A four-year undergraduate degree in engineering or related field such as the physical sciences, or mathematics.
- B. An official transcript of undergraduate record and of any work completed at the graduate level.
- C. Letters of recommendation from three previous or current instructors/employers.
- D. Submission of a personal statement outlining your background, interests, and career goals in the field of biomedical engineering.
- E. Graduate Record Examination (GRE) General Test scores.
- F. Acceptance by both the Program and the Graduate School.

Stipends and tuition scholarships are available for selected students. Distribution of these awards will be based on GRE test scores, undergraduate performance, professional experience, and research/career objectives as outlined in a personal statement.

### Requirements for the M.S. Degree in Biomedical Engineering

A minimum of 31 graduate credits is required to earn the Master of Science in BME (non-thesis option) or 37 credits for the M.S. degree (thesis option). The program study can be chosen from any of the following approved tracks/specializations: [General](#), [Biomechanics](#), [Biosignals](#), [Medical Physics](#), or [Molecular Bioengineering](#). The General program of study can be custom tailored in consultation with your faculty advisor/mentor to accommodate almost any BME area of interest. The following courses must be taken by all first-year graduate students: BME 501 Engineering Principles in Cell Biology, BME 502 Advanced Numerical and Computation Analysis Applied to Biological Systems, BME 505 Principles and Practice of BME, BME 520 Lab Rotation I, and BME 521 Lab Rotation II. All students (except those pursuing the Medical Physics Track) must also fulfill a business/management course requirement, which can be met by taking BME 509 Fundamentals of the Bioscience Industry or any MBA class (MBA 501, MBA 502, MBA 503, MBA 504, MBA 505, MBA 506, MBA 507, MBA 511, or MBA 589) from the School of Business. A given track/specialization will have additional requirements, which includes a minimum of six technical elective courses (4 of which have to be BME).

**Thesis or Non-Thesis Options.** The student has the option of earning the Master of Science Degree in BME on either a thesis or non-thesis track. If non-thesis, the student undertakes elective graduate coursework to complete the 31 credits. In the thesis option, the student must additionally complete six credits of BME 599 Thesis Research, and submit and defend a written thesis. A grade point average of B or better must be attained for the core BME courses taken, and an overall grade point average of 3.0 out of 4.0 must be maintained overall. For the non-thesis option, most students can complete this program within three academic semesters, and most students complete the thesis option in four academic semesters. The non-thesis option is recommended for students who wish to pursue a career in industry that does not involve Research & Development (R&D). Students pursuing the non-thesis option cannot use BME 599 to fulfill any requirements (i.e., it is not a technical elective nor core course). The thesis option is recommended for students who will be continuing on for their doctoral degree and for students who wish to pursue an industrial career with an R&D focus.

### Requirements for the Ph.D. Degree in Biomedical Engineering

#### A. Completion of the M.S. degree in Biomedical Engineering or equivalent graduate program

#### B. Satisfactory completion of the BME qualifying exam

#### C. Plan of Study

Student matriculating in to the doctoral (Ph.D.) degree program must complete all the requirements for the M.S. degree in BME at Stony Brook or enter the program with a relevant M.S. degree. This latter option is termed admission with “Advanced Standing”. After completion of the M.S. degree or admission with Advanced Standing, there are no course requirements per se, though certain courses may be required to fill any gaps in the student's knowledge. Following completion of a qualifying exam, an independent basic research program will be undertaken. Subsequently, the student will present and defend their dissertation proposal. Successful completion of this stage will enable the student to “Advanced to Candidacy”. One semester of teaching practicum must be satisfactorily performed. Completion of the research program will culminate in the submission and oral defense of a doctoral dissertation. The University requires at least two consecutive semesters of full-time graduate study.

#### D. Teaching Requirements

The BME teaching requirement for the Ph.D. degree can be fulfilled in any of the following three manners:

1. Deliver 4 lectures in a BME undergraduate or graduate course, and present a seminar that covers the state-of-the-art in your field of research.
2. Teach a BME course, either as the instructor of record (if you have G5 student status) or as the principal instructor (for G4 student status).
3. Petition for something else that is equivalent to the above.

#### E. Thesis Proposal Examination

After successful completion of the qualifying examination, the student selects a thesis advisor and writes a proposal for thesis research. After approval by the thesis advisor, the proposal is orally defended before a thesis committee.

#### F. Advancement to Candidacy

After successful completion of all required and elective courses, the qualifying examination, and the thesis proposal examination, the student will be recommended to the Graduate School for advancement to candidacy.

#### G. Dissertation

The research for the Ph.D. dissertation is conducted under the supervision of the thesis committee. The dissertation must represent a significant contribution to the scientific and/or engineering literature. Upon approval of the completed dissertation by the thesis committee, a formal public oral defense of the dissertation is scheduled at which the student presents their findings and is questioned by members of the examining committee and by other members of the audience. On acceptance of the dissertation by the thesis committee, all requirements for the degree will have been satisfied.

#### H. Time Limit/Residency Requirements

All requirements for the Ph.D. degree must be completed within seven years after completing 24 credits of graduate study. The University requires at least two consecutive semesters of full-time graduate study.

Faculty of Biomedical Engineering Department

### **Distinguished Professors**

Chu, Benjamin, Ph.D., 1959, Cornell University: Synthesis, characterization and processing of biomaterials, molecular manipulation and self-assembly in biomimetic mineralization, DNA complexation for gene therapy.

Dill, Ken A., Ph.D., 1978, UC San Diego: Quantitative Biology

Hsiao, Benjamin, Ph.D., 1987, Institute of Materials Science at University of Connecticut: Structural and morphological development of complex polymer systems during preparation and processing in real time.

Rafailovich, Miriam, Ph.D., 1980, Stony Brook University: Polymeric liquids; phase transitions; thin film wetting phenomena; biopolymers.

Rubin, Clinton, T., Chair, Ph.D., 1983, Bristol University: Tissue adaptation; biophysical treatment of musculoskeletal disorders.

Takeuchi, Esther, Ph.D., 1981, Ohio State University: Cutting-edge research in electrochemistry, batteries and their intersection with human health

### **Professors**

Abi-Dargham, Anissa, M.D., 1984, St. Joseph's University Molecular imaging, pharmacology, schizophrenia and addiction

Benveniste, Helene, Ph.D., understanding diagnostic MR contrast parameters suitable to visualize neuro-pathology in neurodegenerative diseases.

Bluestein, Daniel (Danny), Ph.D., 1992, Tel Aviv University, Israel: Dynamics of fluid flow and cellular transport through vessels.

Clark, Richard, M.D., 1971, University of Rochester: Tissue engineering in wound repair.

Dilmanian, F. Avraham, Ph.D., 1980, Massachusetts Institute of Technology: Experimental methods of radiation therapy utilizing the tissue-sparing effects.

Du, Congwu, Ph.D., 1996, University of Luebeck, Germany: Development of advanced biomedical optical imaging techniques for translational research.

Duong, Timothy, Ph.D., 1998, Washington University: Development and application of MRI, spectroscopy and speckle and optical imaging, to the study of brain and retinal anatomy.

Entcheva, Emilia, Ph.D., 1998, University of Memphis: Cardiac bioelectricity, electrical stimulation of cardiac tissue, mechanisms of cardiac arrhythmias, defibrillation and modulation of cell function through gene transfer.

Frame, Molly, Ph.D., 1990, University of Missouri: Microvascular flow control at the fluid dynamic and molecular levels.

Fowler, Joanna, Ph.D., 1967, University of Colorado: Radiotracer synthesis with positron emitters.

Ghebrehwet, Berhane, D.Sc., 1974, Université de Paris: Structure and function of C1q receptors (C1qRs) in health and disease.

Hannon, Gregory, Ph.D., 1992, Case Western Reserve University: Explores the mechanisms and regulation of RNA interference as well as its applications to cancer research.

Judex, Stefan, Ph.D., 1999, University of Calgary, Canada: Molecular bioengineering; mechanical, molecular, and genetic influences on the adaptation of bone and connective tissues to physiologic stimuli.

Kaufman, Arie E., Ph.D., 1977, Ben-Gurion University: Computer graphics; visualization; interactive systems; 3-D virtual colonoscopy; computer architecture.

Liang, Jerome, Ph.D., 1987, City University of New York: Development of medical imaging hardware for single photon detection.

Lieber, Baruch, Ph.D., 1985, Georgia Institute of Technology, Cerebrovascular Research

McCombie, Richard, Ph.D., 1982, University of Michigan: Structure and function in complex genomes.

Miller, Lisa, Ph.D., 1995, Albert Einstein College of Medicine: Research focuses on the study of the chemical makeup of tissue in disease using high-resolution infrared and x-ray imaging.

Mitra, Partha, Ph.D., 1993, Harvard University, Brain function

Mueller, Klaus, Ph.D., 1998, Ohio State University: Computer graphics, data visualization, medical imaging.

Pan, Yingtian, Ph.D., 1992, National Laser Technology Laboratories, China: Optical/NIR spectroscopy and imaging methods and applying these techniques to provide clinical diagnostic information.

Parsey, Ramin, M.D., Ph.D., 1994, University of Maryland Baltimore: State-of-the-art imaging modalities to investigate psychiatric and neurological disorders.

Qin, Yi-Xian, Ph.D., 1997, Stony Brook University: Physical mechanisms involved in the control of tissue growth, healing, and homeostasis, especially bone adaptation influenced by mechanical environment.

Rizzo, Robert, Ph.D., 2001, Yale University: Application of computational techniques to drug discovery

Simmerling, Carlos, Ph.D., 1994, University of Illinois, Chicago: Simulate known properties of molecules, assist in the refinement and interpretation of experimental data.

Simon, Sanford, Ph.D., 1967, Rockefeller University, Acute and chronic inflammatory responses.

Skiena, Steven, Ph.D., 1988, University of Illinois: Computational geometry; biologic algorithms.

Tracey, Kevin, M.D., 1983, Boston University: Research focuses on the roles of individual mediators of systemic inflammation, and their regulation by interactions between the brain and the innate immune system.

Vaska, Paul, Ph.D., 1997, State University of New York at Stony Brook: Instrumentation for positron emission tomography (PET).

Zhao, Wei, Ph.D., 1997, University of Toronto, Canada: Development of novel detector concept and new clinical applications for early detection of cancer.

#### **Associate Professors**

Balazsi, Gabor, Ph.D., 2001, University of Missouri-Saint Louis: Synthetic gene circuits

Button, Terry, Ph.D., 1989, University at Buffalo: High-resolution computer-aided tomography.

DeLorenzo, Christine, Ph.D., 2007, Yale University: Brain Imaging and mental disease

Mujica-Parodi, Lilianne, Ph.D., 1998, Columbia University: Relationships between four simultaneously or near-simultaneously interacting systems: neural, cardiac, endocrine, and cognitive, to better understand the neurobiology of arousal, fear, and stress.

Osten, Pavel, Ph.D. 1995, SUNY Downstate: Automated microscopy and bioinformatics methods for whole-brain analysis in the mouse

Powers, Scott, Ph.D., 1983, Columbia University: Cancer gene discovery; cancer diagnostics and therapeutics; cancer biology.

Rubenstein, David, Ph.D., 2007, Stony Brook University: Fabrication of complex three dimensional biomimetic scaffolds and to test the compatibility of the fabricated scaffolds with the vascular system.

Schlyer, David, Ph.D., 1976, San Diego State University: Development of multi-modality imaging

Sitharaman, Balaji, Ph.D., 2005, Rice University: Research related to related to the diagnosis/ treatment of disease and tissue regeneration.

Sordella, Raffaella, Ph.D., 1998, University of Turin: Why cancer cells are responsive to the inhibition of one particular gene or gene product.

Strey, Helmut, Ph.D., 1993, Technical University, Munich: Nanostructured Materials for Applications in Bioseparation, Drug Delivery and Biosensors.

Yin, Wei, Ph.D., 2004, Stony Brook University: Role of disturbed shear stress on platelets, vascular endothelial cells and their interactions.

#### **Assistant Professors**

Arbab, Hassan, Ph.D., 2012, University of Washington: Terahertz spectroscopy, Ultrafast photonics and femtosecond optics, Wavelet methods, Biomedical optics

Bialkowska, Agnieszka, Ph.D. 2003, Institute of Biochemistry and Biophysics: Inflammation within the gastrointestinal tract

Brouzes, Eric, Ph.D., 2004, Institute Curie: Microfluidic technologies for single-cell genomics

Huang, Chuan, Ph.D., University of Arizona: Medical Imaging Analysis

Jia, Shu, Ph.D., Princeton University, 2010: Development of novel biophotonic technologies for understanding complex biological systems at the nano-meter scale.

Li, Yu Yulee, Ph.D., University of Illinois at Urbana-Champaign, 2002: Cardiac magnetic resonance imaging research program with a focus on high-speed imaging.

Sheltzer, Jason, Ph.D., Massachusetts Institute of Technology, 2015: Understand the genetic differences between normal, malignant, and metastatic cells.

Venditti, Chuck, M.D., Ph.D., 1996, Pennsylvania State University: Inborn errors of metabolism, the hereditary methylmalonic acidemias (MMA), and disorders of intracellular cobalamin metabolism.

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

Spring 2018

Department of Biomedical Informatics

**Chairperson**

Joel H. Saltz, Health Sciences Center Level 3, Room 3-043, (631) 638-2590

**Graduate Program Director**

Jonas Almeida, Health Sciences Center Level 3, Room 3-045C, (631) 638-1326

**Department Office**

Department of Biomedical Informatics  
College of Engineering and Applied Sciences and School of Medicine  
Health Sciences Center Level 3, Room 3-043  
Stony Brook University  
Stony Brook, NY 11794-8322  
Main number: 631-638- 2590

**Degrees Awarded**

Ph.D. in Biomedical Informatics; M.S. in Biomedical Informatics; Advanced Graduate Certificate in Biomedical Informatics

**Web Site**

<https://bmi.stonybrookmedicine.edu/>

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-gs](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-gs)

The Department of Biomedical Informatics currently offers graduate work leading to the **Doctor of Philosophy**, **Master of Science** degree and **Advanced Graduate Certificate** in three areas of specialization, or Tracks:

- 1) **Clinical Informatics** - enhancing the quality and efficiency of clinical workflows;
- 2) **Imaging Informatics** - integrative analysis and management of biomedical images; and
- 3) **Translational Bioinformatics** - application of informatics methods to advance patient related biomedical research, from Clinical Genomics to Population Health.

The new Stony Brook University Biomedical Informatics Program is a collaboration of the School of Medicine and in the College of Engineering and Applied Sciences. This interdisciplinary field studies and pursues the effective use of biomedical data, information, and knowledge for scientific inquiry, problem solving and decision making, driven by efforts to improve human health.

We embed BMI Education in research and operations at the Stony Brook University Health Sciences Center, where quantitative sciences have emerged at the very core of efforts to understand, prevent and treat disease. Further, our program emphasizes the ability of trainees to produce software artifacts and conduct computational experiments, along the same lines as the College of Engineering and Applied Sciences. The resulting refactoring of Informatics equips BMI trainees to play a new role in a Systems Biomedicine enterprise that spans from patient-centric information systems to the distributed analytics needed to contextualize emerging biomolecular Big Data resources.

Students will be instructed via a combination of classroom teaching, seminars, and/or structured projects. Graduates can expect careers in academia, research, healthcare, industry, or government.

For more information, visit our website: <https://bmi.stonybrookmedicine.edu/>

**Admission requirements for Ph.D. in Biomedical Informatics:**

1. A bachelor's degree in Biomedical Informatics, or a related field such as computer science, another engineering discipline, physical science, chemistry, mathematics

OR a bachelor's degree in biology, biochemistry, pharmacology, social science

OR post baccalaureate training equivalent to the above

OR a bachelor's degree in humanities with coursework and projects in digital arts and media

OR an MD Degree.

2. A grade point average of at least B or equivalent in all engineering, mathematics, and science courses.

3. Completion and submission of the Graduate Record Examination (GRE) General Test.

4. A Statement of Purpose describing the applicant's relevant past experience and immediate and long-term goals. Applicants should describe how the type of research that they expect to conduct while in the program relates to one of the department's research areas.
5. Three letters of recommendation.
6. Acceptance by both the Biomedical Informatics Graduate Program and the Graduate School.
7. In addition, students must meet all admissions requirements, fees, and deadlines of the Stony Brook University Graduate School.

Requests for exceptions to the stated admissions requirements must be submitted in writing and approved by the BMI Graduate Program Director and The Graduate School.

Admission requirements for M.S. programs in Biomedical Informatics:

1. A bachelor's degree in Biomedical Informatics, or a related field such as computer science, another engineering discipline, physical science, chemistry, mathematics

OR a bachelor's degree in biology, biochemistry, pharmacology, social science

OR post baccalaureate training equivalent to the above

OR a bachelor's degree in humanities with coursework and projects in digital arts and media

OR an MD Degree.

2. A grade point average of at least B or equivalent in all engineering, mathematics, and science courses.
3. Completion and submission of the Graduate Record Examination (GRE) General Test.
4. Two letters of recommendation.
5. Acceptance by both the Biomedical Informatics Graduate Program and the Graduate School.
6. In addition, students must meet all admissions requirements, fees, and deadlines of the Stony Brook University Graduate School.

Requests for exceptions to the stated admissions requirements must be submitted in writing and approved by the BMI Graduate Program Director and The Graduate School.

Admission requirements for Advanced Graduate Certificate programs in Biomedical Informatics:

1. A bachelor's degree in Biomedical Informatics, or a related field such as computer science, another engineering discipline, physical science, chemistry, mathematics

OR a bachelor's degree in biology, biochemistry, pharmacology, social science

OR post baccalaureate training equivalent to the above

OR a bachelor's degree in humanities with coursework and projects in digital arts and media

OR an MD Degree.

2. Acceptance by both the Biomedical Informatics Graduate Program and the Graduate School.
3. In addition, students must meet all admissions requirements, fees, and deadlines of the Stony Brook University Graduate School.

Requests for exceptions to the stated admissions requirements must be submitted in writing and approved by the BMI Graduate Program Director and The Graduate School.

Facilities of the Biomedical Informatics Department and Graduate Program

The Biomedical Informatics Department has a strong foothold in computing and in biomedical sciences. Our Department was jointly established by the College of Engineering and Applied Sciences and the Stony Brook University School of Medicine.

BMI's three locations on campus offer students and faculty front seats in key centers of collaborative activity. Each BMI Department location features extensive learning and research suites with faculty and administrative offices, Postdoctoral trainee stations, classroom and meeting space, and student labs equipped with desktop computers, each with 1TB storage space, 16GB main memory, and a 4-core CPU. The Department's HSC Suites have opened in the Health Sciences Center HSC Level 3, and include the Chair's suite and administrative center. A second BMI location with office, meeting and student lab is under construction in the Old Computer Science Building on West Campus. The third BMI Department

suite will be housed with the Cancer Center in the new Medical and Translational Research (MART) building being constructed adjacent to the new Stony Brook Children's Hospital. Virtual meeting solutions continue to keep all Department members together, and enable distance learning.

The Biomedical Informatics Department (BMI) has a cluster computing system dedicated to research, development, and education in high performance computing, systems software, and applications. The cluster system consists of 10 compute nodes and 10 storage nodes. Each compute node has 2 10-core Intel Xeon CPUs, 2 NVIDIA K40 Tesla GPUs, one Intel Xeon Phi co-processor, 256GB main memory, a 512GB SSD, and 2 1TB hard-disks. Each of the storage nodes has 2 6-core CPUs, 64GB main memory and 95TB disk storage in RAID 5 configuration. All the nodes in the cluster are connected to each other via high performance Infiniband Switches. The cluster system is housed in the Department of Computer Science. BMI also owns a small Virtual Machine server farm consisting of a Dell PowerEdge server with 4 8-core CPUs, 256 GB main memory, and 28TB disk storage. This server is used to host VMs for development and testing purposes.

In addition to BMI owned servers and computers, researchers have access to XSEDE resources (<https://www.xsede.org>) through a scientific gateways grant. The XSEDE resources include Stampede which is a distributed-memory Dell Linux Cluster with over 6,400 nodes. Each node has 2 Intel Xeon E5 (Sandy Bridge) processors, 32GB memory, and an Intel Xeon Phi Coprocessor (MIC Architecture) with 8GB memory. The computation nodes are interconnected with Mellanox FDR InfiniBand technology. BMI's Student and meeting space has wifi and wired connections available to the SBU network. In recent years the use of cloud computing has taken center stage in both translational biomedical informatics and bioinformatics and students will also be introduced to those resources.

#### General Requirements for the Biomedical Informatics Graduate Program

Registration: Students must register for at least one graduate credit in the semester in which the diploma is awarded.

Language Requirement: There is no foreign language requirement.

Grade Point Average: To be certified for graduation a cumulative graduate grade point average of 3.0 (out of 4.0) or better is required.

#### General Requirements for the Ph.D. in Biomedical Informatics

The Ph.D. program has been designed to provide students the flexibility to tailor their studies toward their individual research interests while maintaining a common foundational training. Each student's program of study will be defined by the student, the student's advisor and the program director, while satisfying certain mandatory requirements of the program. The program of study has been designed to provide students with the fundamental knowledge of the domain and its tools, to provide depth in the key areas of, and tools used, in BMI, and to give them the flexibility to choose courses that meet their individual needs. A minimum of 24 credits beyond the M.S. degree is required for the Ph.D. degree. Students also select a track to focus on: **Imaging Informatics**, **Clinical Informatics** or **Translational Bioinformatics**.

#### Required Courses:

1. 24 approved graduate course credits beyond the M.S. degree requirement.
  - a. A minimum of 9 graduate credits, excluding BMI 590, BMI 591, BMI 592, BMI 595, BMI 596, BMI 598, BMI 599, BMI 690, BMI 691, BMI 692, BMI 695, BMI 696, BMI 699, BMI 700, BMI 701, and BMI 800, must be taken in the Biomedical Informatics Program (includes all BMI courses and all BMI-Approved Elective courses from other departments).
  - b. Either BMI 502 or BMI 503, but not both, can be applied toward the course requirements.
  - c. No more than a total of 4 credits of BMI 692 may be applied toward the Ph.D. degree credit requirements, although all on-campus Ph.D. students who have advanced to candidacy must register for and attend BMI 692 each semester (exemption from BMI 692 is subject to **prior** approval of the student's advisor and the graduate program director.).
2. All full-time Ph.D. graduate students are required to register for BMI 592 each semester and obtain a satisfactory grade before they advance to candidacy.
3. All full-time Ph.D. graduate students are required to register each semester for BMI 692 each semester and obtain a satisfactory grade after they advance to candidacy.
4. All courses taken outside the department for application to the graduate degree requirements are subject to **prior** approval of the student's advisor and the graduate program director.
5. The graduate program may impose additional course requirements.
6. Students must complete all the required courses from at least one of the Biomedical Informatics program tracks (see below).

#### Transfer Credits:

All requests for transfer of credits require the **prior** approval of the graduate program director and all requests for transfer of credits beyond 12 graduate credits must also be approved by a majority vote of the primary Biomedical Informatics faculty. For a student who transferred from another comparable national BMI program and has already completed all course requirements and passed the preliminary written exam, the student can petition the Graduate School to be placed into advanced status (passing preliminary examination equivalent) with prior approval by a majority vote of the primary Biomedical Informatics faculty.

#### Preliminary Examination:



Students will be required to pass a written preliminary examination. This examination is designed to broaden the multidisciplinary nature of the candidate student base. Biomedical Informatics attracts people working in many domains, often acquiring skills and interests that are not captured by the more conventional curricular track offered in those domains. Naturally, this is also an opportunity to verify the accuracy of the candidate's claims to quantitative skills as a route to a multidisciplinary curriculum. The examination will be offered at least once every year, usually in April. The preliminary examination will be developed by the student's advisor in consultation with the student's examination committee, and must then be approved by the graduate program director prior to being administered. The examination committee will consist of three Biomedical Informatics faculty members. Students will be encouraged to take the preliminary examination the first time it is offered after they begin academic residency. Each student can take the written preliminary examination two times before being disqualified as candidates to this Ph.D. program.

#### Qualifying Examination:

This examination is designed to test the student's ability to utilize his or her background to carry out research in a chosen field of study, and to make clear written and oral presentations of research. As part of the qualifying examination, the student is required to submit a written dissertation proposal (15 page limit) and present it in a public oral examination conducted by the dissertation examining committee. The written dissertation proposal must be distributed to the committee members at least two weeks before the oral examination. The oral examination probes the doctoral student's ability and examines the progress, direction and methodology of the dissertation research. The student will be examined on the dissertation topic and its objective, the problem formulation, research approach, and knowledge in related areas. A majority of the dissertation examining committee must approve the student's performance.

#### Teaching:

Ph.D. students are required to take 3 credits of BMI 698 Practicum in Teaching II or obtain approval of equivalent teaching experience from the Graduate Program Director as part of the degree requirement. BMI 698 is taken under a faculty advisor who is responsible for providing feedback and making a formal evaluation of the student's work. The form of this practicum may include making class presentations, teaching in recitation classes, or preparation and supervision of laboratory classes. All Teaching Assistants are required to take BMI 697 Practicum in Teaching I prior to taking BMI 698. BMI 697 will provide students a background in learning theory, course design, learning styles, content delivery formats, teaching technology, advising, rubrics and assessment.

#### Advancement to Candidacy:

After passing the preliminary examination, a student will be advanced to candidacy for the Ph.D. degree when he/she has completed all formal coursework, passed the qualifying examination and satisfied all other Ph.D. requirements except the dissertation. These requirements must be completed within one calendar year after passing the written qualifying examination. Advancement to candidacy must be at least one year before the beginning of the semester in which a student plans to defend his/her dissertation.

#### Dissertation:

The student chooses a dissertation topic in consultation with his/her doctoral dissertation advisor as soon as possible. Dissertation research is an apprenticeship for the candidate, who, under the supervision of the dissertation advisor, independently carries out original work of significance. The dissertation examining committee should be established after the student passes the qualifying examination. The committee must include at least three members from the Department of Biomedical Informatics primary or secondary faculty, including the dissertation advisor, and at least one "outside" member from another program or from outside the University. This "outside" member may not be a member of the Biomedical Informatics program graduate faculty. The committee must be approved by the graduate program director upon recommendation by the dissertation advisor. The official recommendation for the appointment of the dissertation examining committee is made to the Dean of the Graduate School.

#### Dissertation Defense:

Once the dissertation is complete, approval of the dissertation requires a formal oral defense. The formal defense is open to the public. A candidate must fill out the Doctoral Degree Defense Form (available on the Graduate School Web page) with dissertation abstract as well as other relevant details, and submit the Form to the graduate program director at least three weeks in advance of the proposed event. The Form is forwarded by the graduate program director to the dean of the Graduate School. Copies of the dissertation are to be distributed to the committee members at least two weeks before the dissertation defense; one copy is to be kept in the program office for examination by the faculty. The final approval of the dissertation must be by a majority vote of the dissertation examining committee.

#### Annual Review of Progress:

The student's advisor must submit a written report to the graduate program director on the student's progress once per year documenting student progress and accomplishments (e.g., published papers or proceedings, presentations at conferences, fellowships, grants, awards or other honors).

#### Time Limit/Residency Requirement:

The time limit for a doctoral degree is seven years for a student who has a previous graduate degree or 24 credits of graduate study in such a degree program. For all other students, the time limit for a doctoral degree is seven years after completion of 24 graduate level credits at Stony Brook University.

#### **Ph.D. Course Table with Track options:**

|          |                                                                                           | "req" = required course for track              |                           |                                     |
|----------|-------------------------------------------------------------------------------------------|------------------------------------------------|---------------------------|-------------------------------------|
|          |                                                                                           | "x" = elective course subject applies to track |                           |                                     |
|          |                                                                                           | <b>TRACK</b>                                   |                           |                                     |
| Course # | Title                                                                                     | Imaging Informatics (II)                       | Clinical Informatics (CI) | Translational Bio-informatics (TBI) |
| BMI 501  | Intro. To Biomedical Informatics                                                          | req                                            | req                       | req                                 |
| BMI 502  | Life Sciences for Biomedical Informatics                                                  | req or 503                                     | req or 503                | req or 503                          |
| BMI 503  | Computer Science for Biomedical Informatics                                               | req or 502                                     | req or 502                | req or 502                          |
| BMI 511  | Translational Bioinformatics                                                              |                                                |                           | req                                 |
| BMI 512  | Clinical Informatics                                                                      |                                                | req                       |                                     |
| BMI 513  | Imaging Informatics                                                                       | req                                            |                           |                                     |
| BMI 514  | Imaging Informatics Analysis                                                              | req                                            |                           |                                     |
| BMI 517  | Current Research in Signaling Pathways, Biochemistry, and Tissue Morphology of Disease    | x                                              | x                         | x                                   |
| BMI 520  | Data Analytics and Software Stacks                                                        | req                                            | x                         | req                                 |
| BMI 530  | Software Development in Biomedical Informatics                                            | req                                            | x                         | req                                 |
| BMI 540  | Statistical Methods in Biomedical Informatics                                             | req                                            | req                       | req                                 |
| BMI 550  | Clinical Informatics Practice Patterns                                                    |                                                | req                       |                                     |
| BMI 551  | Case Studies in Clinical Informatics                                                      |                                                | req                       |                                     |
| BMI 552  | Quality Improvement Methods for Clinical Informatics                                      |                                                | x                         |                                     |
| BMI 560  | Personalized Medicine                                                                     |                                                |                           | x                                   |
| BMI 590  | Independent Study in Biomedical Informatics                                               | x                                              | x                         | x                                   |
| BMI 591  | Independent Reading in Biomedical Informatics                                             | x                                              | x                         | x                                   |
| BMI 592  | Maters/Pre-Candidate Seminar (FT students must register each semester prior to candidacy) | req                                            | req                       | req                                 |
| BMI 595  | Special Topics in Biomedical Informatics                                                  | x                                              | x                         | x                                   |
| BMI 596  | Special Problems in Biomedical Informatics                                                | x                                              | x                         | x                                   |
| BMI 598  | M.S. Capstone Project in Biomedical Informatics                                           |                                                |                           |                                     |
| BMI 599  | M.S. Research and Thesis in Biomedical Informatics                                        |                                                |                           |                                     |
| BMI 620  | Advanced Topics in Clinical Informatics                                                   |                                                | x                         |                                     |
| BMI 622  | Advanced Topics in Translational Bioinformatics                                           |                                                |                           | x                                   |

|         |                                                                                 |                   |                   |                   |
|---------|---------------------------------------------------------------------------------|-------------------|-------------------|-------------------|
| BMI 625 | Advanced Topics in Imaging Informatics                                          | x                 |                   |                   |
| BMI 690 | Independent Study in Biomedical Informatics                                     | x                 | x                 | x                 |
| BMI 691 | Independent Reading in Biomedical Informatics                                   | x                 | x                 | x                 |
| BMI 692 | BMI Candidate Seminar (FT students must register each semester after candidacy) | req               | req               | req               |
| BMI 695 | Special Topics in Biomedical Informatics                                        | x                 | x                 | x                 |
| BMI 696 | Special Problems in Biomedical Informatics                                      | x                 | x                 | x                 |
| BMI 697 | Teaching Practicum I                                                            | req               | req               | req               |
| BMI 698 | Teaching Practicum II                                                           | req               | req               | req               |
| BMI 699 | Dissertation Research-On Campus (up to 12 credits)                              | req or 700 or 701 | req or 700 or 701 | req or 700 or 701 |
| BMI 700 | Dissertation Research-Off campus, Domestic                                      | req or 699 or 701 | req or 699 or 701 | req or 699 or 701 |
| BMI 701 | Dissertation Research-Off campus, International                                 | req or 699 or 700 | req or 699 or 700 | req or 699 or 700 |
| BMI 800 | Full-Time Summer Research                                                       | x                 | x                 | x                 |

## General Requirements for the M.S. in Biomedical Informatics

The M.S. program has been designed to provide students with the core foundations of Biomedical Informatics and the flexibility to define a specialization that best meets their career objectives. Students may select the **M.S. with Thesis** option or the **M.S. with Capstone Project** option. Students also select a track to focus on: **Imaging Informatics, Clinical Informatics or Translational Bioinformatics.**

## Required Courses:

1. All M.S. students are required to take the initial BMI sequence:

a. **BMI 501** Introduction to Biomedical Informatics

b. **BMI 502** Life Sciences for Biomedical Informatics

OR **BMI 503** Computer Science for Biomedical Informatics

c. Based on Student's selected track (**BMI 501** must be taken before or at the same time as BMI 511, BMI 512 or BMI 513):

**BMI 511** Translational Bioinformatics

OR **BMI 512** Clinical Informatics

OR **BMI 513** Imaging Informatics

2. All M.S. Students are required to take **BMI 540** Statistical Methods in Biomedical Informatics.

3. All full-time M.S. graduate students are required to register each semester for **BMI 592** Biomedical Informatics Masters/Pre-Candidate Seminar, and obtain a satisfactory grade.

4. Students must complete all the required courses (marked "req" on the M.S. Course Table with Track options, below) from at least one of the Biomedical Informatics program Tracks.

5. A minimum of 18 graduate credits must be taken in the Biomedical Informatics Program (includes all BMI courses and all BMI-Approved Elective courses from other departments). Of these, 15 credits must be in courses other than BMI 590, BMI 591, BMI 592, BMI 595, BMI 596, BMI 690, BMI 691, BMI 695, and BMI 696 (the independent study, independent reading, seminar, special topics and special problems courses).

6. All courses taken outside the Program for application to the graduate degree requirements are subject to prior approval of the student's advisor and the BMI Graduate Program Director.

7. Up to 15 credits from the Advanced Graduate Certificate in Biomedical Informatics may be applied to the M.S. degree in Biomedical Informatics provided they meet the course requirements for the M.S. degree.

### Transfer Credits:

A maximum of 12 graduate credits may be transferred from other programs toward the M.S. degree. These may include up to 6 credits from other institutions. The maximum also includes any credits received from Biomedical Informatics courses while having non-degree status at Stony Brook as an SPD or GSP student. Credits used to obtain any prior degrees are not eligible for transfer. All requests for transfer of credits require the prior approval of the BMI Graduate Program Director.

### Time Limit:

Full-time students must complete all M.S. degree requirements within three years. Part-time students must complete all M.S. degree requirements within five years. For any term in the M.S. program, 12 credits are needed for students to be considered full-time.

### Requirements for the MS in Biomedical Informatics - With Thesis

The M.S. Thesis option is intended for students who wish to perform Biomedical Informatics research. A written thesis is submitted and is defended in an oral examination.

A student choosing the M.S. Thesis option must define a suitable research question and select a M.S. Thesis **research advisor**, who must approve the M.S. Thesis research.

Upon completion, the M.S. Thesis must be defended in an **oral examination** before a **faculty committee** of at least three members (of which at least two members must be Biomedical Informatics faculty; one member must be the student's M.S. Thesis research advisor). This faculty committee must be approved by the BMI Graduate Program Director. The written M.S. Thesis must be distributed to the faculty committee members at least two weeks before the oral examination.

A student choosing the M.S. Thesis option may not switch to the Capstone Project option without permission of the graduate program committee.

A student who has at any time been appointed as a teaching, graduate, or research assistant must choose the M.S. Thesis option unless otherwise approved by the graduate program committee.

### Course Requirements for M.S. with Thesis:

21 approved graduate course credits and an accepted Thesis, which is registered as up to 12 credits of **BMI 599 M.S. Research and Thesis in Biomedical Informatics**.

- a. No more than a total of 12 credits of **BMI 599** may be applied toward the M.S. degree credit requirements.
- b. No more than a total of 6 credits of **BMI 596 Special Problems in Biomedical Informatics-Masters** and **BMI 696 Special Problems in Biomedical Informatics-Doctoral** may be applied toward the course requirements.
- c. No credits of **BMI 598 M.S. Capstone Project in Biomedical Informatics** may be applied toward the course requirements for students who select the M.S. with Thesis.
- d. Either **BMI 502 Life Sciences for Biomedical Informatics** or **BMI 503 Computer Science for Biomedical Informatics**, but not both, can be applied toward the course requirements.

### Requirements for the MS in Biomedical Informatics - With Capstone Project

The Capstone Project option is intended for students who wish to take additional elective courses, plus complete a practicum rotation, instead of the highly-focused M.S. research that is part of the M.S. with Thesis option.

A student choosing the Capstone Project option must select a project advisor. Prior to starting a Capstone rotation, a student is required to submit a project proposal with well-defined deliverables to both his/her academic advisor and project advisor. The student's project advisor is required to submit a mid-term evaluation to the student's academic advisor.

The student is required to complete a final report and also present his/her work at a department seminar. Upon completion, the project must be submitted for approval to a faculty committee of at least two members (the academic advisor and the project advisor; at least one committee member must be Biomedical Informatics faculty; committees with more than two members are permitted).

A student who has selected the Capstone Project option may not have been (nor be concurrently) appointed as a teaching, graduate, or research assistant unless otherwise approved by the graduate program committee.

### Course Requirements for M.S. with Capstone Project:

30 approved graduate credits, including 6 credits of **BMI 598 M.S. Capstone Project in Biomedical Informatics**.

- a. No more than a total of 6 credits of **BMI 598** may be applied toward the M.S. degree credit requirements.

- b. No more than a total of 6 credits of **BMI 596 *Special Problems in Biomedical Informatics-Masters*** and **BMI 696 *Special Problems in Biomedical Informatics-Doctoral*** may be applied toward the course requirements.
- c. No credits of **BMI 599 *M.S. Research and Thesis in Biomedical Informatics*** may be applied toward the course requirements for students who select the M.S. with Capstone Project.
- d. Either **BMI 502 *Life Sciences for Biomedical Informatics*** or **BMI 503 *Computer Science for Biomedical Informatics***, but not both, can be applied toward the course requirements.

***M.S. Course Table with Track options:***

Requirements for the MS in Biomedical Informatics - With Capstone Project

The Advanced Graduate Certificate program has been designed to provide students with the basic grounding in Biomedical Informatics and the flexibility to design a curriculum that best augments their current training. A minimum of 15 credits is required for the Advanced Graduate Certificate.

Required Courses:

1. 15 approved graduate credits including BMI 501, BMI 502 and/or BMI 503. As well as one from the following list corresponding to the track specialization: BMI 511 Translational Bioinformatics, BMI 512 Clinical Informatics or BMI 513 Imaging Informatics.
2. All courses taken outside the Program for application to the graduate degree requirements are subject to prior approval of the student's advisor and the BMI Graduate Program Director.
3. Students must complete all the required courses from at least one of the Biomedical Informatics program tracks (see AGC Course Table, below).

Transfer Credits:

A maximum of 6 graduate credits may be transferred from other programs toward the Advanced Graduate Certificate. These may include up to 3 credits from other institutions. The maximum also includes any credits received from taking Biomedical Informatics courses while having non-degree status at Stony Brook as an SPD or GSP student. Credits used to obtain any prior degrees are not eligible for transfer. All requests for transfer of credits require the prior approval of the BMI Graduate Program Director.

Time Limit:

Full-time students must complete all Advanced Graduate Certificate requirements within two years. Part-time students must complete all Advanced Graduate Certificate requirements within four years.

***Advanced Graduate Certificate Course Table with track requirements:***

Faculty of Biomedical Informatics Department

**Please see the "People" page of the BMI Department website:**

<https://bmi.stonybrookmedicine.edu/people>

***NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.***

**Biomedical Sciences (Tracks)**

Please visit individual program pages within the bulletin for directory and program contact information:

**Anatomical Sciences (HBA)****Biochemistry and Structural Biology (BSB)****Molecular and Cellular Biology (MCB)****Molecular and Cellular Pharmacology (HBH)****Molecular Genetics and Microbiology (HBM)****Neuroscience (NEU)****Oral Biology and Pathology (HDO)****Physiology and Biophysics (HBY)****Clinical Research****Description**

The MS in Biomedical Sciences (HBBMS) is shared by nine graduate programs: Anatomical Sciences (HBA), Biochemistry and Structural Biology (BSB), Molecular and Cellular Biology (MCB), Molecular and Cellular Pharmacology (HBH), Molecular Genetics and Microbiology (HBM), Neuroscience (NEU), Oral Biology and Pathology (HDO), Physiology and Biophysics (HBY), and Clinical Research.

Each track under the MS in Biomedical Sciences is differentiated by their areas of study. Curriculum is established by each area.

**Admissions Requirements**

Please visit individual program pages within the bulletin for admission information:

Anatomical Sciences (HBA)

Biochemistry and Structural Biology (BSB)

Molecular and Cellular Biology (MCB)

Molecular and Cellular Pharmacology (HBH)

Molecular Genetics and Microbiology (HBM)

Neuroscience (NEU)

Oral Biology and Pathology (HDO)

Physiology and Biophysics (HBY)

Clinical Research

**Degree Requirements****Anatomical Sciences Track (HBA)**

Completion of this track requires 30 credits from the approved PhD curriculum in Anatomical Sciences and a thesis or comprehensive examination.

**Biochemistry and Structural Biology Track (BSB)**

Completion of this track requires 30 credits from the approved PhD curriculum in Biochemistry and Structural Biology and a thesis.

**Molecular and Cellular Biology Track (MCB)**

Completion of this track requires 30 credits from the approved PhD curriculum Molecular and Cellular Biology and a thesis.

**Molecular and Cellular Pharmacology Track (HBH)**

Successful completion of the Pharmacology track requires 42 graduate level credits and a thesis. Twenty four credits are in required courses, up to 6 credits of electives, and 12 to 18 research credits.

**Molecular Genetics and Microbiology Track (HBM)**

Completion of this track requires 30 credits from the approved PhD curriculum Molecular Genetics and Microbiology and a thesis.

**Neuroscience Track (NEU)**

Completion of this track requires 30 credits from the approved PhD curriculum Neuroscience and a thesis.

**Oral Biology and Pathology Track (HDO)**

Completion of this track requires 30 credits from the approved PhD curriculum Oral Biology and Pathology and a thesis.

**Physiology and Biophysics Track (HBY)**

Completion of this track requires 30 credits from the approved PhD curriculum Physiology and Biophysics and a thesis.

**Clinical Research Track**

Completion of this track requires 38 credits of graduate coursework, including electives and a master's thesis. There are 30 credits in required courses, up to 8 credits in electives, and 0-6 additional credits required. \*Contact individual programs for more information\*

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

Spring 2018

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College of Business**Dean**

Manuel London, Harriman Hall (631) 632-5787

**Associate Dean and Graduate Program Director**

Dmytro Holod, Harriman Hall (631) 632-7183

**Assistant Dean for Administration**

Amy Milligan, Harriman Hall (631) 632-5708

**Assistant Dean**

Joyce Wellinger, Harriman Hall

**Director of the Center for Human Resource Management**

Manuel London, Harriman Hall (631) 632-7159

**Office of Student Services**

Harriman Hall Room 109 (631) 632-7171

**Web Site**

<http://www.stonybrook.edu/business>

**Advanced Graduate Certificates Awarded**

Health Care Management, Human Resources Management, Finance

**Degrees Awarded**

M.B.A., M.B.A. in Accounting, M.B.A. in Finance, M.B.A. in Marketing, M.B.A. in Health Care Management, M.S. in Accounting, M.S. in Finance, M.S. in Technology Management (in Korea)

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-gs](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-gs)

Effective for Fall 2015, applicants with an awarded Bachelor's degree in Business are eligible for a 36 credit track MBA in Accounting, MBA in Finance, MBA in Marketing or MBA with concentrations. All other applicants with an awarded Bachelor's degree, regardless of undergraduate major, are eligible for a 48 credit track in MBA in Accounting, MBA in Finance, MBA in Marketing, MBA in Health Care Management or MBA with concentrations. The available concentrations are Human Resources (HR), Innovation, Management, or Management Operations.

All students admitted prior to the Fall 2015 semester must follow the MBA track for the term they were admitted under. Please refer to the Graduate School Bulletin archives to find your program plan for your admit term.

**Description of the MBA Program**

In today's world of constant change and extraordinary opportunity, the need for business education has never been greater. Our MBA degree program is taught by leading Stony Brook faculty. They are complemented by key executives recruited as visiting professors from throughout the tri-state region—industry leaders who have built stellar careers in today's global business world.

Our students participate in a vibrant learning environment where they gain the knowledge, skills, and insights necessary to manage complex organizations. Our dedicated faculty has both academic and business experience, and teaches not only the broad principles of management, finance, and marketing but also the more intangible aspects of leadership, communications, and business strategy.

The College of Business offers flexible full and part time programs with day, evening, and Saturday courses at our beautiful main campus in Stony Brook, Long Island, which is located 60 miles east of New York City. We also offer some courses for the MBA program in an online format. As a result of our relationship with business schools overseas, our programs extend to the far corners of the globe.

Full-time students are encouraged to spend a summer session or a semester in the study abroad program to learn about business in Africa, China, Europe, India, Korea, Greece, or the Middle East. These experiences provide students with a competitive edge in the job market as businesses increasingly look for employees with overseas experience. Today most businesses are global in nature, whether they are multinational corporations or small local businesses with overseas suppliers, customers, or a diverse international workforce.

By focusing on strategic, managerial, analytical, and technical processes and outcomes critical to success in a broad spectrum of industries, Stony Brook University's MBA program helps students recognize ways in which they can add value to their firms and advance their careers.

**Superior Teaching in a Nurturing Learning Environment:** The Stony Brook program prides itself on its superior teaching and its dedication to working with each student to develop his or her business and managerial skills. We seek to bridge the gap between theory and practice by selecting faculty members who can clearly communicate the practical benefits of managerial knowledge.

**Placement and Career Services****Career Services**



The Career Center, located on the ground floor of the Melville Library at the foot of the Zebra Path, provides a variety of career and life planning services to MBA students. These services include: online listings of on- and off-campus jobs and internships, resume referrals, on-campus interviews, job and internship fairs, workshops on topics including resume preparation and interviewing, individual counseling, and additional resources online and in print.

**Job & internship listings, applications, and resume referrals** (when the Career Center forwards appropriate resumes to interested employers) happen through Handshake - to access it, visit [www.stonybrook.edu/career](http://www.stonybrook.edu/career).

Many companies visit the campus to conduct **one-on-one interviews** with MBA students. It is suggested that graduate students contact the Career Center at the beginning of their first semester for more details.

**Job and internship fairs**, in which employers visit the campus to discuss their organizations and share available job openings, are held regularly. These fairs provide graduate students with unique opportunities to meet, have brief interviews with, and leave resumes with a significant number and variety of employers. For dates and details, visit [www.stonybrook.edu/career](http://www.stonybrook.edu/career) and look under Career Center Upcoming Events.

### Workshops

For those who are about to begin the process of searching for a job, writing a resume, and/or interviewing, group workshops are offered which provide information on these and related topics. Other workshops offer networking opportunities and insight into particular careers & employers. For dates and details, visit [www.stonybrook.edu/career](http://www.stonybrook.edu/career) and look under Career Center Upcoming Events.

### Individual Counseling

Professional career counselors are available to assist with questions pertaining to any facet of the career decision-making process, from deciding on a specific business path to finding out how to effectively search for a job. Topics which are frequently discussed include: selecting a specialization, researching companies, obtaining experience through volunteer and internship positions, job search strategy, and marketing the value of a graduate degree. Those interested in discussing these or other issues are encouraged to drop by or set up appointments by calling or visiting the Career Center.

### Website and Career Resource Library

The Career Center's website and Career Resource Library contain a wealth of information on a variety of topics related to the career planning process. Materials include information on occupations, labor market trends, salary levels, job hunting, resume writing, employment interviewing, and many other areas. Those MBA students interested in pursuing doctoral study can look through directories and information on entrance tests required. Detailed information on potential employers, including annual reports and related documents, is included in what's available

### Admission Requirements of the MBA Program

The College of Business graduate programs are designed for ambitious and analytical students who are capable of applying what they learn toward the solutions of organizational problems. New students can begin the Stony Brook MBA in the Fall or Spring semester. The MS in Accounting and MS in Finance programs can be started in the Fall semester only.

All graduate applications are submitted online through the following Website: <https://app.applyyourself.com/?id=sunysb-gs>. Applicants are encouraged to submit a current resume along with their online application and personal statement. The requirements for the business graduate programs include:

A. A bachelor's degree with a minimum grade point average of 3.0. In exceptional cases, students not meeting the GPA requirement may be considered for admission on a conditional basis. Official transcripts can be mailed directly to the College of Business or sent electronically to [CoBadmissions@stonybrook.edu](mailto:CoBadmissions@stonybrook.edu). We strongly encourage foreign transcripts to be evaluated by World Education Services (WES) or another NACES member association.

B. Aptitude for quantitative analysis, demonstrated through previous coursework, standardized tests, or practical experience. All applicants must have successfully completed an introductory calculus course (MAT 123 or equivalent) with a grade of C or higher.

C. Submission of Graduate Management Admission Test (GMAT) scores or GRE scores

D. Three letters of recommendation, one of which, if possible, should be from a professional working in a private company or public agency who is capable of evaluating the applicant's motivation and potential. The three letters of recommendation should also include at least one from a college faculty member, counselor, or administrator. Letters of recommendation should be submitted through ApplyYourself.

E. Applicants whose first or primary language is not English, must submit one of the following:

A TOEFL internet-based score of 85 or above

An IELTS test with an overall score of 6.5 or above, with no sub-scores below 6.0. Acceptance by both the College of Business and the Graduate School.

G. \$100 application fee.

In addition to the criteria stated above, the MBA in Accounting and MS in Accounting programs have further requirements. Applicants to these programs must have completed 21 credits of accounting prerequisites and one 3 credit law course. In addition, applicants to the MS in Accounting

program must have completed 30 credits in general business (non-accounting) coursework. Please refer to the program website for detailed prerequisite information.

#### Application Deadlines:

Application deadline for MBA Programs for the Spring semester is November 15th; International Applicants should apply by October 15th. Application deadline for MS Programs for the Fall semester is May 15th; International Applicants should apply by March 15th. Application deadline for MBA Programs for the Fall semester is June 15th; International Applicants should apply by March 15th. Applications may be considered after these dates, as long as space is available.

For additional information, please visit [www.stonybrook.edu/business](http://www.stonybrook.edu/business) or email [CoBadmissions@stonybrook.edu](mailto:CoBadmissions@stonybrook.edu)

Office of Student Services  
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College of Business  
Stony Brook University  
Stony Brook, New York  
11794-3775  
(631) 632-7171  
E-mail: [CoBadmissions@stonybrook.edu](mailto:CoBadmissions@stonybrook.edu)

#### Certificate Programs

Applications for the Advanced Graduate Certificate Programs are available through the School of Professional Development, with the exception of the Health Care Management Certificate, which is available through the School of Health Technology and Management. Admission into an AGC does not guarantee admission into the MBA program. Students must submit a separate application directly to the MBA program or MS in Finance Program to be considered for admission. Students who are accepted into a Master's program may apply up to 12 credits towards their degree program. Students must declare their decision to matriculate into a master's program before the completion of 12 credits.

Note that, although it is a valuable academic credential, an Advanced Graduate Certificate is not a degree.

#### Certificate Program in Finance

The 18-credit Advanced Graduate Certificate (AGC) in Finance prepares students for careers in financial management, including financial analysis, portfolio management, investment banking and corporate financial associate positions. The curriculum places an emphasis on developing financial analytical skills. It offers in-depth knowledge of the principles and techniques of finance and accounting needed to understand how corporate financial objectives are developed, measured and reported, as well as the central issues in government regulation, taxation and financial reporting.

The AGC in Finance is a part-time program designed for working professionals. Courses are scheduled in the evening, and several of them are offered completely online

#### Certificate Program in Human Resource Management

The Advanced Graduate Certificate in Human Resource Management is a program for private- and public-sector managers, labor relations specialists, and union representatives, human resources/personnel managers, and employee training professionals. The program, leading to the New York State Advanced Certificate in Human Resources Management, requires a bachelor's degree from an accredited college. This program is administered by the School for Professional Development. For further information and to apply, please refer to the following Web site: <http://ws.cc.sunysb.edu/spd/graduate/hrm.html>

#### Certificate Program in Health Care Management

The Advanced Graduate Certificate Program in Health Care Management is a professional development program intended for health practitioners who require management training and for managers who require specific training in the health care field. It offers participants a comprehensive understanding of health care and management and helps them develop the analytical capabilities to be effective managers. The Advanced Certificate Program in Health Care Management is a joint program of the School of Health Technology and Management and the College of Business.

The program is designed to meet the needs of (1) working professionals who are part-time students and (2) full-time graduate students at the University. Many courses are offered in the late afternoon or early evening. Certificate program students are required to complete the program within a three-year period. Graduate students who pursue either the Master of Science in Health Sciences in the School of Health Technology and Management or the MBA in the College of Business may obtain the certificate as they earn credits toward graduation. For further information and to apply, please refer to the following Web site: <http://www.hsc.stonybrook.edu/shtm/programs/hcpm/hcpm.html>

#### Facilities of the MBA Program

##### Research

Faculty members in the College of Business are strongly committed to teaching and fostering working relationships with students inside and outside the classroom, while maintaining their involvement in research.

In their research, Business professors examine complex issues and problems confronting today's managers and decision makers. They analyze businesses and other institutions as well as the economic, regulatory, and technological forces underlying decision-making processes and ongoing changes within these organizations. They keep close contact not only with other researchers in the United States and abroad, but also with regional, national, and international businesses by conducting applied research projects and working as consultants.

Students at the College of Business benefit from this high-caliber research in several ways. Faculty members often revise and develop new course materials to incorporate current research into their teaching and instruction. Exposing students to the latest knowledge and management skills best prepares them for future challenges and, at the same time, makes the classroom experience dynamic and stimulating. Business students work closely with professors and all students are invited to participate in seminars conducted by the school's researchers.

The College houses Centers for Human Resource Management, Health Services Research Management, Information Systems Management, Center for Operational Excellence, and the Innovation Center. Quality research conducted by the centers contributes significantly to the College's academic programs. In addition, the centers' applied and interdisciplinary research promotes valuable interactions with industry, government, and nonprofit organizations and provides hands-on experience to students.

#### Behavioral Research Lab

The College of Business Behavioral Research Lab provides a space for faculty to conduct experiments and test theories that will help consumers, managers, and organizations make better decisions. The lab is equipped with computers and recording equipment to support the growing number of researchers who serve as principle investigators in areas such as behavioral finance, consumer behavior, and organizational behavior. The space may be reserved by faculty in the College of Business and students conducting research studies under the supervision of a faculty member in the College of Business.

#### Requirements for the Masters Degree in Business Administration

The MBA curriculum prepares students for careers in management in business, government, and nonprofit organizations. The MBA may be pursued either full-time or part-time. Full-time students require two years of coursework with an internship in the summer between the two years. Part-time students may follow the same curriculum over a longer period, not to exceed five years. Admission is available in the fall and spring.

Students in the 5 year, 60-credit, Combined BA/BS/BE + M.B.A program complete the first year of the MBA after their junior year and prior to their fifth year at Stony Brook.

The College of Business offers MBA 3 different credit track options for the MBA in Accounting, MBA in Finance, MBA in Health Care, MBA in Marketing and MBA with options to concentration in either Human Resources, Innovation, Management, or Management Operations.

**60 Credit MBA Track:** The 60 credit track is required for students in the BA/BS + MBA program, as well as students who would like the option to take additional elective courses to gain a more in depth knowledge of their field of study. The 60-credit program is comprised of 18 three-credit courses plus a six-credit industry project. The 18 courses include 11 required core courses plus 7 electives. Four of the seven elective courses must be taken in the respective degree subject area or a student's field of concentration, (Human Resources, Innovation, , or Management). This 60-credit program is completed over a two-year period. Students in the 60 credit program are required to complete an internship. The internship is typically completed during the Summer after the first year of the program.

#### Internship Requirement

The College of Business internship program provides full time students with important practical training in business management. Ideally the internship is a paid eight-to twelve-week full-time summer position in a business, government, or nonprofit organization. Students must write a faculty-approved internship report in the semester following the internship. All 60 credit students must enroll in MBA 599, Internship Practicum, for zero to one credit in the term during which they are participating in their internships.

**48 Credit MBA program:** All students who have earned a Bachelor's Degree (regardless of the major), are eligible for the 48 credit track. The curriculum includes curriculum requires 16 three-credit courses (MBA 501-MBA 507; MBA 511; MBA 512; MBA 522; MBA 589; MBA 592). Within the 16 three-credit courses, students take 12 required core courses, including a 3 credit industry project (MBA 522) and 4 electives, which must be in the area of your degree program or from one of the areas of concentration..

**36 Credit MBA Track:** Students who have earned a Bachelor's degree in business are eligible for a 36 credit MBA. Students will take 12 three-credit courses, which includes seven required core courses (MBA 501; MBA 503; MBA 506-507; MBA 511; MBA 512; MBA 522 - a 3 credit industry project) and five elective courses. Four of the 5 elective courses must be taken in the respective degree subject area or from one of the concentrations. Students will not have to take the following core courses: MBA 502, 504, 505, 589, or 592.

**Part-time MBA:** Offering a flexible evening and Saturday course schedule to accommodate work schedules, this program can be completed between two and five years. We also offer convenient summer courses to help accelerate program completion.

#### Core Courses

Our core courses cover a broad range of topics in the first year, including finance, accounting, marketing, leadership, team building, communications, decision-making, economics, innovation, ethics, law, operations research and organizational behavior. In the second year, students focus on an area of concentration such as information management, finance, marketing, human resources, health system management or general management. Students also engage in an industry project in the second year to get hands-on experience in applying the knowledge from the classroom to the business world. Finally, students take a capstone course in business strategy.

**Concentrations:**

Students must take 4 electives from their specific area of concentration in order to earn that concentration.

36 credit track: Students in the 36 credit track will take a total of five 500-level MBA elective courses, four of these must be in their area of concentration.

48 credit program: Students in the 48 credit program must take four elective courses in their area of concentration.

60 credit program: Students in the 60 credit program will take seven (7) 500-level MBA elective courses, four of these must be in their area of concentration.

Innovation Concentration Electives: BUS 554, BUS 567, FIN 552, MBA 509, MBA 538/HRM 538, MBA 530, MBA 540, MBA 563, MBA 570, MBA 571, MBA 574, MKT 535, MKT 565, MKT 567

Human Resources Concentration Electives: HRM 532, HRM 533, HRM 537, HRM 538, HRM 541, HRM 545, HRM 547, MBA 530

Management Concentration Electives: MBA 509, MBA 515, MBA 517, MBA 530, HRM 538/MBA 538, MBA 540, MBA 543, MBA 560, MBA 563, MBA 566, MBA 570, MBA 571, MBA 574, MBA 588, BUS 554, BUS 567, FIN 536, FIN 549, FIN 552, FIN 541, MKT 516, MKT 518, MKT 535, MKT 555, MKT 575, MKT 564, HRM 532, HRM 533, HRM 547

Operations Management Concentration Required Course: MBA 543; Electives: MBA 509, 517, 540, 574, 587, 595

**MBA in Finance**

Finance lies at the heart of both corporate and governmental success. Critical financial decisions involving the creation of capital, its day-to-day management, and its redeployment into more productive areas of companies and the economy are central to the continued prosperity of businesses and nations around the world. Stony Brook's MBA in Finance will prepare students for positions in corporate finance, investment banking, financial management, broker-dealer firms, consulting firms, commercial banks, financial markets, securities firms and government agencies.

**The 60-credit MBA in Finance track** curriculum comprises 18 three-credit courses plus a six-credit industry project (MBA 521). Within the 18 three-credit courses, students take 11 required core courses plus 7 electives, 4 of which must be finance electives. We strongly encourage students to take all \*\*7 electives in the area of finance. Students in the 60-credit program are also required to complete an internship (MBA 599).

**The 48-credit MBA in Finance track** curriculum requires 16 three-credit courses. Within the 16 three-credit courses, students take 12 required core courses, including a 3-credit industry project (MBA 522) and 4 finance electives.

**The 36 credit MBA in Finance track** requires 12 three-credit courses. Within the 12 courses, students take 7 required core courses including a 3 credit industry project (MBA 522), and 5 elective courses. Four of these electives must be Finance electives. \*Students will not have to take the following core courses: MBA 502, 504, 505, 589, or 592.\*

**Course Requirements for the MBA in Finance**

MBA 501 - Management Economics

\*MBA 502 - Finance

MBA 503 - Data Analysis & Decision Making

\*MBA 504 - Financial Accounting

\*MBA 505 - Marketing

MBA 506 - Leadership & Team Effectiveness

MBA 507 - Ethics & Law

MBA 511 - Technological Innovations

MBA 512 - Bus Planning & Strat Mgt

MBA 521/522 - Industry Project

\*MBA 589 - Operations Management

MBA 592 - Organizational Behavior

**Elective courses:**

36 credit track: Students in the 36 credit track will take a total of five 500-level MBA elective courses, four of these must be FIN courses.

48 credit program: Students in the 48 credit program must take four FIN elective courses.

60 credit program: Students in the 60 credit program will take seven 500-level MBA elective courses, four of these must be FIN courses.

### **MBA in Marketing**

In today's competitive business environment a strong knowledge of marketing is necessary since one must understand how to stand out and effectively compete against other companies who are targeting the same population. Marketing is a discipline which relies on psychology, sociology and others and applies this knowledge to the exchange process where a company or individual is completing a sale. One must understand consumer behavior, the competitive environment, the company and the culture in which one operates. At the more micro level, the effective marketer must regulate elements of the marketing mix in bringing their product to market. Understanding how to price, promote, distribute and create the right product is essential if one is to achieve success. Understanding how consumers think and what motivates them to purchase is essential in an environment where everyone is competing for the same sale. The M.B.A. in Marketing will prepare students for careers in Brand Management, Product Management Advertising and/or Marketing Research.

**The 60-credit MBA in Marketing track** curriculum comprises 18 three-credit courses plus a six-credit industry project (MBA 521). Within the 18 three-credit courses, students take 13 required core courses plus \*\*5 electives, 2 of which must be marketing electives. We strongly encourage students to take all 7 electives in the area of marketing.

**The 48-credit MBA in Marketing track** curriculum requires 16 three-credit courses. Within the 16 three credit courses, students take 14 required core courses, including a 3 credit industry project (MBA 522) and 2 Marketing electives.

**The 36 credit MBA in Marketing track** requires 12 three-credit courses. Within the 12 courses, students take 9 required core courses, including a 3 credit industry project (MBA 522), and 3 elective courses. Two of these electives must be marketing electives. \*Students will not have to take the following core courses: MBA 502, 504, 505, 589, or 592.\*

### **Course Requirements for the MBA in Marketing**

MBA 501 - Management Economics

\*MBA 502 - Finance

MBA 503 - Data Analysis & Decision Making

\*MBA 504 - Financial Accounting

\*MBA 505 - Marketing

MBA 506 - Leadership & Team Effectiveness

MBA 507 - Ethics in Management

MBA 511 - Technological Innovations

MBA 512 - Bus Planning & Strat Mgt

MBA 521/522 - Industry Project

\*MBA 589 - Operations Management

MBA 592 - Organizational Behavior

\*MBA 565 - Marketing Reserach

\*MBA 567 - Marketing Strategy

### **Elective courses:**

36 credit track: Students in the 36 credit track will take a total of five 500-level MBA elective courses, two of these must be MKT elective courses.

48 credit program: Students in the 48 credit program must take two MKT elective courses.

60 credit program: Students in the 60 credit program will take seven 500-level MBA elective courses, two of these must be MKT courses.

### **MBA in Health Care Management**

The College of Business offers an MBA in Health Care Management Degree. This degree prepares students for careers in the exciting and tremendously growing field of health care. From industries such as hospitals, insurance and health services, to pharmaceuticals, biotech, and consulting, there is a huge demand for business professionals with health care acumen. This program will provide students with knowledge in health management, regulations, delivery systems and various industry segments that span the health systems of the 21st century. Courses in this program are offered in collaboration with Stony Brook's School of Health Technology and Management and the College of Business. In addition to health care management expertise, the degree will equip students with broad skills and knowledge in business, accounting, finance, marketing, operations, management, and leadership. It allows for 4 classes in the health care management area, allowing students exposure to various aspects of health care management functions across various types of health care organizations.

**The 60-credit MBA in Health Care Management track** curriculum comprises 18 three-credit courses plus a six-credit industry project (MBA 521). Within the 18 three- credit courses, students take 11 required core courses plus \*\*7 electives, 4 of which must be Health Care Management electives. We strongly encourage students to take all 7 electives in the area of Health Care Management. Students in the 60-credit program are also required to complete an internship (MBA 599).

**The 48-credit MBA in Health Care Management track** requires 16 three-credit courses. Within the 16 three- credit courses, students take 12 required core courses, including a 3 credit industry project (MBA 522) and 4 Health Care Management electives.

**The 36 credit MBA in Health Care Management track** requires 12 three-credit courses. Within the 12 courses, students take 7 required core courses, including a 3 credit industry project (MBA 522), and 5 elective courses. Four of these electives must be Health Care Management electives. \*Students will not have to take the following core courses: MBA 502, 504, 505, 589, or 592.\*

#### **Course Requirements for the MBA in Health Care**

MBA 501 - Management Economics

\*MBA 502 - Finance

MBA 503 - Data Analysis & Decision Making

\*MBA 504 - Financial Accounting

\*MBA 505 - Marketing

MBA 506 - Leadership & Team Effectiveness

MBA 507 - Ethics & Law

MBA 511 - Technological Innovations

MBA 512 - Bus Planning & Strat Mgt

MBA 521/522 - Industry Project

\*MBA 589 - Operations Management

MBA 592 - Organizational Behavior

#### **Elective courses:**

36 credit track: Students in the 36 credit track will take a total of five 500-level MBA elective courses, four of these must be HAS elective courses.

48 credit program: Students in the 48 credit program must take four HAS elective courses.

60 credit program: Students in the 60 credit program will take seven 500-level MBA elective courses, four of these must be HAS courses.

#### **MBA in Accounting**

The College of Business is committed to providing students with a high quality education in accounting with a combined emphasis on theory and practical application. The MBA in Accounting is designed to provide students with the theoretical knowledge and analytical tools necessary to function in public accounting or private industry. The program will meet the education requirements for the Uniform Certified Public Accounting exam and licensing in New York State. We have designed the MBA in Accounting to accommodate a variety of students by establishing three paths of study. All three paths require the completion of accounting prerequisites prior to acceptance into the program

#### **Traditional 60 Credit MBA in Accounting Program**

Requires 18 three-credit courses plus a six-credit industry project (MBA 521). Within the 18 three- credit courses, students take 10 required core courses plus 8 accounting courses: ACC 542, ACC 562, ACC 590, ACC 591, ACC 594, ACC 596, ACC 597 and ACC 598. Students in the 60-credit program are also required to complete an internship (MBA 599).

#### **48 Credit MBA in Accounting Program**

Requires 16 three-credit courses. Within the 16 three- credit courses, students take 11 required core courses, including a 3 credit industry project (MBA 522) and 5 accounting courses: ACC 542, ACC 562, ACC 596, ACC 597, ACC 590.

#### **36 Credit MBA in Accounting Track**

Requires 12 three-credit courses. Within the 12 courses, students take 7 required core courses, including a 3 credit industry project (MBA 522), and the following 4 Accounting courses: ACC 562, ACC 596, ACC 597, ACC 590. Students 36 credit track will also take one additional MBA elective. \*Students in the 36 credit track will not have to take the following core courses: MBA 502, 504, 505, 589, or 592.\*

#### **Accounting/Prerequisite Requirements**

ACC 210 – Financial Accounting

ACC 214 – Managerial Cost Analysis and Applications

ACC 310 – Intermediate Accounting I

ACC 311 – Federal Income Taxation I

ACC 312 – Financial Statement Reporting and Analysis

ACC 314 – Federal Income Taxation II

ACC 400 – External Auditing

BUS 325 – Legal Environment of Business

### **MBA in Accounting Core Course Requirements**

MBA 501 – Managerial Economics

MBA 502 - Finance

MBA 503 – Data Analysis and Decision Making

MBA 505 – Marketing

MBA 506 – Leadership and Team Effectiveness

MBA 507 - Ethics and Law

MBA 511 – Technological Innovations

MBA 512 – Business Planning and Strategic Management

MBA 522 – Industry Project

MBA 589 – Operations Management

MBA 592 – Organizational Behavior

### **MBA Accounting Courses**

ACC 542 – Accounting for the Small Business Entrepreneur

ACC 562 – Accounting Information Systems

ACC 590 – Advanced Auditing & Assurance

ACC 591 – Internal Auditing

ACC 594 – Governmental and Not-For-Profit Accounting

ACC 596 – Financial Accounting Theory

ACC 597 – Advanced Accounting Problems

ACC 598 – Forensic Accounting

**Accelerated "Fast Track" BA/BS/BE + MBA:** A 48-credit accelerated MBA program for high achieving current Stony Brook undergraduate students. This program permits students to begin taking graduate credits during their undergraduate career. In their fifth year, students typically go directly into the second year of the MBA program. Students have opportunities for a summer study abroad and an internship. Contact the College of Business for a complete list of eligible majors and admissions criteria.

### **Dual Degree Programs**

- Combined MBA/ MA in Art History
- Combined MBA / MS in Mechanical Engineering Combined MBA / MS in Computer Science
- Combined MBA / MS in Biomedical Engineering Combined MBA / MS in Public Policy
- Combined MPH (Public Health)/ MBA
- Combined MD / MBA

### **MS in Accounting**

The Master of Science in Accounting is designed to provide students with the theoretical knowledge and analytical tools necessary to function in public accounting or private industry. The program will meet the education requirements for the Uniform Certified Public Accounting exam and licensing in New York State. This is a 30 credit program designed to be taken full time over the course of two semesters. Students must meet all prerequisites to be considered for this program. This program offers only Fall admission.

Prerequisites: 30 general business credits; 3 law credits; accounting specific prerequisites: ACC 210, ACC 214, ACC 310, ACC 311, ACC 312, ACC 314, ACC 400

#### **Course Requirements for the MS in Accounting**

ACC 542 – Accounting for the Small Business Entrepreneur ACC 562 – Accounting Information Systems

ACC 590 – Advanced Auditing & Assurance ACC 591 – Internal Auditing

ACC 594 – Governmental and Not-For-Profit Accounting ACC 596 – Financial Accounting Theory

ACC 597 – Advanced Accounting Problems ACC 598 – Forensic Accounting

ACC 580 – Accounting Capstone

MBA 506 – Leadership, Team Effectiveness

MBA 507 – Ethics and Law

#### **MS in Finance**

The Master of Science in Finance is a unique opportunity to further your education in the field of finance. This 30 credit program is well suited to financial professionals who seek advanced finance skills, as well as students from other disciplines who seek to strengthen their finance expertise.

The Master of Science in Finance focuses on finance-specific topics, requiring ten finance based courses culminating in an expertise of the discipline. This program will focus on developing an understanding of financial concepts and applications, preparing students to work in various areas of commercial finance such as, banking, investments and corporate finance.

#### **Course Requirements for the MS in Finance**

MBA 502 Finance

FIN 536 Financial Management

FIN 539 Investment Analysis

FIN 540 Probability & Statistics for Finance

FIN 541 Bank Management

FIN 545 Capital Markets

FIN 549 Risk Management

FIN 552 Merger and Acquisitions

FIN 578 Behavioral Finance

FIN 580 Finance Capstone Course

#### **MS in Technology Management - Korea**

The Master of Science in Technology Management (MS – TM) is offered jointly by the College of Business and the School of Integrated Sciences & Technologies (aSSIST). This program was created with an emphasis on business and technology to meet the needs of Korea's working professionals.

Students will take a total of 36 credits of TMP courses. Each course is 1.5 credits. The program is offered in a lock-step cohort over the course of one year. Exact courses and schedule of classes will be determined prior to the commencement of each new cohort. The majority of instruction for this program will take place in Korea with a three-week summer study at Stony Brook University's main campus.

Faculty of the MBA Department

Dean

London, Manuel, also Director of the Center for Human Resource Management. Ph.D., 1974, Ohio State University: Performance management programs; training & development; team learning.

Associate Dean

Holod, Dmytro., Ph.D. 2005, University of Kentucky: Economics; banking and financial intermediation; financial markets and institutions; monetary policy; economic growth.



## Professors

Kamins, Michael A., Ph.D., 1984, New York University: Marketing.

Laskowski, Richard, Ed.D., 1982, St. Johns University: Sports management; introduction to business.

Skorin-Kapov, Jadranka, Ph.D., 1987, University of British Columbia, Canada, Ph.D., 2007, Stony Brook University: operations management; operations research; decision sciences.

Sexton, Thomas R., Ph.D., 1979, Stony Brook University, Applied Math & Statistics, research focus on productivity and efficiency theory and analysis

Wolf, Gerrit, Ph.D., 1967, Cornell University; Entrepreneurship; Organizational behavior; human resources management; international management.

## Associate Professors

Holod, Dmytro., Ph.D. 2005, University of Kentucky: Economics; banking and financial intermediation; financial markets and institutions; monetary policy; economic growth.

Jiang, Danling, Ph.D., 2006, Ohio State University: Finance

Kim, Francis, Ph.D., 1994, Baruch College: Accounting

Lewis, Herbert F., Ph.D., 1996, Stony Brook University, Applied Math & Statistics: focus in Operations Research

Yang, Zhifeng, Ph.D., 2006, University of Alberta: Finance

## Assistant Professors

Amin, Keval Ph.D., 2014, Temple University Fox School of Business: Accounting

Connell, Paul M., Ph.D., 2008, University of Arizona: Marketing; consumer psychology related to identity; attitudes and behavior; public policy.

Bear, Julia, Ph.D., 2010, Carnegie Mellon University: Organizational Behavior and Theory

Buhrau, Denise, Ph.D. 2010, Tulane University, consumer behavior; particularly in the context of health behaviors.

Cao, Jiyin, Ph.D., 2015, Northwestern University Kellogg School of Management: Management & Organization

Caprariello, Peter, Ph.D. 2012, University of Rochester, consumer behavior; specifically specifying the relationship context of life experiences versus material possessions affords a more complete understanding of how money can be spent in the pursuit of happiness

Chan, Richard (Chien-Sheng), Ph.D., 2010, University of Washington Seattle: Management & Organization with a focus on technology entrepreneurship, behavioral decision theory and research methods.

Cushenbery, Lily, Ph.D., 2012, Pennsylvania State University, University Park: Industrial Organizational Psychology.

Delton, Andrew W., Ph.D., 2010, University of California Santa Barbara: Psychology

Feng, Qian (Cecilia), Ph.D. Candidate (expected 12/2014), Temple University Fox School of Business: Accounting

Huang, Julie Y., Ph.D., 2011, Yale University: Social Psychology

Kim, Aaron, Ph.D., 2005, Sogang University, Seoul, Korea: Mathematics.

Liu, Ting, Ph.D. 2008, Boston University, Economics, in the areas of industrial organization, health economics, and applied microeconomic theory.

Pew, Ethan, Ph.D. 2012, University of Colorado, consumer behavior, in the context of investment decision making

Robertson, Theresa E., Ph.D., 2011, University of California Santa Barbara: Psychology

Sherman, Gary, Ph.D., 2011, University of Virginia: Social Psychology

Torna, Gokhan, Ph.D., 2013, University of Kansas: Finance Xiao, Keli, Ph.D., 2013, Rutgers University: Finance

Xiao, Keli, Ph.D., 2013, Rutgers: Finance

Zhou, Yiyi, Ph.D., 2012, University of Virginia, Economics, in the areas of dynamic pricing and the video game market

## Research Professors

Barragto, Charles A., Ph.D., 2002 Baruch College: Business

Comunale, Christie, Ph.D., 1999, University of South Florida: Accounting

Pitocco, Christine, Ph.D., 2013, CW Post Long Island University: Philosophy

Stoyanov, Stoyan, Ph.D., 2005, Karlsruhe Institute of Technology, Germany: Mathematical Finance

#### Lecturers

*Abbruscato, Camille; M.B.A, Dowling College: Marketing, marketing strategy, marketing research, brand management, new product development.*

*Allocca, Carl, Director of Undergraduate Studies, MST, CPA, Long Island University: Public and private accounting; auditing; taxation; internal control, systems development.*

*Ettl, Robert., M.B.A., Iona College; M.C.A., New York Institute of Technology; M.B.A., Penn State: Marketing; strategic planning; government relations; public relations.*

*Lekacos, Aristotle T. M.S., Polytechnic Institute of New York: Information systems; business strategic; entrepreneurship; innovation; simulations.*

*Nugent, Michael., M.B.A., Dowling College: Financial Engineering; derivatives; international finance; capital markets and institutions; foreign exchange markets; investment analysis; corporate finance; business strategy.*

*Palermo, Mark R., J.D., Hofstra University School of Law; M.B.A., Adelphi University: Finance; strategy; economics; law; general business.*

#### Affiliate Faculty

*Brusco, Sandro, Ph.D., 1993, Stanford University: Economic Analysis & Policy.*

*Pittinsky, Todd, Ph.D., 2001, Harvard University.*

*Tauman, Yair, Ph.D., 1979, The Hebrew University of Jerusalem, Israel: Mathematics.*

#### Adjunct Faculty

*Aguayo, Rafael, M.B.A, Finance and International Business*

*Coverdale, John, Human Resources Delgaizo, Edward, Ph.D., Human Resources Feinberg, Ronald, Management*

*Higuera, Michael Shane, Ed.D., Management and Business Analytics*

*Kerr Daniel, Ph.D., C.P.A., Accounting and Auditing*

*Mager, Thomas, M.B.A*

*Mone, Edward, M.A., Human Resource Management*

*Pack, Lori, J.D., M.B.A., Marketing and Human Resources*

*Rosner, Lee, Real Estate Finance*

*Tallerico, Thomas, M.S.; M.B.A., Finance*

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

## Chemical and Molecular Engineering

**Chairperson**

Michael Dudley, Old Engineering Building 312 (631) 632-8500

**Graduate Program Director**

Devinder Mahajan, Old Engineering Building 210 (631) 632-1813

**Graduate Program Coordinator**

TBA

**Degrees Awarded**

M.S. in Chemical and Molecular Engineering; Ph.D. in Chemical and Molecular Engineering

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-gs](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-gs)

## Chemical Engineering

The Chemical and Molecular Engineering program, in the College of Engineering and Applied Sciences, offers graduate work leading to the Master of Science and Doctor of Philosophy degrees.

The main mission of the graduate program is to train the next generation of chemical engineers that will make important discoveries, develop new technologies, and apply innovative approaches to solve problems related to the production or use of drugs, food, chemicals, fuel and other products. Our programs in Chemical and Molecular Engineering offer students an extensive curriculum with the opportunity to pursue advanced studies and gain knowledge of chemical engineering theory and its relationship to related engineering processes, including catalysis, nanotechnology, computational modeling, environmental science, fluid mechanics, rheology, materials processing, polymers, thin films, biochemical, biomedical, biotechnology, separations, transport phenomena, and thermodynamics. The motivating philosophy of the graduate program is to provide the student with a broad knowledge in theoretical and experimental techniques to ensure that students graduate with the skills necessary for professional research and teaching in the chemical engineering field.

The faculty in the Chemical and Molecular Engineering program are actively involved in research in different areas and work with graduate students on projects that have both applied and fundamental aspects.

**Research Areas**

Research areas for the graduate program include Catalysis, Environmental Engineering, Nanotechnology, Nanotoxicology, Drug Delivery, Polymers, Energy Science and Computational Modelling.

**Chemical and Molecular Engineering, MS and PhD**

The MS degree in Chemical and Molecular Engineering is primarily a degree for students who wish to equip themselves with a more solid foundation in the principles of chemical and molecular engineering for further advanced study or pursuing a career as professional engineers. Master's degree candidates may elect a thesis or non-thesis option.

The PhD degree in Chemical and Molecular Engineering provides a thorough grounding in the fundamental principles of chemical engineering, as well as an intensive research experience. This degree is mainly designed to prepare students for a research career in academia, government or private laboratories, R&D in industry, or elsewhere.

**Admission:-**

We are excited that you are considering our Graduate Program. Chemical and Molecular Engineering department offers admission to M.S. and Ph.D. programs. The Ph.D. program is intended for students who wish to pursue a research-oriented career, while M.S. program is intended for students who are looking for advanced positions in industry. Admission to the Ph.D. program is more competitive than the M.S. program.

To apply for Graduate Studies in Chemical and Molecular Engineering at Stony Brook you must fill out and send online application. You can fill out the application online at Graduate School's web site. Please note that there may be more steps involved than simply filling out the form online. Please note that there are no application fee waivers. Also, when sending the required application documents please include a photocopy of your GRE and TOEFL scores besides having official scores sent.

**Requirements**

Admission to the M.S. and Ph.D. Programs are handled separately by the departmental Admissions Committee. The requirements for admission to graduate study in CME include:

1. Bachelor's Degree: A bachelor's degree in CME (or a closely related field).
2. A grade average of at least B (i.e., 3.0/4.0) in all mathematics, engineering, and science courses.
3. GRE Examination. All applicants to the MS or PhD program must submit Graduate Record Examination (GRE) scores for the general aptitude tests. Applicants are encouraged to submit GRE test scores for the advanced examination in Computer Science as well.

4. Submission of TOEFL Test scores for all students whose native language is not English. Minimum TOEFL score of 85 is required for general admission and 90 for admission to a doctoral program and to be eligible for consideration for GA/TA support. Masters students that have completed a degree program from a U.S. institution may be eligible for a TOEFL waiver and need to request the waiver from our Graduate Program Director. All PhD applicants with a TA stipend whose native language is not English must demonstrate a sufficient level of English-speaking proficiency (TOEFL Speaking score) and may be required to take ESL courses based on these measures.

### **Deadlines**

Listed below are the application deadlines associated with Spring admission. Please be sure to follow them as listed.

October 1: Application deadline for all applications and deadline for supplementary materials for international students

Listed below are the application deadlines associated with Fall admission. Please be sure to follow them as listed.

January 15: Application deadline for international students and PhD applicants

March 1: Deadline for supplementary materials from international students

If you have any questions about these deadlines feel free to contact the department.

### **Application Instructions**

All applications must be submitted online. All additional required documents, such as, official transcripts, recommendation letters, etc. must be sent directly to our department.

Please do not put your additional required documentation in any type of binder, portfolio, or report cover.

Mail your application materials to the following address:

Stony Brook University

Department of Chemical and Molecular Engineering

Engineering, Room 208

Attn: Graduate Program Secretary

Stony Brook, NY 11794-2275

USA

The Graduate School application fee is \$100\* and is non-refundable. It is required for applicants from all countries.

### **Checking on the Status of your Application**

Fall applications are reviewed in February. If your application file is missing anything, you will receive an e-mail from the department. Due to the high volume of applications we receive, we can't respond to e-mails checking on status until AFTER April 10th.

Offer letters will begin to be mailed out in March. We ask that you do not send us numerous e-mails checking on the status of your application or telephone us regarding application status.

If you do NOT receive a letter of offer from us by April 10th, you should then contact us if you have any questions.

We appreciate your patience during this busy time of year.

### **Financial Support**

Admitted Ph.D. students are typically offered financial support in the form of teaching or research assistantships, which include full tuition. Admission into this program is very competitive, though, and you must have the intention of completing this program. M.S. students are typically admitted with no financial aid. Information regarding tuition and other costs can be found from the Graduate School.

### **Transfer of credits into M.S. or Ph.D. programs**

Students may transfer up to 9 credits of graduate courses obtained from another US accredited university. The following conditions and procedure is required to transfer any credits.

In order to be counted towards graduation, the credits must be evaluated by CME graduate director or one of our faculty members. The evaluation must establish equivalence between a course being transferred from another institution and a CME course in Stony Brook, which is accepted as part of the graduation requirements. The faculty member must be one of those who are teaching the corresponding graduate course on a regular basis. The professor typically evaluates the course materials/contents, student transcripts, etc. The approval is not automatic and we generally take a very careful look at such transfer requests.

Graduate courses that do not meet the previous requirement can be transferred without being counted towards graduation. This can sometimes be useful because students who have earned 24 graduate credits of any kind need to be registered for only 9 credits (instead of 12) in order to have full status. Therefore, gaining this status early might reduce tuition liability.

### **M.S. to Ph.D**

A student in the M.S. program can subsequently apply for admission into the Ph.D. program, but should keep in mind the higher standards for entry into the Ph.D. program. The CME Ph.D. program recognize M.S. degree from other accredited US institutions, person that has M.S. degree in CME can be exempt from the mandatory course requirements for the PhD, totaling 24 credits. The student will be accepted as G5 level student and expected to complete remaining credits and requirements towards the Ph.D. degree.

University Labs and Centers:

SensorCat New York State Center for Advanced Technologies

Geospatial Center

[Trace Element Laboratory](#)

Trace Organic Chemical Mass Spectrometry [Laboratory](#)

[Flax Pond Marine Laboratory](#)

[Southampton Marine Station](#)

[Advanced Energy](#) Research and Technology Center

[Center of Excellence in Wireless and Information Technology](#)

External Labs and Facilities:

[National Synchrotron Light Source \(NSLS\) II](#), Brookhaven National Lab.

[Center for Functional Nanomaterials \(CFN\)](#), Brookhaven National Lab.

### **Requirements for the MS in Chemical and Molecular Engineering**

In addition to the minimum requirements of the Graduate School, the requirements for the M.S. degree in the Program for Chemical and Molecular Engineering can be satisfied by either one of the two following options:

#### **M.S. Non-Thesis Option**

##### **A. Election**

The election of this option must be made by the student upon admission to the program and is considered a terminal degree.

##### **B. Coursework**

- A minimum of 30 graduate credits with a grade point average of 3.0 or better in all graduate courses taken is required to graduate. All credits must be from coursework.
- The 30 credits must include the following four core courses: CME 501,502,503 and 504.
- Only nine credits of CME 696 Special Problems in Chemical Engineering are allowed.
- All courses taken outside the Department require permission from the Graduate Program Director.

#### **M.S. Thesis Option**

##### **A. Election**

The election of this option must be made by the student upon admission to the program and is normally considered part of the Ph.D. sequence. Students may not transfer to the Non-Thesis Option while registered for a Thesis Master's or a Ph.D. degree.

##### **B. Coursework**

- A minimum of 30 graduate credits is required to graduate. These include: At least 24 credits must be from coursework, a maximum of 6 credits of research, and a maximum of 6 credits of special topics.
- The 30 credits must include the following four core courses: CME 501,502,503 and 504.
- In addition, all students who are supported as Teaching Assistants must complete CME 555 Teaching and Mentoring Techniques and CME 698 Practicum in Teaching.
- All courses taken outside the Department require permission from the Graduate Program Director.

**C. Thesis**

For the student who elects to complete a thesis for the M.S. degree, the thesis must be approved by three faculty members, at least two of whom are members of the Department of Materials Science and Engineering, including the research advisor.

**D. Final Recommendation**

Upon fulfillment of the above requirements, the Graduate Program Committee will recommend to the Dean of the Graduate School that the Master of Science degree be conferred or will stipulate further requirements that the student must fulfill.

**E. Transfer to Other Options**

Transfer to another degree option in the Department can be made only with the written permission of the Graduate Program Director.

**Requirements for the Ph.D. Degree in Chemical and Molecular Engineering****A. Plan of Work**

Before completion of one year of full-time residence, the student must have selected a research advisor who agrees to serve in that capacity. The student will then prepare a plan of further coursework. This must receive the approval of the student's advisor and of the Graduate Program Committee.

**B. Coursework**

- An average grade of B or higher is required for all courses.
- A minimum of 24 graduate course credits is required to graduate (excluding CME 599, 697, 698, and 699).
- The 24 course credits must include the following four core courses: CME 501, 502, 503 and 504. If the student does not receive a minimum of a B in a core course, he or she may repeat that course one other time.
- All students must complete CME 555 Teaching and Mentoring Techniques.
- The student must pass at least three credits of CME 698 Practicum in Teaching and six credits of CME 699 Dissertation Research on Campus.
- All courses taken outside the Department require permission from the Graduate Program Director.
- All PhD students must act as teaching assistants for five semesters (regardless of support), and they must register for CME 698 Practicum in Teaching - 0 credits for four semesters, 3 credits for one semester.

**C. Preliminary Examination**

The preliminary examination must be taken before the beginning of the student's fifth semester. This is an oral examination designed to test the student's ability to utilize his or her chemical engineering background to carry out research in a chosen field of study, and to make clear written and oral presentations of research. At least ten days prior to the examination, the candidate should submit a research proposal (10-15 pages) to the examiners that places the research in context of other work in the area, demonstrates original thought, clearly outlines its broader impact, and provides a sustainable timeline for its completion.

The examination committee will consist of three Chemical and Molecular Engineering faculty members, and one member from another department or institution. If a second examination is required, it must be completed by the tenth week of the fifth semester.

Once the student has advanced to candidacy, the student must report to the committee at least once a year before the end of the spring semester on progress towards his/her dissertation.

**D. Advancement to Candidacy**

After the student has successfully completed all requirements for the degree, other than the dissertation, he or she is eligible to be recommended for advancement to candidacy. This status is conferred by the Dean of the Graduate School upon recommendation of the Chairperson and the Graduate Program Director.

**E. Dissertation**

The most important requirement of the Ph.D. degree is the completion of a dissertation, which must be an original scholarly investigation. The dissertation shall represent a significant contribution to the scientific literature, and its quality shall be compatible with the publication standards of appropriate and reputable scholarly journals. At least two semesters should elapse between the preliminary exam and submission of the dissertation.

**F. Defense**

The candidate shall defend the dissertation before the examining committee.

**G. Time Limit**

All requirements for the Ph.D. degree must be completed within seven years after completing 24 credit hours of graduate courses in the program.

Faculty

Professors

Mahajan, Devinder, Ph.D., 1979, University of British Columbia: Applied chemistry; fuel cells; catalysis; renewable energy.

Tannenbaum, Rina, Ph.D., 1982, Swiss Federal Institute of Technology: Chemical Engineering.

#### **Associate Professors**

Koga, Tadanori, Ph.D., 1998, Kyushu University, Japan, Physics: green nanofabrication of polymer thin films; chemical recycling of waste plastics and methane hydrate as a future energy resource.

#### **Assistant Professors**

Meng, Yizhi, Ph.D., 2003, Cornell University, Food Chemistry: Designing novel biomaterials for tissue engineering and nanotherapeutics.

Kim, Tae-Jin, Ph.D., 2007, Lehigh University, Chemical Engineering: Energy and Environmental Heterogeneous catalysis, In-situ and Operando characterization, Reaction Engineering and Kinetics.

#### **Crossover with Materials Science**

Gersappe, Dilip, Ph.D., 1992, Northwestern University, Physics. Professor. Polymer theory and simulation

Rafailovich, Miriam, Ph.D., 1980, Stony Brook University, Physics. **Distinguished Professor.** Polymer nanocomposites; atomic force microscopy; biomaterials; biomechanics; PEM fuel cells; BHJ solar cells; flame retardant materials.

#### **Research Assistant Professor**

Mironava, Tatsiana, Ph.D., 2011, Stony Brook University; Ph.D., 2005, Institute of Physical and Organic Chemistry, Academy of Sciences, Belarus: Nanotoxicology, Design and Synthesis of novel nanoparticles; Chemistry of Polymers and Ion Exchangers.

#### **Adjunct Faculty**

DiMarzio, Donald, Ph.D., 1987, Rutgers University: Nanotechnology, nanocomposites.

Horvat, Kristine, Ph.D., 2015, Stony Brook University, Materials Science: gas hydrates and water purification.

Jurukovski, Vladimir, Ph.D., 1999, Stony Brook University: Cell and Molecular Biology.

Koga, Maya, Ph.D., 2005, Kyoto University: Polymer Physics; x-ray scattering; block copolymers; polymer rheology.

Pinkas-Sarafova, Adriana, Ph.D., 1990, Institute of Molecular Biology, Academy of Sciences, Bulgaria: Cell and Molecular Biology; GMP education and protocol development.

Zaitsev, Vladimir, Ph.D., 1992, Moscow State University, Russia: Chemistry.

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

Chemistry Department

**Chairperson**

Nancy Goroff, Chemistry Building 779 (631) 632-8356

**Graduate Program Director**

Robert B. (Barney) Grubbs, Chemistry Building 749 (631) 632-7911

**Master's Program Director**

Susan Oatis, Chemistry Building 104 (631) 632-1571

**Student Affairs Coordinator**

Katherine M. Hughes, Chemistry Building 104 (631) 632-7886

**Degrees Awarded**

M.S. in Chemistry; Ph.D. in Chemistry

**Web Site**

<http://www.stonybrook.edu/commcms/chemistry/>

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-gs](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-gs)

Chemistry Department

The Department of Chemistry, within the College of Arts and Sciences, offers courses of study leading to the degrees of Master of Arts in Teaching Chemistry, Master of Science, and Doctor of Philosophy. Students in the M.A.T. program must register through the School of Professional Development. A student in the Ph.D. program may choose dissertation research in any one of the diverse areas of chemistry represented by the interests of the program faculty, or may choose an interdisciplinary topic under the guidance of a faculty member in another program. Coordinated activities exist with several programs, and include optional concentrations in chemical physics and chemical biology.

Areas of Current Research

**Synthetic Chemistry**

The synthesis of new molecular compounds distinguishes chemistry from other scientific disciplines. Although many disciplines study the properties of materials and natural phenomena, only chemistry concerns itself with the preparation of new molecular arrangements. The success of past synthetic efforts can readily be appreciated by observing the vast array of new materials that have improved the quality of our lives.

The Chemistry Department at Stony Brook is very fortunate to have many strong synthetic programs in both organic and inorganic chemistry. Among the studies underway are the search for inventive synthetic reactions to produce new molecules, the synthesis of new molecular structures to evaluate our theories of chemical bonding, and the synthesis of new compounds with unusual physical properties (molecular engineering). A major focus in the program lies in the areas of bio-organic and bio-inorganic chemistry. Synthetic chemistry is being applied to the understanding of receptor-substrate interactions as well as of enzyme function, the preparation of artificial enzymes, the mechanism of mutagenesis and carcinogenesis, and the preparation of new compounds for the treatment of diseases.

**Organometallic Chemistry**

Organometallic chemistry is an interdisciplinary field bringing together many aspects of inorganic and organic chemistry. A wide range of organometallic systems are under study using a variety of synthetic, structural, mechanistic, and theoretical techniques. Synthetic and structural research is focused on such problems as the chemistry of unsaturated metal-carbon bonds in metal carbene and carbyne complexes, the stabilization of highly reactive organic moieties through metal complexation, the chemistry of transition metal carbonyl cluster compounds, and the development of useful synthetic reagents. Homogeneous catalysis studies include investigations of the carbonylations of fluoroolefins, small-ring heterocycles, alkenylamides, and similar molecules, and catalytic applications of compounds with unsaturated metal-carbon bonds. Theoretical work includes ab initio and qualitative molecular orbital studies of organometallic compounds and of the chemisorption of organic molecules onto metal surfaces and molecular mechanics minimizations of ligand geometries.

**Structural and Mechanistic Organic Chemistry**

The structures of a wide range of organic molecules are examined at Stony Brook using many techniques, including automated high-field FT-NMR spectroscopy (<sup>1</sup>H, <sup>13</sup>C, <sup>19</sup>F, etc.) and X-ray crystallography. Molecular modeling programs, such as Gaussian and Macromodel, are operated on color graphics workstations in order to rationalize and predict the conformations and reactivities of molecules under study. Variable-temperature <sup>1</sup>H and <sup>13</sup>C NMR spectroscopy is used to investigate conformational changes in macrocycles and other synthetic hosts for guest metal ions and organic molecules. VT-NMR is also used to investigate proton transfer in polyamines and intermolecular exchange of guest ions between polydentate ligands. Stereochemical probes are used to examine mechanisms of organic reactions such as pericyclic and biomimetic processes. Reaction mechanisms are also studied by determining activation volumes using reactors in the high-pressure laboratory that can attain pressures higher than 200,000 psi.

**Institute of Chemical Biology & Drug Discovery at Stony Brook (ICB&DD)**

The primary objective of the ICB&DD, directed by Distinguished Professor Iwao Ojima, is to serve as a world-class "Center of Excellence" in chemical biology and drug discovery at Stony Brook. The rapid and impressive advancement of chemical biology in the last decade clearly demonstrates that solutions for the vast majority of medical problems rely on the understanding of the molecular basis of diseases, therapeutic targets, drug actions, and drug resistance. The ICB&DD promotes highly productive interdisciplinary and collaborative research among chemists,



biologists, medicinal chemists, pharmacologists, and physicians to attack major and significant biomedical problems to find solutions including the discovery of novel therapeutic drugs.

### Biological Chemistry

A significant number of the faculty are using their chemical expertise to explore the chemical and physical details of biological phenomena. Research programs span biological chemistry, enzyme mechanisms, protein folding, membrane structure and function, biophysics and structural biology. Techniques such as high resolution NMR, stop-flow kinetics, fluorescence and Raman spectroscopy are used to probe protein structure, function, and folding. Novel biosynthetic and chemical strategies are being used to generate small molecules for use in probing enzyme mechanisms and exploring ligand-receptor interactions.

### Inorganic Chemistry

Inorganic chemistry, being concerned with the synthesis, structure, and dynamics of the compounds formed by the more than 100 natural and synthetic elements, covers an extremely vast research area. New compounds and new synthetic methods are among the goals of inorganic chemistry research. Such compounds range from materials important in technology to catalysts for industrial chemical processes, small molecules present in outer space, and metal complexes that serve as models for biological materials. The methodologies used in inorganic chemistry include a wide variety of spectroscopic techniques, kinetic methods, procedures for the elucidation of geometric and electronic structures, and theory. The breadth and depth of inorganic chemistry are well represented at Stony Brook, as seen by the following examples of current research: thermally and photochemically activated dynamic processes, in particular, electron transfer reactions; synthetic and structural studies of active site analogs of metalloenzymes such as the zinc proteins that regulate gene transcription and the high-potential iron-sulfur proteins; activation of small molecules by transition metal complexes and homogeneous catalysis; chemistry of unsaturated carbon-metal bonds in mononuclear compounds and in extended molecular assemblies; molecular orbital calculations and molecular mechanics methods applied to transition metal cluster compounds and related organometallic substances; NMR studies of zeolites and supported catalysts.

### Magnetic Resonance

Magnetic resonance in the Chemistry Department ranges from studies in physiology to studies in chemical physics. Topics under investigation include the use of liquid and solid state nuclear magnetic resonance (NMR) spectroscopy and micro-imaging techniques with stable spin 1/2 and quadrupolar nuclides to study inorganic, organic, biological, and living systems. Projects in progress employ a range of single and N-dimensional NMR spectroscopic techniques and novel imaging techniques to elucidate chemical processes and determine the structures of biological and organic molecules in solution.

Novel NMR methods are being developed for the determination of the structures of micro- and macromolecules as they exist in disordered solids and to study the structure and dynamics of molecules in the liquid crystalline state and those absorbed on solid surfaces. Pulsed electron paramagnetic resonance (EPR) techniques are being developed to study metalloenzymes, organic conductors, and other molecules.

The Stony Brook NMR Facility <http://www.stonybrook.edu/commcms/nmr/> is a campus-wide facility that serves the educational and research needs of the University community. With spectrometers located at two different sites, the Chemistry Department and the Center for Molecular Medicine (CMM), the NMR facility offers instrument access to students, post-docs and investigators on diverse research fields including structural biology, chemistry, biophysics, and material sciences. The facility has been updated recently with new Bruker spectrometers, and has a total of nine instruments operating from 300 to 850 MHz proton frequencies.

### Macromolecules

With development of state-of-the-art X-ray diffraction and small-angle X-ray scattering (SAXS) at the State University of New York's X3 Beamline at the National Synchrotron Light Source at Brookhaven National Laboratory, the polymer and biomacromolecular physics group, being members of the participating research team (PRT), possesses one of the most powerful X-ray scattering facilities in the country. The experiments at Stony Brook make use of a wide variety of complementary techniques such as SAXS, laser light scattering, photon correlation spectroscopy, fluorescence photobleaching recovery, holographic relaxation spectroscopy, transient electric birefringence, and various forms of nuclear magnetic resonance spectroscopy. Stony Brook scientists can perform measurements to determine the structure and dynamical behavior of advanced polymeric materials, supramolecular systems, and biomacromolecules. Time-dependent processes can be studied using stop-flow, steady-flow, pressure-jump, and temperature-jump experiments together with time-resolved capabilities using intense radiation sources such as pulsed lasers and the synchrotron radiation. Unparalleled opportunities exist for interdisciplinary research using unique and novel instrumentation in polymer materials, polymer physics, colloid science, and biophysical chemistry.

### Photon-Molecule Interactions

Recent developments in the use of lasers for the investigation of molecular structure and dynamics have led to a revolution in the fields of molecular spectroscopy and dynamics. Intimate details about the structure and interactions of atoms and molecules can now be studied to an extent never before possible. In this program the systems being studied by laser spectroscopy range from atoms and diatomic molecules to molecular crystals and polymers. In these systems various properties are being investigated, including nonlinear interactions with the radiation field, excited state electronic structure, radiationless transitions, ionization mechanisms, crystal field interactions, and photochemical reactions, as well as electron and energy transfer processes. Luminescence spectroscopy, luminescence excitation, multiphoton ionization, multiphoton photoelectron spectroscopy, Raman spectroscopy, and vacuum ultraviolet spectroscopy are among the techniques being used and developed for the ever greater understanding of atomic and molecular systems.

### Soft X-Ray Spectroscopy

The National Synchrotron Light Source at Brookhaven National Laboratory, located only 15 miles from Stony Brook, provides unique opportunities for frontier research in chemistry. The synchrotron and associated devices are unequalled sources of high-intensity X-ray and vacuum ultraviolet radiation. One area of current research uses soft X-rays, photons with energies of 100 to 1000 eV, to investigate the excitation and relaxation of core electrons in molecules. Because core electrons, e.g., the 1s electrons of carbon, are tightly bound to individual atoms, the excitation energy is essentially localized on a particular atom in the molecule. This localization has the potential for producing photochemistry with far greater atomic site specificity than can be achieved by excitation of valence electronics with visible and ultraviolet light.

**Surface Chemistry**

Catalysis, corrosion, and friction are a few examples of familiar processes that occur on solid surfaces. The field of surface chemistry tries to unravel and understand the basic chemical principles that underly such phenomena. At Stony Brook we are actively researching how the electronic and geometric structure of a surface affects its chemical selectivity and reactivity during surface-mediated processes such as catalysis and the chemical vapor deposition of metals from organometallic precursors. In addition, we are interested in understanding the interactions between energetic ions and surfaces in both atmospheric and metal-etching reactions. An arsenal of sophisticated techniques is available to probe both the geometric and electronic structures of a reacting surface on an atomic level. Techniques such as Auger electron spectroscopy (AES) and high-resolution, electron energy loss spectroscopy (HREELS) are used to determine the composition of a surface, while ultraviolet and X-ray photons are commonly used to eject photoelectrons from a surface (which are energy analyzed) yielding electronic structure information. Another technique, low-energy electron diffraction (LEED), exploits the wave nature of electrons and is used to help determine the geometric structure of a surface. These techniques, routinely used at Stony Brook, are complemented by the powerful extended- and near-edge X-ray absorption fine-structure techniques (EXAFS and NEXAFS), available at the National Synchrotron Light Source at nearby Brookhaven National Laboratory.

**Theoretical Chemistry**

Theoretical investigations of a wide variety of chemical phenomena are underway at Stony Brook. Research programs in electronic structure theory are concerned with the development of formalism and computational techniques. Applications include determination of the geometry, spectral shifts, and reaction pathways of molecules chemisorbed onto metal surfaces; calculation of the structure of molecules in highly excited Rydberg states; and evaluation of probability amplitudes for multiphoton excitation and calculation of Born corrections, Born couplings, and orbital stresses in small molecules. In the field of statistical mechanics, analysis and numerical simulation are combined to obtain properties of liquids and ionic solutions from the properties of their constituent molecules and their interactions. Much of this work is focused on the calculation of pair correlation functions, transport properties and dielectric phase diagrams, solvent effects, and rates of electron transfer reactions. Other current work includes theory of photon-molecule interactions, quantum ensembles, Jahn-Teller dynamics, and lifetimes of quasistationary molecular states. In addition, students often do theoretical work closely related to active experimental programs under the joint guidance of a theorist and an experimentalist.

**Nuclear and Isotope Chemistry**

Nuclear chemistry research at Stony Brook has focused on reactions induced by heavy ion beams. Beams are obtained from accelerators located at Stony Brook, Berkeley, Chicago, Michigan, and France. The reactions produce very hot and rapidly rotating atomic nuclei that are studied by observation of particles and fragments that are emitted. Their energies and angles of emission allow for a reconstruction of the properties of the hot emitting nuclei and the mechanism of their production.

Isotope chemistry deals with the small differences in physical and chemical properties of matter that have their origin in the mass difference of isotopes of an element. Although the effects are small, they can be measured with high precision. In general, the effects are quantum effects, and measurement of isotope effects has proven to be a unique method for the study of molecular and intermolecular forces. Isotope effect studies have found application in chemical physics, organic chemistry and biochemistry, geochemistry, and anthropology. Practical applications are found in isotope separation processes. Our present efforts are concentrated on the systematization of isotope chemistry.

**Admission requirements of Chemistry Department**

The following, in addition to the minimum Graduate School requirements, are required for admission to graduate study in chemistry:

- A. A bachelor's degree in chemistry earned in a curriculum approved by the American Chemical Society, or an equivalent course of study.
- B. A minimum grade point average of 3.00 (B) in all undergraduate work and 3.00 (B) in all courses in the sciences and mathematics.
- C. Results of the Graduate Record Examination (GRE) General Test.
- D. Acceptance by the Department of Chemistry and by the Graduate School.

In exceptional cases, a student not meeting requirements A and B may be admitted on a provisional basis.

**Facilities of Chemistry Department**

The Chemistry Building is a modern, seven-story (170,000 sq. ft.) structure designed for research and upper-division instructional activities. The equipment available to faculty, postdoctorals, and students is outstanding. While much of it has been commercially obtained, a substantial portion of the instrumentation of the department has been designed and constructed at Stony Brook and represents the state of the art in various fields. Strong ties exist to programs at Brookhaven National Laboratory, with unique facilities in PET and magnetic resonance imaging, the Relativistic Heavy Ion Collider, the National Synchrotron Light Source, the Center for Functional Nanomaterials and world-class programs in spectroscopy, dynamics and materials science.

The construction and maintenance of this instrumentation is effected by the faculty in conjunction with a staff of non-teaching professionals in the electronic, glass, and machine shops. Our nuclear magnetic resonance (NMR) facility is staffed by two NMR coordinators.

**Requirements for the M.S. Degree in Chemistry**

There are three different options for completing the M.S. degree in Chemistry at Stony Brook. The standard M.S. degree is based on coursework and the writing of a term paper that presents a critical review of a current topic in chemistry. We also offer an M.S. degree with a concentration in Chemical Research. For this option, students need to complete less coursework, but must also carry out a minimum of 18 credits of research, and must write and defend an original research thesis. The third option, the M.S. in Chemistry with concentration in Professional Science, offers students the opportunity to combine chemistry training, including a full-year internship, with additional professional courses in business, management, and/or communication.

**Requirements for the Standard M.S. Degree in Chemistry**

A. Successful completion of an approved course of study comprising at least 30 credits of graduate coursework. A student must achieve a 3.0 overall grade point average in all courses taken at Stony Brook to receive a degree.

B. Successful completion of GRD 500, the CHE 582 seminar (B–), and 18 credits of formal scientific courses (B– = 2.67 average) selected from among chemistry graduate courses, and approved courses from other departments. The student must complete a minimum of 3 core 500-level chemistry courses, from among those numbered CHE 501 through 559. All course selections must be approved by the Master's Advising Committee.

C. Successful completion of the CHE 590 term paper.

**Requirements for the M.S. Degree with Concentration in Chemical Research**

A. Successful completion of an approved course of study comprising at least 30 credits of graduate coursework. A student must achieve a 3.0 overall grade point average in all courses taken at Stony Brook to receive a degree.

B. Successful completion of CHE 581, GRD 500, the CHE 582 seminar (B–), and at least 12 credits of formal scientific courses (B– = 2.67 average) selected from among chemistry graduate courses, and approved courses from other departments. The student must complete a minimum of 3 core 500-level chemistry courses, from among those numbered CHE 501 through 559. All course selections must be approved by the Master's Advising Committee.

C. Chemistry research, including a minimum of 18 research credits (18 credits of CHE 599 or 15 credits of CHE 599 plus 3 credits of the summer research course CHE 597), culminating in successful completion of a research thesis with public defense, describing a body of original research results. The thesis defense committee, assigned by the Graduate Program Director, will include the research advisor and two other Chemistry program faculty, one of whom will serve as committee Chair.

**Requirements for the M.S. Degree with Concentration in Professional Science**

A. Successful completion of an approved course of study comprising at least 30 credits of graduate coursework. A student must achieve a 3.0 overall grade point average in all courses taken at Stony Brook to receive a degree.

B. Successful completion of GRD 500 and at least 12 credits of formal scientific courses (B– = 2.67 average) selected from among chemistry graduate courses, and approved courses from other departments. The student must complete a minimum of 3 core 500-level chemistry courses, from among those numbered CHE 501 through 559. All course selections must be approved by the Master's Advising Committee.

C. Successful completion of 9 credits of additional professional coursework ("plus" courses) in areas such as business, management, writing, or journalism.

D. Successful completion of at least 18 credits of laboratory internship (CHE 598). Internship placements will be determined by the Master's Advising Committee, in consultation with the student, typically at the end of the first academic year. The Professional Science concentration offers internships in a variety of laboratory settings, including government labs (BNL), industrial labs, and regional research consortiums.

D. Successful completion of the CHE 590 term paper.

**Requirements for the M.A. Degree in Teaching Chemistry**

The curriculum for a Master of Arts in Teaching Chemistry consists of 36 credits distributed among graduate-level course offerings in chemistry, other sciences and mathematics, teaching methods in both science and general education, and practice teaching in secondary schools. Individual programs are tailored to the background and interests of the student in consultation with an advisor.

**Requirements for the Bachelor of Science Degree/Master of Science Degree Program**

A student interested in this research-intensive graduate program, intended to prepare students for professional employment in the chemical or pharmaceutical industries, may apply for admission at the end of the junior year. The program leads to a Bachelor of Science degree in Chemistry at the end of the fourth year and a Master of Science in Chemistry at the end of the fifth year. During the senior year, the student is expected to take two 500-level CHE courses and begin research in the senior research sequence. In the fifth year, the student works full-time on research, earning 24 credits in CHE 599. Current Stony Brook undergraduate students majoring in chemistry, biochemistry, or engineering chemistry are eligible to apply for admission to the Bachelor of Science Degree/Master of Science Degree Program.

**Requirements for the Ph.D. Degree in Chemistry****A. Courses**

Successful completion (3.0 GPA) of eighteen credits in formal graduate courses (excluding seminars, teaching, directed study, etc.). At least nine of these credits must be from courses numbered CHE 501 through 559, and at least twelve credits must be from courses in Chemistry. Courses are designated among the following four concentration groups: Group I – Physical Chemistry: CHE 521, CHE 522, CHE 523, CHE 524, CHE 528, CHE 530; Group II – Inorganic Chemistry: CHE 511, CHE 514, CHE 515, CHE 516, CHE 517, CHE 518; Group III – Organic Chemistry: CHE 501, CHE 502, CHE 503, CHE 504, CHE 607; Group IV – Biological Chemistry: CHE 535, CHE 536, CHE 541, CHE 542, CHE 543. Students are required to take at least one course outside their major concentration. Continuation in the Ph.D. program is based, in part, on achievement in at least four chemistry courses to be taken during the student's first year. In addition, students are required to complete CHE 581; CHE 582

or CHE 619; GRD 500; and two semesters of Teaching Practicum (CHE 610, CHE 611). Initially, each student will be assigned an academic advisor to help the student select an appropriate course of study to prepare for research in the student's chosen area of chemistry. Once a student has joined a research group, the research advisor acts as academic advisor.

Students who have taken equivalent courses previously may be excused from individual course requirements with permission of the Graduate Program Director, in consultation with the Graduate Advising Committee.

### **B. Advancement to Candidacy Committee**

Each student selects a faculty research advisor during the first year. Students begin research during the first year or in the summer directly following. At the start of the second year, the Graduate Program Director will assign the student's Advancement to Candidacy Committee (ACC). In addition to the research advisor, the ACC will also include at least two additional Chemistry program faculty, one of whom will serve as Chair of the committee.

### **C. Qualification to Degree**

In the third semester, each student holds the first formal meeting with his or her ACC. At the end of this First Meeting, the ACC makes a recommendation to the faculty of whether the student should be qualified to the Direct Ph.D. track or the MS Thesis track, or needs to leave the program. This recommendation will be based on the student's research performance, knowledge and understanding as demonstrated during the First Meeting, and course grades. Qualification is determined by the faculty as a whole. Students must have satisfactory performance in research and coursework in order to qualify to either track and remain in the Ph.D. program.

The ACC will also consider whether the student has gaps in knowledge or understanding that should be addressed by further coursework. The student may be directed to take additional courses, beyond the 6-course minimum requirement.

### **Direct Ph.D. Track**

Students with satisfactory research performance and science course GPA above 3.0 will generally be qualified to the Ph.D. Direct Track. These students can continue with research and complete the other requirements for the Ph.D., without needing to complete a MS thesis first.

### **M.S. Thesis Track**

Students with science course GPA below 3.0 or deficiencies in understanding or research progress, as determined during the ACC First Meeting, may be qualified to the MS Thesis Track. A student in the MS Thesis track must complete a master's thesis as a first step in the Ph.D. program. Upon completion and defense of the MS thesis, such a student must petition the faculty to continue in the Ph.D. program. If the petition is approved, the student will then join the Direct Ph.D. track and will need to fulfill all requirements of that track in order to earn the Ph.D.

### **D. Second ACC Meeting**

During the fourth semester, students will complete the requirement for a Second Meeting with the ACC. This requirement can be met in several ways. Students in physical, inorganic, or materials chemistry or in chemical physics will generally follow Option 1. Students carrying out research in organic chemistry will generally follow Option 2, while students in biological chemistry will generally follow Option 3.

#### **Option 1**

The second meeting shall consist of an oral report on one or two papers from the recent literature. This report should demonstrate a mastery of the problems and methodology covered in the material. The role of the Advancement to Candidacy Committee is to assess the quality of the report and also to assess the student's intellectual growth. Further study may be recommended at this time.

#### **Option 2**

The student will enroll in the organic chemistry section of CHE 619 *Critical Readings of Current Topics in Chemistry*, and will make a presentation in the class during the second year. This presentation will be in addition to any presentation the student makes in CHE 582 or CHE 619 during the first year.

#### **Option 3**

The student will enroll in the biological chemistry section of CHE 619 *Critical Readings of Current Topics in Chemistry*, and will make a presentation in the class during the second year. This presentation will be in addition to any presentation the student makes in CHE 582 or CHE 619 during the first year.

### **E. Advancement to Candidacy**

Once a student in the Direct Track has successfully completed his or her coursework and First and Second Meetings with the ACC, the student will be advanced to candidacy. From that point forward, the student will focus on research.

### **F. Department Seminar**

Every Ph.D. student in the Direct Track will present a departmental seminar in the third year, describing his or her research. Starting in the third year, students in organic chemistry will be expected to present their research annually in CHE 696, while biological chemistry students in years three through five will present their research annually in CHE 694. All other students will present a single research seminar in the fall of the third year, in CHE 693.

### **G. Research Proposition and Third ACC Meeting**

At least one year before the anticipated thesis defense, the student will prepare an original research proposition and defend the proposition in a closed meeting with the ACC. The proposition is a research proposal based on the literature rather than on the student's own research. At the Third Meeting, the student and committee will also discuss the student's research progress and exit plan for completing the dissertation. A target date for the defense will be set at the conclusion of the Third Meeting. The Third Meeting report may also be used in place of a CHE 590 term paper for any student who wishes to obtain a Master's degree.

#### H. Dissertation Defense

The ACC serves as the basis for the dissertation defense committee, with the addition of one new member from outside the department. The dissertation and defense must adhere to all policies of the Graduate School. The defense will be a public lecture, followed by private examination by the defense committee.

Requirements for the Ph.D. Degree with Concentration in Chemical Physics

##### A. Courses

CHE 581, 582, GRD 500, and two semesters of CHE 610/611 plus six formal graduate courses are required including the following:

1. CHE 523, Chemical Thermodynamics
2. Either CHE 521 (Quantum Chemistry I) or PHY 511 (Quantum Mechanics I)
3. Three courses from a set approved by the Graduate Advisement Committee. This set consists of CHE 522, 524, 525, 528, and 530; and PHY 501, 503, 505, 540, 551, 555, and 565. Other graduate courses can be substituted only with prior permission of the Graduate Program Director.
4. One additional course from outside of Group I.

A prerequisite for the Chemical Physics program is undergraduate training in Classical Mechanics and Electromagnetic Theory at or above the level of PHY 301 (Electromagnetic Theory) and PHY 303 (Mechanics). Students in the Chemical Physics program must take these courses unless they receive waivers from the Graduate Program Director.

##### B. Additional Requirements

Other than coursework, the requirements for the Ph.D. in Chemical Physics are the same as those for the Ph.D. in Chemistry.

Requirements for the Ph.D. Degree with Concentration in Biological Chemistry

##### A. Courses

CHE 581, GRD 500, and two semesters of CHE 610/611 plus 18 credits of formal graduate courses, including

1. A minimum of two graduate biology/biochemistry oriented courses (e.g., BMO 520, CHE 541, CHE 542, etc.) as approved by the student's Academic Advisor or ACC. Students will normally take CHE 541, CHE 542, and CHE 543.
2. At least one course from outside of Group IV.
3. Registration for CHE 619 and CHE 694 (one unit each) in the Spring semester of each year in the program. Students in their first and second year will present a research paper from the literature. Students in their third and fourth year (and fifth year if still in residence) will present a seminar on their thesis research.

##### B. Additional Requirements

Other than coursework, the requirements for the Ph.D. in Biological Chemistry are the same as those for the Ph.D. in Chemistry.

Faculty of Chemistry Department

#### Distinguished Professors

Dill, Kenneth, Distinguished Professor, Ph.D., 1978, University of California: Statistical mechanics and dynamics of biological systems.

Hsiao, Benjamin S., Distinguished Professor, Ph.D., 1987, University of Connecticut: Polymer physics; polymer crystallization; structure and property relationships in nanostructured polymers; nanocomposites and biodegradable polymer; polymers for biomedical applications; synchrotron X-ray scattering and diffraction.

Lauher, Joseph W.<sup>1</sup>, Distinguished Teaching Professor, Ph.D., 1974, Northwestern University: Structural chemistry; design and synthesis of new inorganic and organic materials; hydrogen bonding; molecular graphics, x-ray crystallography.

London, Erwin<sup>2</sup>, Distinguished Professor, Ph.D., 1979, Cornell University: Lipid-protein and protein-protein interactions in membranes; membrane protein folding and translocation by membrane penetrating toxins; cholesterol and lipid domain formation.

Ojima, Iwao, Distinguished Professor, Ph.D., 1973, University of Tokyo, Japan: Development of new and effective methodologies for the syntheses of bioactive compounds of medicinal interest based on organic and organometallic chemistry; medicinal chemistry and chemical biology of anticancer agents, MDR reversal agents, and enzyme inhibitors.

Parise, John B.<sup>3</sup>, Distinguished Professor, Ph.D., 1981, University of North Queensland, Australia: Synthetic solid-state chemistry; structural chemistry; crystallography; materials research.

Takeuchi, Esther<sup>4</sup>, Distinguished Professor, Ph.D., The Ohio State University: Fundamental chemistry and electrochemistry of energy storage, synthesis and characterization of electrochemically active materials; nanomaterials and nanostructured materials related to energy storage.

Takeuchi, Kenneth<sup>5</sup>, Distinguished Teaching Professor, Ph.D., The Ohio State University: Energy storage; fundamental chemistry and electrochemistry of energy storage, synthesis and characterization of electrochemically active materials; nanomaterials and nanostructured materials related to energy storage.

### Professors

Bhatia, Surita, Ph.D., 2000, Princeton University: Rheology and phase behavior of associative polymer gels; small-angle scattering; structure and rheology of colloidal dispersions and complex fluids; polymeric materials for cell encapsulation, delivery, and wound healing.

Drueckhammer, Dale G., Ph.D., 1987, Texas A&M University: Bioorganic chemistry; computer-guided design in molecular recognition, design and synthesis of receptors and sensors for biological molecules.

Goroff, Nancy, Ph.D., 1994, University of California, Los Angeles: Design and synthesis of carbon-rich organic molecules and materials; halocumulenes and alkynes; 3-dimensional chromophores for biological fluorescence studies; cyclophenacenes ("buckybelts") and other unusual conjugated systems.

Grubbs, Robert B., Ph.D., 1998, Cornell University: Polymer chemistry; block copolymer materials; polymer assemblies; controlled radical polymerization.

Johnson, Francis<sup>6</sup>, Ph.D., 1954, Glasgow University, Scotland: Structure and total synthesis of naturally occurring biologically active molecules; DNA damage and enzymatic repair mechanisms; new synthetic methods in organic synthesis; heterocyclic chemistry.

Koch, Stephen, Ph.D., 1975, Massachusetts Institute of Technology: Synthesis and structure in transition metal coordination chemistry; metal ions in biological systems; early transition metal catalysts.

Lacey, Roy A.<sup>7</sup>, Ph.D., 1987, University at Stony Brook: Nuclear chemistry; intermediate and relativistic energy heavy ion reaction studies.

Mayr, Andreas, Ph.D., 1978, University of Munich, Federal Republic of Germany: Reactivity of metal-carbon multiple bonds; synthesis of molecular components for nanocomputing.

Parker, Kathlyn A., Ph.D., 1971, Stanford University: Organic synthesis; synthetic methods; natural products, non-natural nucleosides; designed enzyme inhibitors; molecular tools for biochemistry.

Raleigh, Daniel P., Ph.D., 1988, Massachusetts Institute of Technology: Biological chemistry; experimental studies of protein folding and protein stability; studies of amyloid formation; NMR studies of protein dynamics.

Sampson, Nicole S., Ph.D., 1990, University of California, Berkeley: Enzyme mechanisms and protein-protein interactions; the use of organic synthesis, kinetics and mutagenesis to probe the structure and function of enzymes and cell-surface recognition proteins.

Sears, Trevor John, Ph.D., 1979, Southampton University, England: High resolution spectroscopy of transient species; molecular structure; development of new instrumental techniques; gas phase free radical dynamics and kinetics.

Simmerling, Carlos, Ph.D., 1994, University of Illinois, Chicago: Computational chemistry and structural biology; molecular dynamics of biological macromolecules.

Tonge, Peter J., Ph.D., 1986, University of Birmingham, England: Biological chemistry and enzyme mechanisms; quantitating substrate strain in enzyme-substrate complexes using vibrational spectroscopy; rational drug design.

Wang, Jin, Ph.D., 1991, University of Illinois: Physics and chemistry of biomolecules; single molecule reaction dynamics.

White, Michael, Ph.D., 1979, University of California, Berkeley: Surface chemical dynamics; catalysis; photo-induced reactions; molecular spectroscopy; molecular beam scattering.

Wong, Stanislaus, Ph.D., 1999, Harvard University: Nanoscience; physical chemistry; biophysical chemistry; materials science; scanning probe microscopy imaging of nanomaterials; synthesis and characterization of nanostructures such as nanocrystals and nanotubes; physical, chemical, and biological applications of nanotechnology.

### Associate Professors

Aubrecht, Katherine, Ph.D., 1999, Cornell University: Chemical education, education for sustainability, context-based chemistry education, sustainable polymeric materials.

Boon, Elizabeth, Ph.D., 2002, California Institute of Technology: Biochemistry; prokaryotic nitric oxide biology and the role of the H-NOX family; peptide and protein engineering for novel sensing applications.

Carrico, Isaac, Ph.D., 2003, California Institute of Technology: Chemical biology and bio-organic Chemistry; introduction of unnatural amino acids and sugars into cell and virus systems for diagnostic and therapeutic purposes; development of new reactions designed to take place inside living systems.

Jia, Jiangyong, Ph.D., 2003, State University of New York at Stony Brook: Ultra-relativistic heavy ion reaction studies.

Khalifah, Peter, Ph.D., 2001, Princeton University: Solid state chemistry; electronic and magnetic materials; renewable energy, x-ray diffraction; crystal growth

Rushton, Gregory, Ph.D., 2004, University of South Carolina: Chemistry education; chemistry teacher leadership; STEM teacher quality; discourse practices in chemistry learning environments; models and modeling in chemistry

Rudick, Jonathan G., Ph.D., 2005, University of Pennsylvania: Organic, supramolecular, and polymer chemistry.

#### **Assistant Professors**

Allison, Thomas<sup>8</sup>, Ph.D., 2010, University of California, Berkeley: Chemical Physics. Frequency combs. Ultrasensitive femtosecond spectroscopy, and high-order harmonic generation.

Chiu, Melanie, Ph.D., 2009, University of California, Berkeley: organic, supramolecular, and materials chemistry; synthesis and applications of sequence-defined polymers.

French, Jarrod B.<sup>2</sup>, Ph.D., 2010, Cornell University: Biochemistry, Biophysics and Chemical Biology; macromolecular x-ray crystallography; mechanistic enzymology; microscopy; structure/function studies of purine and pyrimidine biosynthesis; structural biology of viral tegument proteins and photoactive proteins.

Gao, Liang<sup>2</sup>, Ph.D., 2009, Purdue University: Optical imaging, fluorescence microscopy, analytical instrumentation.

Johnson, Christopher, Ph.D., 2011, University of California, San Diego: Physical Chemistry, Chemical Physics. Molecular spectroscopy; reaction dynamics; characterization of reaction intermediates; atmospheric chemistry; catalysis; mass spectrometry.

Laughlin, Scott, Ph.D., 2008, University of California, Berkeley: chemical biology, neuroscience, organic chemistry.

Ngai, Ming-Yu, Ph.D., 2008, University of Texas at Austin: Organic and organometallic chemistry, photochemistry, radiochemistry, and biomedical imaging.

#### **Research Faculty**

Honda, Tadashi, Ph.D., 1979, The University of Tokyo: Drug discovery of new anti-inflammatory and cytoprotective agents and the new chemistry that is derived from their synthesis and modifications.

Marschlok, Amy C., Ph.D., University at Buffalo (SUNY); Inorganic and materials chemistry; preparation and investigation of novel electrode materials and structures for energy storage, including metal-air batteries.

#### **Affiliated Professors**

Rizzo, Robert C., Ph.D., 2001, Yale University: Structure-based drug design, computational structural biology, docking, molecular dynamics. Quantifying molecular recognition with quantitative structural biology. Primary appointment: Department of Applied Math and Statistics.

Weinacht, Thomas, Ph.D., 2000, University of Michigan: Time resolved spectroscopy and Strong Field Quantum Control. Primary appointment: Department of Physics and Astronomy.

#### **Affiliated Associate Professors**

Knopf, Daniel, Ph.D.

Green, David, Ph.D., 2002, Massachusetts Institute of Technology: Computational biology of protein interactions. Primary appointment: Department of Applied Math and Statistics.

Koga, Tadanori, Ph.D., 1998, Kyushu University, Japan: Soft Matter green nanoprocessing and energy x-ray and neutron scattering. Primary appointment: Department of Materials Science and Engineering.

Orlov, Alexander, Ph.D., 2005, University of Cambridge, United Kingdom: Physical and environmental chemistry; materials science and engineering; heterogeneous catalysis; novel materials for environmental and energy applications; environmental engineering and environmental science. Primary appointment: Department of Materials Science and Engineering.

**Affiliated Assistant Professors**

Seeliger, Jessica, Ph.D., 2007, Stanford University: Chemical biology, biochemistry, microbiology. Mechanisms of lipid biosynthesis and transport in bacterial pathogens; developing tools for inducible gene regulation; biophysical behavior of model lipid membranes. Primary appointment: Department of Pharmacological Sciences.

**Affiliated Adjunct Professors**

Gang, Oleg, Ph.D., Physics, 2000, Bar-Ilan University, Israel: self-assembly of biomimetic systems from nanocomponents with recognitions, macromolecular phenomena in confinements, behavior of soft matter at interfaces and development of methods for programmable assembly of optically active nano-architectures. Primary appointment: Brookhaven National Laboratory.

Liu, Ping, Ph.D., 1994, Jilin University: Theoretical description of nanostructures, supported nanostructures, surfaces and their catalytic applications in heterogeneous catalysis and electrocatalysis, with a focus on catalytic processes in production, conversion and use of non-conventional fuels such as hydrogen and alcohols. Density functional calculations, kinetic modeling and sensitivity analysis are employed to obtain a fundamental understanding of catalytic processes and provide guidance for the catalyst development. Primary appointment: Brookhaven National Laboratory.

Miller, Lisa, Ph.D., Biophysics, 1995, Albert Einstein College of Medicine: Study of the chemical makeup of tissue in disease, using high-resolution infrared and x-ray imaging at the National Synchrotron Light Source (NSLS). Primary appointment: Brookhaven National Laboratory.

Misewich, James, Ph.D., 1984, Cornell University: Associate Laboratory Director for Basic Energy Sciences, which is responsible for overseeing research in chemistry, condensed matter physics, materials science and nanoscience. Nanoscience, the study of materials at ultra-small dimensions, will expand at Brookhaven's Center for Functional Nanomaterials. Primary appointment: Brookhaven National Laboratory.

Shanklin, John, Ph.D., 1988, University of Wisconsin-Madison: Biochemistry of lipid metabolism, enzyme structure-function studies, understanding enzyme specificity, redesigning enzymes for new functionality, understanding biochemical regulation processes, metabolic engineering of plants to accumulate unusual fatty acids and to accumulate oil in vegetative tissues. Primary appointment: Brookhaven National Laboratory.

Stavitski, Eli, 2006, Hebrew University of Jerusalem: Operando characterization of advanced functional materials; heterogeneous catalysis; nanoporous frameworks. Primary appointment: Brookhaven National Laboratory.

Rodriguez, Jose A., Ph.D., 1988, Indiana University: Surface chemistry and catalysis. Primary appointment: Brookhaven National Laboratory.

Zhu, Yimei, Ph.D., 1987, Nagoya University: Nanoscale structure and property relations in oxides, strongly correlated electron systems and energy materials, advanced electron microscopy. Primary appointment: Brookhaven National Laboratory.

Zuckerman, Ronald, Ph.D., 1989, University of California, Berkeley: Solid-phase synthesis of sequence-defined polymers. Design, synthesis and folding of peptoid polymers into protein-mimetic nanostructures, screening of combinatorial libraries for function. Primary appointment: Lawrence Berkeley National Laboratory.

Number of teaching, graduate, and research assistants, fall 2015: 161

- 1) Recipient of the State University Chancellor's Award for Excellence in Teaching, 1990; Recipient of the President's Award for Excellence in Teaching, 1990.
- 2) Joint appointment, Department of Biochemistry.
- 3) Joint appointment, Department of Geosciences.
- 4) Joint appointment, Materials Sciences and Engineering.
- 5) Recipient of the State University Chancellor's Award for Excellence in Teaching, 1986.
- 6) Joint appointment, Department of Pharmacology.
- 7) Recipient of the State University Chancellor's Award for Excellence in Teaching, 1998; Recipient of the President's Award for Excellence in Teaching, 1998.
- 8) Joint appointment, Department of Physics & Astronomy.

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*



**Department of Civil Engineering****Chairperson**

Harold Walker, Computer Science 2430 (631) 632-8315

**Graduate Program Director**

Harold Walker (Interim)

**Graduate Program Coordinator**

TBD

**Degrees Awarded**

Ph.D. and M.S. in Civil Engineering; Advance Graduate Certificate

**Website**

<http://www.stonybrook.edu/civil>

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-gs](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-gs)

**Description**

The Department of Civil Engineering, in the College of Engineering and Applied Sciences, offers graduate work leading to the M.S and PhD degrees, and a graduate certificate. The overarching mission of the graduate programs is to train the next generation of civil engineers to make important discoveries, develop new technologies, and apply novel approaches to ensure the safety, resilience, and sustainability of our basic infrastructure systems. Our programs in Civil Engineering offer students a broad curriculum with the opportunity to pursue advanced studies in the major areas of civil engineering. The programs emphasize interdisciplinary approaches in solving society's most pressing problems, with an emphasis on restoring and improving urban infrastructure. The faculty in the Department of Civil Engineering is actively involved in state-of-the-art research and work collaboratively with graduate students on projects that are both applied and fundamental in nature.

**Research Areas**

Research areas for the graduate programs include Coastal Engineering, Environmental Engineering, Geotechnical Engineering, Structures and Construction Materials, and Transportation. For more information on topics and faculty specialties, please visit the department website [www.stonybrook.edu/civil](http://www.stonybrook.edu/civil).

**Civil Engineering, MS and PhD**

The MS program is designed to provide students with greater depth in a particular area in civil engineering for further advanced study or pursuing a career as professional engineers. The PhD program aims to prepare students for a research career in academia, government or private laboratories, R&D in industry, or elsewhere.

**Civil Engineering, Advanced Graduate Certificate**

The Advanced Graduate Certificate is designed to serve students interested in furthering their education in civil engineering. Perspective students for this program include engineers from other disciplines who are interested in developing basic knowledge in civil engineering. The certificate program is also designed for civil engineers who are looking for additional technical depth in civil engineering. This program is also a good fit for practicing engineers looking for continuing professional development credits. The Office of Professions in the New York State Education Department requires continuing education for the Professional Engineering license. The graduate certificate in civil engineering will allow practicing engineers the opportunity to obtain a graduate certificate while also fulfilling the continuing education requirement for licensure.

**Coastal Engineering & Management, Advanced Graduate Certificate**

The Department of Civil Engineering and the School of Marine and Atmospheric Sciences offer a course of study leading to an Advanced Graduate Certificate in Coastal Engineering and Management. This certificate provides students with the opportunity to pursue advanced studies in the major areas of coastal engineering and management of coastal resources.

**Admission Requirements for the Department of Civil Engineering**

For admission to graduate study in the Department of Civil Engineering, requirements are\*:

1. A bachelor's degree in civil engineering, or a related field such as another engineering discipline, physical science, or mathematics.
2. A grade point average of at least B or equivalent in engineering, mathematics, and science courses.
3. Three (3) letters of recommendation
4. Completion and submission of the Graduate Record Examination (GRE) General Test. Stony Brook University's test code is 2548, for Civil Engineering it's 1102
5. For non-native speakers of English, submission of the TOEFL or IELTS test.
6. Acceptance by both the Civil Engineering Graduate Program and the Graduate School.

\*At this time we do not require additional “supplemental materials” of which the ApplyYourself system may ask.

### **Advanced Graduate Certificate program**

Students must have a bachelor's degree and an undergraduate GPA of at least 3.0. Students with lower averages may be admitted in non-matriculated status that may be changed upon earning six or more graduate credits applicable to the Certificate with a GPA of 3.0 or higher. Credits for Certificate program courses may be applied to requirements for the M.S. in Civil Engineering subject to Graduate School rules and limitations; however, no more than 12 credits may be transferred.

Students may start an on-line application to our Certificate, M.S. or Ph.D. program at any time, however, submitting an application must be done before or on the following dates to be considered for admissions to any of our programs:

October 1 for Spring

January 15 for Fall

### **Facilities**

**Coastal and Hydraulic Engineering Research Laboratory (CHERL)**

**High-performance Super-computing Cluster**

**Multi-Scale Structural Materials Laboratory**

**Sustainability and Health of Urban Infrastructure Laboratory**

**Environmental Engineering Molecular Science Laboratory**

**Sustainable Geotechniques Laboratory**

For more details about the Civil Engineering facilities and facilities that Civil Engineering professors and graduate students have access to, please [click here](#).

### **General Requirements**

#### **Academic Advisor**

Each graduate student is assigned an academic advisor in his or her area of interest before registration. The academic advisor will guide the student in course selection, research, and other areas of academic importance. Students receiving financial aid must select a thesis research advisor before the start of their second semester.

#### **Academic Standing**

An average GPA of 3.0 or higher in all coursework, exclusive of CIV 599 (M.S. Thesis Research), CIV 698 (Practicum in Teaching II), and CIV 699 (Ph.D. Dissertation Research), is a minimum requirement for satisfactory status in the graduate program.

#### **Civil Engineering, Advanced Graduate Certificate**

A minimum of 15 credits is required for the Advanced Graduate Certificate in Civil Engineering.

#### **Course Requirements**

A minimum of 15 approved graduate credits, of which 12 credits must be taken in the Civil Engineering Program. Students cannot use credits earned from CIV 596, CIV 599 or CIV 696 to fulfill this requirement.

#### **Transfer Credits**

A maximum of 3 graduate credits may be transferred from other programs toward the certificate. The maximum also includes any credits received from taking Civil Engineering courses while having non-degree status at Stony Brook as an SPD or GSP student. Credits used to obtain any prior degrees are not eligible for transfer. All requests for transfer of credits require the approval of the graduate program director and graduate school.

#### **Time Limit**

All certificate requirements must be completed within three (3) years from the semester date of admission as a matriculated student. NOTE: If the certificate program is taken in collaboration with a graduate degree program, then the student has five years for completion of the certificate.

### **Civil Engineering, MS**

A minimum of 30 credits is required for the M.S. degree.

#### **Course Requirements**

1. M.S. with thesis: 21 approved graduate course credits and an accepted thesis, which is registered as 9 credits of CIV 599.
2. M.S. with project: 30 approved graduate credits. Credits earned for CIV 599 may not be used to fulfill this requirement. No more than 6 credits of CIV 595, CIV 596 or CIV 696 may be applied toward the course requirements.

3. All full-time graduate students are required to register for CIV 691 (Civil Engineering Seminar) each fall semester and obtain a satisfactory grade.
4. A minimum of 18 graduate credits, of which 15 credits are in courses other than CIV 599 and CIV 696, must be taken in the Civil Engineering Program. All courses taken outside the Program for application to the graduate degree requirements are subject to approval of the student's advisor and the graduate program director.
5. Up to 15 credits from the Advanced Certificate in Civil Engineering may be applied to the M.S. degree in Civil Engineering provided they meet the course requirements for the M.S. degree.

#### Transfer Credits

A maximum of 12 graduate credits may be transferred from other programs toward the M.S. degree. These may include up to 6 credits from other institutions. The maximum also includes any credits received from taking Civil Engineering courses while having non-degree status at Stony Brook as an SPD or GSP student. Credits used to obtain any prior degrees are not eligible for transfer. All requests for transfer of credits require the approval of the graduate program director and graduate school.

#### Thesis Requirements

A student choosing the thesis option must select a research advisor. Upon completion, the thesis must be defended in an oral examination before a faculty committee of at least three members of which at least two must be Civil Engineering faculty. A student choosing the thesis option may not switch to the project option without permission of the graduate program committee. A student who has ever been appointed as a teaching, graduate, or research assistant must choose the thesis option unless otherwise approved by the graduate program committee.

#### Project Requirements

A student choosing the project option must select a project advisor. Upon completion, the project must be submitted for approval to a faculty committee of at least two members of which at least one must be a Civil Engineering Faculty. A student who has selected the project option may not be appointed as a teaching, graduate, or research assistant unless otherwise approved by the graduate program committee.

#### Time Limit

Full-time students must complete all degree requirements within three years. Part-time students must complete all degree requirements within five years.

#### **Civil Engineering, Ph.D.**

A minimum of 24 credits beyond the M.S. degree is required for the Ph.D. degree.

#### Course Requirements

1. 24 approved graduate course credits beyond the M.S. degree requirement. A minimum of 9 credits, excluding CIV 599, CIV 696 and CIV 699, must be taken in the Civil Engineering Program.
2. All full-time graduate students are required to register for CIV 691 each fall semester and obtain a satisfactory grade.
3. All courses taken outside the department for application to the graduate degree requirements are subject to approval of the student's advisor and the graduate program director. The graduate program may impose additional course requirements.

#### Transfer Credits

A maximum of 6 graduate credits from other programs, including those of other institutions, may be transferred toward the Ph.D. degree. Credits used to obtain any prior degrees are not eligible for transfer. Requests for transfer of credits must be approved by the graduate program director.

#### Preliminary Examination

Students will be required to pass a written preliminary examination. The examination will be offered at least once every year, usually in April. The preliminary examination will be developed by the student's advisor in consultation with the student's examination committee. The examination committee will consist of three Civil Engineering faculty members. The graduate program director must approve the content of each exam prior to administration. Students will be encouraged to take the preliminary examination the first time it is offered after they begin academic residency. Each student can take the written preliminary examination two times before being dismissed from the Ph.D. program.

#### Qualifying Examination

This examination is designed to test the student's ability to utilize his or her background to carry out research in a chosen field of study. As part of the qualifying examination, there will be a written and oral examination determined by the dissertation examining committee. The written exam must be distributed to the committee members at least two weeks before the oral examination. The oral examination probes the doctoral student's ability and examines the progress, direction and methodology of the dissertation research. The student will be examined on the dissertation topic and its objective, the problem formulation, research approach, and knowledge in related areas. A majority of the dissertation examining committee must approve the student's performance.

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#### Teaching

Ph.D. students are required to take 3 credits of CIV 698 Practicum in Teaching II or obtain approval of equivalent teaching experience from the Graduate Program Director as part of the degree requirement. CIV 698 is taken under a faculty advisor who is responsible for providing feedback and making a formal evaluation of the student's work. The form of this practicum may include making class presentations, teaching in recitation

classes, or preparation and supervision of laboratory classes. All Teaching Assistants are required to take CIV 697 Practicum in Teaching I prior to taking CIV 698. CIV 697 will provide students with a background in learning theory, course design, learning styles, content delivery formats, teaching technology, advising, rubrics and assessment.

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#### Advancement to Candidacy

A student will be advanced to candidacy for the Ph.D. degree when all formal coursework has been completed and all the requirements except the dissertation have been satisfied. These requirements must be completed within one calendar year after passing the written qualifying examination. Advancement to candidacy must be one year before the beginning of the semester in which a student plans to defend his/her dissertation.

#### Dissertation

The student chooses a dissertation topic in consultation with his/her doctoral dissertation advisor as soon as possible. Dissertation research is an apprenticeship for the candidate, who, under the supervision of the dissertation advisor, independently carries out original work of significance. The dissertation examining committee should be established after the student passes the qualifying examination. The committee must include at least three members from the Department of Civil Engineering, including the dissertation advisor, and at least one member from another program or from outside the University. The committee must be approved by the graduate program director upon recommendation by the dissertation advisor. The official recommendation for the appointment of the dissertation examining committee is made to the Dean of the Graduate School.

#### Dissertation Defense

Once the dissertation is complete, approval of the dissertation requires a formal oral defense. The formal defense is open to all interested members of the University community. A candidate must fill out the Doctoral Degree Defense Form (available on the Graduate School Web page) with dissertation abstract as well as other relevant details, and submit the Form to the graduate program director at least three weeks in advance of the proposed event. The Form is forwarded by the graduate program director to the dean of the Graduate School. Copies of the dissertation are to be distributed to the committee members at least two weeks before the dissertation defense; one copy is to be kept in the program office for examination by the faculty. The final approval of the dissertation must be by a majority vote of the dissertation examining committee.

#### Annual Review of Progress

The student's advisor must submit a written report to the graduate program director on the student's progress once per year documenting their progress, plans and expectations for the coming year. The advisor should also document student accomplishments (e.g., published papers or proceedings, presentations at conferences, fellowships, grants, awards or other honors).

#### Time Limit

The time limit for a doctoral degree is seven years for a student who has a previous graduate degree or 24 credits of graduate study in such a degree program. For all other students, the time limit for a doctoral degree is seven years after completion of 24 graduate level credits at Stony Brook University.

### Civil Engineering Faculty

#### Professors

Sotiropoulos, Fotis, Professor, Ph.D., 1991, University of Cincinnati; Aerospace Engineering

Walker, Harold, Professor, Ph.D., 1996, University of California, Irvine; Environmental Engineering

#### Assistant Professors

Abdelaziz, Sherif, Assistant Professor, Ph.D., 2013, Virginia Tech; Geotechnical Engineering

Farhadzadeh, Ali, Assistant Professor, Ph.D., 2011, University of Delaware; Coastal Engineering

Giles, Ryan, Assistant Professor, Ph.D., 2013, University of Illinois at Urbana-Champaign; Structural Engineering

Hajibabai, Leila, Assistant Professor, Ph.D., 2014, University of Illinois at Urbana-Champaign; Transportation Engineering

Khosronejad, Ali, Assistant Professor, Ph.D. 2006, Tarbiat Modarres University; Computational Fluid Dynamics

Mao, Xinwei, Assistant Professor, Ph.D. 2015, University of California, Berkeley; Environmental Engineering

Yazici, Anil, Assistant Professor, Ph.D., 2010, Rutgers; Transportation Engineering

#### Affiliated Faculty

Hsiao, Benjamin S., Distinguished Professor, Ph.D., University of Connecticut, Material Science

#### Adjunct Faculty

Colobufo, Steve, Adjunct Professor, M.S., Stony Brook University, Geology

Flannagan, Frank, Adjunct Professor, B.S., SUNY College of Environmental Science & Forestry, Cartography & Geographic Information Systems

Hershcovitch, Ady, Adjunct Professor, Ph.D., Massachusetts Institute of Technology, Applied Plasma Physics

Leung, Tony, Adjunct Professor, B.S., University of Colorado at Boulder, Chemical Engineering

O'Connor, Arthur, Adjunct Professor, Ph.D., New York University, Transportation Planning and Engineering

Russo, Frank, Adjunct Professor, B.S., Rochester Institute of Technology, Civil Engineering Technology

Venkatesan, Arjun K., Adjunct Professor, Ph.D., Arizona State University, Environmental Engineering

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

Spring 2018

## Coaching

**Program Coordinator**

Samuel Kornhauser, Coordinator, (631) 632-7198 [samuel.kornhauser@stonybrook.edu](mailto:samuel.kornhauser@stonybrook.edu)

**Graduate Certificate Awarded**

Advanced Graduate Certificate in Coaching

**Website**

<http://www.stonybrook.edu/spd/graduate/coaching.html>

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-edl](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-edl)

## Coaching Program Description

Stony Brook University's Advanced Graduate Certificate in Coaching program (HEGIS 0835) prepares students to become New York State certified athletics coaches. Students will examine a broad range of issues that impact the coach in today's educational climate, including learning theories, social and psychological issues, principles of organization and administration, kinesthetic theories, injury care, and exercise and nutritional considerations. This program is offered completely online to meet the demands of busy professionals. » **Find out more about online learning** at the School of Professional Development.

For students who wish to continue their studies, this graduate credential may also be incorporated into our Master of Arts in Liberal Studies degree program.

## Gainful Employment Regulation Disclosures

## Coaching Admissions

A. Personal statement.

B. A bachelor's degree, with a cumulative 3.0 grade point average.

C. In those cases where the departmental admissions committee deems it desirable, personal interviews with departmental representatives may be necessary.

## Certificate Requirements

This 18-credit certificate program consists of 6 three-credit courses, distributed among the areas listed below.

**1. Required Courses - 15 credits**

CEP 502 Principles of Coaching

CEP 507 Philosophy, Principles & Organization of Athletics in Education

CEP 513 Health Sciences Applied to Coaching I: Care & Prevention of Athletic Injuries

CEP 514 Health Sciences Applied to Coaching II: The Study of Human Movement

CEP 520 Theory and Techniques of Coaching: Sport-Specific Practicum (Prerequisite: CEP 507)

**2. Elective - 3 credits**

CEP 500 Sport and Society

CEP 508 The Concepts of Leisure, Play and Recreation in America\*

CEP 517 Psychology of Sport

CEP 518 Exercise and Nutrition (prerequisite: a course in anatomy and physiology or CEP 514)

HEA 533 Intercollegiate Athletics in Higher Education

**Time to Completion**

All certificate requirements must be completed within three (3) years from the semester date of admission as a matriculated student unless the student is also matriculated in a master's degree program. Master's students have five (5) years to complete the certificate requirements.

## Faculty

The program's faculty is composed of practitioners and researchers who are leaders in the field. While they may present at national conferences, most also retain their full-time administrative positions. Their experience informs their instruction, allowing them to connect the theories that they are teaching to real-world situations.

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

Spring 2018

Electrical and Computer Engineering Department

**Chairperson**

Petar Djuric, Light Engineering Building 273 (631) 632-8420

**Graduate Program Director**

Leon Shterengas, Light Engineering Building 143 (631) 632-9376

**Assistant to the Chair**

Susan Nastro, Light Engineering Building 273 (631) 632-8420

**Graduate Program Coordinator**

Angela Scauso, Light Engineering Building 267A (631) 632-8401

**Degrees Awarded**

M.S. in Electrical Engineering; M.S. in Computer Engineering; Ph.D. in Electrical Engineering; Ph.D. in Computer Engineering

**Web Site**

<http://www.stonybrook.edu/commcms/electrical/>

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-gs](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-gs)

Electrical and Computer Engineering Department

The fields of electrical and computer engineering are in an extraordinary period of growth; new application areas and increased expectations are accelerating due to new technologies and decreased costs. The Electrical and Computer Engineering Department, in the College of Engineering and Applied Sciences, is involved in graduate teaching and research in many of these areas, including communications and signal processing, networking, computer engineering, semiconductor devices and quantum electronics, circuits and VLSI. The department has laboratories devoted to research and advanced teaching in the following areas: computing, engineering design methodology, high-performance computing and networking, parallel and neural processing, machine vision, fiber optic sensors and computer graphics, micro and optoelectronics, VLSI, telorobotics, DNA sequencing, digital signal processing, and communications.

Since Long Island contains one of the highest concentrations of engineering-oriented companies in the country, the department is particularly strongly committed to meeting the needs of local industry. As part of this commitment, most graduate courses are given in the late afternoon or evening, so as to be available to working engineers on Long Island.

The Department of Electrical and Computer Engineering offers graduate programs leading to the M.S. and Ph.D. degrees. Graduate programs are tailored to the needs of each student to provide a strong analytical background helpful to the study of advanced engineering problems. Ample opportunities exist for students to initiate independent study and to become involved in active research programs, both experimental and theoretical.

**Areas of Emphasis in Graduate Study**

Areas of emphasis in current research and instruction are: Communications and Signal Processing, Computer Engineering, Semiconductor Devices and Quantum Electronics, Circuits and VLSI.

Specialties that fall under one or more of the above categories include: VLSI, Image Processing, Computer Vision, Integrated Circuit Fabrication, Novel Electronic and Photonic Devices, Digital Communication, Biomedical Electronics, Computer-Aided Design, Computer Networks, Parallel Processing, Fault-Tolerant Computing, Microprocessors, Robotics, Network Theory, and Optical Signal Processing and Fiber Optic Sensors. Theoretical and experimental programs reflecting these areas are currently underway and students are encouraged to actively participate in these efforts. Outlined below is an overview of the Department's research areas.

**Communications and Signal Processing**

Subject areas of current interest include mobile, wireless and personal communications; high speed data and computer communication networks; communications traffic; data compression; coding and modulation techniques; inter-connection networks and high speed packet switching; digital communication; detection and estimation; statistical signal processing; spectrum estimation; image analysis and processing; computer vision.

**Computer Engineering**

The goal of computer engineering in the ECE department is to provide a balance view of hardware and software issues. The expertise in the program include parallel and/or high performance and/or energy efficient computer architecture, embedded microprocessor system design, fault tolerant computing, design communications and signal processing, parallel and distributed computing, computer networks, cybersecurity, computer vision, artificial neural networks and software engineering.

**Semiconductor Devices, Quantum Electronics**

The program of courses and of research pertinent to solid-state electronics, electromagnetics and optics ranges from a study of the fundamental electronic processes in solids through a description of the mechanism which yield useful devices to a study of the design simulation, and fabrication of semiconductor devices and integrated circuits. Program's scientific interests center on physics and technology of optoelectronic devices and systems. Over the past several years, major efforts were focused on the design and development of the novel semiconductor lasers and detectors. Additionally, the department has a strong experimental effort on the development of coherent optical processors, fiber optic sensors and integrated fiber optics.



**Circuits and VLSI**

The program in the Circuits and VLSI area addresses problems associated to modeling, simulation, design and fabrication of analog, digital, and mixed-signal integrated circuits. Analog and mixed-mode integrated circuit (IC) devices have important applications in many fields including avionics, space technology, and medical technology. The department offers basic and advanced courses covering the following subjects: integrated circuit technology, device modeling, software tools for circuit design and simulation, analog and digital circuit design, VLSI circuits, testing of analog and digital ICs, design automation for analog, digital and mixed-mode circuits, VLSI systems for communications and signal processing.

**Admission requirements of Electrical and Computer Engineering Department**

For admission to graduate study in the Department of Electrical and Computer Engineering, the minimum requirements are:

- A. A bachelor's degree in electrical engineering from an accredited college or university. Outstanding applicants in other technical or scientific fields will be considered, though special make-up coursework over and above the normal requirements for a graduate degree may be required.
- B. A minimum grade point average of B in all courses in engineering, mathematics, and science.
- C. Official Results of the Graduate Record Examination (GRE) General Test.
- D. Acceptance by both the Department of Electrical and Computer Engineering and the Graduate School.

**Facilities of Electrical and Computer Engineering Department**

The department operates laboratories for both teaching and research:

**The Computer-Aided Design Laboratory** offers access to large assortment of software tools used to analyze, model, simulate, and better understand various engineering concepts. The lab comprises 40 Dell PC's, that are networked via switched Ethernet to a Dell file server.

**The Computer Vision Laboratory** has a network of PC's, digital imaging hardware, and custom built Computer Vision Systems for experimental research in 3D vision and digital image processing.

**The COSINE Laboratory** supports the research efforts of faculty members and graduate and undergraduate students in the areas of signal processing, communications, and networking. Current and recent research projects involve Bayesian signal processing, inference, Monte Carlo signal processing, signal modeling, machine learning, deep networks, signal processing over networks, graph signal processing, sensor signal processing, positioning and navigation, biomedical signal processing, wireless networks, radio-frequency identification, the Internet of Things, computer networking, data transmission, multiple-access systems, scheduling, network performance evaluation, grid computing, information theory, and image processing.

**The Digital Signal Processing Laboratory** is involved in digital signal processing architectures and hardware and software research. The laboratory has extensive list of relevant software and hardware tools.

**The Fluorescence Detection Laboratory** is involved in the design and development as well as implementation and testing of various instruments for Life Sciences. Research areas include laser induced fluorescence detection, single photon counting techniques, fast data acquisition and transfer, design and development of analog and digital integrated circuits, signal processing, capillary electrophoresis phenomena, DNA sequencing, and microfluidics.

**The Graduate Computing Laboratory** has extensive computational capabilities to support student's research and studies. Industry standard packages such as Cadence tools, Synopsys, Matlab, and many others are available.

**The Hardware Generation and Optimization (HGO) Laboratory** is dedicated to the design and optimization of digital systems, with a focus on field-programmable gate arrays (FPGAs). The lab is equipped with FPGA development systems (furnished in part through donations from Xilinx, Altera, and Intel), with all related tools.

**The High Performance Computing and Networking Research Laboratory** is equipped to conduct research in the broad area of networking and parallel/distributed computing with emphasis on wireless/mobile networks, cloud computing, data center networks, optical networks, high-speed networks, interconnection networks and multicast communication.

**The Integrated Microsystems Laboratory** focuses on advancing the performance of CMOS IC at analog sensor interfaces. We investigate design of miniature, low-power, highly accurate sensing microsystems, that have a significant and pervasive impact on a large number of applications, ranging from new generation of biomedical devices for personal health monitors, hearing aids or implantable neural prostheses to communication devices and radiation detectors.

**The Nanoscale Circuits and Systems (NanoCAS) Laboratory** focuses on developing design methodologies for high performance as well as energy efficient integrated circuits with a variety of applications ranging from future processors to ultra-low power Internet-of-things (IoT) based devices. The NanoCAS Lab is equipped with a high performance processing and storage server, workstations, and all necessary EDA tools for modeling, design, and analysis.

**The Mixed-Domain Embedded System Laboratory** is equipped for research in the broad area of electronic system design and design automation. Current research projects involve design automation for mixed analog-digital systems and embedded systems for multimedia, sensor network applications and emerging technologies.

**The Mobile Computing and Applications Laboratory** conducts research in mobile computing systems, especially those using sensing devices for various applications in location based services, Internet-of-Things, and healthcare. The laboratory has various latest mobile and embedded devices, and access to a cloud computing facility.

**The Mobile Systems Design Laboratory** conducts research in the broad areas of VLSI system designs for signal processing, communication, and heterogeneous mobile sensors. The laboratory is equipped for design and simulation of complex hardware and software systems.

**The Optoelectronics Laboratory** possesses the infrastructure for molecular beam epitaxial semiconductor heterostructure growth, advanced material characterization as well as fabrication (clean room) and sophisticated characterization and modeling of optoelectronics devices. The recent research projects include design and development of the novel infrared lasers, light emitting diodes, photodetectors and modulators. The laboratory is actively working on metamorphic epitaxial growth techniques to develop the new class of narrow and ultra-low bandgap alloys and superlattices for long-wave infrared photodetector and other applications.

**The Ultra-High-Speed Computing Laboratory** conducts research in high performance energy-efficient flux quantum computing and cybersecurity. It is equipped with powerful computing, networking, and storage facilities and advanced CAD tools for superconductor circuit design.

**The Fiber Optic Sensors Laboratory (FOSL)** - Research emphasis is on the development and fabrication of novel fiber optic systems for very diverse applications ranging from aerospace to biomedical. Research work has been supported by NSF, NASA, NIH and various state and industrial partners. Some of the current research projects include development of capillary waveguide based biosensors for detection of pathogens in a marine environment, laser debridement, cavity sensors for flight control surfaces, and photonic power conversion for mobile platforms. The laboratory is equipped with various capabilities for optical and electronic diagnosis. These include a fiber optic fusion splicer, fiber polisher, diamond saw, optical microscope, optical spectral analyzer, single photon-counting systems, a high speed digital autocorrelator and various laser sources. Additionally, the laboratory has the facilities for designing and fabricating printed circuit boards and fabricating optical and electronic sub-systems.

**The Wireless and Networking Systems Laboratory** conducts research in the area of wireless networking and mobile computing. The lab has extensive computing capabilities, a set of crossbow sensors, professional sensor test bed development kit, and other equipment for network and system research.

Requirements for the M.S. Degree in Computer Engineering

Admission to the MS program in Computer Engineering requires the student to have completed a Bachelor degree in Computer Engineering or Computer Science. Students with a Bachelor degree in Electrical Engineering could also be admitted if they have taken or will take the following courses or their equivalent:

ESE 345 Computer Architecture;

ESE 380 Embedded Microprocessor Systems Design I;

ESE 333 Real-Time Operating Systems.

A candidate for the master's degree may petition to transfer a maximum of 12 graduate credits from another institution towards the master's degree requirements. Students transferring from non-matriculated status are also limited to a maximum of 12 credits for the master's degree.

#### **I. Non-Thesis Option**

1. At least 30 graduate credits with a cumulative and departmental grade point average of 3.0 or better. Among these 30 credits, up to six credits may be ESE 597, ESE 599, or ESE 698. Only 3 credits of ESE 698 may be used. Any non-ESE course will need prior approval given by the Graduate Program Director before a student can register.

2. At least one (1) course from each of the following sub-areas:

Hardware: ESE/CSE 536 Switching and Routing in Parallel and Distributed Systems,  
ESE 545 Computer Architecture,  
ESE 565 Parallel Processing Architectures,  
ESE 566 Hardware-Software Co-Design of Embedded Systems,  
ESE 580 Microprocessor-Based Systems I,  
ESE 581 Microprocessor-Based Systems II.

Networking: ESE 505 Wireless Network,  
ESE 506 Wireless Networking and Mobile Computing,  
ESE 546 Computer Communication Networks,  
ESE 548 Local & Wide Area Networks,  
ESE 550 Network Management and Planning.

CAD and VLSI: ESE 530 Computer Aided Design,  
ESE 549 Advanced VLSI System Testing,  
ESE 555 Advanced VLSI Circuit Design,  
ESE 556 VLSI Physical and Logic Design Automation,  
ESE 575 Advanced VLSI Signal Processing Architecture.

Theory: ESE 554 Computational Models for Computer Engineers,  
CSE 548/AMS 542 Analysis of Algorithms.

Software: ESE 568 Computer and Robot Vision,  
ESE 588 Pattern Recognition,  
CSE 504 Compiler Design,  
CSE 506 Operating Systems,  
CSE 526 Principles of Programming Languages,  
CSE 533 Network Programming,  
CSE 548/AMS 542 Analysis of Algorithms.

3. At least three (3) additional regular lecture based courses. ESE 597, ESE 599, ESE 697, ESE 698 and ESE 699 are not counted as regular courses. Topics course, ESE 670, can be counted only once as a regular course.

4. At least one (maximum three) credit of ESE 597. Graduate Program Director approval is required (see graduate student guide for details). In exceptional circumstances, the Graduate Program Director can approve a replacement of ESE 597 credit by ESE 599, ESE 699 or ESE 698 one.

## II. Thesis Option

1. Students must inform the department in writing at the end of their first semester if they would like to choose the M.S. Thesis Option.

2. At least 30 graduate credits with a cumulative and departmental grade point average of 3.0 or better. Among these 30 credits, at least six credits of ESE 599, with a maximum of 12 credits total being taken from ESE 599, ESE 597, or ESE 698. Only three credits of 698 can be used. Any non-ESE course will need prior approval given by the Graduate Program Director before a student can register.

3. At least one (1) course from each of the following sub-areas:

Hardware: ESE/CSE 536 Switching and Routing in Parallel and Distributed Systems,  
ESE 545 Computer Architecture,  
ESE 565 Parallel Processing Architectures,  
ESE 566 Hardware-Software Co-Design of Embedded Systems,  
ESE 580 Microprocessor-Based Systems I,  
ESE 581 Microprocessor-Based Systems II.

Networking: ESE 505 Wireless Network,  
ESE 506 Wireless Networking and Mobile Computing,  
ESE 546 Computer Communication Networks,  
ESE 548 Local & Wide Area Networks,  
ESE 550 Network Management and Planning.

CAD and VLSI: ESE 530 Computer Aided Design,  
ESE 549 Advanced VLSI System Testing,  
ESE 555 Advanced VLSI Circuit Design,  
ESE 556 VLSI Physical and Logic Design Automation,  
ESE 575 Advanced VLSI Signal Processing Architecture.

Theory: ESE 554 Computational Models for Computer Engineers,  
CSE 548/AMS 542 Analysis of Algorithms.

Software: ESE 568 Computer and Robot Vision,  
ESE 588 Pattern Recognition,  
CSE 504 Compiler Design,  
CSE 506 Operating Systems,  
CSE 526 Principles of Programming Languages,  
CSE 533 Network Programming,  
CSE 548/AMS 542 Analysis of Algorithms.

4. At least one (1) additional regular lecture based course. ESE 597, ESE 599, ESE 697, ESE 698 and ESE 699 are not counted as regular courses. Topics course, ESE 670, can be counted only once as a regular course.

5. At least one (maximum three) credit of ESE 597. Graduate Program Director approval is required (see graduate student guide for details). In exceptional circumstances, the Graduate Program Director can approve a replacement of ESE 597 credit by ESE 599, ESE 699 or ESE 698 one.

6. Students must satisfactorily complete a thesis (see graduate student guide for details).

Requirements for the Ph.D. Degree in Computer Engineering

### A. Major and minor area requirements

1. Major area requirement is satisfied by taking minimum of three (3) courses from a selected major area with minimum GPA of 3.5. See Graduate Student Guide for preapproved lists of courses for each area.

2. Minor area requirement is satisfied by taking courses from other areas (different from the selected major area) with minimum GPA of 3.0. Students with BS degree (G3) are required to take two (2) courses from other areas while students with MS degree (G4) are required to take one (1) course.

### **B. Course Requirements**

1. A minimum of six (6) regular courses beyond the MS degree or 14 regular courses beyond the BS degree (including courses taken to satisfy major and minor requirements). The choice must have the prior approval of the designated faculty academic advisor. Any non-ESE course will need prior approval given by the Graduate Program Director before a student can register.
2. ESE 697 Practicum in Teaching (3 credits) is required to satisfy the teaching requirement. Students must be G-5 status in order to take this course, i.e. be advanced to candidacy.
3. The courses ESE 597, ESE 598, ESE 599, ESE 698, and ESE 699 are not counted as regular courses.
4. Courses presented under the title ESE 670 Topics in Electrical Sciences that have different subject matters, and are offered as formal lecture courses, are considered different regular courses but may not be counted more than twice.

### **C. Advancement to Candidacy**

After successfully completing all major/minor/course requirements (except ESE 697) the student is eligible to be recommended for advancement to candidacy. This status is conferred by the dean of the Graduate School upon recommendation from the chairperson of the department. Departmental policy requires that all G3 classified doctoral students Advance to Candidacy within 2.5 years from his/her academic start at Stony Brook University. All G4 classified doctoral students are required to Advance to Candidacy within 1.5 years from his/her academic start.

### **D. Preliminary Examination**

A student must pass the preliminary examination not more than 1.5 year after advancement to candidacy. Both a thesis topic and the thesis background area are emphasized. Students must pass the Preliminary Examination at least ONE year prior to their Defense. See Graduate Student Guide for details.

### **E. Dissertation**

The most important requirement for the Ph.D. degree is the completion of a dissertation, which must be an original scholarly investigation. The dissertation must represent a significant contribution to the scientific and engineering literature, and its quality must be compatible with the publication standards of appropriate and reputable scholarly journals.

### **F. Approval and Defense of Dissertation**

The dissertation must be orally defended before a dissertation examination committee, and the candidate must obtain approval of the dissertation from this committee. The committee must have a minimum of four members (at least three of whom are faculty members from the department), including the research advisor, at least one person from outside the department, and a committee chair. (Neither the research advisor nor the outside member may serve as the chair). On the basis of the recommendation of this committee, the dean of engineering and applied sciences will recommend acceptance or rejection of the dissertation to the dean of the Graduate School. All requirements for the degree will have been satisfied upon the successful defense of the dissertation.

### **G. Residency Requirement**

The student must complete two consecutive semesters of full-time graduate study. Full-time study is 12 credits per semester until 24 graduate credits have been earned. After 24 graduate credits have been earned, the student may take only nine credits per semester for fulltime status.

### **H. Time Limit**

All requirements for the Ph.D. degree must be completed within seven (7) years after completing 24 credits of graduate courses in the department.

### **Certificates**

Admission to the certificate programs is limited to students enrolled in either the MS or PhD programs in the Department of Electrical & Computer Engineering. Students may receive the certificate if they have no more than 12 graduate credits in the department as of the start of Spring 2018.

#### **1. Networking & Wireless Communications Certificate**

Matriculated students only.

Networking and wireless communications are key technologies in today's technological world. Networks such as the Internet as well as telephone, cable and wireless networks serve to interconnect people and computers in a ubiquitous and cost effective way. The area of wireless communications in particular has grown rapidly in recent years and has utilized networking technology to be successful. There is a large industrial base involving networking and wireless communications in terms of equipment and software providers, service providers and end users. Moreover this technology has made the average consumer's life more productive, flexible and enjoyable.

The Stony Brook Certificate Program in Networking and Wireless Communications is designed to give matriculated students validated graduate level instruction in this area of much recent interest. The program can be completed in a reasonable amount of time as it involves only four courses. These are regular Stony Brook graduate level courses taught by Stony Brook faculty. The SUNY approved certificate program can be tailored to the needs of the individual student. Courses used for the certificate program can also be used toward the MS or PhD degree by matriculated students.

To receive the Stony Brook Certificate in Networking and Wireless Communications, a student must complete FOUR required courses as specified below, with at least a B grade in each course.

**At least ONE course from the following:**

ESE 505: Wireless Communications  
ESE 506: Wireless Networking

**At least ONE course from the following:**

ESE 532: Theory of Digital Communications  
ESE 546: Networking Algorithms and Analysis  
ESE 548: Local and Wide Area Networks

**In addition to the above, if needed, courses may be selected from:**

ESE 503: Stochastic Systems  
ESE 504: Performance Evaluation of Communication and Computer Systems  
ESE 522: Fiber Optic Systems  
ESE 528: Communication Systems  
ESE 531: Detection and Estimation Theory  
ESE 535: Information Theory and Reliable Communication  
ESE 536: Switching and Routing in Parallel and Distributed Systems  
ESE 543: Mobile Cloud Computing  
ESE 544: Network Security Engineering  
ESE 547: Digital Signal Processing  
ESE 550: Network Management and Planning  
ESE 552: Interconnection Networks

Students must request the Certificate from Professor Thomas Robertazzi via Email [Thomas.Robertazzi@stonybrook.edu](mailto:Thomas.Robertazzi@stonybrook.edu) once the program is completed.

## 2. Engineering Machine Learning Systems

Matriculated students only.

The Engineering Machine Learning Systems certificate program educates about the mathematical theory, fundamental algorithms, and optimized engineering of computational learning systems used in real-world, big data applications. Students will also study modern technologies used in devising such data systems, including software tools, architectures, and related hardware structures. Comprehensive, hands-on student projects on designing, implementing, and testing real-world learning systems are part of the certificate program. The certificate program includes a total of four courses: three required courses and one elective course.

To receive the Stony Brook certificate in the Engineering Machine Learning Systems, a student must be currently enrolled in an MS or PhD program in the Electrical and Computer Engineering Department and must complete four courses as specified below, with at least a B grade in each course.

**Foundations (1 required):** ESE 503 Stochastic Systems

**Fundamental Methods (2 required):** ESE 588 Pattern Recognition  
ESE 589 Learning Systems for Engineering Systems

**Applications (1 out of three electives):** ESE 568 Computer Vision,  
ESE 587 Hardware Architectures for Machine Learning,  
BMI 511/ESE 569 Translational Bioinformatics

To apply for the Engineering Machine Learning Systems Certificate Program, a student must complete the "Permission to Enroll in a Secondary Certificate Program" form (which requires some signatures) from the Graduate School website, and submit it within the first week of the semester when they start the certificate.

## 3. Engineering the Internet of Things

Matriculated students only.

The Engineering the Internet-of-Things certificate program provides the fundamental principles, popular technologies and optimized engineering of Internet-of-Things applications and systems. Students gain a broad set of skills and knowledge for IoT development and innovation, including sensors and interfaces, RF communication, microcontroller and embedded systems, wireless radios, network protocols, cloud services and security techniques. Students learn how to design, implement and evaluate IoT systems and applications through hands-on projects on popular embedded system hardware. The certificate program includes a total of four courses: three required courses and one elective course.

To receive the Stony Brook certificate in the Engineering the Internet-of-Things, a student must be enrolled in an MS or PhD program in the Electrical and Computer Engineering Department and must complete four courses as specified below, with at least a B grade in each course.

**Foundations (1 required):** ESE 566 Hardware Software Co-design for Embedded Systems

**Basic Skills and Knowledge (2 required):** ESE 506 Wireless Networking and Mobile Computing  
ESE 525 Modern Sensors

**Cloud and Security (1 out of two electives):** ESE 543 Mobile Cloud Computing  
ESE 544 Network Security Engineering

To apply for the Engineering the Internet-of-Things Certificate Program, a student must complete the “Permission to Enroll in a Secondary Certificate Program” form (which requires some signatures) from the Graduate School website, and submit it within the first week of the semester when they start the certificate.

Faculty of Electrical and Computer Engineering Department

### Distinguished Professors

Belenky, Gregory, Doctor of Physical and Mathematical Sciences, 1979, Institute of Physics, Baku, USSR: Design, manufacturing, and characterization of optoelectronic and microelectronic semiconductor devices; physics of semiconductors and semiconductor devices.

Djuric, Petar M., Chairperson, Ph.D., 1990, University of Rhode Island: Signal analysis, modeling and processing; wireless communications and sensor networks.

Luryi, Serge, Ph.D., 1978, University of Toronto, Canada: High speed solid-state electronic and photonic devices, physics and technology.

Yang, Yuanyuan, Ph.D., 1992, Johns Hopkins University: Wireless and mobile networks, cloud computing, data center networks, optical networks, high speed networks, parallel and distributed computing systems, multicast communication, high performance computer architecture, and computer algorithms.

### Professors

Doboli, Alex, Ph.D., 2000, University of Cincinnati: VLSI CAD and design, synthesis and simulation of mixed analog-digital systems, hardware/software co-design of embedded systems, and high-level synthesis of digital circuits.

Hong, Sangjin, Ph.D., 1999, University of Michigan: Low-power VLSI design of multimedia wireless communications and digital signal processing systems, including SOC design methodology and optimization.

Parekh, Jayant P., Ph.D., 1971, Polytechnic Institute of Brooklyn: Microwave acoustics; microwave magnetics; microwave electronics; microcomputer applications.

Robertazzi, Thomas G., 1981, Princeton University: Computer networking; grid computing; performance evaluation; parallel processing; e-commerce technology.

Short, Kenneth L., Ph.D., 1973, University at Stony Brook: Digital system design; microprocessors; instrumentation.

Subbarao, Murali, Ph.D., 1986, University of Maryland: Computer vision; image processing; pattern recognition.

### Associate Professors

Bugallo, Monica, Ph.D., 2001, Universidade da Coruna (Spain): Statistical signal processing with the emphasis in the topics of Bayesian analysis, sequential Monte Carlo methods, adaptive filtering, and stochastic optimization.

Dhadwal, Harbans, Ph.D., 1980, University of London, England: Laser light scattering; fiber optics; optical signal processing and instrumentation.

Donetski, Dmitri, Ph.D., 2000, Stony Brook University: Design and technology of optoelectronic devices and systems including photovoltaic and photoconductive detectors, diode lasers and diode laser arrays.

Dorojevets, Mikhail, Ph.D., 1988 Siberian Division of the USSR Academy of Sciences, Novosibirsk: Computer architectures, systems design.

Gorfinkel, Vera, Ph.D., 1980, A.F. Ioffe Physical-Technical Institute, St. Petersburg, Russia: Semiconductor devices, including microwave and optoelectronics, DNA sequencing instrumentation, single photon counting techniques.

Kamoua, Ridha, Undergraduate Program Director, Ph.D., 1992, University of Michigan: Solid-state devices and circuits; microwave devices and integrated circuits.

Salman, Emre, Ph.D. 2009, University of Rochester: Nanoscale integrated circuit design, emerging technologies for future electronic systems, highly heterogeneous integrated systems, digital and mixed-signal circuits.

Shterengas, Leon, Graduate Program Director, Ph.D. 2004, Stony Brook University: High power and high speed light emitters, carrier dynamics in nanostructures, nanofabrication and molecular beam epitaxy of semiconductor nanostructures.

Stanacevic, Milutin, Ph.D., 2005, Johns Hopkins University: Analog and mixed-signal VLSI integrated circuits and systems; adaptive Microsystems; implantable electronics.

Tang, K. Wendy, Ph.D., 1991, University of Rochester: Interconnection networks, parallel computing, and neural networks.

Wang, Xin, Ph.D., 2001, Columbia University: Mobile and ubiquitous computing, wireless communications and networks, grid and distributed computing, advanced applications and services over Internet and wireless networks.

#### **Assistant Professors**

Eisaman, Matthew, Ph.D., 2006 Harvard University: Photovoltaic devices, especially light trapping nanostructures for improved solar cell efficiency, and spatial variations at the nanoscale.

Lin, Shan, Ph.D., 2010, University of Virginia: Cyber physical systems, networked information systems, wireless networks, sensing and control systems.

Milder, Peter, Ph.D. 2010, Carnegie –Mellon University: Digital hardware design, generation, and optimization focusing on signal processing, computer vision, and related domains; design for FPGA.

Westerfeld, David, Ph.D. 2005, Stony Brook University: Design and characterization of high-performance mid-infrared semiconductor light sources (LEDs and lasers).

Ye, Fan, Ph.D., 2004, UCLA: Mobile computing/sensing systems & applications, indoor localization and floor plan reconstruction, internet-of-things and sensor networks.

Zhao, Yue, Ph.D., 2011, UCLA: Smart energy systems, renewable energy integration, electricity market, infrastructure security, sensing and signal processing, optimization theory, information theory, communication networks.

Ji Liu, Ph.D., 2013, Yale University: Distributed control and computation, multi-agent systems, social networks, epidemic networks, and power networks.

Number of Teaching, Graduate, and Research Assistants in Fall 2016: 54

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

Computer Science Department

**Interim Chairperson**

Samir Das, New Computer Science Building 2313G (631) 632-1807

**Graduate Program Director for M.S. and Ph.D. Programs in Computer Science**

CR Ramakrishnan, New Computer Science Building 233, (631) 632-8218

Erez Zadok, New Computer Science Building 349 (631) 632-8461

**Graduate Program Admissions Administrator for M.S. and Ph.D. Programs in Computer Science**

Lourdes Hartwell, New Computer Science Building 202, Email Contact Preferred: [graduate@cs.stonybrook.edu](mailto:graduate@cs.stonybrook.edu)

**Degrees Awarded**

M.S. in Computer Science; Ph.D. in Computer Science

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-gs](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-gs)

Computer Science

The Department of Computer Science offers an M.S. and a Ph.D. in Computer Science.

The M.S. program in Computer Science is designed primarily to train students with professional goals in business, industry, or government, requiring a detailed knowledge of computer science concepts and applications. The program concentrates primarily on applied computer science, emphasizing software development, programming, computer systems, and applications. Each student is given the experience of working on a large-scale software or hardware development project involving analysis, design, evaluation, and implementation.

The Ph.D. program in Computer Science is for students interested in obtaining academic or research positions in colleges and universities or in government or commercial research laboratories. The program gives students a rigorous and thorough knowledge of a broad range of theoretical and practical research subject areas and develops the ability to recognize and pursue significant research in computer science. The first two years of graduate study are devoted to coursework. By the end of the second year the research phase of the student's graduate career should be underway, with participation in advanced study and preliminary research work. The final years of graduate study are devoted to dissertation research.

The primary areas of departmental research interests include, among others, theoretical computer science, algorithms, logic, concurrency, model checking, databases, languages, artificial intelligence, machine learning, computer vision, computer graphics, visualization, cyber-security, operating systems, networking, and computer architecture.

Information in this Bulletin concerning the M.S. and the Ph.D. programs in Computer Science is an abbreviated version of the Graduate Program Handbook found at the Computer Science Department's web site. Students must refer to the Handbook for further details and the up-to-date information. Additional information about the graduate program in Computer Science can be found on the department's Web site at [www.cs.stonybrook.edu](http://www.cs.stonybrook.edu).

**Admission to the M.S. and Ph.D. in Computer Science**

Admission to the M.S. and Ph.D. programs are handled separately by the departmental admissions committee. The requirements for admission to graduate study in computer science include:

A. Bachelor's Degree: A bachelor's degree, usually in a science or engineering discipline or in mathematics, is required. The transcript should show a grade average of at least B (3.0/4.0) in all undergraduate coursework, and in the science, mathematics, and engineering courses.

B. Basic Mathematics: Two semesters of college-level calculus, plus a course in linear algebra. Also desirable is a course in either probability theory or probability and statistics.

C. Minimal Background in Computer Science: As a measure of that background, the student must satisfy five of the following proficiency requirements: The student must have at least undergraduate level proficiency in the core computer science areas. If the student does not have a degree in computer science, he/she must demonstrate this proficiency via junior/senior undergraduate level coursework or relevant job/project experience preferably in the following core computer science areas: discrete mathematics, theory of computing, algorithms, programming languages or compilers, computer organization/architecture and operating systems. If exposure is lacking in one or two of the above areas, similar level of exposure in the following areas may be acceptable instead: computer networks, artificial intelligence, databases, computer security or computer graphics. Note that mere programming experience is usually not considered sufficient.

1. Theory of Computation: CSE 303 or CSE 540
2. Algorithms: CSE 373 or CSE 548
3. Language/Compilers: CSE 304, CSE 307, CSE 504, or CSE 526
4. Architecture: CSE 320 or CSE 502
5. Databases: CSE 305 or CSE 532



6. Operating Systems: CSE 306 or CSE 506

7. Networks or Graphics: CSE 310, CSE 533, CSE 328, or CSE 528

D. Acceptance by the Computer Science Department and Graduate School.

E. All applicants to the M.S. or Ph.D. program must submit Graduate Record Examination (GRE) scores for the general aptitude tests. Applicants are encouraged to submit GRE test scores for the advanced examination in Computer Science as well. More information on the application process can be found on our Web site: [www.cs.stonybrook.edu/students/Graduate-Studies](http://www.cs.stonybrook.edu/students/Graduate-Studies).

#### Facilities of Computer Science Department

The Computer Science Department is composed of a number of special interest labs (Visualization, Experimental Systems, Logic Modeling, Security Systems, File systems, Human Interface with Computers, Wireless Networking and Multimedia) connected by a multi-gigabyte backbone. Typical systems are PCs running FreeBSD, Linux, MS Windows, and Sun Sparc systems. There are numerous multiprocessor/large memory systems including a graphics cluster of Linux and MS Windows PC's. General access labs provide Unix and MS Windows systems, and each office desktop is equipped with a workstation. The department maintains its own dial-up service and wireless network. The Stony Brook campus is connected to the Internet via multiple OC3 connections.

#### Requirements for the M.S. Degree in Computer Science

Students in the M.S. degree program may choose between three options, M.S. with thesis, M.S. with advanced project, and the M.S. with special project. The course requirements depend on the option chosen.

##### A. Registration

Students must register for at least one graduate credit in the semester in which the diploma is awarded.

##### B. Language Requirement

There is no foreign language requirement.

##### C. Course Requirements

Students are required to complete 31 graduate credits in the Computer Science Department. There are no specific courses required other than a thesis or project, with the stipulation that the proficiency requirements must be satisfied. Students can take up to 4 credits of CSE 587 (at most two courses) to fill in missing proficiency requirements. All seven proficiency requirements must be satisfied by the time of M.S. certification for the advanced project and thesis option. Graduate courses in five of seven proficiency areas must be completed by the time of M.S. certification for special projects option. A list of graduate courses is provided in the course compendium at the end of this section.

##### D. Grade Point Average

To be certified for graduation a cumulative graduate grade point average of 3.0/4.0 or better is required.

##### E. Advanced Project Option

Students choosing the advanced project option are required to take the courses CSE 523/CSE 524, Laboratory in Computer Science. The two courses may not be taken in the same semester. These courses provide students with the experience of dealing with large-scale, computer-oriented problems such as those encountered in commercial, industrial, or research environments. Students taking CSE 523/CSE 524 may not use any CSE 599 (M.S. Thesis Research) credits toward their M.S. degree.

##### F. Special Project Option

Students choosing the special project option are required to take the courses CSE 522, Basic Project in Computer Science and one credit in research, teaching, or industrial experience that may be satisfied with CSE 698, CSE 596, Computer Science seminars (excluding SCE 600), Special Topics courses, or regular 3 credit technical Computer Science graduate courses. Students choosing this option may not use credits from CSE 523, CSE 524, or CSE 599 credits toward their M.S. degree. Moreover, at most 6 credits from CSE Special Topics (CSE 590/591/592/593/594/595) and CSE 6XX-level courses may be used toward their M.S. degree.

##### G. Thesis Option

A student choosing the thesis option must select a project (or thesis) advisor by the end of the second semester in the program. The role of the advisor is to guide the student through the M.S. studies, formulate a project or thesis topic, and supervise the student towards completion of the assigned task. The thesis must be approved by a departmental faculty committee of no less than three members appointed by the graduate program director. At the discretion of the committee, the student may be required to present a seminar on the topic of his or her thesis. A student registers for CSE 599 when writing a thesis. No more than nine credits of this course can be applied towards the 31 credits required for the M.S. degree.

##### H. Switching Between the M.S. and Ph.D. Programs

An M.S. student who wishes to advance to the Ph.D. program must take the Qualifying Examination. Regular applications to the Ph.D. program will not be considered from current M.S. students. Please refer to the Graduate Program Handbook for further details.

#### Requirements for the Ph.D. Degree in Computer Science

##### A. Residence

The student must complete two consecutive semesters of full-time graduate study. Full-time study is 12 credits per semester until 24 graduate credits have been earned. Students who have earned 24 graduate credits at another school may be assigned advanced status and are required to take only nine credits per semester for full-time status.

**B. Qualifying Examination**

Students must pass the written Qualifying Examination to demonstrate their ability to undertake the course of study leading to the Ph.D. degree. Qualifying examinations are given twice a year: in May (usually the week after the finals period) and in early January. Students must refer to the Web page at [www.cs.sunysb.edu/graduate/QualsHandbook.html](http://www.cs.sunysb.edu/graduate/QualsHandbook.html) for further details and the up-to-date information on the qualifying examination. The following is a short summary of the contents of this examination.

The exam consists of three parts, 3 hours each, based on undergraduate material as described below. Undergraduate Stony Brook courses covering that material are listed in parentheses. An appropriate way for students who have already taken an undergraduate course in a particular area to prepare for the exam is to take a graduate course in that area. Questions test not just routine knowledge but also the student's ability to use that material in a creative way.

Theory and Mathematics:

Theory of Computation, Languages and Automata Analysis of Algorithms, and Logic. The examination is based on the following courses: CSE 303, CSE 371, CSE 213, and CSE 373.

Software:

Programming Languages, Compilers, Databases, and Graphics. The examination is based on CSE 304, CSE 305, CSE 307, and CSE 328.

Systems:

Networks and Communications, Operating Systems, Computer Architecture, and Computer Organization. The examination is based on CSE 310, CSE 306, CSE 320, and CSE 220.

The results of the written examination will be communicated to each student individually following a meeting of the faculty, which evaluates the results of the examination along with the student's ability to do research and the likelihood of completing the program.

**C. Course Requirements**

In the first year, a student seeking the Ph.D. degree will normally register for a full-time load of courses selected in conjunction with an advisor in order to prepare for the Qualifying Examination. By the time of graduation, each student is required to accumulate at least 20 credits of full (regular lecture) courses, internship, special topics courses or seminars. At most five credits of seminars and internship can be included in the 20 credits required for graduation; generic courses such as CSE 593, CSE 587, CSE 600, CSE 698, and CSE 699 cannot be included. In addition, the following requirements should be noted:

*M.S.-specific courses:* Students in the Ph.D. program may not enroll in CSE 523/CSE 524 or CSE 599. These courses are specific to the M.S. program.

*Ongoing research seminar:* The student must register and complete two semesters of CSE 600. Credits earned in this course cannot be used towards the 20 credits required for the Ph.D. program.

*Internship, CSE 696:* At most two credits of Internship in Research can be counted toward the 20 credits required for the Ph.D. program.

*Dissertation Research, CSE 699:* The Dissertation Research course can be taken *only* by Ph.D. students who have been advanced to candidacy (have G5 status). Prior to the advancement, students conduct research and participate in projects by taking CSE 593: Independent study. G4 students can register for up to 9 credits of CSE 593 in any semester. G3 students can register for only up to 3 credits of CSE 593.

*Teaching requirement:* University policy requires that all doctoral students participate in an appropriately structured teaching practicum. This can be CSE 698 in conjunction with a TA in the first year.

**D. Research Proficiency Examination (RPE)**

The purpose of the Research Proficiency Examination is to ascertain the breadth and depth of the student's preparation to undertake a significant original research investigation.

By the end of the third semester since admission into the Ph.D. program, an RPE Committee will have been formed for each student and an agreement reached on a research project. (M.S. students who were admitted to the Ph.D. program after passing the qualifying examination must form the RPE committee by the end of their first semester in the Ph.D. program.)

By the end of the fourth semester (at the latest) the student will take the RPE.6 (M.S. students who switched to Ph.D. must take the RPE by the end of their second semester in the Ph.D. program.)

Having passed both the qualifying examination and the RPE the student is advanced to candidacy. This status, called G5, is conferred by the Dean of the Graduate School upon recommendation of the Department. Note that unlike the change from G3 to G4, the change from G4 to G5 is not automatic—the student must request to be advanced to candidacy by notifying the Computer Science Graduate Secretary.

Students must advance to candidacy at least one year before defending their dissertations. The graduate school requires G5 students to register for 9 credits, which can be research or other graduate courses relevant to their dissertation. Courses outside of the major require the approval of the dissertation advisor and Graduate Director. Failure to complete the research proficiency examination within the specified time frame and obtain the G5 status is considered evidence of unsatisfactory progress.

**E. Thesis Proposal Requirement**

After the student has completed the requirements in subsections C and D, and with the approval of the student's research advisor, the student will present a thesis proposal. The purpose of the thesis proposal is to assess student's progress towards the Ph.D. thesis. The proposal must be submitted to the student's Thesis Committee within 18 months of the time the student had passed the research proficiency examination. Failure to fulfill this requirement by that time without a formal extension may be considered evidence of unsatisfactory progress toward the Ph.D. degree. The major requirements of the thesis proposal are as follows:

- (1) The student must be thoroughly familiar with the background and current status of the intended research area.
- (2) The student must have clear and well-defined plans for pursuing the research objectives.
- (3) The student must offer evidence of progress in achieving these objectives.

The student will present the thesis proposal to the thesis committee in a seminar presentation. It is limited to members of the committee, invited computer science faculty, and invited graduate students. Faculty members are free to question the student on any topics they feel are in any way relevant to the student's objectives and career preparation. Most questions, however, will be directed toward verifying the student's grasp of the intended specialty in depth. The student will be expected to show complete familiarity with the current and past literature of this area.

The findings of the committee will be communicated to the student as soon as possible and to the Graduate School within one week of the presentation of the proposal. If the committee finds the thesis proposal unsatisfactory, the student will submit an improved proposal, if such resubmission is approved by the Dean of the Graduate School.

#### **F. Dissertation**

An important requirement of the Ph.D. program is the completion of a dissertation, which must be an original scholarly investigation. The dissertation shall represent a significant contribution to the scientific literature, and its quality shall be compatible with the publication standards of appropriate reputable scholarly journals.

#### **G. Approval and Defense of Dissertation**

The dissertation must be orally defended before a dissertation examination committee, and the candidate must obtain approval of the dissertation from this committee. The oral defense of the dissertation is open to all interested faculty members and graduate students. The final draft of the dissertation must be submitted to the committee no later than three weeks prior to the date of the defense.

#### **H. Satisfactory Progress and Time Limit**

A student who does not meet the target dates for the Qualifying Examination, the Research Proficiency Examination, and the Thesis Proposal, or who does not make satisfactory progress toward completing thesis research may lose financial support. The candidate must satisfy all requirements for the Ph.D. degree within seven years after completing 24 credit hours of graduate courses in the Department of Computer Science at Stony Brook. In rare instances, the dean of the Graduate School will entertain a petition to extend this time limit, provided it bears the endorsement of the department's graduate program director. A petition for extension must be submitted before the time limit has been exceeded. The dean or the department may require evidence that the student is still properly prepared for the completion of work.

#### **I. Part Time Students**

Students admitted into the Ph.D. program for part time study are bound by all the rules set out henceforth. In particular, part time students should adhere to the schedule for the Qualifying Examination, Research Proficiency Examination, and Thesis Proposal, as explained in Sections 4.3.4, 4.3.5, and 4.3.6, unless a different schedule has been approved in writing by the Graduate Director.

#### **J. Obtaining an M.S. Degree on the Way to Ph.D.**

A Ph.D. student who has passed the Research Proficiency Examination can complete the requirements for an M.S. degree by satisfying the proficiency requirements and completing 31 credits of course work.

Passing the qualifying examination is considered to have satisfied the proficiency requirements. (Another way to satisfy these requirements is, of course, to take the required courses.)

At most 9 credits of seminars (excluding CSE 600), special topics courses, or CSE 593 (Independent study) can be included in the required 31 credits. A student who has switched from the M.S. program to the Ph.D. program can in addition use the previously earned credits of CSE 523/CSE 524 toward the aforesaid 9 credits. These 9 credits together with the RPE are considered to be equivalent to the Thesis Option in the M.S. program. The remaining 22 credits required for the M.S. degree must be satisfied by taking technical graduate courses in computer science (*i.e.*, excluding courses such as CSE 523/CSE 524, CSE 587, CSE 593, CSE 596, CSE 599, CSE 696, CSE 698, CSE 699, seminars, and special topics).

Faculty of Computer Science Department

<http://www.cs.stonybrook.edu/people/faculty.html>

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

## Creative Writing and Literature Program

**Director**

Lou Ann Walker, Southampton, Chancellors Hall 407 (631) 632-2576

**Associate Director**

Carla Caglioti, Southampton, Chancellors Hall 238 (631) 632-5016

**Program Coordinator**

Margaret Grigonis, Southampton, Chancellors Hall 238 (631) 632-5028

**Degree Awarded**

MFA in Creative Writing and Literature

**Advanced Graduate Certificate Awarded**

Advanced Certificate in Creative Writing; Advanced Certificate in Children's Literature

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-gs](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-gs)

## Creative Writing and Literature

The Creative Writing and Literature program at Stony Brook Southampton emphasizes creative work in fiction, poetry, and nonfiction. However, the program also extends its emphasis beyond the familiar categories of creative expression to treat all forms of writing as equally relevant to understanding and mastering a world constructed out of words. Students are free to take workshops in all genres, in the belief that writing outside the lines informs their primary areas of interest.

Courses are taught by a full-time core faculty of three, joined by a part-time faculty of distinguished visiting writers whose teaching and lecturing assignments rotate among the fall, spring, and summer sessions. These distinguished visitors provide creative breadth to the writing program, offering coverage in areas of writing that are essential in contemporary society, in particular fiction, non-fiction, poetry, scriptwriting, and writing for children.

## The MFA in Creative Writing and Literature

The 46 academic credits for the MFA program is divided among required courses that introduce students to the profession and discipline of writing and the skills necessary to teach writing to others; advanced writing workshops in a variety of writing genres; seminars designed to focus closely on an issue or type of contemporary writing; graduate-level literature courses; and an MFA thesis intended to be a publishable, book-length work. The program is offered in two academic semesters, two six-week summer sessions, and a credit-bearing writers conference.

## The Advanced Certificate in Creative Writing

Designed for working adults who have completed a BA and who are interested in master's level instruction, the Certificate Program in Creative Writing is distinguished by the fact that it allows students flexibility in choice of courses and genres. The Advanced Certificate is a sixteen credit hour concentration available upon successful application to degree-seeking students who have been admitted to any Stony Brook University graduate program, as well as to non-degree seeking students who meet the requirements outlined by the Graduate School.

## The Advanced Certificate in Children's Literature

The Advanced Certificate in Children's Literature accepts up to 12 serious children's book writers each year for a part-time, year-long, 16-credit course of instruction that is customized, affordable, comprehensive, and professionally useful. Certificate students work independently with outstanding faculty mentors in spring and fall terms. During summer and winter terms, they come together as a cohort, in July at the Southampton Writers Conference and in January for a special Children's Literature Publishing and Editing Practicum. The Advanced Certificate in Children's Literature is unique in its design, suited for the types of writers who are interested in children's books—librarians, educators, and parents with young children. These student writers are not able to take time off or relocate to enroll in a full-time MFA program. Unlike the few children's literature MFA programs throughout the country and in the New York metropolitan area, the Stony Brook Advanced Certificate in Children's Literature is a flexible but coherent pathway to completion of a creative project, in only one year.

**Special Programs***SOUTHAMPTON WRITERS CONFERENCE*

The MFA in Writing and Literature sponsors the Southampton Writers Conference, an intensive program of three-credit workshops in contemporary writing that includes lectures, readings, workshops, and panels featuring nationally distinguished authors who join the department's summer faculty. Graduate students in the program will assist in planning and running the Conference, and will have the option of taking a Conference workshop for credit. The Writers Conference also encourages participation by visiting students – new writers, established writers, teachers of writing and editors – who will be admitted by application and may receive academic credit upon request.

*MANHATTAN*

MFA courses are regularly taught in the fall and spring semester at the Manhattan Center. The Manhattan center is conveniently located at 28th Street and Park Avenue South. The campus is easy to reach by bus, train, and subway.

### THE SOUTHAMPTON REVIEW

*The Southampton Review (TSR)*, sponsored by the MFA Program in Writing and Literature at Stony Brook Southampton, is a carefully-edited, beautifully-designed journal dedicated to publishing fine fiction, nonfiction, poetry, and art. *TSR* focuses on work by students and graduates of the MFA program and from the Southampton Writers Conference, but we do open our pages to writers from across the globe whose work is compelling. Our pages are equally devoted to writers whose voices are fresh as well as to those whose are well-established.

### Admission requirements of Creative Writing and Literature Program

Application for admission to the Graduate School is made to a specific program for a specific degree. For the MFA in Creative Writing and Literature, applicants must fulfill both the Graduate School admission requirements and the specific requirements for the MFA in Creative Writing and Literature. See sections I and II for details on these requirements. Application forms may be found on line at <http://www.grad.sunysb.edu/prospective/applying/index.shtml>. Please note that applications for Admission to the MFA in Creative Writing and Literature are made to MFA in Creative Writing and Literature Program and not to the Graduate School.

Any materials not included in the online application, such as transcripts, should be mailed to:

MFA in Creative Writing and Literature  
Stony Brook Southampton

239 Montauk Highway  
Southampton, NY 11968  
Phone: 631-632-5030

**Application Deadline:** The MFA program in Writing and Literature accepts applications for admission on a rolling basis. To receive full consideration for admission with financial support, complete admission and financial aid applications should be filed by January 1 for the fall semester.

### Admission to the MFA in Writing and Literature

Applicants for the MFA program in Writing and Literature must have a bachelor's degree from an accredited college or university. The program accepts applications from candidates whose undergraduate degrees were taken in areas other than the humanities.

Admission to the program is based on the evaluation of a portfolio of the applicant's writing, made in conjunction with a review of the candidate's entire academic career, and letters of recommendation. The portfolio may include works in any written form including fiction, creative non-fiction, poetry, scripting, or other genre. Results from the Graduate Record Examination are encouraged, but not required.

In addition to the Graduate School Admission requirements, the MFA in Writing and Literature requires the following:

- Letters of recommendation from three instructors or writing professionals familiar with your written work.
- A statement discussing your reasons for graduate study (1-2 pp, submitted with the online application)
- A writing sample consisting of up to 10 pages of poetry, single-spaced, or 30 pages of prose, double-spaced (submitted with the online application). Your name should appear on the writing sample.
- A single sheet listing your address, phone number, email address, and title(s) of submission(s).
- A copy of your resume# or c.v. (submitted with the online application)

Any deficiencies in these or the Graduate School admission requirements shall not automatically bar admission, but it is understood that inadequacies in undergraduate preparation normally will require the student to take additional work, the amount to be determined by the appropriate graduate advisory committee. Additional work may not be used to fulfill MFA degree requirements.

### Admission to the Advanced Certificate in Creative Writing

Admission to the Advanced Certificate in Creative Writing is competitive. Students who are eligible to apply include those enrolled in a graduate degree-granting program at Stony Brook University and to students who have a bachelor's degree from an accredited college or university who meet the admissions criteria.

For applicants already admitted to the University, admission involves completing a "Permission to Enroll in a Secondary Certificate" form. Students also need to submit a statement of purpose and a writing sample (details below). Students are required to have an earned bachelor's degree (or equivalent) with a cumulative grade point average of 2.75 on a 4-point scale. The following must be submitted to the Creative Writing and Literature Program:

- A statement discussing the student's reasons for graduate study (1-2 pp, submitted with the online application)
- A writing sample consisting of up to 10 pages of poetry (single-spaced) or 30 pages of prose (double-spaced), with the student's name on the writing sample.

## Admission to the Advanced Certificate in Children's Literature

Admission to the Advanced Certificate in Children's Literature is highly competitive. Students who are eligible to apply include those enrolled in a graduate degree-granting program at Stony Brook University and to students who have a bachelor's degree from an accredited college or university who meet the admissions criteria.

For applicants already admitted to the University, admission involves completing a "Permission to Enroll in a Secondary Certificate" form. Students also need to submit a statement of purpose and a writing sample (details below). Students are required to have an earned bachelor's degree (or equivalent) with a cumulative grade point average of 2.75 on a 4-point scale. The Children's Literature program considers only applicants for admission in Spring term. The following must be submitted to the Creative Writing and Literature Program by December 1:

- A statement discussing the student's reasons for graduate study (1-2 pp, submitted with the online application)
- A writing sample consisting of up to 10 pages of creative writing for picture book or 25 pages for chapter, middle grade or young adult.
- Letters of recommendation from three instructors or writing professionals familiar with your creative work.

## Requirements for the M.F.A. Degree in Creative Writing and Literature Program

The MFA in Writing and Literature degree requires 40 credits of course work and a six credit thesis for a total of 46 credits. Following are the specific requirements.

## A. Required Introduction to the M.F.A. Program (4 credits)

CWL 500 Introduction to Graduate Writing

## B. Six of the following writing workshops (24 credits)

Students select six writing workshops from the following. Individual courses under each category will be labeled according to the content of the course. Although courses may be repeated for credit, students are strongly encouraged to experiment among the disciplines.

## CWL 510 Forms of Fiction

Individual courses within the fiction category will be labeled according to the form covered. For example, Short Story Collections, Beginning the Novel, Advancing the Novel, etc.

## CWL 520 Forms of Poetry

Individual courses within the poetry category will be labeled according to the form covered. For example, Prose Poems.

## CWL 530 Forms of Scriptwriting

Individual courses within the scriptwriting category will be labeled according to the form covered. For example, Screenplay, Playwriting, etc.

## CWL 535 Writing in Multiple Genres

Individual courses within the scriptwriting category will be labeled according to the genres covered.

## CWL 540 Forms of Creative Nonfiction

Individual courses within the nonfiction category will be labeled according to the form covered. For example, Creative Nonfiction, Memoir, etc.

## CWL 550 Forms of Professional and Scientific Writing

Individual courses within the professional and scientific writing category will be labeled according to the form covered. For example, Speech Writing, Writing in the Digital World, Writing about Science, etc.

## CWL 570 Advanced Writing Workshop

This course is for manuscripts in progress across writing disciplines and is strongly recommended for students preparing to take the thesis.

## CWL 575 Writers Conference

**C. Two or more of the following special topic writing and literature seminars (8 Credits)\***

CWL 560 Topics in Literature for Writers

CWL 565 Special Topics in Writing

CWL 588 Independent Study

\*With the approval of the Writing Program director, this requirement may be filled through taking the following graduate English Literature courses offered at Stony Brook University: EGL 501 Studies in Chaucer, EGL 502 Studies in Shakespeare, EGL 503 Studies in Milton, EGL 503 Studies in Genre, EGL 520 Studies in Renaissance, EGL 525 17th-Century Literature, EGL 530 Studies in Restoration Literature, EGL 535 Studies in Neoclassicism, EGL 540 Studies in Romanticism, EGL 545 Studies in Victorian Literature, EGL 547 Late 19th-Century British

Literature, EGL 550 20th-Century British Literature, EGL 555 Studies in Irish Literature, EGL 560 Studies in Early American Literature, EGL 565 19th-Century American Literature, EGL 570 20th-Century American Literature, EGL 575 British and American Literature, EGL 584 Topics in Genre Studies

**D. One or more of the following practicums (4 credits)\***

\*With the permission of the director, a course in writing or literature may be substituted in place of the practicum requirement.

CWL 580 Practicum in Arts Administration

CWL 581 Practicum in Teaching Writing

CWL 582 Practicum in Publishing and Editing

**E. MFA Thesis (6 credits)**

CWL 599 Thesis

Requirements for the Advanced Certificate in Creative Writing

The Advanced Certificate in Creative Writing requires 16 credits of coursework. Following are the specific requirements.

**A. Required Introduction to the MFA Program (4 Credits)**

CWL 500 Introduction to Graduate Writing

**B. Three or more of the following writing workshops or topics courses (12 Credits)**

CWL 510 Forms of Fiction, 4 credits

CWL 520 Forms of Poetry, 4 credits

CWL 530 Forms of Scriptwriting, 4 credits

CWL 540 Forms of Creative Nonfiction, 4 credits

CWL 550 Forms of Professional and Scientific Writing, 4 credits

CWL 565 Special Topics in Writing, 4 credits

CWL 575 Writers Conferences, 1-6 credits

CWL 570 Advanced Writing Workshop, 4 credits

Students select three or more writing workshops or topics courses totaling 12 credits of course work. Individual topics under each category will be labeled according to the content of the course. Although courses may be repeated for credit, students are strongly encouraged to experiment among the genres.

Requirements for the Advanced Certificate in Children's Literature

The Advanced Certificate in Children's Literature requires the following 16-credit sequence of four courses, two long-distance tutorials alternating with two residential courses in an intensive conference format:

CWL 510 (4 credits): Forms of Fiction

CWL 575 (4 credits): Writers Conference

CWL 570 (4 credits): Advanced Writing

CWL 582 (4 credits): Publishing & Editing Practicum in Children's Lit

These courses must be taken in sequence, starting in Spring term.

Faculty of Creative Writing and Literature Program

Distinguished Professor

Rosenblatt, Roger, Ph.D., 1968, Harvard University: Literary Essay, Novel, Novella, Playwriting, Literature for Writers.

Associate Professors

Reeves, Robert, Director. B.A., 1973, M.A., 1977, Harvard University: Graduate Writing, Advanced Fiction, Comedy.

Sheehan, Julie, B.A., Yale University; M.F.A., 2000, Columbia University: Poetry, Advanced Poetry, Reading & Writing Poetry, Practicum in Teaching Writing

#### Lecturer

Walker, Lou Ann, Editor-in-Chief, The Southampton Review. B.A., 1976, Harvard University: Memoir, Children's Literature, Publishing and Editing.

#### Writers

Bank, Melissa. M.F.A., 1988, Cornell University: Short Fiction.

Black, Star. M.F.A., Brooklyn College: Poetry.

Botsford, Andrew. B.A., 1972, Williams College: Professional Writing.

Collins, William. Ph.D., 1971, University of California-Riverside: Poetry

Feiffer, Jules. The Pratt Institute: Humor and Truth, Screenplay

Gabler, Neal. A.M., 1974, University of Michigan, Creative Nonfiction, Biography, Essay

Hegi, Ursula. M.A., 1979, University of New Hampshire: Fiction

Jones, Kaylie, M.F.A., 1988, Columbia University: Novel, Russian Literature

Klam, Matthew. M.A., 1992, Hollins College: Creative Nonfiction

Marx, Patricia. B.A., 1975, Harvard University: Fiction, Humor.

McAndrew, Megan, M.P.P.M., 1995, Yale University: The Short Story, Voice, Writing Place, Literature for Writers, Teaching Practicum.

McCormick, Patricia. M.S., 1985, Columbia University: Young Adult Fiction.

Menaker, Daniel. M.A., 1965, The Johns Hopkins University: Fiction

Merrell, Susan Scarf. M.F.A., 2009, The Bennington College Writing Seminars: Fiction.

Emma Walton Hamilton, Children's Literature

Wolitzer, Meg. B.A., 1981, Brown University: Fiction.

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*



## Cultural Analysis and Theory

Graduate Program with tracks in Comparative Literature, Cultural Studies, and Women's and Gender Studies

**Degrees Awarded**

M.A. and Ph.D in Cultural Analysis and Theory

Certificate programs in Cultural Studies & Women's and Gender studies

**Department of Cultural Studies & Comparative Literature: Comparative Literature & Cultural Studies tracks****Chairperson**

Vacant

**Graduate Program Director**

Izabela Kalinowska-Blackwood, Humanities Building room #1067 (631) 632-7396

**Graduate Program Coordinator**

Mary Moran-Luba, Humanities Building room #1055 (631) 632-7456

**Website**

Visit our web page at: <http://www.stonybrook.edu/commcms/cscl>

**Application**

The Comparative Literature & Cultural Studies tracks have suspended admissions.

**Department of Women's, Gender, & Sexuality Studies: Women's & Gender Studies track****Chairperson**

MaryJo Bona, Humanities Building #2048 (631) 632-6355

**Graduate Program Director**

Victoria Hesford, Humanities Building #2058, [victoria.hesford@stonybrook.edu](mailto:victoria.hesford@stonybrook.edu)

**Graduate Program Coordinator**

Jacqueline Donnelly, Humanities Building #2049 (631) 632-1967

**Website**

Visit our web page at: <http://www.stonybrook.edu/commcms/wgss/>

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-gs](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-gs)

## Cultural Analysis and Theory

The Department of Cultural Analysis and Theory, which is part of the College of Arts and Sciences, offers the M.A. and Ph.D. degrees in Cultural Analysis & Theory, with tracks in Comparative Literature, Cultural Studies and Women's & Gender Studies as well as advanced graduate certificates in Cultural Studies and Women's and Gender Studies.

**Registration**

All students enrolled in the Graduate School in any program, whether in residence or absentia, must register each fall and spring for at least one graduate credit until all degree requirements have been met. A student is not considered to have registered until enrollment is posted on the University system, SOLAR, and arrangements regarding tuition and fees have been made with the Bursar's Office. Students who hold a TA, GA, RA, fellowship, or tuition scholarship must be registered as full-time students by the fifteenth day of classes each semester. Students failing to register before the first day of classes or before late registration begins may still register during the first 15 days of the semester, but will be charged a late fee of \$40. Students who have not been granted an official Leave of Absence by the Dean of the Graduate School and have not yet registered will be considered to have withdrawn from the University. Students are responsible for making sure they are registered on time. Programs or individual faculty members do not have authority to waive these rules.

## Admission Requirements of Cultural Analysis and Theory Program

To be considered for admission to graduate studies in Cultural Analysis and Theory, all applicants must hold a baccalaureate degree from an accredited college or university with a suitable overall grade point average and with a high average in a major field appropriate to study in

comparative literature or cultural studies or both. Applicants should also have a good command of at least one, and preferably two, foreign languages. In addition, they must submit the following:

1. B.A. or M.A. degree from a recognized institution in a suitable area of study;
  2. An official graduate application including a statement of purpose and 3 letters of recommendation can be completed on-line at the following Web site: <https://app.applyyourself.com/?id=sunysb-gs>.
  3. One official copy of any transcript from any undergraduate college or university attended, **from which a degree was conferred**. Applicants must submit one official copy of any transcript relating to any graduate level work undertaken, **regardless of whether or not a degree was earned**. *(If transcripts are in a foreign language, authoritative English translations are required in addition to the original documents. See Academic FAQs under Transcripts for a list of acceptable translation services.)*
- Note: Educational systems that cannot be compared to the United States must be evaluated by a US credentials evaluation service before admission can be finalized.
4. For international students, proficiency in English as demonstrated by a minimum TOEFL score of 550 (paper) or 213 (computer) or 90 (iBT) OR an IELTS total score of 6.5. In order to teach, any graduate student whose native language is not English must score 55 or above on the TSE or SPEAK test OR obtain a score of 7.0 or better in the speaking component of the IELTS test. The website for ETS (TOEFL & GRE) is [www.ets.org](http://www.ets.org);
  5. An appropriate score on the Graduate Record Examination General Test (GRE) Institution Code 2548;
  6. Two term papers or other writing samples in literature or a related field; cultural studies, or women's and gender studies (or related fields), depending on the track applied for.
  7. An application fee of \$100.

#### Admission to the Graduate Programs (Comparative Literature Track)

Applicants to the graduate programs with an emphasis in comparative literature are required to fulfill the minimum admission requirements of the Graduate School. In addition, applicants are ordinarily required to hold a bachelor's degree in an appropriate field from a recognized institution. Furthermore, applicants to the graduate program in comparative literature are expected to demonstrate competence in one foreign language as well as in English. Adequate reading knowledge of a second foreign language is highly desirable.

Any deficiencies in these requirements shall not automatically bar admission, but it is understood that inadequacies in undergraduate preparation will normally require the student to take additional work, the amount to be determined by the graduate program committee and not to be used to fulfill any specific degree requirements.

In all cases, admission is by action of the graduate studies committee of the department under guidelines established by the Graduate School. Applicants are admitted on the basis of their total records, and no predetermined quantitative criteria by themselves ensure a positive or a negative decision.

Stony Brook's graduate program in comparative literature emphasizes developments in contemporary interpretive theory that have transformed disciplinary identities. It understands its "comparative" mission not only to encourage a global perspective on literature beyond narrow linguistic and cultural boundaries, but also to seek alternatives to established approaches to literary study. The program's faculty and students work closely with members of other programs in the humanities, arts, and social sciences in a collaborative effort to examine the role of literary expression as related to other forms of human activity. Students supplement their core study in comparative literature by designing individual programs with strong links to related fields. While providing students with the techniques required for advanced literary analysis, the program seeks to provide full appreciation of how those techniques interact with different modes of scholarly inquiry.

As an institution, Stony Brook is committed to increasing the opportunities for interdisciplinary activity crucial to the programs in comparative literature. The University's Humanities Institute is the most visible expression of a broad university commitment to bringing diverse scholars together for a common intellectual enterprise.

Applicants holding the M.A. degree in comparative literature from the graduate program in Cultural Analysis and Theory from Stony Brook may, upon the advice of the graduate studies committee, be directly admitted to the Ph.D. program. Other applicants will be admitted to the program after review of their qualifications.

#### Admission to the Graduate Programs (Cultural Studies Track)

Applicants to the graduate programs with an emphasis in cultural studies are required to fulfill the minimum admission requirements of the Graduate School. In addition, applicants are ordinarily required to hold a bachelor's degree in an appropriate field from a recognized institution. Furthermore, applicants to the graduate programs in cultural studies are expected to demonstrate competence in one foreign language as well as in English. Adequate reading knowledge of a second foreign language is highly desirable.

Any deficiencies in these requirements shall not automatically bar admission, but it is understood that inadequacies in undergraduate preparation will normally require the student to take additional work, the amount to be determined by the graduate program committee and not to be used to fulfill any specific degree requirements.

In all cases, admission is by action of the graduate studies committee of the department under guidelines established by the Graduate School. Applicants are admitted on the basis of their total records, and no predetermined quantitative criteria by themselves ensure a positive or a negative decision.

The graduate program in cultural studies is an interdisciplinary and interdepartmental program based in the Department of Cultural Analysis and Theory. The cultural studies programs at Stony Brook are designed for students whose interests cut across traditional modes of study in the Humanities and Social Sciences. Areas of emphasis include popular and mass culture, minority and diasporic cultures, visual culture, media and technology, cultural production, cross-cultural and transnational/global formations, as well as the study of elite, dominant, and national cultures. Course requirements are designed to build competence in interdisciplinary cultural studies theory and practice, maximize collegial interaction among students, and allow students to develop disciplinary fluency in a particular subfield.

Cultural Analysis and Theory's strengths lie primarily in literary and cultural theory, cinema and media studies, visual culture studies, and cross-cultural studies, as reflected in the Department's popular undergraduate majors in Cinema and Cultural Studies (CCS) and Women's & Gender Studies (WaGS). Competence in languages other than English has also long been considered essential to the department's mission. A network of affiliated faculty represent a wide range of areas in disciplines including Africana studies, art history and studio art, Asian and Asian American studies, Digital Art, Culture and Technology (cDACT), English, European and Hispanic languages, history, music and philosophy. Prospective students are encouraged to examine the list of faculty to see how their own interests may be served by the current faculty cohort both within and outside of CAT.

#### Admission to the Graduate Programs (Women's and Gender Studies Track)

The graduate programs in Women's and Gender Studies at Stony Brook creates a space within the academy for critical thinking across disciplines about the explanatory categories of gender, race, class, sexuality, nation, and disability. Women's and Gender Studies explores how these categories come into being and operate across different cultures and historical periods, and how they shape social, political, economic and institutional organizations as well as personal experience and perception. The program is particularly strong in four key areas: transnational social movements and globalization; the politics of representation and media analysis; gender and health; and the critical analysis of sexuality.

Along with the core faculty in Women's and Gender Studies, the graduate programs draw from an extensive network of Graduate Faculty from across Stony Brook University, including in the social and behavioral sciences, humanities, and health sciences.

As an institution, Stony Brook is committed to increasing the opportunities for interdisciplinary activity crucial to the programs in Women's and Gender Studies. The University's Humanities Institute is the most visible expression of a broad university commitment to bringing diverse scholars together for a common intellectual enterprise.

Applicants to the graduate programs with an emphasis in Women's and Gender Studies are required to fulfill the minimum admission requirements of the Graduate School. In addition, applicants are ordinarily required to hold a bachelor's degree in an appropriate field from a recognized institution.

Any deficiencies in these requirements shall not automatically bar admission, but it is understood that inadequacies in undergraduate preparation will normally require the student to take additional work, the amount to be determined by the graduate program committee and not to be used to fulfill any specific degree requirements.

In all cases, admission is by action of the graduate studies committee of the department under guidelines established by the Graduate School. Applicants are admitted on the basis of their total records, and no predetermined quantitative criteria by themselves ensure a positive or a negative decision.

Applicants holding the M.A. degree in Women's and Gender Studies from the graduate program in Cultural Analysis and Theory from Stony Brook may, upon the advice of the graduate studies committee, be directly admitted to the Ph.D. program. Other applicants will be admitted to the program after review of their qualifications.

#### Requirements for the M.A. Degree (Comparative Literature Track)

In addition to the minimum requirements of the Graduate School, the following are required:

##### A. Course Requirements

The minimum course requirement for the M.A. degree is 30 graduate credit hours. An M.A. candidate is expected to take:

1. CLT 501: Theories of Comparative Literature
2. CLT 509: History of Literary Criticism
3. Three CLT/CST courses numbered 600 and higher

The remaining courses may be distributed among graduate offerings in comparative literature, English, foreign languages, philosophy, history, art criticism, theatre, music, and other appropriate fields. A student must achieve a 3.5 overall grade point average for all graduate courses taken at Stony Brook to receive a degree.

##### B. First-Year Evaluation

In the middle of the student's second semester of graduate work, the director of graduate studies prepares a file for the student's first-year evaluation. It consists of (1) the student's grades and (2) letters from the professor in all of the student's classes. Students may submit any other

relevant material such as a seminar paper or original essay. The graduate studies committee will evaluate the dossier and decide whether the student should be encouraged to continue in the program.

### **C. Satisfactory Progress Toward the M.A.**

Because so many factors depend on satisfactory progress toward the degree, it is important for students to be aware of and monitor their own progress. The following define the minimum limits for satisfactory progress for full-time students:

1. Maintain a 3.5 average, with no course below B-, in each semester of graduate study, as well as complete all incomplete grades by the first deadline. Students who fail to fulfill these requirements in any semester will be automatically placed on probation during the following semester and will be subject to possible dismissal.
2. Receive an acceptable first-year evaluation in the spring semester of the first year of study.

### **D. Foreign Language Requirements**

Entering students are expected to have a good command of one and preferably two foreign languages. Students must ultimately be competent in one major and one minor language (non-native speakers of English may offer English as one of the two languages).

All students must have passed the language requirements before they are allowed to take the M.A. examination. To demonstrate competence in the major language, students must take for credit, and earn a grade of B or better in, at least one graduate or advanced undergraduate literature course conducted in the language (final papers may be written in English). Competence in the minor language can be demonstrated by (1) earning a grade of B or better in a graduate translation course or (2) passing a CLT examination to be taken with a dictionary

### **E. M.A. Examination**

*Examination:* The student will take a two-hour oral examination in the second year of graduate study or submit a master's thesis. The exam measures the student's knowledge and mastery of literary theory and its history, familiarity with the major texts of world literature, and ability to compose a competent stylistic analysis of literary texts. The master's examination committee consists of three members of the faculty, at least two of whom are members of the CAT graduate faculty. The student's advisor normally chairs the committee, and the other two members are chosen by the director of graduate studies in consultation with the student and his/her advisor.

*Reading List for the Examination:* The student, in consultation with the examination committee, prepares a list of works in each of the following three areas: 1) history of literary theory from the Greeks to the present; 2) a literary genre; and 3) a literary period. The list for (1) is set. Each of the other reading lists will consist of 15 to 20 primary texts.

(The number of required titles for the genre will be increased if the student chooses short works; whatever the genre, the reading required should approximate that imposed by 15 to 20 novels.) The list, signed by the student and all members of the examination committee, must be submitted to the director of graduate studies for approval by the graduate studies committee at least four weeks prior to the examination date. At the two-hour oral exam at least two of the three members of the examination committee must be present.

*Thesis Substitute for Master's Examination:* Instead of taking the M.A. examination, students may substitute a thesis for the exam. The thesis must be on a substantive topic in comparative literature requiring original research. The student will form a committee of three faculty, at least two of whom must be from the comparative literature graduate faculty, who will supervise the project and give final approval. The student's committee and project proposal must be approved by the graduate studies committee prior to embarking on the thesis.

### **F. Advisor and Mentor**

The Graduate School requires all students to have an advisor. The director of graduate studies serves as advisor to all entering students during their first year and helps them plan their programs. Before the end of the first academic year, full-time students should choose one, or preferably two, official graduate advisors from the comparative literature graduate faculty. Advisor and student meet regularly to discuss the student's progress and program. Advisors are normally chosen for one year, but students are, of course, free to change advisors and are encouraged to consult with all members of the faculty.

### **G. Residence Requirements**

The University requires that students receiving a M.A. must take at least two consecutive semesters of full-time graduate study, this usually means 12 credits per semester.

### **Requirements for the Ph.D. Degree (Comparative Literature Track)**

In addition to the minimum requirements of the Graduate School, the following are required:

#### **A. Course Requirements**

1. CLT 501: Theories of Comparative Literature
2. CLT 509: History of Literary Criticism
3. CLT 680: Cultural Studies Research Seminar
4. CLT 698/CST 698: Teaching Practicum
5. *Twelve additional graduate courses, at least three of which must be CLT/CST/WST courses numbered 600 or higher*

A minimum of 48 credits of graduate work is required for the Ph.D. Students who hold an M.A. in comparative literature or a related discipline can request that their transcripts be evaluated by the graduate studies committee and may receive a maximum of 30 credits toward their Ph.D.

All students seeking the Ph.D. must take the required courses listed above, unless the graduate program committee accepts comparable courses taken previously. All Ph.D. students must acquire a minimum of one semester of formal teaching experience (even if they are unsupported or are on a fellowship requiring no teaching duties) and must concurrently take the formal teaching practicum, CLT 698.

In their first year students will take the Teaching Practicum CLT 698. The Practicum will include information about Stony Brook undergraduate requirements and the various undergraduate programs administered by CAT, data on Stony Brook undergraduates, analyses of practical pedagogical issues, consideration of the aims of education and the social role of the university, and teaching observations. The Practicum also provides students with the opportunity to develop a syllabus for an undergraduate course. The Practicum meets roughly every two weeks during both semesters of the first year. The Practicum Director serves as an advisor to first year students, prior to their selection of individual faculty advisors in the second semester.

Students must take the required courses when they are offered, and cannot replace them by Independent Study courses, except in the most unusual circumstances and by petition to the director of graduate studies at the beginning of the term the course is offered. The petition has to be signed by the person directing the Independent Study and must be approved by the graduate studies committee.

Students taking any Independent Study or Directed Reading course will do so under the departmental rubrics, CLT 599 and CLT 690. Under exceptional circumstances, the director of graduate studies may approve Independent Study under another department's designator, contingent on proper comparative literature procedures being followed. A maximum of six credits of Independent Study courses is applicable to the degree requirements for the Ph.D. All such courses must be approved by the director of graduate studies before the end of the add/drop period of the semester during which they are to be taken. All students taking Independent Study or Directed Reading courses must file a detailed description, for which forms are available in the Department office. Failure to have these courses approved in a timely fashion will result in de-registration or in denial of credit for the courses.

### **B. First-Year Evaluation**

In the middle of the student's second semester of graduate work, the director of graduate studies prepares a file for the student's first-year evaluation. It consists of: 1) the student's grades, 2) letters from the professor in all of the student's classes, and, if the student is a teaching assistant, 3) a letter of evaluation from appropriate faculty, and 4) student evaluations. Students may submit any other relevant material such as a Seminar paper or original essay. The graduate studies committee will evaluate the dossier and decide whether the student should be encouraged to continue in the program.

In May of the second year, and each year following, the student will complete a report on progress in the program, including specific progress towards degree (coursework, qualifying exams, dissertation prospectus, and dissertation) and other achievements (funding, research, presentations, and publications). They will then meet with the director of graduate studies or dissertation advisor to discuss their progress in the program. The graduate studies committee will evaluate the report and decide whether the student should be encouraged to continue in the program.

### **C. Satisfactory Progress Toward the Ph.D.**

In addition to requirements above, Ph.D. students must fulfill the following requirements:

1. Maintain at least a 3.5 average, with no course below B-, in each semester of graduate study. There is a one year maximum limit on incompletes. A student may accumulate no more than two incomplete grades in any one semester or he/she will no longer be considered a Student in Good Standing, a prerequisite to continue in the program. As a result, the student will lose his or her T.A. line as well as face likely dismissal from the program;
2. Receive a satisfactory first-year evaluation in the spring semester of the first year of study;
3. Satisfy at least one language requirement in each year of residence until all language requirements are met. All language requirements must be completed at least three months before the comprehensive examination;
4. Complete all core courses in the first two years of full-time study and all 48 credits for the Ph.D. in three years;
5. Take the comprehensive examination no later than one year after completion of coursework;
6. Submit a dissertation proposal in the semester following satisfactory completion of the comprehensive examination.

By rules of the Graduate School, students must satisfy all requirements for the Ph.D. within seven years after completing 24 credits of graduate work in the Stony Brook department in which they are registered. In rare instances, the Graduate School will entertain a petition to extend this time limit, provided it bears the endorsement of the department. The program may require evidence that the student is still properly prepared for completion of the degree. In particular, the student may be required to pass the comprehensive examination again in order to be permitted to continue work.

### **D. Foreign Language Requirements**

Entering graduate students are expected to have a good command of at least one, and preferably two, foreign languages. Candidates for the Ph.D. will eventually demonstrate competence in two or three foreign languages, depending on which of the two options outlined below the student chooses. All language requirements must be met three months before students sit for the comprehensive examination.

Non-native speakers of English may choose English (but not their native language) as one of their foreign languages. All students are of course required to demonstrate full command of written and spoken English, the language of instruction in most comparative literature courses.

Whenever possible, language exams for comparative literature students will be given by core or affiliated faculty in CAT. Each exam will be read by two faculty members.

The options for fulfilling the language requirement are as follows:

**Option A:** The student offers two principal foreign languages. A principal language is defined by the student's demonstrating a high degree of competence in the language, i.e., the ability to understand lectures given in the language and to read it with facility.

Students may demonstrate this degree of competence by taking for credit, and by earning a grade of B or better in at least one graduate or advance undergraduate course in the lettered humanities conducted in the language. This course must have been taken within five years of matriculating to Stony Brook and must have been taken at an accredited University. Final papers may be written in English. In special cases, students may substitute an advanced language examination of three hours in lieu of course work.

The examination consists of three sections: a) oral comprehension, defined as the ability to understand and summarize in English the contents of two graduate level lectures conducted in the foreign language; b) written comprehension, defined as the ability to understand and answer questions on a moderately long (approximately ten pages) theoretical, critical, or scholarly article; c) translation skills, shown through translating into English an advanced-level literary passage. The student is permitted to use a dictionary for part c but not for part b. If the principal foreign language being examined is a Classical language (e.g., Classical Chinese, Sanskrit, Greek), the three-hour test will consist of translations at an appropriately advanced level.

**Option B:** The student offers one principal language and two secondary languages. Demonstration and competence in the principal language will be the same as outlined for Option A.

Competence in the secondary languages can be demonstrated in either of the following ways:

1. By earning a grade of B or better in a graduate translation course taught by one of the foreign language departments at Stony Brook. Credits for a graduate translation course do not count toward the total credits required for the Master's or the Ph.D. degree in Comparative Literature.
2. By passing a departmental examination consisting of two parts, each one hour long, to be taken with a dictionary: a) a short theoretical, critical, or scholarly article that the student is required to summarize and discuss in English; b) a translation of a short literary prose passage of medium difficulty.

#### **E. Comprehensive Examination**

*Comprehensive Examination in Comparative Literature:* Full-time students who are candidates for the Ph.D. will normally take their comprehensive examination no more than one year after completing their course work. Completing the language requirement is a prerequisite for sitting for the examination.

*Committee for the Examination:* Students will discuss the choice of a chair for their examination committees with their advisors and the director of graduate studies. One CAT faculty member will be asked by the student to serve as chair of the committee. Three more faculty members who can examine the student in one or more areas of the examination, as defined below, will be selected by the student in consultation with the director of graduate studies, the advisor and the chair of the committee. At least three of the four members of the examination committee must be members of the CAT graduate faculty (including affiliates). At least three of the members of the committee must be physically present at the examination.

*Reading List:* A reading list for all parts enumerated below will be compiled by the student with the help of the examination committee. The student's examination committee will review and approve the exam lists before the student submits the signature sheet to the Director of Graduate Studies for final pre-examination review of requirements. Students should submit a description of the special area, related to the dissertation, along with the reading list.

*Examination:* The examination is oral, with the duration to be determined by the members of the committee but not shorter than two hours and not longer than three. Questions posed by examiners will be based on the reading list for the examination. The examination may be passed, passed with distinction, failed, or failed in part. In case of failure, the examination may be retaken once, but no later than the end of the semester following the time when it was initially scheduled. In case of partial failure, the second examination will cover only the area(s) on which the candidate's performance was inadequate.

The comparative literature comprehensive examination will consist of four parts:

1. History of Literary Criticism
2. A literary genre
3. A period in literary history
4. A special area of a comparative nature

For parts 2 to 4 of the comprehensive examination, the reading list submitted must include primary texts in at least two languages other than English. Reading lists in these areas are not intended to be exhaustive, but they should provide coverage of the field that adequately prepares the student to teach courses in the areas of the examination. Guidelines for the preparation of the reading lists can be obtained in the Department.

Parts 2 and 3 normally include 35-45 primary texts and 12-15 secondary works.

#### **F. Advancement to Candidacy**

Advancement to candidacy is granted by the Graduate School upon recommendation of the director of graduate studies after a successful comprehensive examination. Again, all other requirements must have been met before the student sits for the comprehensive examination. Advancement must be 1 year prior to defense.

Students who have passed their Ph.D. oral comprehensive exam will be deemed to have passed the equivalent of the master's exam and be granted a M. Phil. degree unless they already have a master's degree in comparative literature from another institution. The student must file appropriate papers with the department.

#### **G. Dissertation**

The dissertation represents the culmination of the student's degree program and should be a serious contribution to scholarship.

Within three months of passing the comprehensive examination, the student must be prepared to schedule the Dissertation Proposal Review.

As soon as possible, after the Comprehensive Examination, the candidate should choose a dissertation director, as well as the two CAT readers of the dissertation. (The reader outside CAT at SB may be chosen nearer to the defense date, at the discretion of the dissertation director.) The director of the dissertation must be a member of the CAT core faculty. Affiliates may co-direct dissertations with a core faculty member. In consultation with the dissertation director and the readers, the candidate drafts a dissertation proposal.

The dissertation prospectus, which must be appropriate to comparative literature, should be between 2000 and 3500 words, not counting footnotes or bibliography, and should include the following:

- Title of the dissertation;
- Description of the topic and its appropriateness for comparative literature in focus and method;
- The rationale behind the choice of topic, and the anticipated contribution of the proposed research to knowledge;
- A discussion of the argument your dissertation will advance;
- Current state of research on the topic and a basic bibliography;
- Method of work, including the general approach (e.g., historical, generic, thematic, structural) and an outline of chapters.

When the director and readers have approved the prospectus, the student and the director will schedule a Dissertation Prospectus Review to be attended by the student, the director, and all other members of the dissertation committee. Faculty and/or graduate students may be invited to the review at the discretion of the student. The review should be no less than one hour in length. The director, the readers, and others in attendance will discuss the proposal with the student in order to insure that the student is ready to proceed in the project. When the director and the readers agree that the student is ready, they will sign off on the prospectus and submit it to the Director of Graduate Studies. The candidate then proceeds to the dissertation.

#### **Guidelines for Dissertation Prospectus Review**

- The student will circulate her or his prospectus to all members of the committee three weeks prior to the review.
- The student will begin the review with a summary of the project in less than five minutes. She or he should clearly communicate the core thesis of the prospective dissertation.
- The members of the committee will then ask questions and make suggestions.
- The student should take notes during the meeting and make sure that she or he understands what the committee is suggesting.
- At the end of the meeting, the student will be asked to leave the room so that the members of the committee can discuss whether or not they are ready to sign off on the prospectus. If the members of the committee are satisfied that the student is prepared to begin writing the dissertation, they will sign off on the document and send it to the DGS.
- In some cases the committee may decide not to sign and request a revised proposal. If the members of the committee are satisfied with the revised proposal, there is no need for a second dissertation prospectus review. In some cases, however, the committee may decide that a second review is necessary.

Although there are no strict regulations on length, dissertations will normally be between 200 and 400 pages, not including bibliography and other supplemental material. The dissertation committee may, in special cases and with justification, allow a student to submit a shorter or longer dissertation.

When the dissertation has been completed in accordance with guidelines published in Guide to the Preparation of Theses and Dissertations, legible copies of the complete dissertation must be given to all committee members at least one month in advance of the scheduled defense.

All dissertation defenses shall take place on campus and require the full attendance of the dissertation examining committee. Any exceptions from this practice will require approval from the Dean of the Graduate School. Campus Audio/Video Services can be employed in the event that either a committee member or the defending student cannot be on the premises due to extenuating circumstances. While the examining committee may wish to hold the committee examination of the defense in private, the public presentation of the defense will be open to the university community and should be advertised campus-wide three weeks prior to the scheduled date. A minimum of three weeks prior to

the dissertation defense, the dissertation abstract, approved by the student's advisor and director of graduate studies, must be submitted to the Graduate School with details of the time and location for the defense. The Graduate School will be responsible for advertising the defense to the university community.

The dissertation examining committee will set up the ground rules for the defense, which usually involves the student giving a short précis of the research problem, the research method, and the results. This is followed by questions from the Committee and, if the committee so desires, from the audience.

#### **H. Teaching Assistantships**

For Ph.D. students awarded teaching assistantships, four years of full support is the department's norm. Awards are renewable annually, provided the student maintains satisfactory academic progress towards the degree and performs teaching duties appropriately (see above, Satisfactory Progress). Students (other than Turner fellows) should not count on assistantship resources beyond the fourth year of study.

During their first year, Ph.D. students will normally be placed as teaching assistants in CAT lecture courses. During their second and third years, students will most commonly teach as instructors in the Writing Program or in the Department of Asian and Asian American Studies, and during their fourth year, as independent instructors of CAT courses. Admitted students who would prefer a Writing Program or AAAS placement during their first year should notify the Department immediately upon admission into the Ph.D. program. While placements will vary according to student and program needs and constraints, every effort will be made to provide each student with the available range of teaching experiences.

Graduate students in Cultural Analysis and Theory have the opportunity to teach a wide variety of courses. Their teaching obligation may be fulfilled in several ways depending on departmental needs: Assisting an instructor in a large lecture course; teaching a small section of a literature course under the supervision of the CAT faculty; participating in the basic language course in a foreign language department or in a composition course in the English department.

T.A. assignments differ, but the amount of work required cannot exceed 20 hours per week. T.A.s will usually: Hold office hours to review course materials, assist in grading, and discuss other course-related issues with undergraduates; attend classes (graduate courses will be scheduled to minimize interference with T.A. assignments) and read all required entries on the syllabus; lead discussion groups; grade exams, homework, and other written material.

The performance of teaching assistants is monitored by evaluation forms given to undergraduate students at the end of each semester, as well as by faculty members who visit certain classes taught by the T.A. and submit a written evaluation. Stipends of teaching assistants may be terminated if (on the basis of these evaluations and other relevant criteria) the graduate studies committee judges that they have been deficient in carrying out their teaching duties. Superior work as a T.A. is highly valued by the CAT faculty and by the Graduate School. In the past, several T.A.'s from CAT have won the President's Award for Excellence in Teaching by a Graduate Student. This and other prizes for which T.A.'s are eligible carry a cash award.

#### **I. Advisor and Mentor**

The Graduate School requires all students to have an advisor. The director of graduate studies serves as advisor to all entering students during their first year and helps them plan their programs. Before the end of the first academic year, full-time students should choose one, or preferably two, official graduate advisors from the CAT graduate faculty. Advisor and student meet regularly to discuss the student's progress and program. Advisors are normally chosen for one year, but students are, of course, free to change advisors and are encouraged to consult with all members of the faculty.

#### **J. Residence Requirement**

The University requires that students receiving a Ph.D. must take at least two consecutive semesters of full-time graduate study. For those entering without prior graduate study or with fewer than 24 graduate credits, this usually means 12 credits per semester; for those entering with more than 24 graduate credits or with advanced standing provided by prior graduate work, this would mean 9 credits per semester.

#### **Requirements for the M.A. Degree (Cultural Studies Track)**

In addition to the minimum requirements of the Graduate School, the following are required:

##### **A. Course Requirements**

The M.A. in Cultural Studies requires 30 credits of graduate work. At least 15 credits must be taken within the department (including no more than three credits of CST 597 or CST 599). The following courses must be taken by all M.A. students.

1. CST 502: Theories of Cultural Studies
2. CST 510: History of Cultural Studies
3. CST 609: Topics in Cultural Theory
4. Two CLT/CST courses numbered 600 and higher

##### **B. First-Year Evaluation**

In the middle of the student's second semester of graduate work, the director of graduate studies or director of cultural studies prepares a file for the student's first-year evaluation. It consists of: 1) the student's grades and (2) letters from the professors in all the student's classes. Students may submit any other additional relevant material they choose. The graduate studies committee will evaluate the dossier and decide whether the student should continue in the program.



Because so many factors influence students' satisfactory progress towards the degree, it is important for students to be aware of and to monitor their own situation. The following define the minimum limits for satisfactory progress for full-time students:

1. Maintain a 3.5 grade point average, with no course below B-, in each semester of graduate study. There is a one-year maximum limit on incompletes. A student may accumulate no more than two incomplete grades in any one semester or she/he will no longer be considered a Student in Good Standing, a prerequisite to continue in the program. As a result, the student will likely face dismissal from the program.
2. Receive a satisfactory first-year evaluation in the spring semester of the first year of study.

### C. Language Requirements

Candidates for the MA are required to demonstrate competence in either one principal foreign language (that is, any language that is of principal importance to the student's course of study) or two secondary languages. English may count as a principal language for non-Native speakers.

To demonstrate competence in the principal foreign language, students must take for credit and earn a grade of B or better in at least one graduate or advanced undergraduate literature course conducted in the language (final papers may be written in English). Or, students may enroll in an independent study. In special cases, students may substitute an advanced language examination of three hours in lieu of course work. The examination consists of three sections: a) oral comprehension, defined as the ability to understand and summarize in English the contents of two graduate level lectures conducted in the foreign language; b) written comprehension, defined as the ability to understand and answer questions on a moderately long (approximately ten pages) theoretical, critical, or scholarly article; c) translation skills, shown through translating into English an advanced-level literary passage. The student is permitted to use a dictionary for part c but not for part b. If the principal foreign language being examined is a Classical language (e.g., Classical Chinese, Sanskrit, Greek), the three-hour test will consist of translations at an appropriately advanced level.

Competence in the two secondary languages can be demonstrated by: 1) earning a grade of B or better in a graduate translation course or 2) passing a translation examination to be taken with a dictionary.

### D. Master's Examination

The student will take a two-hour oral examination in the second year of graduate study or submit a master's thesis. The Master's examination committee consists of three members of the faculty, at least two of whom are members of the CAT core faculty. The student's advisor normally chairs the Committee, and the other two members are chosen by the director of graduate studies in consultation with the student and his/her advisor.

*Reading List for the Examination:* The student, in consultation with the examination committee, prepares a list of works in each of the following three areas: A) History and theory of cultural studies; B) A cultural phenomenon; C) a historical period. Each of the other reading lists will consist of 15-20 primary texts. The student's examination committee will review and approve the exam lists before the student submits the signature sheet to the Director of Graduate Studies for final pre-examination review of requirements. At the two-hour oral exam at least two of the three members of the examination committee must be present.

*Thesis Substitute for Master's Examination:* Instead of taking the M.A. examination students may substitute a thesis for the Master's examination. The thesis must be on a substantive topic in cultural studies requiring original research. The student will form a committee of three faculty, at least two of whom must be from the CAT core faculty, who will supervise the project and give approval. The student's committee and project proposal must be approved by the graduate studies committee prior to embarking on the thesis.

### E. Advisor and Mentor

The Graduate School requires all students to have an advisor. The director of cultural studies serves as advisor to all entering students during their first year and helps them plan their programs. Before the end of the first academic year, full-time students should choose one official graduate advisor from the Cultural Analysis and Theory graduate faculty. Advisor and student meet regularly to discuss the student's progress and program. Advisors are normally chosen for one year, but students are, of course, free to change advisors and are encouraged to consult with all members of the faculty.

Incoming students are also urged to choose a faculty member to serve as a mentor who can meet with the student to discuss a variety of concerns not necessarily involving course work.

### F. Residence Requirement

The University requires that students receiving a M.A. must take at least two consecutive semesters of full-time graduate study, this usually means 12 credits per semester.

## Requirements for the Ph.D. Degree (Cultural Studies Track)

In addition to the minimum requirements of the Graduate School, the following are required:

### A. Course Requirements

1. CST 502: Theories in Cultural Studies
2. CST 510: History of Cultural Studies
3. CST 680: Cultural Studies Research Seminar

## 4. CLT/CST 698: Teaching Practicum

5. *Twelve additional graduate courses, at least three of which must be CLT/CST/WST courses numbered 600 or higher.*

To ensure disciplinary fluency in a more traditional sense, students are strongly recommended to take at least three of these courses in a single discipline (outside the core cultural studies sequence), and to include at least one faculty member from that field on the Ph.D. oral exam and dissertation committees.

A minimum of 48 credits of graduate work to be completed before the comprehensive exam is required for the Ph.D. Students who hold an M.A. in cultural studies can transfer up to *30 credits* at the discretion of the director of graduate studies and director of cultural studies. If students enter the program with an M.A. in some other discipline (e.g., Anthropology, Art, English, Film Studies, History, Media Studies, etc.), the director of graduate studies and director of cultural studies may grant them up to *18 credits*. It will be the prerogative of the graduate studies committee to grant additional credits to such students, up to a maximum of 30 credits.

Please note: Students must take the required courses when they are offered, and cannot replace them by Independent Study courses, except in the most unusual circumstances and by petition to the director of graduate studies before the beginning of the term the course is offered. The petition has to be signed by the person directing the Independent Study and must be approved by the director of graduate studies and director of cultural studies. A student may take no more than one Independent Study in a given semester. A maximum of six credits will count toward the Ph.D.

All students seeking the Ph.D. must take the required courses listed above, unless the graduate studies committee accepts comparable courses taken previously. All Ph.D. students must acquire a minimum of one semester of formal teaching experience (even if they are unsupported or are on a fellowship requiring no teaching duties) and must concurrently take the formal teaching practicum, CST 698.

In their first year students will take the Teaching Practicum CLT 698. The Practicum will include information about Stony Brook undergraduate requirements and the various undergraduate programs administered by CAT, data on Stony Brook undergraduates, analyses of practical pedagogical issues, consideration of the aims of education and the social role of the university, and teaching observations. The Practicum also provides students with the opportunity to develop a syllabus for an undergraduate course. The Practicum meets roughly every two weeks during both semesters of the first year. The Practicum Director serves as an advisor to first year students, prior to their selection of individual faculty advisors in the second semester.

**B. First-Year Evaluation**

Following the student's second semester of graduate work, the director of graduate studies or director of cultural studies will prepare a file for the student's first-year evaluation. It consists of: 1) a qualifying paper, usually the paper produced for a core seminar; 2) the student's grades, 3) letters from the professors in each of the student's classes, and, if the student is a teaching assistant, 4) a letter of evaluation from appropriate faculty, and 5) student evaluations. The graduate studies committee will evaluate the dossier and decide whether the student should be encouraged to continue in the program.

In May of the second year, and each year following, the student will complete a report on progress in the program, including specific progress towards degree (coursework, qualifying exams, dissertation prospectus, and dissertation) and other achievements (funding, research, presentations, and publications). They will then meet with the director of graduate studies or dissertation advisor to discuss their progress in the program. The graduate studies committee will evaluate the report and decide whether the student should be encouraged to continue in the program.

**C. Satisfactory Progress Toward the Ph.D.**

In addition to requirements listed above, Ph.D. students must fulfill the following requirements:

1. Maintain at least a 3.5 average, with no course below B-, in each semester of graduate study. There is a one year maximum limit on incompletes. A student may accumulate no more than two incomplete grades in any one semester or he/she will no longer be considered a Student in Good Standing, a prerequisite to continue in the program. As a result, the student may lose his or her T.A. line and face possible dismissal from the program;
2. Receive a satisfactory first-year evaluation in the spring semester of the first year of study;
3. Satisfy the foreign language requirement at least three months before the comprehensive examination;
4. Complete all core courses in the first two years of full-time study and all 48 credits for the Ph.D. in three years;
5. Take the comprehensive examination no later than one year after completion of coursework;
6. Submit a dissertation proposal in the semester following satisfactory completion of the comprehensive examination.

By rules of the Graduate School, students must satisfy all requirements for the Ph.D. within seven years after completing 24 credits of graduate work in the Stony Brook department in which they are registered. In rare instances, the Graduate School will entertain a petition to extend this time limit, provided it bears the endorsement of the department. The program may require evidence that the student is still properly prepared for completion of the degree. In particular, the student may be required to pass the comprehensive examination again in order to be permitted to continue work.

**D. Foreign Language Requirements**

Ph.D. students may choose to demonstrate competence in either one principal foreign language (that is, any language that is of principal importance to the student's course of study) or two secondary languages. English may count as a principal language for non-Native speakers.

To demonstrate competence in the principal foreign language, students must take for credit and earn a grade of B or better in at least one graduate or advanced undergraduate literature course conducted in the language (final papers may be written in English). Or, students may enroll in an independent study. In special cases, students may substitute an advanced language examination of three hours in lieu of course work. The examination consists of three sections: a) oral comprehension, defined as the ability to understand and summarize in English the contents of two graduate level lectures conducted in the foreign language; b) written comprehension, defined as the ability to understand and answer questions on a moderately long (approximately ten pages) theoretical, critical, or scholarly article; c) translation skills, shown through translating into English an advanced-level literary passage. The student is permitted to use a dictionary for part c but not for part b. If the principal foreign language being examined is a Classical language (e.g., Classical Chinese, Sanskrit, Greek), the three-hour test will consist of translations at an appropriately advanced level.

Competence in the *two secondary languages* can be demonstrated by: 1) earning a grade of B or better in a graduate translation course or 2) passing a translation examination to be taken with a dictionary.

### **E. Comprehensive Examination**

Students who are candidates for the Ph.D. will normally take their comprehensive examination no more than one year after completing their course work. Completing the language requirement is a prerequisite for sitting for the examination.

Committee for the Examination: Students will discuss the choice of a dissertation chair for their examination committee with their advisors and the director of cultural studies. One CAT faculty member will be asked by the student to serve as chair of the committee. Three more faculty members who can examine the student in one or more areas of the examination, as defined below, will be selected by the student in consultation with the director of graduate studies, the advisor, and the Chair of the committee. At least three of the four members of the examination committee must be CAT faculty or affiliates. At least three of the members of the committee must be physically present at the examination.

Reading Lists: A reading list for all parts enumerated below will be compiled by the student with the help of the examination committee. The student's examination committee will review and approve the exam lists before the student submits the signature sheet to the Director of Graduate Studies for final pre-examination review of requirements. Please note: Students should also submit a description of the special area, related to the dissertation, along with the reading list.

Examination: The examination is oral, with the duration to be determined by the members of the committee but not shorter than two hours and not longer than three. Questions posed by examiners will be based on the reading lists for the examination. The examination may be passed, passed with distinction, failed, or failed in part. In case of failure, the examination may be retaken once, but no later than the end of the semester following the time when it was initially scheduled. In case of partial failure, the second examination will cover only the area(s) on which the candidate's performance was inadequate.

The Cultural Studies comprehensive examination consists of four parts: Cultural Theory; An in-depth Study of a Cultural Phenomenon; An historical Period; Area of Specialized Interest.

Each part of the examination should include at least 40 works. Half of the list for Part 1 will be composed of books from the Cultural Theory Reading List and the student's research interests. The Cultural Theory Reading List is available from the CAT office. There is no standard list of required works for parts 2-4, although committee members may insist on including certain texts at their discretion. All parts of the reading lists must include texts in at least two languages other than English (translations are acceptable). Reading lists in these areas are not intended to be exhaustive, but they should provide coverage of the field that adequately prepares the student to teach courses in the areas of the examination. Guidelines for the preparation of the reading lists can be obtained in the Department.

### **F. Advancement to Candidacy**

Advancement to candidacy is granted by the Graduate School upon recommendation of the director of graduate studies after a successful comprehensive examination. Again, all other requirements must have been met before the student sits for the comprehensive examination.

Students who have passed their Ph.D. oral comprehensive exam will be deemed to have passed the equivalent of the master's exam and be granted a M. Phil. degree unless they already have a master's degree in cultural studies from another institution. The student must file appropriate papers with the department.

### **G. Dissertation**

The dissertation represents the culmination of the student's degree program and should be a serious contribution to scholarship.

Within three months of passing the comprehensive examination, the student must be prepared to schedule the Dissertation Prospectus Review.

As soon as possible, after the Comprehensive Examination, the candidate should choose a dissertation director, as well as the two CAT readers of the dissertation. (The reader outside CAT at SB may be chosen nearer to the defense date, at the discretion of the dissertation director.) The director of the dissertation must be a member of the CAT core faculty. Affiliates may co-direct dissertations with a core faculty member. In consultation with the dissertation director and the readers, the candidate drafts a dissertation prospectus.

The dissertation prospectus, which must be appropriate to cultural studies, should be between 2000 and 3500 words, not counting footnotes or bibliography, and should include the following:

- Title of the dissertation;
- Description of the topic and its appropriateness for cultural studies in focus and method;
- The rationale behind the choice of topic, and the anticipated contribution of the proposed research to knowledge;
- A discussion of the argument your dissertation will advance;

- Current state of research on the topic and a basic bibliography;
- Method of work, including the general approach (e.g., historical, generic, thematic, structural) and an outline of chapters.

When the director and readers have approved the prospectus, the student and the director will schedule a Dissertation Prospectus Review to be attended by the student, the director, and all other members of the dissertation committee. Faculty and/or graduate students may be invited to the review at the discretion of the student. The review should be no less than one hour in length. The director, the readers, and others in attendance will discuss the prospectus with the student in order to insure that the student is ready to proceed in the project. When the director and the readers agree that the student is ready, they will sign off on the prospectus and submit it to the Director of Graduate Studies. The candidate then proceeds to the dissertation.

#### Guidelines for Dissertation Prospectus Review

- The student will circulate her or his prospectus to all members of the committee three weeks prior to the review.
- The student will begin the review with a summary of the project in less than five minutes. She or he should clearly communicate the core thesis of the prospective dissertation.
- The members of the committee will then ask questions and make suggestions.
- The student should take notes during the meeting and make sure that she or he understands what the committee is suggesting.
- At the end of the meeting, the student will be asked to leave the room so that the members of the committee can discuss whether or not they are ready to sign off on the prospectus. If the members of the committee are satisfied that the student is prepared to begin writing the dissertation, they will sign off on the document and send it to the DGS.
- In some cases the committee may decide not to sign and request a revised proposal. If the members of the committee are satisfied with the revised proposal, there is no need for a second dissertation prospectus review. In some cases, however, the committee may decide that a second review is necessary.

Although there are no strict regulations on length, dissertations will normally be between 200 and 400 pages, not including bibliography and other supplemental material. The dissertation committee may, in special cases and with justification, allow a student to submit a shorter or longer dissertation.

When the dissertation has been completed in accordance with guidelines published in Guide to the Preparation of Theses and Dissertations, legible copies of the complete dissertation must be given to all committee members at least one month in advance of the scheduled defense.

All dissertation defenses shall take place on campus and require the full attendance of the dissertation examining committee. Any exceptions from this practice will require approval from the Dean of the Graduate School. Campus Audio/Video Services can be employed in the event that either a committee member or the defending student cannot be on the premises due to extenuating circumstances. While the examining committee may wish to hold the committee examination of the defense in private, the public presentation of the defense will be open to the university community and should be advertised campus-wide three weeks prior to the scheduled date. A minimum of three weeks prior to the dissertation defense, the dissertation abstract, approved by the student's advisor and director of graduate studies, must be submitted to the Graduate School with details of the time and location for the defense. The Graduate School will be responsible for advertising the defense to the university community.

The dissertation examining committee will set up the ground rules for the defense, which usually involves the student giving a short précis of the research problem, the research method, and the results. This is followed by questions from the Committee and, if the committee so desires, from the audience.

#### H. Teaching Assistantships

For Ph.D. students awarded teaching assistantships, four years of full support is the department's norm. Awards are renewable annually, provided the student maintains satisfactory academic progress towards the degree and performs teaching duties appropriately (see below, Satisfactory Progress). Students (other than Turner fellows) should not count on assistantship resources beyond the fourth year of study.

During their first year, Ph.D. students will normally be placed as teaching assistants in CAT lecture courses. During their second and third years, students will most commonly teach as instructors in the Writing Program or in the Department of Asian and Asian American Studies, and during their fourth year, as independent instructors of CAT courses. Admitted students who would prefer a Writing Program or AAAS placement during their first year should notify the Department immediately upon admission into the Ph.D. program. While placements will vary according to student and program needs and constraints, every effort will be made to provide each student with the available range of teaching experiences.

Graduate students in Cultural Analysis and Theory have the opportunity to teach a wide variety of courses. Their teaching obligation may be fulfilled in several ways depending on departmental needs: Assisting an instructor in a large lecture course; teaching a small section of a literature course under the supervision of the CAT faculty; participating in the basic language course in a foreign language department or in a composition course in the English department.

T.A. assignments differ, but the amount of work required cannot exceed 20 hours per week. T.A.s will usually: Hold office hours to review course materials, assist in grading, and discuss other course-related issues with undergraduates; attend classes (graduate courses will be scheduled to minimize interference with T.A. assignments) and read all required entries on the syllabus; lead discussion groups; grade exams, homework, and other written material.

The performance of teaching assistants is monitored by evaluation forms given to undergraduate students at the end of each semester, as well as by faculty members who visit certain classes taught by the T.A. and submit a written evaluation. Stipends of teaching assistants may be terminated if (on the basis of these evaluations and other relevant criteria) the graduate studies committee judges that they have been deficient in carrying out their teaching duties. Superior work as a T.A. is highly valued by the CAT faculty and by the Graduate School. In the past, several

T.A.'s from CAT have won the President's Award for Excellence in Teaching by a Graduate Student. This and other prizes for which T.A.'s are eligible carry a cash award.

### **I. Advisor and Mentor**

The Graduate School requires all students to have an advisor. The director of cultural studies serves as advisor to all entering students during their first year and helps them plan their programs. Before the end of the first academic year, full-time students should choose one official graduate advisor from the Cultural Analysis and Theory graduate faculty. Advisor and student meet regularly to discuss the student's progress and program. Advisors are normally chosen for one year, but students are, of course, free to change advisors and are encouraged to consult with all members of the faculty.

Incoming students are also urged to choose a faculty member to serve as a mentor who can meet with the student to discuss a variety of concerns not necessarily involving course work.

### **J. Residence Requirement**

The University requires that students receiving a Ph.D. must take at least two consecutive semesters of full-time graduate study. For those entering without prior graduate study or with fewer than 24 graduate credits, this usually means 12 credits per semester; for those entering with more than 24 graduate credits or with advanced standing provided by prior graduate work, this would mean 9 credits per semester.

## **Requirements for the M.A. Degree (Women's and Gender Studies Track)**

In addition to the minimum requirements of the Graduate School, the following are required:

### **A. Course Requirements**

The minimum course requirement for the M.A. degree is 30 graduate credit hours. An M.A. candidate is expected to take:

1. WST 600 Feminist Interdisciplinary Histories and Methods
2. WST 601 Feminist Theories
3. WST 698 Women's and Gender Studies Teaching Practicum
4. Two additional WST courses numbered 600 or higher

The remaining courses may be distributed among graduate offerings in other appropriate fields. A student must achieve a 3.5 overall grade point average for all graduate courses taken at Stony Brook to receive a degree.

### **B. First-Year Evaluation**

In the middle of the student's second semester of graduate work, the director of graduate studies prepares a file for the student's first-year evaluation. It consists of (1) the student's grades and (2) letters from the professors in all of the student's classes. Students may submit any other relevant material such as a seminar paper or original essay. The graduate studies committee will evaluate the dossier and decide whether the student should be encouraged to continue in the program.

**C. Satisfactory Progress Toward the M.A.** Because so many factors depend on satisfactory progress toward the degree, it is important for students to be aware of and monitor their own progress. The following define the minimum limits for satisfactory progress for full-time students:

1. Maintain a 3.5 average, with no course below B-, in each semester of graduate study, as well as complete all incomplete grades by the first deadline. Students who fail to fulfill these requirements in any semester will be automatically placed on probation during the following semester and will be subject to possible dismissal.
2. Receive an acceptable first-year evaluation in the spring semester of the first year of study.

### **D. Foreign Language Requirements**

Students must show competence in one foreign language. Competence in a foreign language can be demonstrated by (1) earning a grade of B or better in a graduate translation course or (2) passing a language examination to be taken with a dictionary. All students must have passed the language requirements before they are allowed to take the M.A. examination.

### **E. M.A. Examination**

M.A. students will complete a thesis on a substantive topic in Women's and Gender Studies requiring original research. The student will form a committee of three faculty, at least two of whom must be from the Women's and Gender Studies graduate faculty, who will supervise the project and give final approval. The student's examination committee will review and approve the exam lists before the student submits the signature sheet to the Director of Graduate Studies for final pre-examination review of requirements.

### **F. Advisor and Mentor**

The Graduate School requires all students to have an advisor. The director of graduate studies serves as advisor to all entering students during their first year and helps them plan their programs. Before the end of the first academic year, full-time students should choose an official graduate advisor from the women's and gender studies core faculty. Advisor and student meet regularly to discuss the student's progress and program. Students are encouraged to consult with all members of the faculty.

### **G. Residence Requirements**

The University requires that students receiving an M.A. must take at least two consecutive semesters of full-time graduate study, which usually means 12 credits per semester.

## **Requirements for the Ph.D. Degree (Women's and Gender Studies Track)**

In addition to the minimum requirements of the Graduate School, the following are required:

### **A. Course Requirements**

1. WST 600 Feminist Interdisciplinary Histories and Methods
2. WST 601 Feminist Theories
3. WST 698 Practicing Women's and Gender Studies
4. WST 680 Interdisciplinary Research Design

5. Twelve additional graduate courses, at least three of which must be WST courses numbered 600 or higher

A minimum of 48 credits of graduate work is required for the Ph.D. Students who hold an M.A. in Women's and Gender Studies or a related discipline can request that their transcripts be evaluated by the graduate studies committee and may receive a maximum of 30 credits toward their Ph.D.

All students seeking the Ph.D. must take the required courses listed above, unless the graduate program committee accepts comparable courses taken previously. All Ph.D. students must acquire a minimum of one semester of formal teaching experience (even if they are unsupported or are on a fellowship requiring no teaching duties) and must concurrently take the formal teaching practicum (WST 698).

The Women's and Gender Studies Teaching Practicum prepares students to teach an introductory course in Women's and Gender Studies by engaging with recent developments in feminist pedagogy. Students will observe introductory and upper-level classes in WaGS, and write a syllabus for Introduction to Women's and Gender Studies (WST 102 or WST 103), as well as a syllabus rationale and teaching philosophy. At the same time, we will consider broader questions about the university as an institution in the current moment, and the place of Women's and Gender Studies within the contemporary university. Along with a consideration of the changing practices and objects of feminist knowledge production, we will also discuss the changing politics and economics of academia, and the impact of the wider academic milieu on what and how knowledge is produced.

Students must take the required courses when they are offered, and cannot replace them by Independent Study courses, except in the most unusual circumstances and by petition to the director of graduate studies at the beginning of the term the course is offered. The petition has to be signed by the person directing the Independent Study and must be approved by the graduate studies committee.

Students taking any Independent Study or Directed Reading course will do so under the departmental rubrics, WST 599 or WST 690. Under exceptional circumstances, the director of graduate studies may approve Independent Study under another department's designator. A maximum of six credits of Independent Study courses is applicable to the degree requirements for the Ph.D. All such courses must be approved by the director of graduate studies before the end of the add/drop period of the semester during which they are to be taken. All students taking Independent Study or Directed Reading courses must file a detailed description, for which forms are available in the Department office. Failure to have these courses approved in a timely fashion will result in de-registration or in denial of credit for the courses.

### **B. First-Year Evaluation**

In the middle of the student's second semester of graduate work, the director of graduate studies prepares a file for the student's first-year evaluation. It consists of: 1) the student's grades, 2) letters from the professor in all of the student's classes, and, if the student is a teaching assistant, 3) a letter of evaluation from appropriate faculty, and 4) student evaluations. Students may submit any other relevant material such as a seminar paper or original essay. The graduate studies committee will evaluate the dossier and decide whether the student should be encouraged to continue in the program. In May of the second year, and each year following, the student will complete a report on progress in the program, including specific progress towards degree (coursework, qualifying exams, dissertation proposal, and dissertation) and other achievements (funding, research, presentations, and publications). They will then meet with the director of graduate studies or dissertation advisor to discuss their progress in the program. The graduate studies committee will evaluate the report and decide whether the student should be encouraged to continue in the program. C. Satisfactory Progress Toward the Ph.D.

In addition to requirements above, Ph.D. students must fulfill the following requirements:

1. Maintain at least a 3.5 average, with no course below B-, in each semester of graduate study. There is a one-year maximum limit on incompletes. A student may accumulate no more than two incomplete grades in any one semester or he/she will no longer be considered a Student in Good Standing, a prerequisite to continue in the program. As a result, the student will lose his or her T.A. line as well as face likely dismissal from the program;
2. Receive a satisfactory first-year evaluation in the spring semester of the first year of study, and satisfactory progress report each following May;
3. Satisfy the language requirement before the comprehensive examination;
4. Complete all core courses in the first two years of full-time study and all 48 credits for the Ph.D. in three years;
5. Take the comprehensive examination no later than one year after completion of coursework;
6. Submit and defend a dissertation proposal in the semester following satisfactory completion of the comprehensive examination, no later than one year and a half? after completion of coursework.

By rules of the Graduate School, students must satisfy all requirements for the Ph.D. within seven years after completing 24 credits of graduate work in the Stony Brook department in which they are registered. In rare instances, the Graduate School will entertain a petition to extend this time limit, provided it bears the endorsement of the department. The program may require evidence that the student is still properly prepared for completion of the degree. In particular, the student may be required to pass the comprehensive examination again in order to be permitted to continue work.

### **D. Foreign Language Requirements**

Entering graduate students are expected to have a good command of at least one foreign language. All language requirements must be met three months before students sit for the comprehensive examination.

All students are of course required to demonstrate full command of written and spoken English, the language of instruction in most Women's and Gender Studies courses.

Whenever possible, language exams for students will be given by core or affiliated faculty in CAT. Each exam will be read by a faculty member. Competence in a foreign language can be demonstrated in one of the following ways:

1. By earning a grade of B or better in a graduate translation course taught by one of the foreign language departments at Stony Brook. Credits for a graduate translation course do not count toward the total credits required for the Master's or the Ph.D. degree in Women's and Gender Studies.
2. By passing an examination consisting of two parts, each one hour long, to be taken with a dictionary: a) a short theoretical, critical, or scholarly article that the student is required to summarize and discuss in English; b) a translation of a short scholarly article or passage of medium difficulty.
3. By passing an hour-long oral examination. This option is encouraged for students intending to do interviewing or field research for their dissertation.

### **E. Comprehensive Examination**

*Comprehensive Examination in Women's and Gender Studies:* Full-time students who are candidates for the Ph.D. will normally take their comprehensive examination no more than one year after completing their course work. Completing the language requirement is a prerequisite for sitting for the examination.

**Committee for the Examination:** Students will discuss the choice of a chair for their examination committees with their advisors and the director of graduate studies. One WaGS core or graduate faculty member will be asked by the student to serve as chair of the committee. Three more faculty members who can examine the student in one or more areas of the examination, as defined below, will be selected by the student in consultation with the director of graduate studies, the advisor and the chair of the committee. At least three of the four members of the examination committee must be members of the WaGS core or graduate faculty. At least three of the members of the committee must be physically present at the examination. In most cases, this committee will be the same as the committee for the student's dissertation, which will provide continuity between the comprehensive examination and the writing of the dissertation.

**Reading Lists:** A reading list for all parts enumerated below will be compiled by the student with the help of the examination committee. The student's examination committee will review and approve the exam lists before the student submits the signature sheet to the Director of Graduate Studies for final pre-examination review of requirements. The definitive version of the reading list, with a cover page bearing signatures of the committee members and indicating who will chair, must be submitted to the graduate studies committee no later than two weeks prior to a meeting of the graduate studies committee. The list must be approved by all members of the student's committee. Students should submit a description of the special area, related to the dissertation, along with the reading list (see below).

**Examination:** The examination is written, followed by a short oral defense of the student's written exam. Questions posed by examiners will be based on the reading list for the examination. The examination may be passed, passed with distinction, failed, or failed in part. In case of failure, the examination may be retaken once, but no later than the end of the semester following the time when it was initially scheduled. In case of partial failure, the second examination will cover only the area(s) on which the candidate's performance was inadequate.

The Women's and Gender Studies comprehensive examination will consist of three parts.

1. Feminist theories/interdisciplinary methods
2. One of the doctoral program's four areas of specialization (transnational social movements and globalization; the politics of representation and media analysis; critical analysis of sexuality; and gender and health)
3. Special area (related to the student's dissertation project)

#### **F. Advancement to Candidacy**

Advancement to candidacy is granted by the Graduate School upon recommendation of the director of graduate studies after a successful comprehensive examination. Again, all other requirements must have been met before the student sits for the comprehensive examination. Advancement must be 1 year prior to dissertation defense. Students who have passed their Ph.D. comprehensive exam will be deemed to have passed the equivalent of the master's exam and be granted a M. Phil. degree unless they already have a master's degree in Women's and Gender Studies from another institution. The student must file appropriate papers with the department.

#### **G. Dissertation**

The dissertation represents the culmination of the student's degree program and should be a serious contribution to scholarship.

Within three months of passing the comprehensive examination, the student must be prepared to schedule the Dissertation Proposal Review. This must be scheduled at a date no later than one year after completion of coursework.

As soon as possible, after the Comprehensive Examination, the candidate should choose a dissertation director, as well as the two readers of the dissertation, from the WaGS core or graduate faculty. Generally, this will be the same as or based on the comprehensive examination committee. The director of the dissertation must be a member of the WaGS core faculty. Graduate faculty may co-direct dissertations with a core faculty member. In consultation with the dissertation director and the readers, the candidate drafts a dissertation proposal. *Dissertation Proposal:* The dissertation proposal, which must be appropriate to Women's and Gender Studies, should be between 2000 and 5000 words, not counting footnotes or bibliography, and should include the following:

- Title of the dissertation;
- Description of the topic and its appropriateness for Women's and Gender Studies in focus and method;
- The rationale behind the choice of topic, and the anticipated contribution of the proposed research to knowledge;
- A discussion of the argument your dissertation will advance;
- Current state of research on the topic and a basic bibliography;
- Description of research methods.

When the director and readers have approved the proposal, the student and the director will schedule a Dissertation Prospectus Review to be attended by the student, the director, and all other members of the dissertation committee. Faculty and/or graduate students may be invited to the review at the discretion of the student. The review should be no less than one hour in length. The director, the readers, and others in attendance will discuss the proposal with the student in order to insure that the student is ready to proceed in the project. When the director and the readers agree that the student is ready, they will sign off on the proposal and submit it to the Director of Graduate Studies. The candidate then proceeds to the dissertation.

#### **Guidelines for Dissertation Prospectus Review**

- The student will circulate her or his proposal to all members of the committee three weeks prior to the review.
- The student will begin the review with a summary of the project in less than five minutes. She or he should clearly communicate the core thesis of the prospective dissertation.
- The members of the committee will then ask questions and make suggestions.
- The student should take notes during the meeting and make sure that she or he understands what the committee is suggesting.
- At the end of the meeting, the student will be asked to leave the room so that the members of the committee can discuss whether or not they are ready to sign off on the proposal. If the members of the committee are satisfied that the student is prepared to begin writing the dissertation, they will sign off on the document and send it to the DGS.
- In some cases the committee may decide not to sign and request a revised proposal. If the members of the committee are satisfied with the revised proposal, there is no need for a second dissertation prospectus review. In some cases, however, the committee may decide that a second review is necessary.

**Dissertation:** Although there are no strict regulations on length, dissertations will normally be between 200 and 400 pages, not including bibliography and other supplemental material. The dissertation committee may, in special cases and with justification, allow a student to submit a shorter or longer dissertation. The student should discuss with her or his dissertation director and committee members their expectations for their involvement in the research/writing process.

When the dissertation has been completed in accordance with guidelines published in Guide to the Preparation of Theses and Dissertations, legible copies of the complete dissertation must be given to all committee members at least one month in advance of the scheduled defense. All dissertation defenses shall take place on campus and require the full attendance of the dissertation examining committee. Any exceptions from this practice will require approval from the Dean of the Graduate School. Campus Audio/Video Services can be employed in the event that either a committee member or the defending student cannot be on the premises due to extenuating circumstances. While the examining committee may wish to hold the committee examination of the defense in private, the public presentation of the defense will be open to the university community and should be advertised campus-wide three weeks prior to the scheduled date. A minimum of three weeks prior to the dissertation defense, the dissertation abstract, approved by the student's advisor and director of graduate studies, must be submitted to the Graduate School with details of the time and location for the defense. The Graduate School will be responsible for advertising the defense to the university community. The dissertation examining committee will set up the ground rules for the defense, which usually involves the student giving a short précis of the research problem, the research method, and the results. This is followed by questions from the Committee and, if the committee so desires, from the audience.

#### **H. Teaching Assistantships**

For Ph.D. students awarded teaching assistantships, four years of full support is the department's norm. Awards are renewable annually, provided the student maintains satisfactory academic progress towards the degree and performs teaching duties appropriately (see above, Satisfactory Progress). Students (other than Turner fellows) should not count on assistantship resources beyond the fourth year of study.

During their first year, Ph.D. students will normally be placed as teaching assistants in a WaGS lecture courses. After the first year, students' teaching obligation may be fulfilled in several ways depending on departmental needs, including assisting an instructor in a large course or teaching a small section of a 200-level or 300-level women's and gender studies class. While placements will vary according to student and program needs and constraints, every effort will be made to provide each student with the available range of teaching experiences.

T.A. assignments differ, but the amount of work required cannot exceed 20 hours per week. T.A.s will usually: Hold office hours to review course materials, assist in grading, and discuss other course-related issues with undergraduates; attend classes (graduate courses will be scheduled to minimize interference with T.A. assignments) and read all required entries on the syllabus; lead discussion groups; grade exams, homework, and other written material.

The performance of teaching assistants is monitored by evaluation forms given to undergraduate students at the end of each semester, as well as by faculty members who visit certain classes taught by the T.A. and submit a written evaluation. Stipends of teaching assistants may be terminated if (on the basis of these evaluations and other relevant criteria) the graduate studies committee judges that they have been deficient in carrying out their teaching duties. Superior work as a T.A. is highly valued by the CAT faculty and by the Graduate School. In the past, several T.A.'s from CAT have won the President's Award for Excellence in Teaching by a Graduate Student. This and other prizes for which T.A.'s are eligible carry a cash award.

#### **I. Advisor and Mentor**

The Graduate School requires all students to have an advisor. The director of graduate studies serves as advisor to all entering students during their first year and helps them plan their programs. Before the end of the first academic year, full-time students should choose an official graduate advisor from the WaGS core or graduate faculty. Advisor and student meet regularly to discuss the student's progress and program. The advisor will most often end up directing the student's dissertation. Students are encouraged to consult with all members of the faculty. Students will have selected a dissertation committee by the end of their third year.

#### **J. Residence Requirement**

The University requires that students receiving a Ph.D. must take at least two consecutive semesters of full-time graduate study. For those entering without prior graduate study or with fewer than 24 graduate credits, this usually means 12 credits per semester; for those entering with more than 24 graduate credits or with advanced standing provided by prior graduate work, this would mean 9 credits per semester

#### **The Graduate Certificate Program In Cultural Studies**

Students who complete the Cultural Studies Certificate Program will, upon completion of their home department's Ph.D. program, be awarded the Ph.D. in "[home department] and cultural studies." Ph.D. students from all departments at Stony Brook are eligible; M.A./M.F.A. students may also apply and be admitted by the director of cultural studies.

The cultural studies program at Stony Brook is designed for students whose interests cut across traditional modes of study in the Humanities and Social Sciences. Areas of emphasis include popular and mass culture, minority and diasporic cultures, visual culture, media and technology, cultural production, cross-cultural and transnational/global formations, as well as the study of elite, dominant, and national cultures.

The Cultural Studies Certificate program is designed for graduate students whose interests are not fully served by traditional Humanities and Social Science departments but who seek to be employed by such departments as they continue to adapt and evolve in a changing disciplinary and interdisciplinary landscape. The certificate is administered through the Department of Cultural Analysis and Theory (CAT), in conjunction with the Humanities Institute at Stony Brook. CAT's strengths lie primarily in literary and cultural theory, cinema and media studies, visual culture studies, and cross-cultural studies, as reflected in the Department's popular undergraduate major in Cinema and Cultural Studies. A network of Cultural Studies affiliated faculty represent a wide range of areas in disciplines including Africana Studies, Art History and Studio Art, Asian and Asian American Studies, Digital Art, Culture and Technology (cDACT), English, European and Hispanic Languages, History, Music, Philosophy, and Women's Studies. The Certificate Program is open to students enrolled in any of Stony Brook's Ph.D. programs. M.A./M.F.A. students may be admitted on approval of the Director of Cultural Studies, who will advise students in tailoring the program to their specific needs. The Certificate will be awarded upon completion of the 15-credit sequence (two core courses and three electives), which may also be counted toward the Ph.D. in the student's home department.

#### **Course Requirements**

1. CST 510: History of Cultural Studies



## 2. CST 609: Topics in Cultural Theory

## 3. CST 698: Teaching Practicum

*Two-credit CST elective courses are also required.* These will normally be included in a list of electives published in the semester prior to their being offered (available in the CAT Department). Students may request that other relevant courses be approved to count as electives by contacting the director of cultural studies. Please be aware that a maximum of 6 graduate credits earned prior to the student being matriculated into the secondary program can be applied to the secondary program.

For more information, contact:

Department of Cultural Analysis and Theory  
Room 2048  
Stony Brook University  
Stony Brook, NY 11794-5355

### The Graduate Certificate Program In Women's and Gender Studies

The Women's and Gender Studies Program, in the College of Arts and Sciences, offers a course of study that leads to the Graduate Certificate in Women's Studies. The program has affiliated faculty members from more than 20 different programs in the social and behavioral sciences, humanities, and health sciences. The program is designed to allow students working toward a degree in departments such as English, History, Philosophy, Theatre, Music, Cultural Analysis and Theory, Psychology, or Sociology to draw on faculty whose work deals with gender and sexuality issues in a wide range of disciplines. Since Women's and Gender Studies has affiliates in nearly every department in the social sciences and humanities, the certificate program offers graduate students the opportunity for an unusually rich interdisciplinary experience.

The program is particularly strong in feminist theory, with faculty affiliates from the departments of Philosophy, English, Art, History, Cultural Analysis and Theory, and Hispanic Languages and Literature offering courses in this area. Other areas of concentration include Science and Critical Medical Studies, Global Public Health, Queer Theory, American Cultural History, and British, American, and Postcolonial literatures.

The graduate certificate entails three required seminars—feminist theory, feminist histories and methodologies, and the teaching practicum in women's and gender studies—and two electives that can be taken with affiliated faculty in the student's home department or from a list of seminars offered by faculty affiliates in other departments. Recent and future courses offered by our core faculty and affiliates include, for example, "Modernism and Cultural Studies," "Madness and Civilization, 1960-1980," "Globalization and Gender," "Fashion in Theory and Film," and "Race, Gender, and Global Culture," and "Silk, Gold and Spices: Literature and International Trade." Where courses are not available for a particular topic, students may arrange directed readings with an affiliated faculty member.

It is expected that most students can fulfill the requirements for the Graduate Certificate in Women's Studies while working toward the master's, doctoral, or other degree. Students should consult with their home program to determine whether the credits earned in the certificate program can be used toward their degrees. Opportunities for teaching in the CAT program are available for graduate certificate students who have successfully completed the pedagogy seminar. Certificate Students who teach for the program are also eligible for the annual Vivien Hartog Prize awarded to a graduate student who has shown a clear commitment to activism and teaching centered on human rights and social justice.

### Requirements for the Graduate Certificate in Women's Studies

The Graduate Certificate Program in Women's Studies is designed to provide an interdisciplinary course of instruction for students already enrolled in a graduate degree-granting program or to those admitted to the free-standing Graduate Certificate Program. To earn the certificate, students must complete a minimum of 15 graduate credits in courses approved for the Certificate Program. Approved credits earned toward a graduate degree in another program or department may be applied toward the Graduate Certificate in Women's Studies. Students should consult with their home programs to determine whether credits earned for the certificate can be applied to the master's or doctoral degree. Teaching assistantships may be available for advanced students.

#### Core Requirements (9 credits):

WST 600 Histories and Methods of Gender Studies  
WST 601 Feminist Theories  
WST 698 Teaching Practicum in Gender Studies

#### Electives (6 credits):

Only one elective (3 credits) may be a readings course taken with an affiliated faculty member and with approval from the CAT graduate director.

#### For more information, contact

Department of Women's, Gender, and Sexuality Studies  
Room 2048  
SUNY Stony Brook  
Stony Brook, NY 11794-5356  
(631) 632-1967

Faculty of Cultural Analysis & Theory

**Tim August**, *Assistant Professor*, (Ph.D., 2014, University of Minnesota)

**Brooke Belisle**, *Assistant Professor*, (Ph.D., 2012, University of California, Berkeley) Faculty Fellow American Council of Learned Societies; Comparative media studies and visual culture studies; the history and theory of digital media, cinema and photography.

Mary Jo Bona, *Professor* (Ph.D., 1989, University of Wisconsin-Madison) American literature, Italian American literature, multiethnic American literature, women's literature, gender/genre theory, theories of narrativity, theories of ethnicity, migration/diaspora literary histories.

**Ritch Calvin**, *Assistant Professor* (Ph.D., 2000, Stony Brook University) Feminist theory, Latina literature and culture, Latina feminisms, feminist science fiction, reproductive technologies.

**Lisa Diedrich**, *Associate Professor* (Ph.D., 2001, Emory University) Critical medical studies, disability studies, feminist theories, interdisciplinary methods.

Melissa M. Forbis, *Assistant Professor* (Ph.D. University of Texas at Austin) Transnational gender theories and politics, race/ethnicity, indigenous rights, Mexico and Latin America, feminist ethnography.

**Jacob Gaboury**, *Assistant Professor* (Ph.D., 2014, New York University) Digital Media, History of Computing, Queer Studies, Media Theory, Visual Culture, Art and Technology.

**Raiford Guins**, *Associate Professor* (Ph.D., 2000, University of Leeds): History of technology, video game history and preservation, material and object culture, visual culture and design studies, technological governance and media regulation, cultural studies and cultural history.

**Robert Harvey**, *Distinguished Professor* (Ph.D., 1988, University of California, Berkeley): 20th-century and contemporary literature in French and English; critical theory; film, relations between philosophy and literature.

**Victoria Hesford**, *Associate Professor* (Ph.D., 2001, Emory University) Gender, sexuality, queer and feminist theory, U.S. queer and feminist history, popular and mass culture in the postwar era, and critical theory.

**Nancy Hiemstra**, *Assistant Professor* (Ph.D., 2012, Syracuse University) Global migration, migration policy-making, immigration enforcement practices, "homeland security" at the scales of home and community, processes of racialization, constructions of borders and sovereignty, Latin America, feminist epistemology and methodologies.

**Izabela Kalinowska Blackwood** *Associate Professor* (Ph.D., 1995, Yale University): Russian and Polish literature; culture and film.

**E. Ann Kaplan**, *Distinguished Professor* (Ph.D., 1970, Rutgers University): Contemporary theory -- world cinema, media, and gender; trauma, ethnicity, and memory studies; humanities for the environment.

**Liz Montegary**, *Assistant Professor* (Ph.D., 2011, University of California, Davis) Feminist and queer theory; transnational American studies; LGBT/queer activism; travel, tourism, and mobility studies; cultural studies of militarization.

**Patrice Nganang**, *Associate Professor* (Ph.D., 1998, Johan Wolfgang Goethe-University, Frankfurt/Main (Germany): European philosophy; critical theory; African literature; cinema and colonialism; theories of violence; media theory; media theory; creative writing.

**Nikos Panou**, *Assistant Professor and Peter V. Tsantes Endowed Professor in Hellenic Studies* (Ph.D. 2008, Harvard University) Reception studies; Byzantine and Modern Greek literature and culture; Orientalism; Mediterranean studies; history of emotions.

**Gregory Ruf**, *Associate Professor* (Ph.D., 1994, Columbia University): Socio-Cultural Anthropology, Gender & Social Organization, Cultural Ecology & Environmental History, Social Theory, Research Design, Ethnographic Methods & Writing, Political & Legal Anthropology, Economic Development, Historical Anthropology.

**E.K. Tan**, *Associate Professor* (Ph.D., 2007, University of Illinois at Urbana-Champaign): Modern and Contemporary Chinese Literature, Sinophone Literature, Chinese Language Cinema, Film Theory, Diaspora Theory, Globalization Theory, Psychoanalytical Theory, Translation Theory.

#### **Affiliated Faculty**

**Nerissa Balce**, *Associate Professor* (Ph.D., University of California-Berkeley Ethnic Studies): Asian American literature and popular culture, Filipino American studies, Humor studies, Postcolonial theory, U.S. Empire studies.

**Pamela Block**, *Associate Professor* (Ph.D., 1997, Duke University): Researches disability experience on individual, organizational and community levels, focusing on socio-environmental barriers, empowerment/capacity-building, and health promotion.

**Ruth B. Bottigheimer**, *Research Professor* (D.A., 1981, University at Stony Brook): Tale collections, children's literature, fairy tales; socio-cultural analysis of literature.

**Edward S. Casey**, *Distinguished Professor* (Ph.D., 1967, Northwestern University): Phenomenology, philosophical psychology, aesthetics, theory of psychoanalysis. Recent research includes investigations into place and space; landscape painting and maps as modes of representation; ethics and the other; feeling and emotion; philosophy of perception (with special attention to the role of the glance); the nature of edges.

**Daniela Flesler**, *Associate Professor* (Ph.D., 2001, Tulane University): Contemporary Spanish Literature and Cultural Studies, Postcolonial Theory, Spain and North Africa, Immigration, Tourism.

**Michele Friedner**, Assistant Professor (Ph.D., 2011, University of California, Berkeley- University of California, San Francisco): deaf and disability studies, India, development, anthropology, theories of stigma and value.

**Michael Kimmel**, Professor, (Ph.D., 1981, University of California, Berkeley): Comparative and historical development; social movements; gender and sexuality

**Shirley Jennifer Lim**, Associate Professor (Ph.D., 1998, University of California at Los Angeles): U.S. racial minority women's cultural history.

**Sara Lipton**, Associate Professor (Ph.D., 1991, Yale University): Religious identity and experience, Jewish-Christian relations, and art and cultural in the high Middle Ages (11th-14th centuries).

**Iona Man-Cheong**, Associate Professor (Ph.D., 1991, Yale University): Chinese history, culture and society, particularly Qing dynasty; women, gender and sexuality in China.

**Celia Marshik**, Associate Professor (Ph.D. 1999, Northwestern University): 20th Century British Literature; Modernism; Feminist Studies.

**Adrián Perez-Melgosa**, Associate Professor (Ph.D., 1995, University of Rochester): Cinema and the novel in the Americas; cultural studies.

**Adrienne Munich**, Professor, (Ph.D., 1976, City University of New York): Victorian cultural studies, feminist theory, popular culture.

**Zabet Patterson**, Assistant Professor (Ph.D., 2007, University of California, Berkeley): media archaeology, contemporary art and technology, history of digital representation, history of art, critical theory and psychoanalysis.

**Mary C. Rawlinson**, Associate Professor (Ph.D., 1978, Northwestern): Aesthetics, literature, and philosophy; Proust, mystery, and detective fiction; 19th-century Philosophy (esp. Hegel); philosophy of medicine.

**Michael Rubenstein**, Assistant Professor (Ph.D., 2003, Rutgers State University): James Joyce; 20th-Century Irish Literature; 20th-Century British and Anglophone Literature; Postcolonial Literature; Modernism; Psychoanalysis; The Novel; Film; Environmentalism and the Humanities.

**Jeffrey Santa Ana**, Assistant Professor (Ph.D., 2003, University of California, Berkeley): American literature and culture; Asian American literature and film; Filipino diaspora; global migration and transnationalism; gender and sexuality studies; race and ethnicity; emotion studies.

**Andrew V. Uroskie**, Associate Professor (Ph.D. University of California, Berkeley): History criticism and theory of modern and contemporary art; experimental film, video installation, sound and performance; critical theory, aesthetics, psychoanalytic philosophy; histories and theories of modern media

**Kathleen M. Vernon**, Associate Professor (Ph.D., 1982, University of Chicago): Contemporary Spanish and Latin American cinema and cultural studies; gender and popular culture; contemporary Hispanic literature.

**Tracey Walters**, Associate Professor (Ph.D., 1999, Howard University): African American literature; Black British literature and culture.

#### **Emeritus Faculty**

**Krin Gabbard**, Professor (Ph.D., 1979, Indiana University-Bloomington): Film theory and history, jazz, interrelations of literature, art, music, and film, comparative literature methodology, psychoanalytic approaches to the arts; ancient Greek literature, drama, and literary theory.

**Sandy Petrey**, Professor Emeritus (Ph.D., 1966, Yale University): 19th-century fiction, theories of the novel; contemporary criticism.

**Ilona N. Rashkow**, Associate Professor Emerita (Ph.D., 1988, University of Maryland): Hebrew Bible, Judaic studies, Religious studies, feminist literary criticism; psychoanalytic literary theory, women's studies, literary theory, comparative literature.

**Louise O. Vásvari**, Professor Emerita (Ph.D., 1969, Berkeley): Medieval literature, literature and folklore, literature and linguistics, translation theory, Romance philology, semiology, art and literature, sexuality and literature.

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

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**Data and Computational Sciences, Graduate Certificate****Director**

Robert Harrison, IACS L165, 631-632-2347

**Graduate Program Director**

Alan Calder, IACS L164, 631-632-2336

**Graduate Certificate Coordinator**

Lynn Allopenna, IACS L166, 631-632-2345

**Degree Awarded**

Advanced Graduate Certificate in Data and Computational Science

**Website**<https://www.iacs.stonybrook.edu/certificate>**Description**

The Institute for Advanced Computational Science (IACS) at Stony Brook University was established in 2012 with a \$20M private endowment. The institute has a core of thirteen faculty in a variety of computational disciplines (chemistry, materials, atmospheric science, geoscience, social science, applied mathematics, and computer science) and seeks to make sustained advances in the fundamental techniques of computation and in high-impact applications. Together with the Brookhaven National Laboratory Computational Science Initiative, our integrated, multidisciplinary team of faculty, students, and staff overcome the limitations at the very core of how we compute, collectively take on challenges of otherwise overwhelming complexity and scale, and individually and jointly define new frontiers and opportunities for discovery through computation.

IACS offers a 17-credit Advanced Graduate **Certificate in Data and Computational Science (CDCS)**, available to both PhD and MS/MA students.

**Admission Requirements**

PhD and MS/MA matriculated students in the following departments are eligible to participate in the certificate program: Applied Mathematics and Statistics, Materials Science and Chemical Engineering, Computer Science, Sociology, SOMAS, Physics and Astronomy, and Linguistics. Students must have the permission of their advisors and their Graduate Program Directors before enrolling in the certificate program, and they must meet with the IACS Certificate Coordinator to map out a course schedule. Students must complete, with the requisite signatures, and submit to the Graduate School the form entitled *Permission to Enroll in a Secondary Certificate Program*.

**Facilities**

The institute is located in the IACS Building, next to the Laufer Center for Physical and Quantitative Biology. Our space houses the institute's faculty, students/postdocs (circa 45), and technical/administrative staff. The combined resources of the endowment, university and external funding provide for the institute a substantial computational capability (**circa 20TFLOP/s**) including substantial storage (circa 1Pbyte) and state-of-the-art 10GB networking throughout the building (optical fiber within the building to major hubs across campus). The institute provides to its members' office space, office materials and supplies, administrative support, commonly used software packages including select compilers and libraries, technical assistance with computer administration and software installation, and use of the institute's computer clusters.

**Degree Requirements**

- 17 credits, courses can be double counted toward the certificate and the student's major
- Three core courses: (1) JRN 501: Distilling Your Message (2); JRN 503 Improvisation for Scientists (3); AMS 561 Introduction to Computational and Data Science (*Spring - Students are strongly encouraged to take AMS 561 in their first year of study*)
- Students are expected to take at least 3 credits in AMS and 3 credits in CS from the course catalog (cdcse-course-catalog-final.docx).  
 ----- CS students: at least 3 credits in AMS (not crosslisted with CS) and 3 credits in a non-CS crosslisted course in any department  
 ----- AMS students: at least 3 credits in CS (not crosslisted with AMS) and 3 credits in a non-AMS crosslisted course in any department
- Up to 6 credits of courses that are listed in the course catalog from the student's home department can count toward the certificate

CDCS Course Catalog: [cdcse-course-catalog-final.docx](#)

**Faculty**

Alan C. Calder, PhD, Vanderbilt University, Physics and Astronomy

Barbara Chapman, PhD, Queen's University, Applied Mathematics and Statistics/Computer Science

Rezaul Alam Chowdhury, PhD, University of Texas Austin, Computer Science

Marivi Fernandez-Serra, PhD, University of Cambridge, Physics and Astronomy

Robert J. Harrison, PhD, University of Cambridge, Applied Mathematics and Statistics

Jeffrey Heinz, PhD, University of California Los Angeles, Linguistics

Xiangmin Jiao, PhD, University of Illinois at Urbana-Champaign, Applied Mathematics and Statistics

Marat Khairoutdinov, PhD, University of Oklahoma, SOMAS

Predrag Krstic, PhD, City College of CUNY, IACS

Heather Lynch, PhD, Harvard University, Ecology and Evolution

Matthew Reuter, PhD, Northwestern University, Applied Mathematics and Statistics

Jason Trelewicz, PhD, Massachusetts Institute of Technology, Materials Science and Chemical Engineering

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

Spring 2018

**School of Dental Medicine**

For more information about the programs offered by Stony Brook's School of Dental Medicine, visit the [School of Dental Medicine](#) website or the Health Sciences Center Bulletin.

For course and policy information please visit the [School of Dental Medicine](#) web site or the Health Sciences Center Bulletin.

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

Spring 2018

## Disability Studies

**Graduate Program Director**

Pamela Block, Stony Brook University Research & Development Park, Building 17, Suite 120 (631) 444-3197

**Advanced Graduate Certificate Awarded**

Advanced Graduate Certificate in Disability Studies

**Website**

<https://healthtechnology.stonybrookmedicine.edu/programs/ds>

**Application**

<https://healthtechnology.stonybrookmedicine.edu/programs/ds/admissions>

The certificate program in Disability Studies focuses on multiple social and environmental factors that influence the experience of chronic conditions and functional impairments. These factors range from architectural barriers to social discrimination and have a profound influence on access to education, employment, recreation, and participation in other community activities across the life cycle.

The Health and Rehabilitation Sciences Program in cooperation with the Women's Gender and Sexuality Studies Program offers a course of study that leads to the Graduate Certificate in Disability Studies. The program has affiliated faculty members from more than a dozen different programs in the social and behavioral sciences, humanities, and health sciences. The program is designed to allow students working toward a degree in many departments such as Health and Rehabilitation Sciences, Women's Gender and Sexuality Studies, English, History, Philosophy, Linguistics, Theatre, Music, Dance, Cultural Analysis and Theory, Psychology, Public Health, Bioethics, Technology and Society, or Sociology to draw on faculty whose work engages with disability in a wide range of disciplines. Other programs and areas of scholarship include Bioethics, Sustainability Studies, Embodied Cognition, Neurodiversity, Queer Theory, Critical Race Studies, Postcolonial and Area studies within both Northern and Southern regional contexts.

**Admission Requirements of Disability Studies**

Admission to The Graduate Certificate Program in Disability Studies is open to any full-time student enrolled in a Stony Brook graduate degree-granting program, and in certain cases independent scholars and writers, as well as clinicians and other professionals in the health fields. Admission involves filling out two forms:

Permission to Enroll in a Secondary Certificate Program <http://web.archive.org/web/20160613234839/http://www.stonybrook.edu/commcms/cat/graduate/Permission%20to%20Enroll%20in%20a%20Secondary%20Program%20-%20Certificates%20Only.pdf>

and a Disability Studies Certificate Program application form (link not yet live – see attached):

Applicants must show writing and critical analytical abilities sufficient to pursue this course of study. The applications will be reviewed by the director of the concentration and a committee of disability studies program faculty.

**Requirements for the AGC in Disability Studies**

The certificate, which can be completed in two years consists of five courses. Students must take the following two courses (6 credits)

HAX 664 Conceptual Foundations of Disability Studies 1890s to 1990s

HAX 668 Emerging Topics in Disability Studies

Plus one of the following three courses (3 Credits)

HAX 665 Disability, Participation and Justice

HAX 667 Disability, Language, Rhetoric & Narrative

HAX 669 Disability and Health in Local and Global Contexts

Plus two elective courses (6 credits)

Elective courses (6 credits) can be taken, as long as the content is appropriate for the DS Certificate, with affiliated faculty in the student's home department, from a list of seminars offered by faculty affiliates in other departments, or as a readings course taken with an affiliated faculty member. Only one readings course is allowed, and must receive approval from the director of the disability studies certificate program.

**Faculty of Disability Studies**

Mark Aronoff, Linguistics

Michele Ballan, Social Welfare

Pamela Block, Health and Rehabilitation Sciences and Graduate Certificate in Disability Studies

Lisa Diedrich, Women's Gender and Sexuality Studies

Patricia Dunn, English

Christa Erikson, Art

Michele Friedner, Health and Rehabilitation Sciences, Disability Studies Concentration

Manuel London, College of Business

John Lutterbie, Theater Arts, CAS

Liz Montegary, Women's Gender and Sexuality Studies

Stephen Post, Center for Medical Humanities, Compassionate Care and Bioethics

Lori Scarlatos, Technology and Society

Carrie Shandra, Sociology

Amy Sullivan, Dance

Nancy Tomes, History

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

Spring 2018



Ecology and Evolution

**Chairperson**

Robert Thacker, Life Sciences Building 650, (631) 632-8600

**Ph.D. Graduate Program Director**

Stephen Baines, Life Sciences Building 112, (631) 632-1092

**M.A. Graduate Program Director**

Joshua Rest, Life Sciences Building 676, (631) 632-1916

**Graduate Program Coordinator**

Melissa J. Cohen, Life Sciences Building 650, (631) 632-8604

**Degrees Awarded**

M.A. in Biological Sciences: Concentration in Applied Ecology or Concentration in Applied Evolution

Ph.D. in Ecology and Evolution

**Web site**

[www.stonybrook.edu/ecoevo](http://www.stonybrook.edu/ecoevo)

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-gs](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-gs)

Ecology and Evolution Department

The Department of Ecology and Evolution and the Graduate Program in Ecology and Evolution (GPEE) at Stony Brook were the first such units in the United States and have served as models for corresponding units at many other institutions. The Faculty of the GPEE at Stony Brook includes one member of the National Academy of Sciences, several past presidents of national and international societies in ecology, evolution, and systematics, and authors of influential books in these disciplines. Since its inception, the program has emphasized the integration of concepts from ecology and evolutionary biology.

The faculty and the graduate students in GPEE are engaged in research on Long Island and around the world, including Alaska, the continental US, the Caribbean, Mexico, Central and South America, Africa, and Antarctica. They study terrestrial, freshwater, and marine organisms comprising a wide range of taxa, including fish, amphibians, reptiles, primates, birds, mollusks, insects, vascular plants, fungi, and bacteria. Their research incorporates experimental, comparative, theoretical, and statistical approaches and utilize field, laboratory, and literature survey studies. Research in GPEE includes interspecific interactions, geographical variation and phylogeography, population genetics, experimental evolution, evolutionary genomics, molecular evolution, evolutionary developmental biology, phylogenetics, population dynamics, biological invasions, phenotypic plasticity, ecosystem ecology and paleontology. Many faculty members are active in the application of their research to problems in conservation.

Our program has students studying toward both master's and doctoral degrees. Graduates are qualified for positions in academic or research institutions, government agencies, conservation organizations, and environmental consulting companies. Former students have become faculty members in biology, ecology and evolution, agricultural entomology, and marine biology departments at prominent private and public universities as well as selective liberal arts and smaller state colleges. Although GPEE emphasizes basic research, many of its graduates have entered careers that apply ecological and evolutionary principles to problems in such areas as marine toxicology, agricultural entomology, invasive species, natural resource management, conservation, and risk assessment.

An atmosphere of collegiality and intellectual interchange prevails throughout the GPEE and is fostered by discussion groups and an exciting weekly program of invited speakers during the academic year. A detailed description of the program, including degree requirements, and descriptions of the faculty research interests, and application materials are available on the web at [www.stonybrook.edu/ecoevo](http://www.stonybrook.edu/ecoevo). Applicants are strongly encouraged to contact individual faculty members whose interests they share.

**Master of Arts in Biological Sciences (concentrations in Applied Ecology and Applied Evolution)**

The concentration in Applied Ecology provides students with a strong foundation in ecological principles and the quantitative tools necessary for sound assessment of environmental issues. The concentration is intended to address the need for professionals in environmental sciences at federal, state, county, and other levels of government, environmental departments of large industrial companies and smaller environmental consulting firms, and non-governmental conservation and environmental protection organizations. This training is valuable in environmental planning, resource use and regulation, conservation biology, and data analyses for decision makers in government and the private sector.

The Applied Evolution concentration prepares students for work in these sectors and in fields including biotechnology, forensics, agricultural, pharmaceutical, and biomedicine where genomic, phylogenetic, and population genetics-based analytical skills are required. In particular, the program offers the opportunity to explore both the evolutionary and ecological dimensions of problems such as the evolution of antibiotic or pesticide resistance and genetic contributions to population decline via inbreeding.

Both concentrations are useful for further specialized degree programs or careers in education, and are particularly strong in developing quantitative skills, providing enhanced career opportunities. Courses offered by the Department of Ecology and Evolution provide training in ecology, evolution, genomics, conservation biology, mathematical methods, and statistics, with applications in these fields.

**Ph.D. Program in Ecology and Evolution**

First year students take courses in ecology, evolution, and biometry. A general preliminary examination is given at the end of the first year. Students are encouraged to take specialized courses at Stony Brook and other institutions and to become involved in research during the first summer. Advanced courses and seminars are taken in subsequent years. A temporary advisor is assigned upon entering the program. Students appoint a permanent advisor and advisory committee during the second year. After passing an oral examination that concentrates on the areas of their proposed research and submitting a research proposal to the faculty, students undertake original research that is typically independent of their advisor's research.

#### Financial Support and Application Deadline

The application deadline for the PhD Program is December 1 for Fall admission. Applications to the Master's Program is considered rolling. Preference will be given to MA applications received by January 15, but we will continue to review all applications submitted by April 15.

The Department does not offer support for MA students; loans and other financial aid may be available through the University. Stony Brook University has among the lowest tuition and fees of any university in the U.S.

To apply, fill out an online application on the Graduate School website.

Applicants will also need to provide:

1. Official transcripts of undergraduate and (if applicable) graduate course work
2. Official Graduate Record Examination (GRE) scores (Stony Brook's code for score reporting is 2548)
3. Three letters of recommendation
4. A non-refundable application fee of \$100.00. (Please note that applications will not be processed without the \$100.00 fee)
5. Foreign students are required to take the TOEFL test for proficiency in English.

PhD applicants should also have:

1. A bachelor's degree in biology, chemistry, mathematics, or other courses of study that provide an appropriate background for advanced training in ecology and evolution.
2. Formal coursework in genetics, ecology, evolution and the biology of a particular group of organisms is strongly recommended. Prior biological research experience also strongly influences the likelihood of admission.
3. Prior correspondence with GPEE Faculty member(s) to discuss research interests and possibilities is strongly recommended.

All incoming students will need to be accepted by both the Graduate School and the Department of Ecology & Evolution.

For more information on applying, contact the Ecology and Evolution Graduate Program Coordinator.

#### Facilities of the Ecology and Evolution Department

Ample laboratory, greenhouse, and environmental facilities and all of the standard laboratory equipment for molecular, microbiological, and genomic studies are available. The department houses laboratories working with model organisms including *Drosophila* and yeast. Field and marine study areas are at Flax Pond, a University-affiliated laboratory near campus. Some terrestrial studies are performed at the Ashley Schiff Nature Preserve, a 26-acre forested area on campus. The University is a member of the Organization for Tropical Studies, which maintains field stations in Costa Rica. There are other opportunities for field studies both in this country and abroad; faculty members have continuing projects at Friday Harbor Marine Labs in Washington, Cook Inlet in Alaska, Ranomafana National Park in Madagascar, Cajas National Park in Ecuador, the Antarctic Peninsula and through various oceanographic cruises. Collaboration is possible with scientists at Brookhaven National Laboratory, Cold Spring Harbor Laboratory, and the New York Genome Center. Opportunities are also available for projects at field stations maintained by other university centers and colleges of the State University of New York. The School of Marine and Atmospheric Sciences is located on campus. Stony Brook is close enough to New York City and Washington, D.C. for arrangements to be made for consultation and work at museums and other institutions in those cities.

Requirements for the M.A. Degree in Biological Sciences

#### Concentration in Applied Ecology

Required Graduate Courses:

1. BEE 576 - Principles of Applied Ecology and Evolution (4 cr.)
2. BEE 587 - Applied Ecology and Conservation Biology Laboratory (3 cr.)
3. BEE 555 - Mathematical Methods in Population Biology (3 cr.)
4. BEE 574 - Landscape Ecology Laboratory (3 cr.) or Ecology Laboratory (3 cr.)
5. BEE 552 - Biometry (4 cr.)

Electives include:

1. BEE 554 - Population Genetics and Evolution (3 cr.)
2. MAR 522 - Environmental Toxicology and Public Health (3 cr.)
3. MAR 536 - Environmental Law and Regulation (3 cr.)
4. BEE 586 - Introduction to Ecological Modeling (3 cr.)
5. BEE 550 - Principles of Ecology (4 cr.)

### **Concentration in Applied Evolution**

Required Graduate Courses:

1. BEE 576 - Principles of Applied Ecology and Evolution (4 cr.)
2. BEE 554 - Population Genetics and Evolution (3 cr.) or an equivalent approved by the Program Director
3. CSE 549 - Computational Biology (3 cr.) or AMS 533 - Numerical Methods and Algorithms in Computational Biology (3 cr.)
4. Molecular Diversity Laboratory (3 cr.)
5. BEE 552 - Biometry (4 cr.)

Electives include:

1. BEE 555 - Mathematical Methods in Population Biology (3 cr.)
2. BEE 587 - Applied Ecology and Conservation Biology Laboratory (3 cr.)
3. BEE 551 - Principles of Evolution (4 cr.)
4. AMS 536 - Molecular Modeling of Biological Molecules (3 cr.)
5. AMS 589 - Quantitative Genetics (3 cr.)
6. ANT 565 - Human Evolution (4 cr.)
7. ANT 564 - Primate Evolution (4 cr.)
8. HBA 550 - Vertebrate Evolution (4 cr.)
9. HBM 503 - Molecular Genetics (3 cr.)

### **Requirements for the Ph.D. Degree in Ecology and Evolution**

#### **A. Course Requirements**

1. In the first year in residence, students are normally required to take BEE550 Principles of Ecology, BEE551 Principles of Evolution, BEE552 Biometry, and BEE556 Research Areas in Ecology and Evolution.
2. In later semesters, students must take a minimum of three other graduate courses, other than seminars, within this or other programs of this or other universities. Upon the recommendation of a student's dissertation committee and with the approval of the Graduate Program Director, one elective course may be waived.
3. BEE671 and BEE672, Colloquium in Ecology and Evolution must be taken each semester in residence.
4. Four graduate seminar courses are required under normal circumstances.
5. Most students will require advanced training in various ancillary disciplines appropriate to their chosen field of research. Requirements will be determined by the student's advisory committee and may include a foreign language or advanced studies in mathematics, statistics, computer science, molecular biology, taxonomy, or other areas.

#### **B. Entering Student Advising and Evaluation**

Early in the first semester of study, each student meets with his or her advisor and other faculty member(s) as needed to discuss additional courses beyond required first-year courses. At the end of the second semester, a Preliminary Examination is given testing students' knowledge in the fields of ecology and evolution.

#### **C. Oral Examination**

In the second year of study, each student takes an Oral Examination tailored to the student's interests and administered by his or her advisory committee. The student and his or her committee decide in advance on the areas to be covered in this examination. This examination is concurrent with the submission of a Dissertation Research Proposal that is written by the student and must be approved by the advisory committee before advancement to Ph.D. candidacy. As part of his or her dissertation proposal, each student writes a substantial review of the topic of the dissertation.

#### **D. Advancement to Candidacy**

The faculty will recommend a student to the Graduate School for advancement to candidacy upon satisfactory completion of the Oral Examination and any language requirement established for the student, and upon acceptance of the written Dissertation Research Proposal by the faculty.

#### **E. Research and Dissertation**

A dissertation is required for the Ph.D. degree. It must contain the results of original and significant investigation. A student's progress in research is monitored by regular evaluations by the faculty in meetings held twice a year. Continued lack of progress may result in probation or dismissal.

**F. Dissertation Committee**

Students select a temporary advisor during the first semester and a permanent advisor at the beginning of the third semester. The advisory committee, consisting of the permanent advisor and at least two other GPEE faculty members, is nominated by the student in consultation with his or her permanent advisor and must be approved by the Graduate Program Director. Additional members from outside GPEE and/or the University may be appointed to the dissertation committee.

**G. Final Examination**

The dissertation must be approved by the student's advisory committee. A dissertation examining committee (which must include an external examiner) is then approved by the Dean of the Graduate School. A formal public oral dissertation defense is held, at which the student presents his or her findings and is questioned by members of the audience and then by the examining committee in a meeting immediately following the presentation.

**H. Teaching Requirement**

All graduate students completing a doctoral degree will function as teaching assistants during at least one semester of their graduate careers.

**I. Residence Requirement**

At least two consecutive semesters of full-time graduate study are required. The demands of the course of study usually necessitate a longer period of residence.

**J. Time Limit**

The time limit imposed by the Graduate School is observed by GPEE. Students must satisfy all requirements for the Ph.D. degree within seven years after completing 24 credit hours of graduate courses in GPEE.

Faculty of Ecology and Evolution Department

Distinguished Professors

**Dykhuizen, Daniel E.** Emeritus. Ph.D., 1971, University of Chicago: Population genetics and molecular evolution, especially of bacteria.

**Fleagle, John G.**<sup>1</sup> Ph.D., 1976, Harvard University: Primate evolution; comparative anatomy; behavioral ecology.

**Futuyma, Douglas** Ph.D. 1969, University of Michigan: speciation, evolution of ecological interactions among species.

**Levinton, Jeffrey S.** Ph.D., 1971, Yale University: Marine benthic ecology; population genetics of bivalve mollusks; paleoecology.

**Rohlf, F. James** Emeritus. Ph.D., 1962, University of Kansas: Multivariate data analysis techniques applied to problems in taxonomy and ecology; computer modeling; applied ecology.

Professors

**Akcakaya, H. Resit** Ph.D. 1989, Stony Brook University: Applied ecology; conservation biology; population dynamics; landscape ecology.

**Bell, Michael A.** Ph.D., 1976, University of California, Los Angeles: Evolutionary biology; ichthyology; paleobiology; geographic variation.

**Eanes, Walter F.** Ph.D., 1976, University at Stony Brook: Population and biochemical genetics of *Drosophila*; molecular evolution.

**Ginzburg, Lev** Emeritus. Ph.D., 1970, Agrophysical Institute, St. Petersburg, Russia: Theoretical and applied ecology.

**Gurevitch, Jessica** Ph.D., 1982, University of Arizona: Evolutionary ecology of plant populations and communities; plant physiological ecology.

**Koenig, Andreas**<sup>3</sup> Ph.D., 1992, Georg-August University: Primate behavioral ecology, social evolution.

**Lopez, Glenn R.**<sup>2</sup> Ph.D., 1976, University at Stony Brook: Marine and freshwater benthic ecology; animal-microbe-sediment interactions; detritus.

**Padilla, Dianna K.** Ph.D., 1987, University of Alberta, Canada: Phenotypic plasticity, plant-herbivore functional ecology, ecology of invading species.

**Susman, Randall L.**<sup>1</sup> Ph.D., 1976, University of Chicago: Primate ecology.

**Thacker, Robert W.** Chairperson. Ph.D., 1995, University of Michigan: Systematics, phylogenetics and ecology.

**Wright, Patricia**<sup>3</sup> Ph.D., 1985, City University of New York: Primates and tropical conservation. Associate Professors

**Baines, Stephen B.** Ph. D., 1993, Yale University-New Haven; Aquatic ecosystem ecology, biogeochemistry of carbon and trace elements, plankton ecology, stoichiometry.

**Collier, Jackie**<sup>2</sup> Ph.D., 1994, Stanford University: Microbial ecology.

**Davalos, Liliana** Ph.D., 2004, Columbia University; Conservation biology, climate change, phylogeny.

**Graham, Catherine** Ph.D., 2003, University of Missouri – St. Louis: Landscape and behavioral ecology.

**Lynch, Heather** Ph.D., 2006, Harvard University: Development and application of statistics.

**Nehm, Ross** Ph.D., 1998, University of California-Berkeley: Science education, evolution education, cognition.

**Rest, Joshua** Ph.D., 2004, University of Michigan; Genome evolution.

**Rogers, Alistair** Ph.D., 1998, University of Essex: whole planet ecosystems response to global change, modeling, photosynthesis and carbon and nitrogen metabolism interactions.

**True, John** Ph.D., 1995, Duke University: Evolutionary and developmental genetics of color patterning in *Drosophila*. Assistant Professors

**Dheilly, Nolwenn**<sup>2</sup> Ph.D., 2010, Macquarie University, Sydney, Australia: Evolution of host-parasite interactions.

**Henn, Brenna**<sup>7</sup> Ph.D., 2009, Stanford University: Human evolution, population genetics, genomics.

**Hollister, Jesse** Ph.D., 2009, University of California, Irvine: Plant evolutionary genomics and epigenetics.

**Matus, David Q.**<sup>4</sup> Ph.D., 2006, University of Hawaii at Manoa: evolutionary, cell and developmental biological approaches to understanding morphogenesis

**Munch, Stephan**<sup>6</sup> Ph. D., 2002, University at Stony Brook: Evolutionary ecology of growth and life history traits, Evolution in harvested populations, Applied population dynamics modeling, Mathematical modeling and statistics

**Nye, Janet**<sup>2</sup> Ph.D., 2008, University of Maryland: Fish ecology, climate variability, global environmental change.

**Serbin, Shawn P.**<sup>4</sup> Ph.D., 2012, University of Wisconsin, Madison: Forest ecology, plant physiology, ecosystem science, remote sensing

**Smaers, Jeroen B.**<sup>3</sup> Ph.D., 2010, University of Cambridge, UK: Brain evolution, phylogenetic comparative methodology, macroevolutionary morphology.

**Thorne, Lesley**<sup>2</sup> Ph.D., 2010, Duke University: Bio-physical and trophic interactions in marine ecology.

**Veeramah, Krishna R.** Ph.D., 2008, University College London: Primate comparative genomics, genetic basis of epilepsy.

**Volkenborn, Nils**<sup>2</sup> Ph.D., 2005, University of Bremen, Germany: Benthic ecology, sediment biogeochemistry.

- 1) Department of Anatomical Sciences
- 2) School of Marine and Atmospheric Sciences
- 3) Department of Anthropology
- 4) Department of Biochemistry
- 5) Brookhaven National Laboratory
- 6) University of California, Santa Cruz
- 7) University of California, Davis

Number of teaching, graduate, and research assistants, Fall 2017: 29

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

Economics Department

**Chairperson**

Juan Carlos Conesa, Ward Melville Social and Behavioral Sciences Building, N-649, (631) 632-7549

**Ph.D Program Director**

Steven Stern, Ward Melville Social and Behavioral Sciences Building, N-621 (631) 632-1328

**MA Program Director**

Eva Carceles-Poveda, Ward Melville Social and Behavioral Sciences Building S-629 (631) 632-7533

**Graduate Program Coordinator**

Maryann Calvacca, Ward Melville Social and Behavioral Sciences Building S-607, (631) 632-7537

**Degree Awarded**

Ph.D. in Economics

M.A. in Economics

**Web Site**

<http://www.stonybrook.edu/economics/>

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-gs](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-gs)

Economics Department

The graduate program in Economics, in the College of Arts and Sciences, emphasizes rigorous training in economic theory and quantitative methods and their creative applications. Both theoretical and empirical work is heavily based on mathematical modeling. In addition to core courses, students choose elective courses from the variety of fields offered in theoretical and applied economics. It is through these courses that breadth of economic knowledge is gained. Both Ph.D. and M.A. programs share the same courses.

The program of study does not depend on prior knowledge of economics, though that is useful. Because of its emphasis on mathematical modeling, the graduate program is highly suitable for those whose undergraduate degrees are in physics, engineering, and mathematics. Those whose undergraduate degrees are in economics usually have to take a number of mathematics courses at a level not usually required for their undergraduate degree in order to be prepared for a graduate. program.

**Financial Support and application deadlines**

Students in the M.A. program do not receive financial support and are expected to pay tuition. Ph.D. students may receive financial support for four years of study and a tuition waiver for the entire duration of their study subject to satisfactory progress in the program. Most of the time, we can provide at least fifth-year graduate students in good standing. The number of openings for the Ph.D. program is small and acceptance is very competitive. Students who do well in the advanced M.A. program (see M.A. program details) are prime candidates to be accepted into the Ph.D. program upon completion. Since the course requirements for both programs are almost identical they would only need to complete the teaching practicum and the research workshop (see Ph.D. program details) and can start their research immediately.

All admissions are for the academic year starting in September. Applicants to the Ph.D. program seeking financial aid are required to apply by January 15. Applications for the M.A. program are accepted until May 1 for foreign students and August 1 for domestic students.

**Admission requirements of Economics department ( for both Ph.D and M.A. programs )**

All first year courses are mandatory and follow a two semester sequence. Thus the program admits students only for the Fall semester. Minimum requirements to be considered for admission, in addition to the minimum Graduate School requirements, are as follows, although exceeding these requirements increases the probability of admission:

A. A bachelor's degree, with an average of at least B in the undergraduate major subject, which need not be economics. Applicants with majors in mathematics, the physical sciences, or engineering are encouraged.

B. At least one year of introductory differential and integral calculus and at least one semester of linear algebra in courses whose level is that required for physics majors in research universities with proficiency demonstrated by a grade of at least B in the courses. Additional semesters of multivariate calculus are highly recommended. Further mathematics such as real analysis and topology are very helpful.

C. Letters of recommendation from three instructors or academic advisors. The referees should be able to evaluate the mathematical preparation and ability of the applicant.

D. Submission of results of the Graduate Record Examination (GRE) General Test (verbal, quantitative, and analytical parts). Applicants with quantitative scores below the 80th percentile are generally not admitted.

E. Non-native speakers of English only: submission of results of the TOEFL examination, with a minimum score of 550 (paper), 213 (computer) or 90 (iBT). In addition, a score of at least 40 in the SPEAK test which can be taken upon arrival.

Students should be aware that admitted students generally exceed these requirements. However, students who do not meet or exceed all these requirements may apply if they think that their preparation as a whole shows they are capable of succeeding in the graduate program.

Requirements for the M.A. Degree in Economics

**Fall year I**

ECO500 Microeconomics I

ECO510 Macroeconomics I

ECO520 Mathematical Statistics

ECO590 Mathematical foundations of contemporary Economic Theory

**Spring year I**

ECO501 Microeconomics II

ECO511 Macroeconomics II

ECO521 Econometrics

ECO531 Introduction to Computational Methods in Economics

For the **basic program** in the second year students will take at least three more courses.

ECO522 Applied Econometrics (F)

ECO597 master's project

The third course will be one of the electives offered in either the Fall or the Spring semester (please see list below). No courses are offered in the summer.

**Elective courses:**

ECO604 Game Theory I (F)

ECO605 Game Theory II (S)

ECO610 Advanced Macroeconomic Theory I

ECO612 Computational Economics & Dynamic Modeling

ECO613 Computational Macroeconomics

ECO636 Industrial Organization I (F)

ECO637 Industrial Organization II (S)

ECO640 Advanced Labor Economics Theory I (F)

ECO641 Advanced Labor Economics Theory II (S)

ECO642 Demographic Economics I

ECO643 Demographic Economics II

ECO645 Health Economics I

ECO646 Health Economics II (S)

For the **Concentration in Industrial Strategy** students will take the following courses in their second year:

**Fall year II**

ECO522 Applied Econometrics

ECO604 Game Theory I

ECO636 Industrial Organization I

**Spring year II**

ECO605 Game Theory II

ECO637 Industrial Organization II

ECO597 master's project

For the **Concentration in People Markets and Government** students will take the following courses in their second year:

**Fall year II**

ECO522 Applied Econometrics

ECO640 Labor Economics I

ECO642 Demography

**Spring year II**

ECO641 Labor Economics II

ECO645 Health Economics

ECO597 master's project

For the **Concentration in Macroeconomic Policy** students will take the following courses in their second year:

**Fall year II**

ECO522 Applied Econometrics

ECO612 Computational Economics & Dynamic Modeling

ECO613 Computational Macroeconomics

**Spring year II**

ECO610 Advanced Macroeconomic theory I

ECO597 master's project

One elective course of the existing list:

ECO604 Game Theory I (F)

ECO605 Game Theory II (S)

ECO636 Industrial Organization I (F)

ECO637 Industrial Organization II (S)

ECO640 Advanced Labor Economics Theory I (F)

ECO641 Advanced Labor Economics Theory II (S)

ECO642 Demographic Economics I

ECO643 Demographic Economics II

ECO645 Health Economics I

ECO646 Health Economics II (S)

Requirements for the Ph.D. Degree in Economics

The goal of the Ph.D. program is to develop the capability of each student to conduct independent research and analysis. To this end the program has three phases: (1) a general foundation in economic theory and quantitative methods starting from the basics but done in a very mathematical way, (2) specialization in two or more fields of theoretical or applied economics, and (3) independent research culminating in the doctoral dissertation. These are not totally distinct phases but indicate the natural order of progression. Coursework is supplemented by independent study and research seminars. Throughout the program students have advisors to consult in developing a study plan that best meets their needs.

The Ph.D. degree requirements are as follows:

**A. Course Requirements**



A minimum of 15 courses in economics (including core courses) must be completed, with a grade of B or better in each elective course. Included in the elective courses must be at least two in each of two approved pairs of courses forming fields (listed below). However, the Ph.D. committee may approve a waiver of part of the 15-course requirement for students with graduate work elsewhere.

1. Core Courses: The courses that provide the foundation in economic theory (micro and macro) and quantitative analysis (mathematical methods, statistics, and econometrics) are referred to as core courses. Comprehensive examinations are taken in microeconomics, macroeconomics, and econometrics at the end of the first year of study.

2. Elective Courses and Fields of Specialization: In addition to core courses, normally at least six elective courses must be taken, including two pairs of courses, where each pair forms an approved field. It is usual but not necessary that a dissertation topic be chosen from one of these fields of specialization. The two elective fields must be satisfactorily completed by the end of the sixth semester. Each field may be completed on the basis of an average grade of B+ or higher in the courses in that field. Fields currently offered by the department are composed of courses in game theory, industrial organization, applied econometrics, labor economics, health economics, demographic economics, computational methods, and computational macroeconomics.

## **B. Workshops and Seminars**

Each student takes a research workshop in the fifth semester. The purpose of this workshop is to provide a structured introduction to research methodology. In addition, participation in program seminars and research workshops is considered an essential part of a student's progress toward the doctorate. Seminars in economic theory, applied micro, and macroeconomics are presented on a regular basis by faculty, visitors, and graduate students. Workshops oriented toward thesis research are conducted by faculty and students working in related areas.

## **C. Advancement to Candidacy**

Advancement to candidacy for the Ph.D. is achieved by satisfactory completion of most course requirements specified in item A. Advancement to candidacy normally must be achieved by the end of the fourth semester.

## **D. Dissertation**

A dissertation, presenting the results of original and significant research, must be approved. An examination on a dissertation proposal research must be passed by the end of the sixth semester of study. The examination is both written and oral, and its syllabus is to be determined by the student's dissertation committee in consultation with the student. Final approval of the dissertation will be by a committee including the candidate's principal advisor, two other department members, and one member from another department. The results of the dissertation will be presented at a colloquium convened for that purpose.

## **E. Teaching**

The program is committed to achieving a high quality of teaching and encourages as many graduate students as possible to acquire teaching experience during their graduate studies. The department operates a training program to prepare teaching assistants for classroom instruction.

## **F. Time Limit**

The time limit for a doctoral degree is seven years for a student who has a previous graduate degree or 24 credits of graduate study in such a degree program. For all other students, the time limit for a doctoral degree is seven years after completion of 24 graduate level credits at Stony Brook University.

## **G. Dismissal Policy**

A student may be dismissed from the program at the end of any semester in which he or she does not achieve a semester or cumulative B average or fails to meet the pertinent requirements for the Ph.D. as specified.

Faculty of Economics department

Professors

Brusco, Sandro, Ph.D., 1993, Stanford: Mechanism design, corporate finance, political economy.

Conesa, Juan Carlos, Chairperson, Ph.D., 1999, University of Minnesota: Macroeconomics; computational economics.

Dubey, Pradeep, Ph.D., 1975, Cornell University: Game theory; mathematical economics.

Montgomery, Mark, Ph.D., 1982, University of Michigan: Economic demography; development economics; econometrics.

Sanderson, Warren C., Ph.D., 1974, Stanford University: Economic demography; economic history; labor economics.

Stern, Steven, Ph.D., 1985, Yale University: Labor economics; econometrics; economics of aging and disability.

Tauman, Yair, Ph.D., 1978, Hebrew University, Jerusalem: Industrial organization; game theory.

Associate Professors

Anagnostopoulos, Alexis, Ph.D., 2005, London Business School: Macroeconomics; computational economics.

Azzimonti, Marina, Ph.D., 2004, University of Rochester: Macroeconomics, political economy.

Benítez-Silva, Hugo, Ph.D Program Director, Ph.D., 2000, Yale University: Labor economics, computational economics.

Cárceles-Poveda, Eva, Ph.D., 2001, Universitat Pompeu Fabra: Macroeconomics, financial economics, international economics.

Dawes, William, Ph.D., 1972, Purdue University: Econometrics; economic history.

#### Assistant Professors

Centorrino, Samuele, Ph.D., 2013, Toulouse School of Economics: Quantitative Economics and econometrics.

Horowitz, Basak, Ph.D., 2017, Rutgers University: Microeconomic theory, economics of networks and matching theory, industrial organization and game theory.

Liu, Ting, Ph.D., 2008, Boston University: Applied Microeconomic Theory, industrial organization, health economics.

Mihalache, Gabriel, Ph.D., 2016, University of Rochester: International economics; macroeconomics; computational economics.

Quella Isla, Nuria, Ph.D., 1995, New York University: Economic growth and development; environmental economics; international economics.

Wiczer, David, Ph.D., 2013, University of Minnesota: Macroeconomics, Labor economics, occupations and occupational choice.

Zhou, Yiyi, Ph.D., 2012, University of Virginia: Industrial Organization, applied econometrics.

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

The Distributed Teacher and Leader Education Program (D-TALE) is Stony Brook University's home for all programs that lead to New York State Certification for P-12 teaching and administration. For a complete list of programs and pathways to certification, visit the D-TALE website:

<http://www.stonybrook.edu/dtale/>

**Education and Teacher Certification**

The Distributed Teacher and Leader Education Program (D-TALE) is Stony Brook University's home for all programs that lead to New York State Certification for P-12 teaching and administration. For a complete list of programs and pathways to certification, visit the D-TALE website:

<http://www.stonybrook.edu/dtale/>

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

Spring 2018

## Educational Computing

**Program Coordinator**

Al Pisano, Al.Pisano@stonybrook.edu

**Graduate Certificate Awarded**

Advanced Graduate Certificate in Educational Computing

**Website**<http://www.stonybrook.edu/spd/graduate/edcomputing.html>**Application**[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-edl](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-edl)

## Educational Computing Program Description

Educational computing is a diversified area of study which is concerned with the design, implementation and assessment of computer-based technologies to enhance education and training. The advanced graduate certificate program was designed to provide professionals in all fields with the necessary expertise to use technological concepts and devices to improve the performance and management of specific systems. Students in this program focus on one of two professional tracks - education or business and industry. This advanced graduate certificate program is approved by the New York State Education Department (HEGIS 0799).

**TWO TRACKS, MULTIPLE OPPORTUNITIES**

Students in this program focus on one of two professional tracks: education or business & industry. Experts in educational computing can find employment with:

- Schools and colleges that need highly-skilled faculty and administrators
- State departments of education that seek curriculum developers and technology planners
- Government and public service agencies that require trainers for skills development programs
- High-tech manufacturers that hire experts to develop products for the education market
- Publishing companies that need educational software developers for the mass market
- Corporations that hire skilled professionals as instructors and designers of in-house training programs
- Business and organizations, that are expanding their operations to embrace electronic commerce

This certificate is offered in collaboration with the University's Department of Technology and Society, part of the College of Engineering and Applied Sciences. Courses from this program may also be used to fulfill requirements for the Master of Science degree in Technology Systems Management as well as for SPD's Master of Arts in Liberal Studies.

## Gainful Employment Regulation Disclosures

## Educational Computing Admissions

A. Personal statement.

B. A bachelor's degree, with a cumulative 3.0 grade point average.

C. In those cases where the departmental admissions committee deems it desirable, personal interviews with departmental representatives may be necessary.

## Certificate Requirements

This certificate program consists of 6 three-credit courses, selected from the list below. Students select either the School Track or Business/Industry Track. Several of the courses are available online.

**1. Required Courses - 12 credits**

EST 565 Foundations of Technology in Education

EST 567 The Internet, Social Networking and Collaborative Environments

EST 570 Educational Technology Lesson Development

EST 571 Educational Technology Research Methodologies

**2. Professional Tracks - 3 credits**

SCHOOL TRACK (choose one)

EST 563 Computer Literacy for Educators

EST 573 Design of Multimedia Courseware

EST 585 Technology in Learning Systems

OR

**BUSINESS/INDUSTRY TRACK (choose one)**

EMP 509 Management Information Systems

EST 520 Computer Applications and Problem Solving

EST 530 Electronic Commerce

**3. Elective - 3 credits**

EST 528 Teaching with Interactive Whiteboards and Immersive Technologies

EST 529 Supporting Common Core Standards Through Educational Technology

EST 574 Distance Learning and Virtual Environments

EST 576 Geographic Information Systems (GIS) in Research and Education

EST 589 Technology-Enhanced Decision Making

EST 590 Project Seminar in Educational Computing

EST 591 Independent Study in Educational Computing

EST 596/CEY 596 Simulation Models for Environmental & Waste Management

CEI 511 Communication Technology: Impact on Education, Business, and Society

CEN 580 Assessment of Socio-Technological Problems

**Time to Completion**

All certificate requirements must be completed within three (3) years from the semester date of admission as a matriculated student unless the student is also matriculated in a master's degree program. Master's students have five (5) years to complete the certificate requirements.

**Faculty**

The program's faculty is composed of practitioners and researchers who are leaders in the field of educational technology. While they may present at national conferences, most also retain their full-time administrative positions. Their experience informs their instruction, allowing them to connect the theories that they are teaching to real-world situations.

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

## Educational Leadership Programs

**Interim Faculty Director**

Craig Markson, 2321 Computer Science Building (631) 632-7067 [craig.markson@stonybrook.edu](mailto:craig.markson@stonybrook.edu)

Robert Scheidet, 1437 Computer Science Building (631) 632-4584 [robert.scheidet@stonybrook.edu](mailto:robert.scheidet@stonybrook.edu)

**Program Coordinator**

Ken Forman, [Kenneth.forman@stonybrook.edu](mailto:Kenneth.forman@stonybrook.edu)

**Internship Coordinator**

Robert Scheidet, 1437 Computer Science Building (631) 632-4584 [robert.scheidet@stonybrook.edu](mailto:robert.scheidet@stonybrook.edu)

**Post-Master's Advanced Graduate Certificates Awarded**

Educational Leadership (School Building and School District Leadership), School District Business Leadership

**Website**

<http://www.stonybrook.edu/spd/edleadership>

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-edl](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-edl)

## Educational Leadership

Stony Brook University offers two post-master's advanced graduate certificate programs that lead to New York State certification in areas of school district, building and business leadership.

The **Educational Leadership (EDL)** program is a fully online, post-master's advanced graduate certificate program that prepares K-12 educators for advancement to positions at both the school district (SDL) and school building (SBL) levels. Such positions include superintendent of schools, district superintendent, assistant superintendent, principal, assistant principal, department chairperson, or athletic director.

The post-master's certificate in **School District Business Leadership (SDBL)** program prepares professionals from the corporate world, public service agencies, and charitable institutions for access and advancement to positions in a school district central office, such as assistant superintendent for school business positions. Most courses are scheduled online, but two are offered on campus.

Both programs are offered in collaboration with the University's Professional Education Program and articulate with EdD programs from other universities in the region.

Gainful Employment Regulation Disclosures for the EDL program.

Gainful Employment Regulation Disclosures for the SDBL program.

## Educational Leadership Admissions

**Educational Leadership (School District and School Building) Requirements**

A. Personal statement.

B. Master's degree.

C. Two letters of recommendation. One must be from the Superintendent of Schools (or her/his designee) and the other must be from school supervisory personnel or administrators who have a thorough knowledge of whether the applicant has the temperament and disposition to become an effective leader.

D. Permanent/professional teaching, administrative or pupil personnel certification plus three years of full-time teaching, administrative, supervisory, or pupil personnel service experience, excluding civil service.

E. In those cases where the departmental admissions committee deems it desirable, personal interviews with departmental representatives may be necessary.

**School District Business Leadership Requirements**

A. Personal statement.

B. Transcripts indicating that the applicant has taken at least 6 credits of accounting and has earned one of the following master's degrees: MBA, MS in Management, MS in Finance or Accounting or a graduate degree in Human Resource Management.

C. Two letters of recommendation: one from the CEO, COO, or CFO (or his or her designee) and at least two from corporate or other supervisory personnel or administrators who have a thorough knowledge of whether the applicant has the temperament and disposition to become an effective leader.

D. Letter from employer stating that the applicant has had at least three (3) years of full-time administrative, supervisory and business-related experience.

E. In those cases where the departmental admissions committee deems it desirable, personal interviews with departmental representatives may be necessary.

**NOTE:** Effective Spring 2017, a maximum of 12 credits may be transferred to the Educational Leadership and School District Business Leadership programs prior to matriculation.

## Educational Leadership Program Requirements

### EDUCATIONAL LEADERSHIP

This combined SDL/SBL program consists of 36 credits, distributed among the four areas listed below.

#### 1. Foundation Courses—9 credits

EDL 501 – Educational Leadership Theory I

EDL 502 – Educational Leadership Theory II (prerequisite: EDL 501)

EDL 503 – Educational Leadership Practice (prerequisites: EDL 501 and EDL 502)

#### 2. Required Courses—18 credits

EDL 515 – School District Leadership

EDL 528 – School Law

EDL 541 – School Building Leadership

EDL 555 – Supervision of Instruction

EDL 571 – School Business Administration

EDL 572 – School Personnel Management

#### 3. Research Project —3 credits

EDL 595 – Educational Leadership Research Project Seminar

The goal of the Project Seminar is to teach students to understand and conduct graduate-level research that culminates in a final research paper.

*Prerequisite:* Completion of all foundation and required course work.

*Note:* There are no transfer credits or substitutions permitted for EDL 595 Project Seminar.

A grade of "B" or better is required for degree clearance.

#### 4. Internship and Seminar—6 credits

EDL 585 – Internship in School District/School Building Leadership\* (co-requisite: EDL 586)

EDL 586 – Seminar in School District/School Building Leadership\* (co-requisite: EDL 585)

*\*Prerequisite:* Completion of all foundation and required course work. Students may not enroll themselves in EDL 585 and EDL 586. Students who have completed the prerequisite course work should contact the Internship Coordinator, Dr. Robert Scheidet, for enrollment.

*Please Note:* In addition to the full semester and summer portion of the internship, there are field hours embedded in each course through authentic activities. These field hours and EDL 585 are typically completed through the school district in which the student works.

»Educational Internship FAQs

#### Examination and Workshop Requirements

In addition to the course requirements listed above, all students must complete required NYSED workshops and examinations for certification. It is the student's responsibility to monitor the [TEACH website](#) to ensure that they are taking the appropriate examinations. »Details

### SCHOOL DISTRICT BUSINESS LEADERSHIP

This certificate program consists of 36 credits, distributed among the areas listed below. Many of these courses are available in an online format; however, the entire program cannot be completed online. Also, please note that the courses are only available to students who are matriculated in the program.

#### 1. Foundations - 9 credits

EDL 501 Educational Leadership Theory I

EDL 502 Educational Leadership Theory II (prerequisite EDL 501)

EDL 515 School District Leadership

#### 2. Required Courses—18 credits

MBA 514 Collective Bargaining and Arbitration in the Public Sector

EDL School Finance

EDL Managerial Accounting for the School Business Official

EDL School Law  
EDL School Business Administration  
EDL School Personnel Management

**3. Research Project (EDL 595)—3 credits**

Each student is required to conduct an individual research project on a topic of special academic interest or professional relevance. The topic must be approved by and completed under the direction of the faculty member teaching this course.

*Please Note:* There are field hours embedded in each course through authentic activities. Assignments will be given that would require collaboration with administrators in a public school district. This is in addition to the full semester and summer portion of the Internship.

**4. Internship and Seminar—6 credits**

*Prerequisite:* Students must complete a minimum of 27 credits (all foundation and required courses, and an elective) before enrolling in these courses. *Read more about the Internship Experience.*

EDL 565 – School Business Internship  
EDL 566 – School Business Internship Seminar

**Examination and Workshop Requirements**

In addition to the course requirements listed above, all students must complete required NYSED workshops and examinations for certification. It is the student's responsibility to monitor the [TEACH website](#) to ensure that they are taking the appropriate examinations. »**Details**

**Faculty**

Craig Markson, EdD, Dowling College, Interim Director, Educational Leadership Program

Todd L. Pittinsky, Professor, PhD, Harvard University. Research areas: Leadership, positive intergroup relations.

Robert Scheidet, Lecturer, EdD, Nova Southeastern University, Coordinator of Internships, Educational Leadership Program

**Adjunct Faculty**

The Educational Leadership adjunct faculty is composed of researchers and practitioners who are leaders in the field.

*NOTE:* The course descriptions for this program can be found in the corresponding program PDF or at [COURSE SEARCH](#).



Electrical and computer engineering Department

**Chairperson**

Petar Djuric, Light Engineering Building 273 (631) 632-8420

**Graduate Program Director**

Leon Shterengas, Light Engineering Building 143 (631) 632-9376

**Assistant to the Chair**

Susan Nastro, Light Engineering Building 273 (631) 632-8420

**Graduate Program Coordinator**

Angela Scauso, Light Engineering Building 267A (631) 632-8401

**Degrees Awarded**

M.S. in Electrical Engineering; M.S. in Computer Engineering; Ph.D. in Electrical Engineering; Ph.D. in Computer Engineering

**Web Site**

<http://www.stonybrook.edu/commcms/electrical/>

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-gs](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-gs)

Electrical and computer engineering Department

The fields of electrical and computer engineering are in an extraordinary period of growth; new application areas and increased expectations are accelerating due to new technologies and decreased costs. The Electrical and Computer Engineering Department, in the College of Engineering and Applied Sciences, is involved in graduate teaching and research in many of these areas, including communications and signal processing, networking, computer engineering, semiconductor devices and quantum electronics, circuits and VLSI. The department has laboratories devoted to research and advanced teaching in the following areas: computing, engineering design methodology, high-performance computing and networking, parallel and neural processing, machine vision, fiber optic sensors and computer graphics, micro and optoelectronics, VLSI, telorobotics, DNA sequencing, digital signal processing, and communications.

Since Long Island contains one of the highest concentrations of engineering-oriented companies in the country, the department is particularly strongly committed to meeting the needs of local industry. As part of this commitment, most graduate courses are given in the late afternoon or evening, so as to be available to working engineers on Long Island.

The Department of Electrical and Computer Engineering offers graduate programs leading to the M.S. and Ph.D. degrees. Graduate programs are tailored to the needs of each student to provide a strong analytical background helpful to the study of advanced engineering problems. Ample opportunities exist for students to initiate independent study and to become involved in active research programs, both experimental and theoretical.

**Areas of Emphasis in Graduate Study**

Areas of emphasis in current research and instruction are: Communications and Signal Processing, Computer Engineering, Semiconductor Devices and Quantum Electronics, Circuits and VLSI.

Specialties that fall under one or more of the above categories include: VLSI, Image Processing, Computer Vision, Integrated Circuit Fabrication, Novel Electronic and Photonic Devices, Digital Communication, Biomedical Electronics, Computer-Aided Design, Computer Networks, Parallel Processing, Fault-Tolerant Computing, Microprocessors, Robotics, Network Theory, and Optical Signal Processing and Fiber Optic Sensors. Theoretical and experimental programs reflecting these areas are currently underway and students are encouraged to actively participate in these efforts. Outlined below is an overview of the Department's research areas.

**Communications and Signal Processing**

Subject areas of current interest include mobile, wireless and personal communications; high speed data and computer communication networks; communications traffic; data compression; coding and modulation techniques; inter-connection networks and high speed packet switching; digital communication; detection and estimation; statistical signal processing; spectrum estimation; image analysis and processing; computer vision.

**Computer Engineering**

The goal of computer engineering in the ECE department is to provide a balance view of hardware and software issues. The expertise in the program include parallel and/or high performance and/or energy efficient computer architecture, embedded microprocessor system design, fault tolerant computing, design communications and signal processing, parallel and distributed computing, computer networks, cybersecurity, computer vision, artificial neural networks and software engineering.

**Semiconductor Devices, Quantum Electronics**

The program of courses and of research pertinent to solid-state electronics, electromagnetics and optics ranges from a study of the fundamental electronic processes in solids through a description of the mechanism which yield useful devices to a study of the design simulation, and fabrication of semiconductor devices and integrated circuits. Program's scientific interests center on physics and technology of optoelectronic devices and systems. Over the past several years, major efforts were focused on the design and development of the novel semiconductor lasers and detectors. Additionally, the department has a strong experimental effort on the development of coherent optical processors, fiber optic sensors and integrated fiber optics.

**Circuits and VLSI**

The program in the Circuits and VLSI area addresses problems associated to modeling, simulation, design and fabrication of analog, digital, and mixed-signal integrated circuits. Analog and mixed-mode integrated circuit (IC) devices have important applications in many fields including avionics, space technology, and medical technology. The department offers basic and advanced courses covering the following subjects: integrated circuit technology, device modeling, software tools for circuit design and simulation, analog and digital circuit design, VLSI circuits, testing of analog and digital ICs, design automation for analog, digital and mixed-mode circuits, VLSI systems for communications and signal processing.

Admission requirements of Electrical and Computer Engineering Department

For admission to graduate study in the Department of Electrical and Computer Engineering, the minimum requirements are:

- A. A bachelor's degree in electrical engineering from an accredited college or university. Outstanding applicants in other technical or scientific fields will be considered, though special make-up coursework over and above the normal requirements for a graduate degree may be required.
- B. A minimum grade point average of B in all courses in engineering, mathematics, and science.
- C. Official Results of the Graduate Record Examination (GRE) General Test.
- D. Acceptance by both the Department of Electrical and Computer Engineering and the Graduate School.

Facilities of Electrical and Computer Engineering Department

The department operates laboratories for both teaching and research:

**The Computer-Aided Design Laboratory** offers access to large assortment of software tools used to analyze, model, simulate, and better understand various engineering concepts. The lab comprises 40 Dell PC's, that are networked via switched Ethernet to a Dell file server.

**The Computer Vision Laboratory** has a network of PC's, digital imaging hardware, and custom built Computer Vision Systems for experimental research in 3D vision and digital image processing.

**The COSINE Laboratory** supports the research efforts of faculty members and graduate and undergraduate students in the areas of signal processing, communications, and networking. Current and recent research projects involve Bayesian signal processing, inference, Monte Carlo signal processing, signal modeling, machine learning, deep networks, signal processing over networks, graph signal processing, sensor signal processing, positioning and navigation, biomedical signal processing, wireless networks, radio-frequency identification, the Internet of Things, computer networking, data transmission, multiple-access systems, scheduling, network performance evaluation, grid computing, information theory, and image processing.

**The Digital Signal Processing Laboratory** is involved in digital signal processing architectures and hardware and software research. The laboratory has extensive list of relevant software and hardware tools.

**The Fluorescence Detection Laboratory** is involved in the design and development as well as implementation and testing of various instruments for Life Sciences. Research areas include laser induced fluorescence detection, single photon counting techniques, fast data acquisition and transfer, design and development of analog and digital integrated circuits, signal processing, capillary electrophoresis phenomena, DNA sequencing, and microfluidics.

**The Graduate Computing Laboratory** has extensive computational capabilities to support student's research and studies. Industry standard packages such as Cadence tools, Synopsys, Matlab, and many others are available.

**The Hardware Generation and Optimization (HGO) Laboratory** is dedicated to the design and optimization of digital systems, with a focus on field-programmable gate arrays (FPGAs). The lab is equipped with FPGA development systems (furnished in part through donations from Xilinx, Altera, and Intel), with all related tools.

**The High Performance Computing and Networking Research Laboratory** is equipped to conduct research in the broad area of networking and parallel/distributed computing with emphasis on wireless/mobile networks, cloud computing, data center networks, optical networks, high-speed networks, interconnection networks and multicast communication.

**The Integrated Microsystems Laboratory** focuses on advancing the performance of CMOS IC at analog sensor interfaces. We investigate design of miniature, low-power, highly accurate sensing microsystems, that have a significant and pervasive impact on a large number of applications, ranging from new generation of biomedical devices for personal health monitors, hearing aids or implantable neural prostheses to communication devices and radiation detectors.

**The Nanoscale Circuits and Systems (NanoCAS) Laboratory** focuses on developing design methodologies for high performance as well as energy efficient integrated circuits with a variety of applications ranging from future processors to ultra-low power Internet-of-things (IoT) based devices. The NanoCAS Lab is equipped with a high performance processing and storage server, workstations, and all necessary EDA tools for modeling, design, and analysis.

**The Mixed-Domain Embedded System Laboratory** is equipped for research in the broad area of electronic system design and design automation. Current research projects involve design automation for mixed analog-digital systems and embedded systems for multimedia, sensor network applications and emerging technologies.

**The Mobile Computing and Applications Laboratory** conducts research in mobile computing systems, especially those using sensing devices for various applications in location based services, Internet-of-Things, and healthcare. The laboratory has various latest mobile and embedded devices, and access to a cloud computing facility.

**The Mobile Systems Design Laboratory** conducts research in the broad areas of VLSI system designs for signal processing, communication, and heterogeneous mobile sensors. The laboratory is equipped for design and simulation of complex hardware and software systems.

**The Optoelectronics Laboratory** possesses the infrastructure for molecular beam epitaxial semiconductor heterostructure growth, advanced material characterization as well as fabrication (clean room) and sophisticated characterization and modeling of optoelectronics devices. The recent research projects include design and development of the novel infrared lasers, light emitting diodes, photodetectors and modulators. The laboratory is actively working on metamorphic epitaxial growth techniques to develop the new class of narrow and ultra-low bandgap alloys and superlattices for long-wave infrared photodetector and other applications.

**The Ultra-High-Speed Computing Laboratory** conducts research in high performance energy-efficient flux quantum computing and cybersecurity. It is equipped with powerful computing, networking, and storage facilities and advanced CAD tools for superconductor circuit design.

**The Fiber Optic Sensors Laboratory (FOSL)** - Research emphasis is on the development and fabrication of novel fiber optic systems for very diverse applications ranging from aerospace to biomedical. Research work has been supported by NSF, NASA, NIH and various state and industrial partners. Some of the current research projects include development of capillary waveguide based biosensors for detection of pathogens in a marine environment, laser debridement, cavity sensors for flight control surfaces, and photonic power conversion for mobile platforms. The laboratory is equipped with various capabilities for optical and electronic diagnosis. These include a fiber optic fusion splicer, fiber polisher, diamond saw, optical microscope, optical spectral analyzer, single photon-counting systems, a high speed digital autocorrelator and various laser sources. Additionally, the laboratory has the facilities for designing and fabricating printed circuit boards and fabricating optical and electronic sub-systems.

**The Wireless and Networking Systems Laboratory** conducts research in the area of wireless networking and mobile computing. The lab has extensive computing capabilities, a set of crossbow sensors, professional sensor test bed development kit, and other equipment for network and system research.

Requirements for the M.S. Degree in Electrical Engineering

The M.S. degree in the Department of Electrical and Computer Engineering requires the satisfactory completion of a minimum of 30 graduate credits. These requirements may be satisfied by either one of the following options:

#### **I. Non-Thesis Option**

1. At least 30 graduate credits with a cumulative and departmental grade point average of 3.0 or better. Among these 30 credits, up to six credits may be ESE 597, ESE 599, or ESE 698. Only 3 credits of ESE 698 may be used. Any non-ESE course will need prior approval given by the Graduate Program Director before a student can register.
2. Minimum of eight (8) regular courses. Of these eight, at least seven (7) regular courses must be taken in the department; three of the seven must be selected from the following CORE Courses: ESE 502, ESE 503, ESE 511, ESE 520, ESE 528 or ESE 532, ESE 545, ESE 554, and ESE 555.
3. ESE 597, ESE 599, ESE 697, ESE 698 and ESE 699 are not counted as regular courses in (2). Topics course, ESE 670, can be counted only once as a regular course.
4. At least one (maximum three) credit of ESE 597. Graduate Program Director approval is required (see graduate student guide for details). In exceptional circumstances, the Graduate Program Director can approve a replacement of ESE 597 credit by ESE 599, ESE 699 or ESE 698 one.

#### **II. Thesis Option**

1. Students must inform the department in writing at the end of their first semester if they would like to choose the M.S. Thesis Option.
2. At least 30 graduate credits with a cumulative and departmental grade point average of 3.0 or better. Among these 30 credits, at least six credits of ESE 599, with a maximum of 12 credits total being taken from ESE 597, ESE 599, or ESE 698. Only 3 credits of ESE 698 may be used. Any non-ESE course will need prior approval given by the Graduate Program Director before a student can register.
3. Minimum of six (6) regular courses. Of these six, at least five (5) regular courses must be taken in the department. Three of these five regular courses must be selected from the following CORE Courses: ESE 502, ESE 503, ESE 511, ESE 520, ESE 528 or ESE 532, ESE 545, ESE 554, and ESE 555.
4. ESE 597, ESE 599, ESE 697, ESE 698 and ESE 699 are not counted as regular courses in (3). Topics course, ESE 670, can be counted only once as a regular course.
5. At least one (maximum three) credit of ESE 597. Graduate Program Director approval is required (see graduate student guide for details). In exceptional circumstances, the Graduate Program Director can approve a replacement of ESE 597 credit by ESE 599, ESE 699 or ESE 698 one.
6. Students must satisfactorily complete a thesis (see graduate student guide for details).

Requirements for the Ph.D. Degree in Electrical Engineering

**A. Major and minor area requirements**

1. Major area requirement is satisfied by taking minimum of three (3) courses from a selected major area with minimum GPA of 3.5. See Graduate Student Guide for preapproved lists of courses for each area.
2. Minor area requirement is satisfied by taking courses from other areas (different from the selected major area) with minimum GPA of 3.0. Students with BS degree (G3) are required to take two (2) courses from other areas while students with MS degree (G4) are required to take one (1) course.

**B. Course Requirements**

1. A minimum of six (6) regular courses beyond the MS degree or 14 regular courses beyond the BS degree (including courses taken to satisfy major and minor requirements). The choice must have the prior approval of the designated faculty academic advisor. Any non-ESE course will need prior approval given by the Graduate Program Director before a student can register.
2. ESE 697 Practicum in Teaching (3 credits) is required to satisfy the teaching requirement. Students must be G-5 status in order to take this course, i.e. be advanced to candidacy.
3. The courses ESE 597, ESE 598, ESE 599, ESE 698, and ESE 699 are not counted as regular courses.
4. Courses presented under the title ESE 670 Topics in Electrical Sciences that have different subject matters, and are offered as formal lecture courses, are considered different regular courses but may not be counted more than twice.

**C. Advancement to Candidacy**

After successfully completing all major/minor/course requirements (except ESE 697) the student is eligible to be recommended for advancement to candidacy. This status is conferred by the dean of the Graduate School upon recommendation from the chairperson of the department. Departmental policy requires that all G3 classified doctoral students Advance to Candidacy within 2.5 years from his/her academic start at Stony Brook University. All G4 classified doctoral students are required to Advance to Candidacy within 1.5 years from his/her academic start.

**D. Preliminary Examination**

A student must pass the preliminary examination not more than 1.5 year after advancement to candidacy. Both a thesis topic and the thesis background area are emphasized. Students must pass the Preliminary Examination at least ONE year prior to their Defense. See Graduate Student Guide for details.

**E. Dissertation**

The most important requirement for the Ph.D. degree is the completion of a dissertation, which must be an original scholarly investigation. The dissertation must represent a significant contribution to the scientific and engineering literature, and its quality must be compatible with the publication standards of appropriate and reputable scholarly journals.

**F. Approval and Defense of Dissertation**

The dissertation must be orally defended before a dissertation examination committee, and the candidate must obtain approval of the dissertation from this committee. The committee must have a minimum of four members (at least three of whom are faculty members from the department), including the research advisor, at least one person from outside the department, and a committee chair. (Neither the research advisor nor the outside member may serve as the chair). On the basis of the recommendation of this committee, the dean of engineering and applied sciences will recommend acceptance or rejection of the dissertation to the dean of the Graduate School. All requirements for the degree will have been satisfied upon the successful defense of the dissertation.

**G. Residency Requirement**

The student must complete two consecutive semesters of full-time graduate study. Full-time study is 12 credits per semester until 24 graduate credits have been earned. After 24 graduate credits have been earned, the student may take only nine credits per semester for fulltime status.

**H. Time Limit**

All requirements for the Ph.D. degree must be completed within seven (7) years after completing 24 credits of graduate courses in the department.

**Certificates****1. Networking & Wireless Communications Certificate**

Matriculated students only.

Networking and wireless communications are key technologies in today's technological world. Networks such as the Internet as well as telephone, cable and wireless networks serve to interconnect people and computers in a ubiquitous and cost effective way. The area of wireless communications in particular has grown rapidly in recent years and has utilized networking technology to be successful. There is a large industrial base involving networking and wireless communications in terms of equipment and software providers, service providers and end users. Moreover this technology has made the average consumer's life more productive, flexible and enjoyable.

The Stony Brook Certificate Program in Networking and Wireless Communications is designed to give matriculated students validated graduate level instruction in this area of much recent interest. The program can be completed in a reasonable amount of time as it involves only four courses. These are regular Stony Brook graduate level courses taught by Stony Brook faculty. The SUNY approved certificate program can be tailored to the needs of the individual student. Courses used for the certificate program can also be used toward the MS or PhD degree by matriculated students.

To receive the Stony Brook Certificate in Networking and Wireless Communications, a student must complete FOUR required courses as specified below, with at least a B grade in each course.

**At least ONE course from the following:**

- ESE 505: Wireless Communications
- ESE 506: Wireless Networking

**At least ONE course from the following:**

- ESE 532: Theory of Digital Communications
- ESE 546: Networking Algorithms and Analysis
- ESE 548: Local and Wide Area Networks

**In addition to the above, if needed, courses may be selected from:**

- ESE 503: Stochastic Systems
- ESE 504: Performance Evaluation of Communication and Computer Systems
- ESE 522: Fiber Optic Systems
- ESE 528: Communication Systems
- ESE 531: Detection and Estimation Theory
- ESE 535: Information Theory and Reliable Communication
- ESE 536: Switching and Routing in Parallel and Distributed Systems
- ESE 543: Mobile Cloud Computing
- ESE 544: Network Security Engineering
- ESE 547: Digital Signal Processing
- ESE 550: Network Management and Planning
- ESE 552: Interconnection Networks

Students must request the Certificate from Professor Thomas Robertazzi via Email [Thomas.Robertazzi@stonybrook.edu](mailto:Thomas.Robertazzi@stonybrook.edu) once the program is completed.

## **2. Engineering Machine Learning Systems**

Matriculated students only.

The Engineering Machine Learning Systems certificate program educates about the mathematical theory, fundamental algorithms, and optimized engineering of computational learning systems used in real-world, big data applications. Students will also study modern technologies used in devising such data systems, including software tools, architectures, and related hardware structures. Comprehensive, hands-on student projects on designing, implementing, and testing real-world learning systems are part of the certificate program. The certificate program includes a total of four courses: three required courses and one elective course.

To receive the Stony Brook certificate in the Engineering Machine Learning Systems, a student must be currently enrolled in an MS or PhD program in the Electrical and Computer Engineering Department and must complete four courses as specified below, with at least a B grade in each course.

|                                                 |                                                                                                                                  |
|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| <b>Foundations (1 required):</b>                | ESE 503 Stochastic Systems                                                                                                       |
| <b>Fundamental Methods (2 required):</b>        | ESE 588 Pattern Recognition<br>ESE 589 Learning Systems for Engineering Systems                                                  |
| <b>Applications (1 out of three electives):</b> | ESE 568 Computer Vision,<br>ESE 587 Hardware Architectures for Machine Learning,<br>BMI 511/ESE 569 Translational Bioinformatics |

To apply for the Engineering Machine Learning Systems Certificate Program, a student must complete the "Permission to Enroll in a Secondary Certificate Program" form (which requires some signatures) from the Graduate School website, and submit it within the first week of the semester when they start the certificate.

## **3. Engineering the Internet of Things**

Matriculated students only.

The Engineering the Internet-of-Things certificate program provides the fundamental principles, popular technologies and optimized engineering of Internet-of-Things applications and systems. Students gain a broad set of skills and knowledge for IoT development and innovation, including

sensors and interfaces, RF communication, microcontroller and embedded systems, wireless radios, network protocols, cloud services and security techniques. Students learn how to design, implement and evaluate IoT systems and applications through hands-on projects on popular embedded system hardware. The certificate program includes a total of four courses: three required courses and one elective course.

To receive the Stony Brook certificate in the Engineering the Internet-of-Things, a student must be enrolled in an MS or PhD program in the Electrical and Computer Engineering Department and must complete four courses as specified below, with at least a B grade in each course.

**Foundations (1 required):** ESE 566 Hardware Software Co-design for Embedded Systems

**Basic Skills and Knowledge (2 required):** ESE 506 Wireless Networking and Mobile Computing  
ESE 525 Modern Sensors

**Cloud and Security (1 out of two electives):** ESE 543 Mobile Cloud Computing  
ESE 544 Network Security Engineering

To apply for the Engineering the Internet-of-Things Certificate Program, a student must complete the “Permission to Enroll in a Secondary Certificate Program” form (which requires some signatures) from the Graduate School website, and submit it within the first week of the semester when they start the certificate.

Faculty of Electrical and Computer Engineering Department

### Distinguished Professors

Belenky, Gregory, Doctor of Physical and Mathematical Sciences, 1979, Institute of Physics, Baku, USSR: Design, manufacturing, and characterization of optoelectronic and microelectronic semiconductor devices; physics of semiconductors and semiconductor devices.

Djuric, Petar M., Chairperson, Ph.D., 1990, University of Rhode Island: Signal analysis, modeling and processing; wireless communications and sensor networks.

Luryi, Serge, Ph.D., 1978, University of Toronto, Canada: High speed solid-state electronic and photonic devices, physics and technology.

Yang, Yuanyuan, Ph.D., 1992, Johns Hopkins University: Wireless and mobile networks, cloud computing, data center networks, optical networks, high speed networks, parallel and distributed computing systems, multicast communication, high performance computer architecture, and computer algorithms.

### Professors

Doboli, Alex, Ph.D., 2000, University of Cincinnati: VLSI CAD and design, synthesis and simulation of mixed analog-digital systems, hardware/software co-design of embedded systems, and high-level synthesis of digital circuits.

Hong, Sangjin, Ph.D., 1999, University of Michigan: Low-power VLSI design of multimedia wireless communications and digital signal processing systems, including SOC design methodology and optimization.

Parekh, Jayant P., Ph.D., 1971, Polytechnic Institute of Brooklyn: Microwave acoustics; microwave magnetics; microwave electronics; microcomputer applications.

Robertazzi, Thomas G., 1981, Princeton University: Computer networking; grid computing; performance evaluation; parallel processing; e-commerce technology.

Short, Kenneth L., Ph.D., 1973, University at Stony Brook: Digital system design; microprocessors; instrumentation.

Subbarao, Murali, Ph.D., 1986, University of Maryland: Computer vision; image processing; pattern recognition.

### Associate Professors

Bugallo, Monica, Ph.D., 2001, Universidade da Coruna (Spain): Statistical signal processing with the emphasis in the topics of Bayesian analysis, sequential Monte Carlo methods, adaptive filtering, and stochastic optimization.

Dhadwal, Harbans, Ph.D., 1980, University of London, England: Laser light scattering; fiber optics; optical signal processing and instrumentation.

Donetski, Dmitri, Ph.D., 2000, Stony Brook University: Design and technology of optoelectronic devices and systems including photovoltaic and photoconductive detectors, diode lasers and diode laser arrays.

Dorojevets, Mikhail, Ph.D., 1988 Siberian Division of the USSR Academy of Sciences, Novosibirsk: Computer architectures, systems design.

Gorfinkel, Vera, Ph.D., 1980, A.F. Ioffe Physical-Technical Institute, St. Petersburg, Russia: Semiconductor devices, including microwave and optoelectronics, DNA sequencing instrumentation, single photon counting techniques.

Kamoua, Ridha, Undergraduate Program Director, Ph.D., 1992, University of Michigan: Solid-state devices and circuits; microwave devices and integrated circuits.

Salman, Emre, Ph.D. 2009, University of Rochester: Nanoscale integrated circuit design, emerging technologies for future electronic systems, highly heterogeneous integrated systems, digital and mixed-signal circuits.

Shterengas, Leon, Graduate Program Director, Ph.D. 2004, Stony Brook University: High power and high speed light emitters, carrier dynamics in nanostructures, nanofabrication and molecular beam epitaxy of semiconductor nanostructures.

Stanacevic, Milutin, Ph.D., 2005, Johns Hopkins University: Analog and mixed-signal VLSI integrated circuits and systems; adaptive Microsystems; implantable electronics.

Tang, K. Wendy, Ph.D., 1991, University of Rochester: Interconnection networks, parallel computing, and neural networks.

Wang, Xin, Ph.D., 2001, Columbia University: Mobile and ubiquitous computing, wireless communications and networks, grid and distributed computing, advanced applications and services over Internet and wireless networks.

#### **Assistant Professors**

Eisaman, Matthew, Ph.D., 2006 Harvard University: Photovoltaic devices, especially light trapping nanostructures for improved solar cell efficiency, and spatial variations at the nanoscale.

Lin, Shan, Ph.D., 2010, University of Virginia: Cyber physical systems, networked information systems, wireless networks, sensing and control systems.

Milder, Peter, Ph.D. 2010, Carnegie –Mellon University: Digital hardware design, generation, and optimization focusing on signal processing, computer vision, and related domains; design for FPGA.

Westerfeld, David, Ph.D. 2005, Stony Brook University: Design and characterization of high-performance mid-infrared semiconductor light sources (LEDs and lasers).

Ye, Fan, Ph.D., 2004, UCLA: Mobile computing/sensing systems & applications, indoor localization and floor plan reconstruction, internet-of-things and sensor networks.

Zhao, Yue, Ph.D., 2011, UCLA: Smart energy systems, renewable energy integration, electricity market, infrastructure security, sensing and signal processing, optimization theory, information theory, communication networks.

Ji Liu, Ph.D., 2013, Yale University: Distributed control and computation, multi-agent systems, social networks, epidemic networks, and power networks.

Number of Teaching, Graduate, and Research Assistants in Fall 2016: 54

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

English Department

**Chairperson**

Celia Marshik, Humanities Building 2022 (631) 632-7415

**Graduate Program Director**

Patricia Dunn, Humanities Building 2082 (631) 632-7784

**Graduate Coordinator**

Theresa Spadola, Humanities Building 2087 (631) 632-7373

**Degrees Awarded**

M.A. in English; Ph.D. in English

**Web Site**

<http://www.stonybrook.edu/english/>

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-gs](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-gs)

English Department

Through our graduate programs, Stony Brook's English Department participates in learning communities around the world. Professionals with Stony Brook English degrees teach in secondary schools, colleges and universities, present research at scholarly conferences, and write for specialized and general-interest audiences.

Students enrolled in the Master of Arts program pursue a course of study that includes courses in historical periods, literary genres, topics in gender, race and cultural studies, and various writing workshops. The program offers students the opportunity to broaden as well as deepen their knowledge of literature while also developing their own writing skills. This course of study leads to the Master of Arts degree and requires 30 credits, including a master's thesis, for completion. While pursuing the M.A. in English, students may also earn an interdisciplinary graduate certificate in women's studies, cultural studies, or composition studies.

Students enrolled in the Ph.D. program pursue a course of study that is designed, in large part, around individual interests and that moves from a broad-based survey to a more narrowly focused specialization. Eleven courses are required of each student. EGL 600, The Discipline of Literary Studies, must be taken during the first fall semester in which it is offered, as it introduces students to the variety of approaches to literature represented in current criticism. Students select their remaining courses in consultation with faculty advisors; these courses are intended to strengthen the student's literary background and theoretical knowledge, and further define chosen areas of inquiry. To accommodate the latter goal, students may take courses in other departments with approval from the graduate director. While pursuing the Ph.D. in English, students may also earn an interdisciplinary graduate certificate in women's studies, cultural studies, or composition studies.

Corresponding to the pattern of study that underlies the Ph.D. program are the oral examination and the dissertation prospectus meeting. The first, a three-hour general examination taken by the end of the fifth semester, enables each student to concentrate on three literary periods or two literary periods and one issue, genre, or theory relevant to the student's interests. At the prospectus meeting, held by the end of the sixth semester, the student discusses the dissertation topic with faculty advisors and develops a plan for completion of the project.

Ph.D. students receiving financial support teach one course each semester. Teaching assignments are varied and flexible. Teaching assistants teach courses in composition or introductory courses in literature, and assist professors in large lecture courses. During their first semester of teaching writing at Stony Brook, students must enroll in the Teaching Practicum, which provides them with pedagogical theory and teaching supervision. All Ph.D. students on financial support must be registered as full-time students.

**Admission requirements of English department**

Applicants for admission to all graduate programs in English should submit all materials by January 15 for fall semester admission. In all cases, admission is determined by the graduate admissions committee of the department under guidelines established by the Graduate School. Applicants are admitted on the basis of their total records, and there are no predetermined quantitative criteria that by themselves ensure a positive or negative decision. There is midyear admission to the M.A. program but not the Ph.D. program. The deadline for spring M.A. admission is October 15.

About the Graduate Record Examination: All applicants to the Stony Brook University are required to take the general aptitude portion of the Graduate Record Examination (GRE). The English Department does not require applicants to take the subject test.

Our admissions committee will review an applicant's file when all documents have been received. This includes the GRE score. Therefore, it is to the student's advantage to take the exam at the earliest opportunity. We do not admit provisionally. Information about testing dates can be obtained by contacting the Educational Testing Service at [www.gre.org](http://www.gre.org). While we have no set cutoff score for admission, we pay special attention to the score on the verbal and analytical writing sections of the examination.

**Admission to the M.A.T. in English 7-12**

The M.A.T. in English 7-12 is administered by the School of Professional Development. Individuals interested in this program should refer to the School of Professional Development's section in this bulletin.



**Admission to the M.A. Program in English**

The following, in addition to the minimum Graduate School requirements, are required for admission to the M.A. program:

- A. A bachelor's degree from a recognized institution;
- B. An average of at least B in the last two years of undergraduate work;
- C. An official transcript of all undergraduate work;
- D. Letters of recommendation from three instructors;
- E. The applicant's score on the Graduate Record Examination (GRE) General Test, required of all students by the Graduate School;
- F. A writing sample (10 double-spaced pages; page count does not include bibliography);
- G. Acceptance by both the Department of English and the Graduate School.

**Admission to the Ph.D. Program in English**

The following, in addition to the minimum Graduate School requirements, are required for admission to the Ph.D. program:

- A. A bachelor's degree from a recognized institution;
- B. An average of at least B in the last two years of undergraduate work;
- C. An official transcript of all undergraduate work and of any graduate work that may have been done;
- D. Letters of recommendation from three instructors;
- E. The applicant's score on the Graduate Record Examination (GRE) General Test, required by the Graduate School of applicants in all departments;
- F. A writing sample (15-20 double-spaced pages; page count does not include bibliography);
- G. Proficiency in a language other than English, equivalent to two years of college work;
- H. Acceptance by both the Department of English and the Graduate School.

Semi-finalists for admission to the PhD program will be invited to a video-conference interview with a member of the Graduate Admissions Committee.

**Requirements for the M.A. Degree in English**

In addition to the minimum requirements of the Graduate School, the following are required:

**A. Course Requirements**

A master's degree in English requires ten three-credit courses completed with a 3.0 overall grade point average and submission of a master's thesis. Of the ten courses, three, including a required course in the history and structure of the English language (EGL 509 or EGL 510 or approved substitute), must be in linguistics, rhetoric or composition theory (EGL 506 or approved substitute), including problems in the teaching of composition (EGL 592 or approved substitute). Students who demonstrate proficiency in a language other than English are only required to complete two courses in Language and Rhetoric. EGL courses previously taken on the undergraduate level and passed with a grade of B or better may be accepted as fulfilling these requirements but must be replaced with an elective. Students will sign up for three credits of thesis research while writing a master's thesis. The remaining courses must include one course on literature before 1800, and three courses in at least two of the following topic areas (or other courses as approved by the Graduate Program Director):

EGL 584: Topics in Genre Studies

EGL 585: Topics in Cultural Studies

EGL 586: Topics in Gender Studies

EGL 587: Topics in Race, Ethnic or Diaspora Studies

EGL 588: Writing Workshop

Note: Topic courses may be repeated as long as content varies. Courses run through the School of Professional Development are not accepted for English M.A. requirements.

**B. Independent Studies**

Only one course numbered EGL 599, Independent Study, will be permitted to count toward the total courses required for the degree of Master of Arts in English. EGL 599 cannot be elected during the student's first semester of work toward the master's degree. EGL 599 may be elected during the second semester only if the student has a B+ average in the first semester and has no Incompletes at the time of registering for EGL

599. A proposal for an EGL 599 course should be submitted in writing to the faculty member under whose direction the student plans to study. This proposal must be submitted before the end of the semester previous to that in which the student will register for EGL 599. The proposal must be approved in writing by both the directing faculty member and the graduate program committee of the English Department before the student registers for EGL 599.

### **C. Competence in a Second Language**

Students have the option of demonstrating competence in a language other than English in lieu of completing one of the three required courses in Language and Rhetoric. This competence may be demonstrated by having completed the second year of a foreign language at the undergraduate level within the past five years with a grade of B or better; by obtaining a grade of B or better on a 500-level reading/translation course or other graduate course offered in a non-English language or literature; or by examination arranged by the English department. The following languages are automatically accepted for fulfilling this requirement: Greek,

Latin, Hebrew, French, German, Italian, Russian, Spanish, Hindu, and Bengali. Other languages relevant to a student's graduate program may be approved upon petition to the Graduate Program Director.

### **D. Master's Thesis**

Students enroll for EGL 598 while writing a master's thesis of 30-40 pages under the guidance of a thesis advisor (chosen by the student with approval of Graduate Director) and an additional faculty member chosen by the student and the advisor. A final copy of the thesis and written approvals from the advisor and reader must be submitted to the Graduate School by the last day of classes in the semester in which the student graduates. Students must be registered in the semester in which they graduate.

Transfer Credit and Standards of Performance in English at the M.A. Level: The department permits the transfer of six hours of credit in suitable graduate work done elsewhere that resulted in a grade of B or better. The student must, however, make special application after admission. In all coursework done at Stony Brook, an average grade of B is the minimum required, but no more than two grades below B- will be permitted. The time limit for completion of the M.A. degree is three years for full-time students and five years for part-time students. Any student who plans not to enroll in classes for a semester must apply for an official leave of absence; failure to do so will lead to a lapse in enrollment. To re-apply, the student must pay a \$500 readmission fee.

### **Requirements for the Ph.D. Degree**

In addition to the minimum requirements of the Graduate School, the following are required:

#### **A. Course Requirements**

The minimum course requirement for students in the doctoral program is 11 courses, including at least seven 600-level seminars. No course with a grade below B- may be used to satisfy course requirements. In order to continue in the program, students must maintain an average grade of B or better in all coursework, and no more than two grades below B- will be permitted. No transfer credit is accepted at the seminar level.

One of the seven seminars the student must satisfactorily complete is the proseminar, EGL 600, The Discipline of Literary Studies. Students must take this course in their first fall semester in the program, or as soon as it is offered.

While the majority of courses for the Ph.D. requirements must be taken in the English Department, students may, in consultation with their advisors, take courses of an equivalent level in other departments or programs. Requests must be approved in writing by the Graduate Program Director.

It is assumed that students entering the Ph.D. program will have studied Chaucer, Shakespeare, Milton, and a variety of literary periods in their B.A. or M.A. programs. However, students with a variety of backgrounds are welcome into the Ph.D. program; those without the kind of broad-based knowledge outlined above will work out a suitable program of study with their advisors.

Students with teaching assistantships must pass the Teaching Practicum in their first semester of teaching in the Writing Program.

#### **B. Independent Studies**

Only two courses numbered EGL 615, Independent Study, will be permitted to count toward the total courses required for the degree of Doctor of Philosophy in English. EGL 615 cannot be elected during the student's first semester of work toward the doctoral degree. EGL 615 may be elected during the second semester only if the student has a B+ average in the first semester and has no Incompletes at the time of registering for EGL 615. A proposal for an EGL 615 course should be submitted in writing to the faculty member under whose direction the student plans to study. This proposal must be submitted before the end of the semester previous to that in which the student will register for EGL 615. The proposal must be approved in writing by both the directing faculty member and the graduate program committee of the English Department before the student registers for EGL 615.

#### **C. Language Requirements**

Students must demonstrate the ability to translate writings of moderate difficulty in one language other than English appropriate to the area of study and hence the ability to make use of relevant literary and scholarly writings in this language. Students can satisfy this requirement in three ways:

**Option I:** By obtaining a grade of B or higher in a 500-level reading/translation course or other graduate course offered in a foreign language or literature. Language courses offered at other institutions will need the approval of the Graduate Program Director to fulfill this requirement.

**Option II:** By passing a translation exam (from the foreign language into English). Students may use a dictionary for this exam; passages will be set by examiners from other departments or from English. Contact the Graduate Program Director to arrange an exam.

**Option III:** By conducting research in, and translation of, a foreign language in the course of writing a seminar paper submitted in any 600-level course (including EGL 600, the Pro Seminar). Students who select this option must complete the appropriate form before submitting the paper, and their plan must be approved by both the instructor of the seminar and the Graduate Program Director.

The following languages are automatically accepted for fulfilling the language requirement: Greek, Latin, Hebrew, French, German, Italian, Russian, and Spanish. Other languages relevant to a student's graduate program may be approved upon petition to the graduate program director.

Students will not be permitted to take the General Exam without first satisfying the language requirement.

#### **D. Award of MA Degree to PhD Students**

Students who enroll in the Doctoral Program in English who do not already have an M.A. degree are eligible to earn an M.A. in English. To receive an MA, the student must complete:

1. 10 three-credit graduate courses with a 3.0 overall grade point average. At least one of these courses must be on a literary historical period before 1800. Only one may be an independent study (EGL 615).
2. The language requirement for the doctoral program, described below.
3. An MA thesis. Typically, the thesis will be a revision and expansion of a seminar paper, in response to the thesis advisor's feedback. The student will not enroll in EGL 598: Thesis Research. Otherwise, the thesis requirements correspond to those for the MA program, described above.

#### **E. General Examination**

The general examination is a three-part, three-hour oral with three examiners. It must be taken by the end of the fifth semester in the program. The examination committee should be formed no later the fourth semester. The committee is composed of a chairperson selected by the student and two other faculty members appointed by the Graduate Program Director in consultation with the chairperson.

Two parts of the examination must focus on different literary periods of approximately 100 years each, and the third will either address another literary period or engage a problem or area of special interest (e.g., a genre, issues, or a line of theoretical inquiry).

In consultation with their examiners, students will offer reading lists for this examination that outline the area of inquiry for each part of their exam. Because one of the purposes of the exam is to give students the opportunity to make sense of their lists, the period lists may or may not vary from the traditional literary historical divisions of the anthologies. Whereas one student may follow traditional texts for a literary period, another may choose to study noncanonical texts within a traditional chronological range, while another may redefine the range (e.g., 1750-1850 or 1850-1945 instead of the 18th century, 19th century, or 20th century).

In consultation with his or her chairperson, the student may choose to take this exam in two parts. All three committee members must sign all three of the reading lists at least one month prior to the examination. The student must submit to the Graduate Director the signed reading lists along with a memo, stating the names of the members on the committee, one month before the exam.

Taking this examination brings students a step closer to entering a profession in which one writes and publishes scholarship and constructs and teaches courses. To promote this kind of professional development, to facilitate students' focus, and to enhance the conversations that make up the examinations:

1. For the first part, the student will submit to his or her committee, at least two weeks prior to the exam, a 15-30 page paper related to a particular period or problem area. In most cases, this will be a revised seminar paper, and will include a bibliography. The paper is not intended as additional work, but rather as a way for the student to organize an approach to one of the lists. During the exam, the paper will serve as a springboard for discussion of the entire period or area being examined.
2. For the second part, the student will submit to his or her committee, at least two weeks prior to the exam, a syllabus and bibliography of background reading for an advanced undergraduate course in a particular period or problem area. Questions regarding pedagogical and theoretical approach, as well as inquiries into criteria of selection and content, will help to initiate and focus discussion of the entire period or area being examined.
3. For the third part, the student may simply invite questions without using one of the above devices, or may submit another paper or syllabus (or some other piece of writing agreeable to the committee) as a means of generating and directing discussion of the entire list.

Each of the three parts will be judged separately as either pass or fail. Each failed part may be retaken one additional time, no later than a year after the original examination.

It is the responsibility of the examination committee chairperson to inform the Graduate Office in writing of the date, time, and place of the examination two weeks before the examination.

#### **F. Dissertation Prospectus and Dissertation Prospectus Meeting**

The dissertation prospectus meeting is a discussion between the student and a three member faculty committee, including at least two members of the English department, chosen by the student.

To schedule the meeting, the student must submit a form to the Graduate Office three weeks prior to the meeting date. The Graduate Office will then schedule a place for the meeting.

At least three weeks before the meeting, the student must submit to the committee and the Graduate Office a written statement (the prospectus) of 1500-3000 words (i.e., 7-10 double-spaced pages) describing the dissertation project, with a bibliography of 5-10 double-spaced pages including a preliminary list of the primary and secondary texts that will form the foundation of the dissertation.

The focus of the meeting will be the topic that the student has chosen for his or her dissertation along with the proposed plan for advancement to completion of the degree. Thus, the prospectus should embrace the various kinds of texts and the overarching method that the student will engage in order to begin writing the dissertation. The prospectus should not be thought of as a contract; both the prospectus and the meeting work toward the demonstration of a well-wrought initial account of the argument, methods, architecture, scope and scholarly contribution of the project, as it will be realized in the dissertation.

In order for the student to advance to candidacy, the prospectus must be approved by the committee and the student must submit to the chair of the committee a summary of the conversation at the dissertation prospectus meeting, highlighting the committee's suggestions. The chair must approve this summary and forward it to the Graduate Office to be placed in the student's file. If the prospectus is not approved, the student must schedule another dissertation prospectus meeting for a later date.

All the doctoral requirements described above must be completed before a student is allowed to schedule the prospectus meeting.

### **G. Advancement to Candidacy**

After the approval of the prospectus and the summary of the meeting, the student is recommended to the dean of the Graduate School for advancement to candidacy.

### **H. Dissertation**

The dissertation is a scholarly monograph of extended scope, written with the guidance of a committee composed of a Director and three readers. At least two of the committee members must be from the English department, and at least three must be from the University. One, the outside reader, must be from a different department at the University or from a different university.

In order to establish the working arrangement between the student and the committee members, the semester after the Prospectus Meeting the student should have the director and the readers sign a contract supplied by the Graduate Office. On this contract, each Committee Member indicates whether he or she will read and comment on individual chapters or only on the completed dissertation. When the outside reader is identified, he or she should add his or her signature to the document or send an e-mail message indicating the method of response.

At some point during the writing of the dissertation, the dissertation director will call a meeting of the student and all members of the committee with the exception of the outside reader. This meeting can serve to discuss specific chapters, the student's overall progress, and any other issues as necessary. It will serve as a crucial opportunity to provide clear direction and advice. Either the student or the director can call additional such meetings, but one meeting is required by the program.

The Dissertation Committee must recommend acceptance of the dissertation before it can be approved by the Graduate School. Students will present the results of dissertation research at a colloquium (the Defense) convened for that purpose by the Department of English, which will be open to interested faculty and graduate students.

### **I. The Dissertation Defense**

At least eight weeks before the Graduate School's deadline for submitting the completed dissertation, the student will submit to his or her readers what is intended to be the final draft of the dissertation. No more than four weeks after that, if the readers have agreed that the dissertation is ready to be defended, the director will schedule the defense. (This is distinct from the actual acceptance of the dissertation, which can take place only at the defense itself.)

The defense is a formal presentation by the student of the results of the dissertation research at a colloquium convened for that purpose by the Department of English. It will be open to all interested Stony Brook University faculty and graduate students. All members of the Dissertation Committee must be present at the defense; outside readers may participate via videoconference.

### **J. Teaching Program**

Training in teaching is stressed by the department, and every student should expect to teach as part of the doctoral program. Teaching assistants instruct in a variety of courses, introductions to poetry, fiction, drama, and composition, and assist in large lecture courses. An important part of the teaching experience is the Practicum in Teaching, required of all teaching assistants.

### **K. Residency Requirement**

The Graduate School requires at least two consecutive semesters of full-time graduate study beyond the baccalaureate. Students will be considered in full-time residence during any semester in which they (1) are taking at least one 500-level course or 600-level seminar or are, in the opinion of the graduate program committee, properly preparing for the special field oral examination; (2) are holding no position other than that required under the teaching program; or (3) are registered for EGL 699 Dissertation Research or EGL 690, Directed Reading for Doctoral Candidates, for three, six, nine, or 12 credit hours, depending on the number of other courses being taken, and the teaching assignment. The total of all these credits and teaching hours is to be no more than 12 for G3, 9 for G4, and 6 for G5 students.

### **L. Time to Degree**

Students are expected to complete the PhD in six years or less, meeting the benchmarks stipulated in the PhD Handbook, including:

- By the end of second year
  - Required course work must be completed with a 3.50 GPA or better
  - Language requirement must be fulfilled

- Three lists for General Exam must be submitted
- By end of third year
  - General Exam completed (Fall)
  - Prospectus Meeting completed (Spring)
- By end of sixth year
  - Dissertation defended

### **M. Advising and Review of Student's Progress**

Each incoming student will meet with an assigned advisor before the start of classes to plan his or her first semester's coursework. The student will also meet with his or her advisor in November and May before pre-registration for each semester's courses. Students will meet at least once each semester with advisors to plan their coursework.

Each spring semester, the graduate program committee will review each student's progress and determine whether the student may proceed with doctoral studies, may continue if certain requirements are met, or may not continue in the doctoral program because of unsatisfactory work. In order to retain financial support, teaching assistants must maintain a 3.5 GPA, in addition to satisfying the program requirements described above.

### **Matters Pertaining to All Advanced Degrees in English**

**A. Extension of time limits:** Extensions of time limits are granted at the discretion of the graduate program director of the department and the dean of the Graduate School and are normally for one semester at a time.

**B. Incompletes:** Faculty may choose to grant graduate students an Incomplete. However, the Incomplete must be made up--the work must be submitted to the faculty member--on or before the beginning of the next semester. Students who take Incompletes in the fall must finish their work before the first day of class in January, and those who take Incompletes in the spring must finish their work before the first day of class in September. Students who have special circumstances that justify having more time to make up the Incomplete should meet with the Graduate Director, then file a written request for an extension. The Graduate Director will make a decision on each case in consultation with the Graduate Program Committee.

**C. Graduate courses** in the 500 series are open to all graduate students. Courses in the 600 series are normally open only to students admitted to study for the Ph.D. degree, although M.A. students with adequate preparation and background can sometimes be admitted with the permission of the instructor. All graduate courses normally carry three credits. Each course in the 500 and 600 series to be offered in a given semester will be described by the instructor in some detail in a special departmental announcement prepared and distributed toward the end of the semester prior to that in which it is to be offered. None of the courses numbered 690-699 (except for EGL 698, which is A-F), can be taken to satisfy the requirement of seven seminars as stated in the sections outlining course requirements for the English Department. Courses run through the School of Professional Development are not accepted for the requirements of the degree, except by prior approval of the Graduate Program Director.

**D. Advising:** There are a number of problems that the preceding explanations make no attempt to cover; students are encouraged to raise individual questions about the graduate program with the graduate program director in English.

Faculty of English Department

### **Distinguished Professors**

Kaplan, E. Ann<sup>1</sup>, 1970, Rutgers University: Literary and film theory; feminist studies; modern American literature; 19th-century American literature; postcolonial British literature; film.

Rosenblatt, Roger, Ph.D., 1968, Harvard University: Creative writing; 20th-century American literature

### **Professors**

Dunn, Patricia A.<sup>5</sup>, D.A., 1991, The University at Albany: Composition and rhetoric; English education; disability studies.

Flescher, Andrew<sup>6</sup>, Ph.D. 2000, Brown University: Medical Humanities, George Bernard Shaw, Narrative Approaches to Ethics, Biomedical ethics; Ethics and Health Care Policy; Ethics of Organ Donation; Compassion and Altruism; Health Care Justice; Normative Ethics; Moral Theory; Religion and Culture; Literature and Film; Hermeneutics

Huffman, Clifford C.<sup>2</sup>, Ph.D., 1969, Columbia University: The Renaissance; Shakespeare.

Manning, Peter, J.<sup>3</sup>, Ph.D., 1968, Yale University: English Romantic literature; literary theory.

Marshik, Celia<sup>7</sup>, Department Chair. Ph.D., 1999, Northwestern University: British and American modernism, cultural studies, women's studies. Munich, Adrienne, Ph.D., 1976, City University of New York: Victorian literature, art, and culture; feminist theory and women's studies. Olster, Stacey<sup>4</sup>, Ph.D., 1981, University of Michigan: American literature; 20th-century fiction; popular culture; film.

Phillips, Rowan Ricardo, Ph.D., 2002, Brown University: Poetry; African-American literature; Caribbean literature; the writing of poet

Spector, Stephen, Ph.D., 1973, Yale University: Old and Middle English literature; history of the English language; the Bible; intolerance in medieval literature; Christianity and Judaism; drama through Shakespeare; manuscript study and bibliography; the "other" in medieval literature and society.

### **Associate Professors**

Cook, Amy, Ph.D. University of California. Cognitive science and theories of performance and early modern drama.

Haralson, Eric, Ph.D., 1993, Columbia University: 19th- and 20th-century British and American literatures; Anglo-American modernism; Henry James.

Hutner, Heidi, Ph.D., 1993, University of Washington: Restoration and 18th-century studies; colonial and postcolonial discourse; women writers; women's studies; eco-feminism.

Lindblom, Kenneth, Associate Dean for Academic Programs, SPD. Ph.D., 1996, Syracuse University: English education; history, theory, and practice of composition-rhetoric; discourse pragmatics.

Newman, Andrew, Ph.D., 2004, University of California, Irvine: Early American literatures; Native American studies, media and memory studies.

Pfeiffer, Douglas, Ph.D., 2005, Columbia University: Renaissance; humanism; history of literary theory and rhetoric; Erasmus; Spenser; Donne. Robinson, Benedict, Ph.D., 2001, Columbia University: Early modern literature and culture; representations of Islam; religion and literature; Shakespeare; Milton.

Rubenstein, Michael, Ph.D., 2003, Rutgers University: British and Anglophone literature after 1945; Irish Studies; modernism, postcolonial literature and theory, and film.

Santa Ana, Jeffrey, Ph.D., 2003, University of California, Berkeley: American literature and culture; Asian American literature and film; Filipino diaspora; global migration and transnationalism; gender and sexuality studies; race and ethnicity; emotion studies.

Scheckel, Susan, Ph.D., 1992, University of California, Berkeley: 19th-century American literature and culture.

### **Assistant Professors**

Graham, Jean Elyse. Yale University, Massachusetts Institute of Technology: digital humanities; print and information systems; the history and theory of technology.

Johnston, Justin Omar, Ph.D., 2012, University of Wisconsin: Contemporary Anglophone literature; biopolitics and biotechnology in post-1945 novels; feminist theories of embodiment; postcolonial critiques of humanism.

Tondre, Michael, Ph.D., 2010, University of Michigan: Nineteenth-century British literature; cultural history of science; gender and sexuality studies; aesthetics.

### **Full-time Lecturer**

Galante, Nicole. Acting Director, English Teacher Education Program. Ph.D., 2014, Stony Brook University: Critical pedagogy, writing and rhetoric, postcolonial literature, magical realism in the global south, popular culture and new media in global literature

Videbaek, Bente, Ph.D., 1992, Northwestern University: Renaissance drama and theater; Scandinavian literature.

### **Affiliated Graduate Faculty**

Faculty members from other departments who may serve as "inside" members of English Ph.D. exam committees (unless they have previously served as "outside" members).

Mary Jo Bona (Women's, Gender, and Sexuality Studies): Italian American studies; ethnic American women writers; theories of race and ethnicity.

Ritch Calvin (Women's, Gender, and Sexuality Studies) Literary theory, feminist theory, feminist science fiction, Latina literature and culture.

Eugene Hammond, (Program in Writing and Rhetoric): Writing Instruction, Biography, 18th Century Studies, Jonathan Swift.

Robert Kaplan (Program in Writing and Rhetoric): Writing in the Disciplines; writing transfer; Euro-American intellectual history, especially eighteenth-century rhetoric; early American literature; queer theory/gender studies.

Peter Khost (Program in Writing and Rhetoric): Writing program administration, the literature/composition connection, assessing writing, autoethnography, critical university studies, holistic education, and collaboration.

John Lutterbie (Department Theatre Arts): Theories of theatre and performance, Co-Director of the Center for Embodied Cognition.

Lorenzo Simpson (Philosophy): Critical race theory; Frankfurt school; cosmopolitanism.

Roger Thompson, (Program in Writing and Rhetoric): Rhetoric, literature, writing studies, veteran studies, environmental studies, trauma studies, outsider art.

Tracey Walters (Africana Studies): African-American; African diasporic writers.

### **Number of teaching, graduate, and research assistants, Fall 2016: 31**

1) Joint appointment, Comparative Literature

- 2) Recipient of the State University Chancellor's Award for Excellence in Teaching, 1993. Recipient of the President's Award for Excellence in Teaching, 1993.
- 3) Recipient of the State University Chancellor's Award for Excellence in Faculty Service, 2013.
- 4) Recipient of the President's Award for Excellence in Teaching, 1987; Recipient of the State University Chancellor's Award for Excellence in Teaching, 1988
- 5) Recipient of State University Chancellor's Award for Excellence in Teaching, 2013
- 6) Joint appointment, Program in Public Health
- 7) Recipient of the Dean's Award for Excellence in Graduate Teaching, 2007
- 8) Joint appointment, Theatre Arts

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

Spring 2018

## Environmental Management

**Faculty Director**

Larry Swanson, Marine Sciences Center, 147 Discovery Hall (631) 632-8704 [Larry.Swanson@stonybrook.edu](mailto:Larry.Swanson@stonybrook.edu)

**Degree Awarded**

MPS in Environmental Management

**Certificate Awarded**

Advanced Graduate Certificate in Environmental Management

**Website**

[http://www.stonybrook.edu/spd/graduate/mps\\_em](http://www.stonybrook.edu/spd/graduate/mps_em)

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-edl](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-edl)

## Environmental Management

The MPS and AGC programs in Environmental Management are designed to prepare professionals to confront the complex problems and issues related to environmental management. The curriculum provides the educational background necessary to make informed decisions on often controversial matters. The program is offered in collaboration with Stony Brook's world-renowned [School of Marine and Atmospheric Sciences](#). It primarily serves adults who seek professional development on a part-time basis. Courses are offered in the evening and several are available online.

The programs offer:

- access to the most current expertise in environmental management
- foundations for effective career or public service initiatives
- sustainable solutions that promote the environmental and economic welfare of the region

**Master of Professional Studies**

The 30-credit Master of Professional Studies (MPS) explores the application of research and experience to complex social, political and environmental issues. The core curriculum focuses on the theoretical structure and methodology of social science disciplines and their application to the professions, while the concentration courses focus on the scientific, managerial and legal that pertain to the field. The degree culminates in a capstone project.

**Advanced Graduate Certificate**

The 18-credit advanced graduate certificate program focuses solely on the environmental management subject areas, without the capstone course or the courses in social science theory and methodology.

Gainful Employment Regulation Disclosures

Environmental Management Program Admissions

**Master of Professional Studies in Environmental Management**

The Master of Professional Studies program is no longer admitting new students. Prospective students may be interested in the master's programs offered from the [School of Marine and Atmospheric Sciences](#).

**Advanced Graduate Certificate Program in Environmental Management**

A. Personal statement.

B. bachelor's degree, with a cumulative 3.0 grade point average.

C. In those cases where the departmental admissions committee deems it desirable, personal interviews with departmental representatives may be necessary.

## MPS in Environmental Management Requirements

The Master of Professional Studies in Environmental Management program consists of 10 three-credit courses as outlined below. The capstone course, CED 595, may be taken after the completion of 24 hours of course work in the program.

**CORE CURRICULUM - 9 credits**

- 3 credits from Area A



- 3 credits from Area B
- 3 credits from EITHER Area A OR Area B

**AREA A COURSES**

CEI 505 Research Methods in the Social Sciences  
 CEX 520 Ethics in Management

**AREA B COURSES**

CEI 596 Seminar on Leadership in Organizations  
 CEN 580 Assessment of Socio-Technological Problems and Issues

*There are no transfer credits or substitutions allowed for 9-credit core curriculum.*

**MPS CONCENTRATION - 18 credits****REQUIRED COURSES - 6 credits**

- CEY 501/MAR 514 Environmental Management
- CEY 503/MAR 536 Environmental Law and Regulations

**AREA COURSES - 12 credits** (at least 3 credits must be selected from Area C)

*Area C Courses* — A minimum of 3 credits must come from Area C

- CEB 505 History of Long Island Environment (*Spring only*)
- CEY 507/MAR 521 Long Island's Groundwater (*Spring only*)\*
- CEY 512/MAR 512 Marine Pollution (*Fall only*)
- CEY 557/MAR 557 Introduction to Risk Assessment and Management (*Fall only*)

*Area D Courses*

- CEY 508 Living with Radiation (*Fall only*)\*
- CEY 509/MAR 525 Environment and Public Health (*Spring only*)
- CEY 525 Ocean Stewardship: Global Science, Local Issues (*Spring only*)\*
- CEY 594/EST 594 Diagnosis of Environmental Disputes (*Fall only*)

*Other Courses* — These courses are occasionally scheduled

- CEY 597/EST 597 Waste Management: Systems and Principles (Area D)
- EST 542 Waste and Wastewater Engineering Practices (Area D)
- EST 595 Principles of Environmental Systems Analysis (Area C)

*\*Courses with an asterisk are only offered online.*

**MPS PROJECT SEMINAR - 3 credits**

- CED 595 Project Seminar

**Advanced Graduate Certificate in Environmental Management Requirements**

The certificate program comprises 18 credits as described below.

**REQUIRED COURSES - 6 credits**

- CEY 501/MAR 514 Environmental Management
- CEY 503/MAR 536 Environmental Law and Regulations

**AREA COURSES - 12 credits** (at least 3 credits must be selected from Area C)

*Area C Courses* — A minimum of 3 credits must come from Area C

- CEB 505 History of Long Island Environment (*Spring only*)
- CEY 507/MAR 521 Long Island's Groundwater (*Spring only*)\*
- CEY 512/MAR 512 Marine Pollution (*Fall only*)
- CEY 557/MAR 557 Introduction to Risk Assessment and Management (*Fall only*)

*Area D Courses*

- CEY 508 Living with Radiation (*Fall only*)\*
- CEY 509/MAR 525 Environment and Public Health (*Spring only*)
- CEY 525 Ocean Stewardship: Global Science, Local Issues (*Spring only*)\*
- CEY 594/EST 594 Diagnosis of Environmental Disputes (*Fall only*)

*Other Courses* — These courses are occasionally scheduled

- CEY 597/EST 597 Waste Management: Systems and Principles (Area D)
- EST 542 Waste and Wastewater Engineering Practices (Area D)
- EST 595 Principles of Environmental Systems Analysis (Area C)

*\*Courses with an asterisk are only offered online.*

### **Time to Completion**

All certificate requirements must be completed within three (3) years from the semester date of admission as a matriculated student unless the student is also matriculated in a master's degree program. Master's students have five (5) years to complete the certificate requirements.

### **Faculty**

The program's faculty is composed of full-time faculty from the School of Marine and Atmospheric Sciences as well as practitioners and researchers who are leaders in the field.

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

European Languages, Literatures, and Cultures

**Chairperson**

Luigi Fontanella, Humanities Building 2126 (631) 632-7440

**Graduate Program Director**

Peter Carravetta Humanities Building 1149, (631) 632-7440

**Graduate Secretary and Interim Graduate Program Coordinator**

Libby Tolson, Humanities Building 2127, (631) 632-7440

**Degrees Awarded**

M.A. in Romance Languages and Literature

M.A.T. (Administered by S.P.D.)

**Web Site**

<http://www.stonybrook.edu/eurolangs/>

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-gs](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-gs)

European Languages, Literatures, and Cultures

The Department, within the College of Arts and Sciences, offers a wide variety of programs emphasizing study of the European languages, literatures, and cultures, courses in pedagogical methodology, supervised teaching experience, and advanced training for careers related to international affairs. The Department is committed to providing the best possible graduate education: two of its members have been named Distinguished Professors, and four have received the Chancellor's Award for Excellence in Teaching. The proximity of numerous cultural institutions such as the Center for Italian Studies on campus, the Goethe House in New York, Alliance Française, the Kosciuszko Foundation, the New York Public Library, and the Harriman Institute of Columbia University, enhance the quality of graduate study in the Department.

The programs have been designed with today's career opportunities in mind. Students are encouraged to shape a personal curriculum, drawing on other Departments engaged in issues pertinent to European cultural history and pedagogy such as Comparative Studies, History, Linguistics, Music, Philosophy, Political Science, and Theater Arts. The Department supports exchange programs with European universities, in France, Germany, Russia, Poland, and Italy.

More detailed program information is available from the Department office and on the Internet at [www.sunysb.edu/eurolangs](http://www.sunysb.edu/eurolangs). Part-time study is permitted; most graduate courses are offered during the late afternoons or evenings. Our advisors work closely with students in designing a program to meet individual needs and interests.

**Degree Programs****M.A. Curriculum**

The M.A. curriculum for each language program is designed to introduce students to research in European languages, literatures, and cultures leading to a doctoral degree, preparation for teaching on the college, university, or secondary school level, as well as careers involving international expertise. Students specialize in one of the offered languages, literary histories, and cultures, or create a combined program (i.e., two Romance languages), with the help of their advisors. Most courses are conducted in the target language. Experienced teaching assistants are encouraged to design and teach advanced courses on the undergraduate level. A carefully developed advising system enables students to tailor specially structured programs to suit their individual needs and interests.

**M.A. Program in Romance Languages**

The Department offers an M.A. in Romance Languages with possible concentrations in French and Spanish, Italian and Spanish, and French and Italian. The curriculum is formulated according to the individual student's needs and interests. It is a flexible program that suits students who wish to go on to doctoral work as well as those who wish to complete their studies with the Master's degree. There are two possible tracks:

**Track A, Literature and Culture:** Designed for students who wish to follow a traditional M.A. program or intend to proceed toward further study on the Ph.D. level. Typically students design a curriculum that includes literature, linguistics, and culture courses in one of the Romance languages or in a combination of two Romance languages. This track gives the students a choice of writing a Master's Thesis or passing a Comprehensive Examination to qualify for the degree.

**Track B, Language Pedagogy for Secondary School Teachers:** Designed for students who have completed provisional requirements to teach languages in secondary schools and are required by State regulations to complete a Master's degree. The track is specifically designed for students who have completed the Teacher Preparation Program in Foreign Languages at the undergraduate level. It allows secondary school teachers to further concentrate in the target language and culture they teach, or in a combination of two Romance languages. All courses are offered no earlier than 5:30 p.m. to meet the time constraints of secondary school teachers.

Graduate courses in other fields, including those offered by the School of Professional Development, are open to qualified students. Departmental students are encouraged to take courses in related areas. With the permission of their advisor, students may obtain six credits outside the program.

**M.A. Programs in German and Slavic**

See the Degree Requirements section. [Programs in German and Slavic are temporarily suspended.]

**M.A.T. Program in French 7-12, German 7-12, Italian 7-12, Russian 7-12**

Consult the S.P.D. section in this bulletin.

Prospective doctoral students are encouraged to contact Professor Peter Carravetta ([peter.carravetta@stonybrook.edu](mailto:peter.carravetta@stonybrook.edu)).

**Admission to the M.A. Programs of European Languages, Literatures, and Cultures**

For admission to graduate studies in the M.A. programs, the following, in addition to the minimum standards of the Graduate School, are normally required:

1. A Bachelor's degree in the major language of study or its equivalent from a reputable scholarly institution. For the M.A. applicants selecting the concentration in two Romance Languages, a Bachelor's degree or its equivalent with a major in French, Italian, or Spanish and at least 18 credits in a second language (French, Italian, or Spanish).
2. Three letters of recommendation written by persons qualified to assess the candidate's preparation.
3. For foreign students, a TOEFL score meeting the current standards set by the Graduate School.
4. Transcripts of undergraduate records.
5. Acceptance by both the Department and the Graduate School.
6. Normally, a grade average of at least B in the undergraduate major.

Provisional admission may be offered in exceptional cases.

While it is expected that the applicant demonstrate superior preparation in a European language, an undergraduate major in that language is not always required. Students judged to be deficient in language proficiency are required to take remedial courses during the academic year or in the summer.

Foreign students must furnish as much information as possible about their training abroad (official certification degrees, lists of courses taken, and papers submitted, whenever possible), together with letters of recommendation. Each application will be judged individually. Transfer credit for previously taken graduate courses will be assessed by the faculty and approved within the regulations of the Graduate School.

**European Languages, Literatures, and Cultures**

The Language Learning and Research Center offers a variety of tutorial tools in the languages taught at the University and includes two computer laboratories, and two multimedia classrooms. The LLRC regularly hosts workshops and courses relating to the intersection between technology and language, literature, and culture learning. <https://llrc.stonybrook.edu>

Students are encouraged to take advantage of the on-campus Humanities Institute. The Institute brings leading national and international specialists in the humanities to speak on current issues, and to provide Stony Brook students with the latest research in culture studies, literature, and the arts.

Students can also participate in many activities sponsored by the Center for Italian Studies and the Alfonse M. D'Amato Chair in Italian and Italian American Studies.

The holdings of the Frank Melville, Jr., Memorial Library include extensive collections in print and other media pertinent to each of the four major language groups taught by the Department. The Department maintains a high profile in state-of-the-art technologies, including Internet applications of language, literature, and culture pedagogy.

**Requirements for the M.A. Degree in Romance Languages (European Languages, Literatures, and Cultures)****Track A: Literature and Culture**

*The M.A. requires a specialization in French, in Italian, or in a combination of two Romance languages (French, Italian, and Spanish). It requires at least ten three-credit courses (eight courses for students who opt to write a Thesis), to be completed with a grade of B or better, for a total of 30 credits.*

**A. Course Requirements****French**

1. FRN 501 Contemporary Culture and Civilization (3 credits)
2. FRN 507 Stylistics, Syntax and Composition (3 credits)

3. Eight additional courses (six for students who opt to write a Thesis), chosen in consultation with the advisor to formulate an area of specialization (18-24 credits). These courses may include three courses in related disciplines.

4. Master Thesis (optional) (6 credits)

Total credits: 30

#### *Italian*

1. ITL 501 Contemporary Italy (3 credits)

2. ITL 508 Syntax and Composition (3 credits)

3. One of the following courses: ITL 507, ITL 511, ITL 512, ITL 513 (3 credits)

Seven additional courses (five for students who opt to write a M.A. Thesis) chosen in consultation with the advisor to formulate an area of specialization (15-21 credits). These courses may include three courses in related disciplines.

4. Master Thesis (optional) (6 credits)

Total credits: 30

#### *Romance Languages*

1. Syntax and Composition in the two chosen languages (FRN 507, ITL 508, SPN 515) (6 credits)

2. One of the following Romance Linguistics courses: ITL 513, FRN 513, SPN 503, SPN 504 (3 credits)

3. Seven additional courses in two Romance languages (five for students who opt to write a M.A. Thesis), to formulate a major and a minor (15-21 credits). These courses are to be chosen in consultations with the advisors and approved by the respective programs to formulate an area of specialization. These courses may include three courses in related disciplines.

4. Master Thesis (optional) (6 credits)

Total credits: 30

#### **B. Language Requirement**

Competence at the intermediate level in a language other than the language of specialization, preferably in a second modern Romance language or Latin. Students opting for a combination of two Romance languages will automatically satisfy this requirement. This requirement may be fulfilled through a departmental examination or a suitable language course designed for graduate students.

#### **C. M.A. Thesis or Examination (Choice of Option 1 or 2)**

1. *M.A. Thesis*: Students write a Master's Thesis under the supervision of a faculty advisor, along with a second faculty member in his/her major program, and a third faculty member in a related field. Upon completion of the Thesis, the student prepares a formal presentation of the Thesis.

2. *M.A. Examination*: Students who opt not to write a Master's Thesis must complete a four-hour written examination and a one-hour oral examination. The examination is based on a comprehensive reading list in the student's area of specialization. Three faculty members will serve as examiners.

#### *Track B: Language Pedagogy for Secondary School Teachers*

*The M.A. in Romance Languages for Secondary School Teachers consists of a total of 30 credits. Students will take three core courses (9 credits) and seven courses (21 credits) in their target language(s). Students must maintain a B average, and receive at least a B in their language courses (FRN 507, ITL 508, SPN 515).*

#### **A. Course Requirements**

Core Courses (9 credits)

1. FLA 540 Foreign Language Acquisition Research (3 credits)

2. DLL/FLA 571 Foreign Language Technology and Education (3 credits)

3. FLA 581 Foreign Language Teaching Independent Project (3 credits)

4. Competence in a foreign language other than the target language

Courses of Study for Areas of Specialization (21 credits)

#### *French*

1. FRN 501 Contemporary Culture and Civilization (3 credits)

2. FRN 502 French Civilization in Its Historical Perspective (3 credits)

3. FRN 507 Stylistics, Syntax and Composition (3 credits)
4. FRN 510 French Phonetics and Diction (3 credits)
5. One course in literature in French (3 credits)
6. Two elective courses relevant to the program chosen in consultation with the advisor (6 credits)

Total credits: 21

#### *Italian*

1. ITL 501 Contemporary Italy (3 credits)
2. ITL 502 Special Topics in Italian Cinema (3 credits)
3. ITL 508 Syntax and Composition (3 credits)
4. ITL 511 History of the Italian language or ITL 507 Italian Linguistics (3 credits)
5. One course in literature in Italian (3 credits)
6. Two elective courses relevant to the program chosen in consultation with the advisor (6 credits)

Total credits: 21

#### *Romance Languages*

This is a combination of two Romance Languages with the first language considered the "primary" language. For the primary languages of either French or Italian, the application is through the department of European Languages. However if Spanish is placed first in the selection of two Romance languages, then the application is through the department of Hispanic Languages. Configuration of courses will be developed on an individual basis according to each student's needs and interests. The following courses are required:

1. ITL 513, FRN 513, SPN 503, or SPN 504 (Romance Linguistics) (3 credits)
2. Two of the following: FRN 507, ITL 508, SPN 515 (Syntax and Composition) (6 credits)
3. Two of the following: FRN 501, ITL 501, SPN 510 (Culture) (6 credits)
4. Two elective courses relevant to the program chosen in consultation with the advisor (6 credits)

Total credits: 21

Note: Culture and linguistics courses can be substituted with permission of the Department, subject to availability.

#### **B. Language Requirement**

Competence in a language other than the language of specialization, preferably in a second modern Romance language or Latin. Competence will be determined by departmental examination, or by completing specific graduate courses approved by the Department. Students opting to choose a combination of two Romance languages will automatically satisfy this requirement. For non-native English language speakers, fluency in English is also required.

#### **C. Research Project**

Students must complete a Research Project under the supervision of a faculty advisor and subject to approval by a second faculty member in his/her major program and by a third faculty member in a related field. Upon completion, the student prepares a formal presentation of his/her research.

#### Requirements for the M.A. Degree in German

[Program temporarily suspended.]

#### *Track A*

##### **A. Course Requirements**

1. One 19th-century German literature course (3 credits); one 20th-century German literature course (3 credits); GER 545 or GER 546 (3 credits); GER 539 Contrastive Structures or GER 557 History of the German Language (3 credits); GER 599 Thesis (6 credits).
2. Four additional offerings at the graduate level from courses within the Department or, upon prior approval by the Department, from those of other Departments within the Graduate School (12 credits).

Total credits: 30

##### **B. Performance**

Average of B or higher in all graduate courses taken at Stony Brook.

### **C. M.A. Thesis**

Submission of a scholarly essay on a topic and of a standard acceptable to the Department is required.

#### *Track B*

### **A. Course Requirements**

There is no Thesis required. All 30 credits can be fulfilled by coursework as follows:

1. GER 504 German Cultural History (3 credits); GER 539 Contrastive Structures or GER 557 History of the German Language (3 credits); one course in older Germanic languages, e.g., GER 558, GER 562, or GER 563 (3 credits); one course in 20th-century German literature, e.g., GER 545 or GER 546 (3 credits).

2. Six additional offerings at the graduate level from courses within the Department or, upon prior approval by the Department, from those of other Departments within the Graduate School (18 credits). Total credits: 30

### **B. Performance**

Average of B or higher in all graduate courses taken at Stony Brook.

Requirements for the M.A. Degree in Slavic Languages and Literatures

[Program temporarily suspended.]

### **A. Course Requirements**

1. Three courses in advanced language and/or linguistics (9 credits)

2. One course in culture (3 credits)

3. Two courses in Russian literature (6 credits)

4. Four electives in the student's major area with the approval of the Department (12 credits)

Total credits: 30

### **B. Language Proficiency in Russian**

The Russian language proficiency requirement may be satisfied by one of the following:

1. Passing an examination

2. Appropriate coursework in Russian (RUS 311, RUS 312, or equivalent)

3. One semester of study abroad in the Commonwealth of Independent States (C.I.S.), in an approved program, such as the SUNY-Albany/MGU Exchange.

### **C. Second Slavic Language Requirement**

This requirement may be satisfied by one of the following:

1. A proficiency examination

2. Appropriate coursework in the language (e.g., SLV 580, SLV 581)

3. Study abroad in an approved program in Eastern Europe or the C.I.S.

With the approval of the program, a non-Slavic language of Eastern Europe or the C.I.S. may be substituted for the second Slavic language.

### **D. Thesis or Comprehensive Examination**

A Master's Thesis or Comprehensive Examination based on a reading list and coursework is required.

## **Faculty - European Languages, Literatures, and Cultures**

### **Professors**

Carravetta, Peter, *Alfonse M. D'Amato Professor*, Ph.D., 1983, New York University: Italian and French critical theory; postmodernism; Italian American and migration studies.

Fontanella, Luigi, Ph.D., 1981, Harvard University: Modern Italian literature; 20th-century Italian poetry, 20<sup>th</sup>-Century European Theatre, The experience of Italian writers in the USA.

Mignone, Mario B., *Distinguished Service Professor and Director of the Center for Italian Studies*, Ph.D., 1972, Rutgers University: Contemporary Italian literature and culture; emigration studies.

Rzhevsky, Nicholas, Ph.D., 1972, Princeton University: Russian and Soviet literature; Russian theater; ideology.

#### **Associate Professors**

Bloomer, Robert K., Ph.D., 1990, University of Michigan: Germanic linguistics; morphology; etymology.

Dalmas, Franck, Ph.D., 2006, University of North Carolina at Chapel Hill: Modern French literature and culture; French language.

Gazzola, Giuseppe, Ph.D., 2008, Yale University: 19th-century Italian literature; travel literature.

#### **Assistant Professors**

Jourdain, Sarah, Ph.D., 1996, Indiana University: pedagogy and teacher training; French language.

#### **Senior Lecturers**

Marchegiani, Irene, **Outstanding Provost Lecturer**, Dottore in Lettere e Filosofia, 1973, University of Florence: Italian language and literature; pedagogy.

#### **Lecturers**

Balducci, Gioacchino, Dottore in Lingue e Civiltà Orientali, 1964, Oriental Institute at the University of Naples: Italian cinema and theater.

Grenkov, Tatyana, Ph.D., 1991, SUNY Stony Brook: Comparative Studies: Medieval, Classical and European Studies.

Sanou, Sini Prosper, Ph.D., 1992, University of Minnesota: French language and pedagogy.

Turan, Madeline, M.S., 1975, Long Island University: foreign language pedagogy; French language. Named Chevalier dans l'Ordre des Palmes Acadéques, 2016

Viola, Birgit Grosse-Middeldorf, D.A., 1990, Stony Brook University: German language and culture; business German.

#### **Affiliates**

Bailyn, John F., *Department of Linguistics, Associate Professor*, Ph.D., 1995, Cornell University: Slavic linguistics; Russian language and linguistics; syntax.

Bethin, Christina Y., *Department of Linguistics, Professor*, Ph.D., 1978, University of Illinois at Urbana-Champaign: Slavic linguistics; Russian, Polish, and Ukrainian languages; phonology. Recipient of the State University Chancellor's Award for Excellence in Teaching, 1983.

Bona, Mary Jo, *Department of Cultural Analysis and Theory*, Ph.D., 1989, University of Wisconsin at Madison: Italian American studies; English literature, American literature, Italian American literature, multiethnic American literature, women's literature, gender/genre theory, theories of narrativity, theories of ethnicity, migration histories

Fouron, Georges, *Department of Africana Studies*, Ed.D., transnationalism

Repetti, Lori, *Department of Linguistics, Associate Professor*, Ph.D., 1989, University of California, Los Angeles: Romance linguistics; Italian dialectology; history of the Italian language.

Rubin, James, *Department of Art*, Ph.D., 1972, Harvard University: 18th and 19th century art; and politics.

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*



**MFA in Film****Southampton Graduate Arts****Associate Provost :** Robert Reeves, (631) 632-5028**Artistic Director :** Christine Vachon, Manhattan Facility (646) 472-2025**Director :** Magdalene Brandeis, Chancellors Hall (631) 632-5010**Degree Awarded :** M.F.A. in Film**Web Site :** <http://www.stonybrook.edu/sb/film>**Application**[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-gs](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-gs)**MFA in Film**

The MFA in Film is a two plus year program that includes a core curriculum in screenwriting, TV Writing, directing and producing, with production periods culminating in a feature screenplay, a 20-minute MFA thesis film, a television writer's portfolio, or a feature producer's package. Faculty Christine Vachon, Pamela Koffler, Alan Kingsburg, Magdalene Brandeis, Mercedes Ruehl, Jennie Allen, Lenny Crooks, Simone Pero, David Hinojosa, Karen Offitzer, and Jordan Roberts, along with top industry professionals, guide participants through the essential elements of independent film production and TV Writing. Hands-on, experiential, in-depth, project driven.

The curriculum requires 45-48 credits.

Interested students should request information from the department and find application information at <http://www.stonybrook.edu/southampton/mfa/film/admissions.html>

Students are encouraged to apply as early as possible, especially if they plan to apply for financial aid.

**Admission to the MFA Program in Film**

This MFA program in Film is intensive and admission to it is highly selective. Upon review, finalists are invited for an interview. For admission, the following, in addition to the minimum Graduate School requirements, are normally required:

1. A bachelor's degree from an accredited college or university.
2. Undergraduate grade point average of at least 3.0.
3. Three letters of recommendation.
4. A current résumé
5. **A statement of purpose.** Describe in a page or two why you are interested in this opportunity, how you would benefit, and what makes you a particularly deserving candidate.

**6. Your specialization:** Screenwriter/TV Writer/Director/Producer/Documentarian

7. **Videos.**(Urls for all video links may be uploaded in the Qualifications sections)
8. **All candidates:The Video Pitch. This is one of the more important elements to your application.** You have probably seen people pitching for donations on a crowdsourcing site. In this case, you can pitch to us anything you want: yourself as a candidate, a project you want to work on, or something else that is exciting to you. The video pitch should be creative, polished, inventive. We want you to win us over here! SUGGESTED LENGTH: 3 MINUTES
9. **Directing candidates only (not required for Screenwriting, TV Writing, or Producing candidates):**Please include a link (or links) to up to 4 video samples of work to which you made a significant contribution. Be clear about what role you played: producer, writer, director, editor, production designer, cinematographer, etc. You may submit links for more than one piece but the total running time should not exceed 15 minutes. If you submit an excerpt, please describe the full work. Unless you are applying as a cinematographer or production designer, the entirety of your video sample should not be in the format of a professional reel but should also show us the substance of your work. (A reel might accompany another sample). In lieu of video, you may submit up to ten photographs, design samples, or photographs of your artwork.
10. **Written materials: (All written materials may be uploaded in the Additional Supplemental Materials section)**

Your written material should include:

1. **All Candidates:The Scene.**Write a short, 2-3-page scene inspired by and using one of these words that have no English language translation. We prefer a scene with two characters where one character wants something from the other.
  - Glas wen (Welsh)

- A smile that is insincere or mocking. Literally, a blue smile.
  - Yuputka (Ulwa)  
The phantom sensation of something crawling on your skin.
  - Iktsuarpok (Inuit)  
You know that feeling of anticipation when you're waiting for someone to show up at your house and you keep going outside to see if they're there yet? This is the word for it.
2. **All Candidates: The Logline.** Write an extended log line or a paragraph describing a project you'd like to realize with us.
  3. **Screenwriting, TV Writing, and Directing Candidates: The Writing Sample.** Please include a writing sample of up to 10 pages. This can be a complete short film, web episode, play, short story, or an excerpt of a feature screenplay, a TV Script, a webisode, a sketch or series of sketches. If you choose to submit an excerpt, please include a few lines describing the full work.
  4. **Producing Candidates: The Writing Sample.** Please include a writing sample of up to 10 pages, including, critiques, production program notes, and/or literary criticism of a chosen screenplay, excerpts of a film or screenplay you have written, acquired or produced; or a brief statement describing your view of the role of Producing in today's platform agnostic film industry.

### 9. Proficiencies. Directing Candidates Only

Please include a list of technical proficiencies in: camera, lighting, editing, and any related skills.

10. Acceptance by both the MFA in Film program and the Graduate School.

Any deficiencies in these or the Graduate School admission requirements shall not automatically bar admission, but it is understood that inadequacies in undergraduate preparation normally will require the student to take additional work, the amount to be determined by the appropriate graduate advisory committee. Additional work may not be used to fulfill MFA degree requirements.

### Eligibility

Applicants to the Master of Fine Arts program must have a bachelor's degree from an accredited college or university and, except in special circumstances, have earned a cumulative grade point average of at least 3.0 on a 4-point scale. It's fine to have an undergraduate degree in an area outside of the arts and humanities. A candidate with outstanding promise in film but a less-than-stellar academic transcript may be admitted on a conditional basis.

### Transfer Credit

The program permits the transfer of up to 12 hours of credit in suitable graduate work done elsewhere that resulted in a grade of B or better. To obtain transfer credit, the student must make special application to the program, submit official transcripts and provide course descriptions or syllabi. Transfer credits are only approved at the discretion of the academic department and the Graduate School. Courses older than five years will be accepted only in rare circumstances. No courses that have been credited toward another degree, such as an MA or an MFA in a different field, can be transferred. Transfer credit request forms are available on the Graduate School website.

### Facilities

The MFA in Film is located at our Manhattan Facility at 535 8th Avenue, and in the Carriage House on the Stony Brook Southampton campus, which includes the Avram Theater and Gallery, a 429-seat theater that was substantially renovated in 2007. The program features an impressive range of industry standard camera, light, grip and sound equipment. Highlights include the RED Epic-W, Canon C100 MKII, Canon XC10, Canon 5D and 7D, Panasonic HMC150P, Go Pro Hero 4, Canon Cine Prime Lenses, Zooms, Kino Flos, ARRI 4 and 3 Light Kits, Lite Panels, Dedos, Tascam Field Recorders, RODE, AT and Sennheiser Shotguns, Countryman Lavs, Kessler Slider, and several one ton grip packages. Our post-production offerings include 27" iMacs equipped with Adobe Creative Cloud, AVID Media Composer and Pro Tools. The University Library holds in excess of 15,000 items comprised of books, eBooks, videos, periodicals, music scores, dissertations, and audio files related to the study of film, which are easily accessible through interlibrary document delivery. Our book collection contains over 7,500 volumes.

### Degree Requirements

The MFA in Film requires a minimum of 45 credits. In addition to the minimum Graduate School requirements, the following are required:

#### A. Required Core Courses (27-28 Credits)

FLM 500 Introduction to Graduate Studies, 4 cr.

FLM 510 Western Theatre & Literature I, 3 cr.

FLM 523 Theatre in New York, 3 cr.

FLM 525 Topics in Theatre, 3 cr.

FLM 576 Theatre Workshop (Summer), 2 cr.

FLM 576 Theatre Workshop (Academic Year), 2-3 cr.

FLM 591 Independent Project, 3 cr.

FLM 660 Acting, 3 cr.

CWL 530 Forms of Scriptwriting: Screenwriting, 4 cr.

***B. One of the following Literature Courses (3 Credits)***

FLM 520 Western Theatre & Literature II, 3 cr.

FLM 530 Directed Readings in Theatre, 3 cr.

***C. One of the following Writing/Performance Workshops (3-4 Credits)***

CWL 510 Forms of Fiction, 4 cr.

CWL 520 Forms of Poetry, 4 cr.

CWL 530 Forms of Scriptwriting, 4 cr.

FLM 575 Adaptation Workshop, 3 cr.

FLM 640 Scenography and New Media, 3 cr.

***D. One of the following Interdisciplinary Options (3-4 Credits)***

With the approval of the Film Program director, select an interdisciplinary study option chosen from any FLM, TAF, CWL, or other SBU graduate course.

***E. One or more of the following practicums (3 credits)***

FLM 550 Practicum in Teaching, 3 cr.

FLM 690 Professional Internship, 3 cr.

***F. MFA Thesis Project and Paper (6 credits)***

FLM 691 MFA Project, 3 cr.

FLM 692 Thesis, 3 cr.

***G. Residence Requirement***

This program is normally completed in three years of full-time residency. Three credits must include Southampton residency, FLM 660 Acting for Directors, (or course substitution, pending approval from Director).

**University Requirements**

The granting of master's degree is based upon the completion of any special departmental requirements in addition to the items listed below:

***A. Courses and Grade Point Average***

A student must maintain a 3.0 overall grade point average

***B. Registration***

Degree candidates must be registered in the program granting their degree. Students must be registered for the semester in which they intend to graduate. Spring (May) and Fall (December) candidates must register for at least one graduate credit; Summer (August) candidates may register for zero credits in either summer session, but it still must be graduate level.

***C. Time Limits***

The time limit for the MFA is three years for full-time study and five years for part-time study. A student's full- or part-time status is based on registration, and the time-limit may be modified if enrollment switches between part- and full-time. The student may petition for an extension of time limit for the degree. Such requests must be filed before the limit is exceeded and must contain a significant justification.

**Faculty of the MFA in Film Program**

**Associate Professor**

Reeves, Robert, Associate Provost. M.A., 1977, Harvard University: Graduate Writing, Advanced Fiction, Comedy.

Kingsberg, Alan. Head of TV Writing, M.F.A. 1984, New York University.

**Visiting Professor**

Vachon, Christine, Artistic Director. B.A., 1983, Brown University

Feiffer, Jules. The Pratt Institute: Humor and Truth, Screenplay

Gabler, Neal. A.M., 1974, University of Michigan, Creative Nonfiction, Biography, Essay

Handley Chandler, Annette. B.A. 1969 C.W. Post College

**Visiting Assistant Professor**

Brandeis, Magdalene, Director. M.F.A., 2008, Stony Brook University

Koffler, Pamela. B.A., 1987, Yale University

Allen, Jennie. M.F.A., 2013, Columbia University

Crooks, Leonard. M.B.A., 1981, Strathclyde University, Scotland. Former head of the UK Film Council's New Cinema Fund.

Pero, Simone. MPP, 1994, University at Albany

Ruehl, Mercedes. B.A. College of New Rochelle, Academy Award Winning Actress

Hinojosa, David. B.A. 2009, Boston University.

Russo, Kathleen. B.F.A., 1986, Rochester Institute of Technology

**Lecturer**

Offitzer, Karen. M.F.A. University of Arizona, M.A. NYU.

Roberts, Jordan. MFA, 2009. New York Film Academy

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

**Finance****Finance Program Director, Finance Program Director**

Michael Nugent, Harriman Hall 315, (631) 632-7478, Michael.Nugent@stonybrook.edu

**Assistant Director, College of Business Programs**

Erica Robey, Harriman Hall 109, (631) 632-7171, Erica.Robey@stonybrook.edu

**Degree Awarded**

MBA in Finance; MS in Finance

**Certificate Awarded**

Advanced Graduate Certificate in Finance

Gainful Employment Regulation Disclosures for Finance Certificate.

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-edl](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-edl)

Advanced Graduate Certificate in Finance

The 18-credit Advanced Graduate Certificate (AGC) in Finance prepares students for careers in financial management, including financial analysis, portfolio management, investment banking and corporate financial associate positions. The curriculum places an emphasis on developing financial analytical skills. It offers in-depth knowledge of the principles and techniques of finance and accounting needed to understand how corporate financial objectives are developed, measured and reported, as well as the central issues in government regulation, taxation and financial reporting.

The AGC in Finance is a part-time program designed for working professionals. All courses are scheduled in the evening, and several of them are offered completely online.

**University Badges**

As they progress through the program, AGC students may earn University Badges — digital credentials that recognize the knowledge and skills developed by successfully completing two-course sequences in specialized areas (see details). The University Badge may be displayed on LinkedIn, Facebook, and Twitter profiles, and added to a resume to bring visibility to your achievement.

**MBA Program**

Certificate students may choose to pursue admission into the University's MBA in Finance program, which has a separate application and additional admissions requirements. Acceptance into the MBA program is not guaranteed, but all certificate credits are transferable into the MBA program.

**Financial Aid Information**

This advanced graduate certificate program is eligible for financial aid. View the federally mandated Gainful Employment Disclosure Information.

AGC in Finance Admissions

A. Personal statement.

B. A bachelor's degree, with a cumulative 3.0 grade point average.

C. Resume.

D. In those cases where the departmental admissions committee deems it desirable, personal interviews with departmental representatives may be necessary.

Finance Certificate Requirements

The curriculum consists of 18 credits (6 courses; 3 credits each). Students complete two required courses and choose elective courses that explore the broad frontier of modern finance.

**Required Courses**

- MBA 502 Finance
- MBA 504 Financial Accounting

**Electives (Choose any 4 courses listed below)**

- FIN 525 Portfolio Management
- FIN 536 Financial Management
- FIN 539 Investment Analysis
- FIN 545 Capital Markets and Financial Institutions
- FIN 552 Mergers & Acquisitions

- FIN 576 Real Estate Finance

**Time to Completion**

All certificate requirements must be completed within three (3) years from the semester date of admission as a matriculated student unless the student is also matriculated in a master's degree program. Master's students have five (5) years to complete the certificate requirements.

**Finance Faculty**

Courses in the AGC in Finance program are taught by full-time and adjunct faculty appointed by the College of Business.

**Full-time Faculty**

Brusco, Sandro, Professor, Economics

**Focardi, Sergio**, Visiting Professor, Finance

**Frey, Robert J.**, Research Professor

**Holod, Dmytro**, Associate Dean; Associate Professor, Finance

**Kim, Aaron**, Assistant Professor, Finance

**Liu, Ting**, Assistant Professor, Economics

**Nugent, Michael**, Lecturer, Finance; MBA Program Director; Finance Program Director

Palermo, Mark, Lecturer, Management

Rachev, Svetlozar (Zari), Professor, Finance

**Smith, Noah**, Assistant Professor, Finance

**Stoyanov, Stoyan**, Research Professor, Finance

**Tauman, Yair**, Professor, Economics

**Torna, Gokhan**, Assistant Professor, Finance

**Xiao, Keli**, Assistant Professor, Finance

**Zeisberger, Stefan**, Assistant Professor, Finance; Director, Center for Behavioral Finance

**Zhou, Yiyi**, Assistant Professor, Economics

**Adjunct Faculty**

**Mark Bhasin**

**Vincent Giardini**

**Cara Marshall**

**Lee Rosner**

**Thomas Talerico**

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

## Genetics Program

**Graduate Program Director**

Martha B. Furie, Centers for Molecular Medicine, Room 248 (631) 632-4232

**Graduate Program Coordinator**

Jennifer Jokinen, Life Sciences Building 130 (631) 632-8812

**Degree Awarded**

Ph.D. in Genetics

**Web Site**

<http://www.stonybrook.edu/commcms/gradgenetics/>

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-gs](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-gs)

## Genetics Program

The Graduate Program in Genetics was founded in 1980 as an inter-institutional program, combining the strengths in genetics at Stony Brook University, Cold Spring Harbor Laboratory, and Brookhaven National Laboratory. With nearly 100 faculty, the Genetics Program encompasses expertise that ranges from fundamental studies on classical animal, plant, and microbial model systems to cutting-edge research on behavior, cancer, and other human diseases. Students enjoy superb opportunities for training that reflect the ever-expanding role of genetics in modern biological and biomedical research. For instance, alongside traditional mutagenic screens with model organisms, the rapidly growing discipline of genomics is producing an explosion of information, which in turn is revealing the genetic circuitry of and relationships among all forms of life. Data gathered by both traditional and new methodologies underscore the central importance of genetics in delineating the connection among genes, their biological functions, and the evolutionary processes that shape life on earth. Genetics also gives practical insights into how defects in genes contribute to disease, as well as how gene products and genetic engineering can be used to improve the human condition.

The first-year student experience includes three core courses that establish a foundation for further study. In addition, each student rotates through three laboratories; these rotations furnish a basis for selecting a dissertation research advisor in May of the first year. All Genetics students further deepen their knowledge and experience by participating in a student seminar series, thematic journal clubs, and elective courses chosen from a wide array of offerings. The breadth of the Graduate Program in Genetics draws trainees from throughout the world with varied backgrounds and research interests, and the Program provides the options and flexibility to meet each student's particular needs.

## Admission Requirements of Genetics Program

The Graduate Program in Genetics requires the following in addition to the minimum Graduate School admission requirements:

- A. Superior undergraduate performance, which should include some formal training in genetics.
- B. Graduate Record Examination (GRE) General Test scores. Note that subject-specific tests (i.e., Biology) are not required, but are helpful when available.
- C. Three letters of recommendation, ideally from previous research mentors and faculty.

The program does not require, but prefers to see, evidence of research activity as an undergraduate. Whenever possible, prospective students are invited to visit for interviews with program faculty.

- D. Acceptance by the Graduate Program in Genetics and by the Graduate School.

All students accepted into the program receive full support in the form of a tuition scholarship, stipend and subsidized health insurance. The annual stipend for the 2014-2015 academic year is \$27,680. Although future stipend increases cannot be guaranteed, it is reasonable to expect periodic increases. Students who remain in good standing with both the Genetics Program and the Graduate School receive full tuition scholarships, health insurance benefits and stipend support throughout their graduate careers.

## Facilities of Genetics Program

The primary training facilities are Stony Brook University, Cold Spring Harbor Laboratory and Brookhaven National Laboratory. Program faculty at Stony Brook are drawn primarily from departments within the College of Arts and Sciences or the School of Medicine. The Life Sciences Building, which houses the Genetics Program office, is home of the Departments of Molecular Genetics and Microbiology, Biochemistry and Cell Biology, Neurobiology and Behavior, and Ecology and Evolution, all of which are represented in the Genetics Program. The University Health Sciences Center, located across the street from the Life Sciences Building, is the primary home for departments in the School of Medicine, including the Departments of Medicine, Pathology, Pharmacological Sciences and Physiology and Biophysics. In addition, the Program also includes faculty in the Departments of Applied Mathematics and Statistics, Biomedical Engineering, Psychology and others. The Centers for Molecular Medicine, a state-of-the-art research building adjacent to the Life Sciences Building, houses three interdepartmental thematic research centers: The Centers for Developmental Genetics, Infectious Diseases, and Structural Biology. Each of these Centers include Genetics Program faculty. The Centers for Molecular Medicine provide both an intellectual and a physical catalyst for facilitating interactions among Stony Brook scientists with common interest in these areas of modern biology, irrespective of their departmental affiliation.

Cold Spring Harbor Laboratory is a modern, world-renowned research institute that provides numerous unique opportunities for trainees. Although the faculty at Cold Spring Harbor are not organized into departments, there is internationally recognized strength in the areas of cancer biology, neurobiology, plant genetics, structural biology, and bioinformatics. The world-class facilities that are available at Brookhaven National Laboratory provide additional resources for trainees in the Genetics Program, including the National Synchrotron Light Source, one of the most unique instruments in the world for probing biological phenomena. Research faculty at Brookhaven have widely recognized programs in the molecular biology of microbial, plant and animal systems, and have a leading role in the fields of proteomics, structural biology and imaging.

#### Requirements for the Ph.D. Degree in Genetics

In addition to the requirements of the Graduate School, the following are required:

##### **A. Course Requirements**

1. Molecular Genetics (MCB 503)
2. Graduate Genetics (BGE 510)
3. Cell Biology (MCB 656)
4. Research Proposal Preparation (BGE 693)
5. Graduate Student Seminar in Genetics (BGE 531) must be taken each semester.
6. During their first year, Genetics students rotate in the laboratories of three or four different faculty members, with the goal of selecting a mentor and environment for their dissertation research. The specific laboratories are selected by students based on their interactions with individual faculty. Rotation selections must be approved by the Graduate Program Director.
7. Three semesters of Readings in Genetics (BGE 691) are required. These “Journal Clubs” are typically taken during the first and second years of study. Students select from thematic journal club topics that are organized each semester by faculty at the different institutions. This exercise provides important training in critical analysis of the literature while also allowing students to broaden their knowledge base on selected topics of interest.
8. Each student must take two or more elective courses, for a minimum total of 6 credits. Electives must be approved by the Program Director. Typically, these courses are in the biological sciences (e.g., Developmental Biology, MCB 657; Immunology, HBP 533; Microbiology, HBM 640; or Molecular Evolution, BEE 565), but courses may also be taken in other relevant areas (e.g., computer sciences, bioengineering).
9. Integrity in Science (GRD 500) is required of all Life Science graduate students. This half-semester course on ethics is typically taken in the Spring semester of the student’s first year.
10. Requirements for any specific student, in addition to those enumerated above, that will be beneficial due to a student’s prior training and/or area of specialization will be determined by the program director and executive committee in conjunction with the student and appropriate advisory committee.
11. Students must attain a grade of B or better in each of BGE 510, MCB 503, and MCB 656, as well as an overall average of B (3.0) or better in their elective courses.

##### **B. Comprehensive (Preliminary) Qualifying Examination**

At the beginning of the fourth semester, students will take a comprehensive (preliminary) examination covering diverse areas of genetics which tests each student’s ability to read and interpret primary scientific literature.

##### **C. Dissertation Proposal Examination**

After successful completion of the comprehensive (preliminary) examination, the student prepares a written proposal for the dissertation research project. This proposal has the format of a grant application, including information on the background and significance of the project, a detailed research plan, and any preliminary results that the student has generated that indicate the feasibility of the project. This written proposal is orally defended before a dissertation proposal examination committee. This committee does not include the student’s thesis advisor, but is selected by the student in conjunction with his or her advisor and program director. The dissertation proposal defense should occur during the fifth semester of graduate study. Generally, the faculty who participate in a student’s proposal examination committee then join with the advisor to form the student’s dissertation advisory committee.

##### **D. Advancement to Candidacy**

After successful completion of all required and elective courses, the comprehensive (preliminary) examination, and the dissertation proposal examination, the student will be recommended to the Graduate School for advancement to candidacy. Each student must meet with his/her dissertation advisory committee at least once a year to inform the members of his/her progress and solicit the members’ advice.

##### **E. Ph.D. Dissertation**

The research for the Ph.D. dissertation is conducted under the supervision of the dissertation advisory committee. Upon approval of the completed dissertation by this committee, a formal public oral defense of the dissertation is scheduled, at which the student presents his or her findings and is questioned by members of the audience. Subsequently, the candidate defends the dissertation to the examining committee in a closed session.

##### **F. Teaching Requirement**



It is expected that each graduate student completing a doctoral degree will have functioned as a teaching assistant during at least two semesters of his or her graduate career (BIO 600).

### G. Publication Requirement

To be eligible for graduation, each student must submit as first author at least one manuscript of original research to a suitable peer-reviewed journal (as determined by the Program's Executive Committee). Moreover, the journal's editors must deem the paper of sufficient quality to merit evaluation by external reviewers.

### H. Residence Requirement

The University requires at least two consecutive semesters of full-time graduate study. The demands of the course of study necessitate a longer period of residence.

Faculty of Graduate Program in Genetics

### Distinguished Professors

Benach, Jorge<sup>7</sup>, Ph.D., 1971, Rutgers University: Pathogenesis of and host responses to spirochetal infections.

Citovsky, Vitaly<sup>3</sup>, Ph.D., 1987, Hebrew University, Jerusalem: Nuclear transport and intercellular communication in plants.

Sternglanz, Rolf<sup>3</sup>, Ph.D., 1967, Harvard University: Chromatin structure and function in yeast; histone modifying enzymes.

Wimmer, Eckard<sup>7</sup>, Dr.rer.nat., 1962, Gottingen, Germany: RNA virus genetics, replication and pathogenicity; cellular virus receptors; whole viral genome synthesis; development of novel vaccines.

### Professors

Bahou, Wadie<sup>6</sup>, M.D., 1980, Massachusetts Medical Center: Human genetics; gene therapy; genetic disorders of hemostasis and thrombosis.

Bliska, James B.<sup>7</sup>, Ph.D., 1988, University of California, Berkeley: Molecular and cellular basis of bacterial-host cell interactions.

Brown, Deborah<sup>3</sup>, Ph.D., 1987, Stanford University: Structure and function of sphingolipid and cholesterol-rich membrane domains.

Carter, Carol A.<sup>7</sup>, Ph.D., 1972, Yale University: HIV and retroviral assembly and replication.

Del Poeta, Maurizio<sup>7</sup>, M.D., 1992, University of Ancona, Italy: Role of sphingolipids in mediating signaling pathways and fungal pathogenesis.

Demple, Bruce<sup>10</sup>, Ph.D., 1981, University of California, Berkeley: Mechanisms and roles of human enzymes that repair oxidative (free radical) damage in DNA

Eanes, Walter<sup>5</sup>, Ph.D., 1976, Stony Brook University: Population and biochemical genetics of *Drosophila*; molecular evolution.

Enikolopov, Grigori<sup>1</sup>, Ph.D., 1978, Institute of Molecular Biology, Russian Academy of Sciences, Moscow: Stem cells; neurogenesis; imaging; signal transduction.

Frohman, Michael<sup>10</sup>, M.D., Ph.D., 1985, University of Pennsylvania: Lipid signaling; vesicle trafficking and fusion; mitochondrial fusion; myogenesis.

Furie, Martha B.<sup>9</sup>, Ph.D., 1980, Rockefeller University: Interactions among endothelial cells, leukocytes, and pathogenic bacteria.

Futcher, A. Bruce<sup>7</sup>, D.Phil., 1981, University of Oxford: Cell cycle control, microarrays, genomics.

Gergen, J. Peter<sup>3</sup>, Ph.D., 1982, Brandeis University: Pattern information and the regulation of gene expression during *Drosophila* development.

Ghebrehwet, Berhane<sup>6</sup>, D.V.M./D.Sc., 1974, University of Paris, France: Role of complement C1q receptors during infection and inflammation.

Hearing, Patrick<sup>7</sup>, Ph.D., 1980, Northwestern University: Adenovirus regulation of cellular proliferation and gene expression; adenovirus vectors for human gene therapy.

Hollingsworth, Nancy<sup>3</sup>, Ph.D., 1988, University of Washington, Seattle: Regulation of meiotic recombination in yeast.

Kaushansky, Kenneth<sup>6</sup>, M.D., M.A.C.P., 1979, University of California, Los Angeles: Molecular and cellular biology of thrombopoietin.

Konopka, James<sup>7</sup>, Ph.D., 1985, University of California, Los Angeles: G-protein coupled receptor signal transduction; fungal pathogenesis (*Candida albicans*).

Kritzer, Mary<sup>8</sup>, Ph.D., 1989, Yale University: Sex differences in cortical microcircuitry.

Lin, Richard Z.<sup>11</sup>, M.D., 1988, University of California, San Francisco: Physiology of phosphoinositide 3-kinase signaling.

Mackow, Erich R.<sup>7</sup>, Ph.D., 1984, Temple University: Viral regulation of cell signaling responses; hantavirus, influenza, dengue and rotavirus pathogenesis.

Marshall, Nancy Reich<sup>7</sup>, Ph.D., 1983, Stony Brook University: Signal transduction and activation of gene expression by cytokines; cellular defense responses to viral infection.

Moll, Ute<sup>9</sup>, M.D., 1985, University of Ulm, Germany: Tumor suppressor genes; role of p53 in human cancer.

Powers, R. Scott<sup>9</sup>, Ph.D., 1983, Columbia University: Cancer gene discovery; cancer diagnostics and therapeutics; cancer biology.

Shroyer, Kenneth<sup>9</sup>, Ph.D. 1983, M.D. 1987, University of Colorado. Cancer biomarkers as diagnostic adjuncts in cervical pathology and cytopathology; cervical cancer and HPV.

Smith, Steven O.<sup>3</sup>, Ph.D., 1985, University of California, Berkeley: Structure and function of membrane proteins.

Thanassi, David<sup>7</sup>, Ph.D., 1995, University of California, Berkeley: Biogenesis of bacterial adhesion organelles.

Thomsen, Gerald<sup>3</sup>, Ph.D., 1988, Rockefeller University: Embryonic developmental mechanisms, regeneration, stem cells and the evolution of developmental processes.

Tsirka, Styliana-Anna<sup>10</sup>, Ph.D., 1989, Aristotelian University of Thessaloniki, Greece: Neuronal-microglial interactions in the physiology and pathology of the central nervous system.

White, Thomas<sup>11</sup>, Ph.D., 1994, Harvard Medical School: Gap junction functions defined by genetic diseases and gene knockouts.

Zong, Wei-Xing<sup>7</sup>, Ph.D., 1999, UMDNJ - Robert Wood Johnson Medical School: Molecular regulation of apoptotic and necrotic cell death.

#### Associate Professors

Bingham, Paul<sup>3</sup>, Ph.D., 1979, Harvard University: Regulation of differentiation; transposable elements; regulation of splicing.

Canli, Turhan<sup>12</sup>, Ph.D., 1993, Yale University: Biopsychology; neural and genetic basis of emotion and cognition.

Carpino, Nicholas<sup>7</sup>, Ph.D., 1997, Stony Brook University: Positive and negative regulation of T cell receptor signaling.

Chen, Jiang<sup>9</sup>, M.D., Ph.D., 1995, Henan Medical University, China; 2001, University of Heidelberg, Germany: Planar cell polarity and primary cilia in skin and hair follicle development and skin cancers.

Chung, Jun<sup>9</sup>, Ph.D., 1999, Washington University School of Medicine: Mechanisms of tumor cell invasion and metastasis.

Colognato, Holly<sup>10</sup>, Ph.D., 1999, Rutgers University: Extracellular matrix in the brain: roles during development and neurodegeneration.

Davalos, Liliana M.<sup>5</sup>, Ph.D., 2004, Columbia University: Conservation biology; climate change; phylogeny.

Dubnau, Joshua<sup>1</sup>, Ph.D., 1995, Columbia University: Genetics of amyotrophic lateral sclerosis in flies and humans; genetic circuits underlying olfactory behavior in flies.

Ge, Shaoyu<sup>8</sup>, Ph.D., University of Science and Technology of China: Molecular mechanisms and function of new neurons in the brain.

Girun, Geoffrey D.<sup>9</sup>, Ph.D., 1999, University of Iowa: Cancer metabolism and transcriptional regulation.

Ju, Jingfang<sup>9</sup>, Ph.D., 1996, University of Southern California: The mechanism of translational control mediated by non-coding RNAs in cancer.

Karzai, Wali<sup>3</sup>, Ph.D., 1995, Johns Hopkins University: Structure and function of RNA-binding proteins and biochemical studies of the SmpB-SsrA quality control system.

Kernan, Maurice<sup>8</sup>, Ph.D., 1990, University of Wisconsin: Genetics of touch and hearing in *Drosophila*; ciliogenesis and ciliary signaling.

Krug, Laurie<sup>7</sup>, Ph.D., 2001, Emory University: Virus-host interactions during chronic gammaherpesvirus infection.

Leatherwood, Janet<sup>7</sup>, Ph.D., 1993, Johns Hopkins University: Cell cycle control of DNA replication.

Martinez, Luis A.<sup>8</sup>, Ph.D., 1998, University of Texas at Austin: Gain-of-function activity of mutant p53 oncogene.

Neiman, Aaron<sup>3</sup>, Ph.D., 1994, University of California, San Francisco: Vesicle trafficking and intracellular signaling in yeast.

Rest, Joshua S.<sup>5</sup>, Ph.D. 2004, University of Michigan: Regulatory evolution; protein network evolution; bioinformatics.

Sirotkin, Howard<sup>8</sup>, Ph.D., 1996, Albert Einstein College of Medicine: Specification and patterning of the neural plate; vertebrate developmental genetics.

Takemaru, Ken-Ichi<sup>10</sup>, Ph.D., Graduate University for Advanced Studies, Japan: Cell signaling and ciliogenesis in mammalian development, health, and disease.

True, John R.<sup>5</sup>, Ph.D., 1995, Duke University: Evolutionary and developmental genetics of color patterning in *Drosophila*.

van der Velden, Adrianus<sup>7</sup>, Ph.D., 2000, Oregon Health and Science University: The mammalian T cell response to *Salmonella enterica* serovar Typhimurium.

### Assistant Professors

Acosta-Martinez, Maricedes<sup>11</sup>, Ph.D., 2002, Albert Einstein College of Medicine: Neuroendocrine regulation of the reproductive axis; signal transduction pathways and metabolic control.

Aguirre, Adan<sup>10</sup>, Ph.D., 2002, Centro de Investigacion y de Estudios Avanzados IPN, Mexico: Endogenous NG2 progenitor cells as cell-based replacement for a variety of brain pathologies.

Chan, Chia-Hsin<sup>10</sup>, Ph.D. 2007, National Taiwan University: Molecular mechanisms of cancer development; cancer metabolism and stemness.

Czaplinski, Kevin<sup>1</sup>, Ph.D., 1999, UMDNJ-Robert Wood Johnson Medical School: Post-transcriptional control of gene expression in the nervous system.

Henn, Brenna<sup>5</sup>, Ph.D., 2009, Stanford University: Human evolutionary genetics; population genetics; genomics.

Levy, Sasha<sup>3</sup>, Ph.D., 2005, University of California, Santa Barbara: Evolutionary dynamics; network dynamics; yeast genomics; high-throughput technology development.

Luk, Ed<sup>3</sup>, Ph.D., 2003, John Hopkins University: Chromosome biology and genome regulation.

MacCarthy, Thomas<sup>2</sup>, Ph.D., 2005, University College London, United Kingdom: Computational immunology; evolutionary systems biology.

Martin, Benjamin L.<sup>3</sup>, Ph.D., 2005, University of California, Berkeley: Stem cell maintenance and differentiation; developmental mechanisms of cancer pathogenesis.

Matus, David Q.<sup>3</sup>, Ph.D., 2006, University of Hawaii: Evolutionary, cellular, and developmental approaches to studying nematode uterine-vulval morphogenesis.

Seeliger, Markus<sup>10</sup>, Ph.D., 2004, Cambridge University, United Kingdom: Molecular mechanisms of protein kinase and ubiquitin ligase signaling in cancer and aging.

Shelly, Maya<sup>8</sup>, Ph.D., 2004, Weizmann Institute of Science, Israel: Molecular mechanisms of embryonic brain development; axon regeneration; neurodegenerative disorders.

Sheridan, Brian<sup>7</sup>, Ph.D., 2008, University of Pittsburgh School of Medicine: Generation and maintenance of effector and memory T cells in intestinal tissues in response to bacterial pathogens.

Talos, Flaminia<sup>9</sup>, M.D., 2002, Ph.D., 2006, Stony Brook University: Intra-tumor heterogeneity in prostate cancer; tissue reprogramming in the urinary bladder.

Veeramah, Krishna<sup>5</sup>, Ph.D., 2008, University College London, United Kingdom: Evolutionary genomics.

### Research Faculty

Luberto, Chiara<sup>11</sup>, Ph.D., 1997, Catholic University of Rome: Sphingolipid metabolism and signaling.

Zachar, Zuzana<sup>3</sup>, Ph.D., 1992, Stony Brook University: Cancer chemotherapy and drug discovery.

### Adjunct Faculty at Cold Spring Harbor Laboratory

Egeblad, Mikala, Associate Professor. Ph.D., 2000, University of Copenhagen and the Danish Cancer Society: Tumor microenvironment; intravital imaging; tumor-associated myeloid cells; breast cancer.

Gingeras, Thomas R., Professor. Ph.D., 1976, New York University: Genome-wide organization of transcription and the functional roles of non-protein coding RNAs.

Hammell, Christopher, Associate Professor. Ph.D., 2002, Dartmouth Medical School: Genetic regulation of temporal development and the function of animal microRNAs.

Huang, Z. Josh, Professor. Ph.D., 1994, Brandeis University: Development and function of the GABAergic inhibitory circuitry in neocortex; developmental plasticity; neurogenomics; autism.

Jackson, David, Professor. Ph.D., 1991, University of East Anglia, England: Plant development; genetics, cell-to-cell mRNA and protein trafficking.

Joshua-Tor, Leemor, Professor. Ph.D., 1990, Weizmann Institute of Science: Structural biology; nucleic acid regulation; RNAi; molecular recognition; X-ray crystallography.

Krainer, Adrian R., Professor. Ph.D., 1986, Harvard University: Posttranscriptional control of gene expression; alternative splicing; splicing in genetic diseases and cancer; splicing-targeted antisense therapeutics.

Lee, Je Hyuk, Assistant Professor. M.D., Ph.D., 2002, Tufts University: Functional genomics; spatial reconstruction of gene expression and cell lineage information; technology development.

Li, Bo, Associate Professor. Ph.D., 2003, The University of British Columbia: Neuroscience; glutamatergic synapse; synaptic plasticity; schizophrenia; depression; rodent models of psychiatric disorders.

Lyon, Gholson J., Assistant Professor. M.D., 2004, Ph.D., 2003, Weill Cornell Medical College, Rockefeller University: Amino-terminal acetylation of proteins; human genetics; neuropsychiatric diseases; whole genome sequencing.

Martienssen, Robert A., Professor. Ph.D., 1986, Cambridge University: Plant genetics; transposons; development; gene regulation; DNA methylation.

McCombie, W. Richard, Professor. Ph.D., 1982, University of Michigan: Human genetics; human genome variation; personal genomics; genetics of psychiatric disorders; genetics of cancer, computational molecular biology.

Mills, Alea A., Professor. Ph.D., 1997, University of California, Irvine: Cancer; development; aging; senescence; epigenetics; autism.

Schatz, Michael C., Adjunct Associate Professor. Ph.D., 2010, University of Maryland: High performance computing for DNA sequence alignment and assembly

Sheltzer, Jason, CSHL Fellow. Ph.D., 2015, Massachusetts Institute of Technology: Consequences of aneuploidy and gene dosage imbalances in development and cancer.

Siepel, Adam C., Professor. Ph.D., 2005, University of California, Santa Cruz: Computational biology; population genetics; molecular evolution; transcriptional regulation.

Sordella, Raffaella, Associate Professor. Ph.D., 1998, University of Turin, Italy: Molecular therapeutics; signal transduction.

Spector, David L., Professor. Ph.D., 1980, Rutgers University: Cell biology; gene expression; nuclear structure; microscopy; non-coding RNAs.

Stillman, Bruce W., Professor. Ph.D., 1979, Australian National University: Cancer; cell cycle; DNA replication; chromatin assembly; yeast genetics.

Tonks, Nicholas K., Professor. Ph.D., University of Dundee: Posttranslational modification; phosphorylation; phosphatases; signal transduction; protein structure and function.

Trotman, Lloyd C., Associate Professor. Ph.D., 2001, University of Zurich: Cancer modeling and treatment; senescence and tumor progression; cancer visualization; PTEN regulation.

Tuveson, David A., Professor. M.D., Ph.D., 1994, Johns Hopkins University: Pancreatic cancer; experimental therapeutics; diagnostics; mouse models; cancer genetics.

Vakoc, Christopher, Associate Professor. M.D., Ph.D., 2007, University of Pennsylvania: Transcriptional regulation of mammalian cell growth.

VanAelst, Linda, Professor. Ph.D., 1991, Catholic University of Leuven, Belgium: Signal transduction; Ras and Rho proteins; tumorigenesis; neuronal development and disorders.

#### **Research Faculty at Brookhaven National Laboratory**

Freimuth, Paul I., Scientist. Ph.D., 1980, Stanford University: Adenovirus reproduction; virus-cellular receptor binding.

Number of teaching, graduate, and research assistants, Fall 2016: 34

1) Department of Anesthesiology

- 2) Department of Applied Mathematics and Statistics
- 3) Department of Biochemistry and Cell Biology
- 4) Department of Biomedical Engineering
- 5) Department of Ecology and Evolution
- 6) Department of Medicine
- 7) Department of Molecular Genetics and Microbiology
- 8) Department of Neurobiology and Behavior
- 9) Department of Pathology
- 10) Department of Pharmacological Sciences
- 11) Department of Physiology and Biophysics
- 12) Department of Psychology

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

Spring 2018

Geosciences Department

**Chairperson**

Daniel M. Davis, Earth and Space Sciences Building 255, (631) 632-8139

**Graduate Program Director**

Timothy Glotch, Earth and Space Sciences Building 250, (631) 632-1168

**Graduate Coordinator**

Melissa Campo, Earth and Space Sciences Building 255, (631) 632-8200, melissa.campo@stonybrook.edu

Laura Colucci, Earth and Space Sciences Building 255, (631) 632-8535, laura.colucci@stonybrook.edu

**Web Address**

[www.geosciences.stonybrook.edu](http://www.geosciences.stonybrook.edu)

**Degrees Awarded**

M.S. in Geosciences; Ph.D. in Geosciences; M.A.T. in Earth Sciences

**Application**

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Geosciences Department

As the core discipline examining Earth's natural processes and materials, Geosciences boasts unparalleled diversity. Spurred by urgent scientific and social questions, ranging from environmental concerns to the origin and evolution of the planet itself, the Geosciences are experiencing remarkable growth, with excellent career opportunities. The Geosciences encompass many disciplines including geology, geochemistry, and geophysics, and its interdisciplinary nature fosters natural links not only with chemistry and physics, but also with environmental science, materials science, engineering, biology, and health fields. Developments in technology and new innovative approaches have transformed graduate study in many areas within Geosciences, and students participate in research utilizing state-of-the-art instrumentation and facilities.

Graduate students may choose among degree programs with emphasis in different areas in Geosciences. Ph.D. and M.S. thesis-based programs are offered with concentrations in areas including seismology and tectonics, mineral and rock physics, crystal chemistry, geochemistry, petrology, sedimentary geology, planetary geosciences, and hydrogeology (described in more detail below). There is also a non-thesis M.S. program in hydrogeology focused primarily on training professionals in environmentally related fields. Also offered is an M.A. in Teaching Earth Science, which leads to provisional certification for teaching earth science in secondary schools of New York State.

**Areas of Emphasis in Graduate Study and Research**

The Department's philosophy has been to pursue excellence by concentrating its research initiatives in specific areas of the Geosciences. Graduate students benefit from greater focus and also enjoy close interaction with faculty members. A distinctive aspect of graduate study in the Geosciences department is the opportunity for collaborative research, often involving several faculty members. The department's extensive state-of-the-art computers, laboratory facilities and modern instrumentation have helped to foster a well-earned reputation for observational, experimental, multifaceted approaches to Geosciences research. Cooperative programs with other departments, nearby institutions, and national laboratories provide access to unique facilities (e.g., NSLS).

**Seismology, Tectonics, and Shallow Surface Geophysics**

A primary focus in seismology and tectonics is the determination of detailed three dimensional earth structure, from the core to the surface, and related studies on the dynamics that drives mantle convection, deformation of the lithosphere, and plate tectonics in general. Particular emphasis is placed on interdisciplinary research and collaboration, where inferences made from seismological, geodynamic, and geodetic investigations are integrated with findings from the fields of mineral and rock physics, geochemistry, and petrology. Areas of specific focus in seismology include inner core structure, anisotropy, and attenuation, outer core structure, core-mantle boundary structure, upper mantle structure, strong ground motion studies, earthquake source parameter studies, and theoretical studies on seismic wave propagation. Investigations in tectonophysics include the coupling between mantle convection and lithospheric dynamics, the development of the kinematics, mechanics, and seismicity within plate boundary deformation zones, and the inference of mantle flow beneath the lithosphere. Current projects involve using earthquake and space geodetic data to infer the deformation fields and employing numerical, analytical, and analog modeling to understand surface geodynamical observations, ranging from geoid, topography, plate motions and surface deformations in the global and regional scales to the partitioning of strain and tectonic implications at geometrically complex plate margins. All of these projects emphasize the use of integrated seismic, structural, geodetic, and field data to understand the structure, composition, and dynamics of the Earth's interior, as well as the driving forces for plate movements and deformations. The topics in shallow surface geophysics include field geophysical surveys of glaciotectonic deformation of Long Island sediments using ground penetrating radar, electrical resistivity, seismic reflection and refraction as well as borehole geophysics.

**Mineral and Rock Physics**

Research in these fields focuses on the investigation of the structure and composition of the Earth, geophysical properties of Earth materials, and the mechanical behavior of the crust and mantle. An important emphasis is the study of high-pressure and high-temperature phases and assemblages, particularly those of relevance to the mantle. In situ measurement of elastic properties, compressibility, and determination of crystal structure complement studies of high-pressure phase relations for constraining models for Earth's mantle and equations of state for mantle phases. Specific projects include determination of ultrasonic wave velocities of minerals and rheological determination of the strength of minerals at the pressure and temperature conditions of the Earth's mantle to depths greater than 500 km. Research initiatives in these areas are closely linked to the activities of the Mineral Physics Institute at Stony Brook and the NSF Consortium for Materials Properties Research in Earth Sciences [COMPRES]. Facilities available in the Department of Geosciences and the Mineral Physics Institute include equipment for ultrasonic

interferometry, Brillouin spectroscopy, and multi-anvil apparatus for experiments at high pressure and temperature; these are all integrated with synchrotron X-ray sources at the NSLS. Complete single-crystal and powder X-ray diffraction facilities and transmission electron microscopy and electron diffraction are available. Another important area of study is rock physics, fluid flow and earthquake mechanics. Experimentally and theoretically based, this program focuses on brittle fracture, mechanical compaction of porous rock, strain localization, frictional instability, and hydromechanical behavior. The rock mechanics laboratory includes a triaxial press, an acoustic emission system, and permeameters.

### **Crystal Chemistry and Crystallography**

The department has a strong background in the study of earth materials at the atomic and molecular level, and in using the results of these studies to interpret the properties of materials constituting Earth from crust to core. Two centers of excellence, the Center for Environmental Molecular Sciences (CEMS) and the Mineral physics Institute (MPI) concentrate on the behavior of upper crustal and Earth's Interior, respectively. Both employ a wide range of structural probes, some located in the department and others located at national and international synchrotron X-ray and neutron facilities. Within the department, extensive facilities for single-crystal and powder X-ray diffraction, with capabilities for in situ high-temperature and high-pressure studies exist. Projects emphasize crystal structure studies on oxides, hydroxides, sulfides, carbonates, and silicates, including characterization of phase transitions, ordering phenomena, and ion exchange. Convenient access to the Brookhaven National Laboratory and the National Synchrotron Light Source, NSLS, provides opportunities for unique experiments requiring a high-intensity X-ray source. Other projects utilize X-ray absorption spectroscopy to examine local structure in minerals, neutron diffraction for studies of hydrous phases, and solid-state NMR spectroscopy to investigate crystal chemical substitutions and defects. Many of the department's faculty are actively engaged in the design and construction of the next generation of beamlines required for high pressure and environmental investigations. These facilities are being designed with the requirements of the Stony Brook and wider national and international user base in mind. This work is complemented by electron diffraction using the department's transmission electron microscope.

### **Geochemistry**

There are broad opportunities for graduate study and research in many areas of geochemistry. Major initiatives exist in isotope and trace-element geochemistry, aqueous and hydrothermal geochemistry, geochemistry of mineral/fluid interfaces, and theoretical and experimental geochemistry of mineral-melt systems. All programs have a strong experimental foundation, and many integrate experimental work with field studies.

Specific areas of research utilizing trace elements and radiogenic isotopes include evolution of Archean and Phanerozoic crust and geochronology of lithologic assemblages. These integrate with petrologic studies of sedimentary, metamorphic, and igneous terranes throughout the world. Research involving the chemistry and structure of sulfide and carbonate mineral surfaces are among the programs in low-temperature aqueous geochemistry; these include emphasis on geocatalysis, crystallization and trace element incorporation mechanisms, as well as the role of sulfides in the origin of life. Field-related studies focus on fluid chemistry in active hydrothermal systems. Research on silicic melts combines theoretical and experimental approaches for characterizing speciation and crystal-melt equilibria, and also for examining nucleation and growth. Closely related experimental studies focus on phase equilibria, solid-solution models, and the development of geothermometers and geobarometers, including applications in field studies.

Experimental and analytical work makes use of the department's electron microprobe, transmission electron microscope, thermal ionization mass spectrometers, FT-IR, Mössbauer lab, DCP and ion chromatography labs, X-ray diffraction facilities, and three synthesis and experimental petrology labs. Additional work uses facilities in other Stony Brook departments, including NMR spectrometers located in the Dept. of Chemistry, as well as facilities at nearby Brookhaven National Laboratory, including the NSLS.

### **Petrology**

Opportunities for graduate study and research in petrology range from atomic-scale investigations, for example, dealing with the structure of glasses, to global questions regarding the relationships of magmatic suites to large-scale mantle and crustal processes. Projects include spectroscopic and quantum chemical approaches for examining mechanisms of volatile dissolution and crystal nucleation in melts and experimental investigations of the effects of pressure, temperature, and volatile composition on stabilities of minerals and melts, with corresponding development of thermodynamic models. Field and laboratory work are integrated in some studies. Experiments are being applied to Martian meteorites.

This work is supported by experimental facilities that contain controlled-atmosphere gas-mixing furnaces, cold-seal bombs, piston-cylinder apparatus, internally heated pressure vessels, as well as multi-anvil apparatus for experiments at high temperature and pressure conditions. Analytical facilities include an electron microprobe, a transmission electron microscope, thermal ionization mass spectrometers, a Mössbauer lab, and X-ray diffraction facilities.

### **Sedimentary Geology**

Research initiatives in sedimentary geology at Stony Brook integrate geochemistry with field, petrologic, and stratigraphic studies. Trace element and isotopic studies of terrigenous sedimentary rocks provide information on their provenance, age, and composition, which yield insight to broader issues of crustal evolution, including sediment subduction, growth of continental crust and the sedimentary mass, and recycling of sedimentary rocks. Carbonate rocks and their diagenesis are another important area of research that utilizes a wide range of approaches. Petrography is combined with microanalytical techniques for trace elements and both stable and radiogenic isotopes to reconstruct the diagenetic environments and the physicochemical characteristics of paleohydrologic systems. Emphasis is also placed on the quantitative modeling of rock-water interaction. A strong component of fieldwork is common for studies of both clastics and carbonates. Analytical facilities include the department's electron microprobe, optical and cathodoluminescence petrography and electron microscopy facilities, a mass spectrometry lab, a Mössbauer lab, DCP and ion chromatography labs, X-ray diffraction facilities, and a variety of facilities at the NSLS.

### **Planetary Science**

Graduate research opportunities are available in the field of planetary science, including planetary geochemistry and petrology, planetary spectroscopy, planetary geophysics and Astrobiology with current focus on Mars and the Earth's moon. Several faculty and students have been actively involved in planetary missions, including Mars Global Surveyor, Mars Exploration Rovers and Mars Odyssey. Projects are available to evaluate geological, chemical, spectroscopic and geophysical data that have been returned from these and other missions. Planetary science

research is also supported by an assortment of experimental and analytical facilities. A recently installed infrared spectroscopy laboratory supports experimental and analytical studies in emission and reflectance spectroscopy of Mars and lunar analog materials as well as investigations of the fundamental infrared spectral properties of a wide variety of minerals. High pressure—high temperature experimental laboratories (see details under Petrology and Mineral and Rock Physics) may be used for evaluating the origin and history of igneous rocks from terrestrial planets and rocky satellites. Low temperature and hydrothermal experimental laboratories are available for the study of Martian near-surface aqueous processes and for investigating issues related to Astrobiology. Experimental laboratories are also supported by a broad array of analytical facilities (see details under Crystal Chemistry and Crystallography, Geochemistry and Sedimentary Geology)

### Hydrogeology

The non-thesis M.S. program with a concentration in hydrogeology is designed to give those with a B.S. degree in physical sciences a solid foundation of theoretical and practical graduate training emphasizing the physical and geochemical aspects of hydrogeology. Coursework and a final research project totaling 30 graduate credits are arranged to accommodate working professionals, with most courses taught in the evenings. This is a part-time degree program. A formal thesis is not required. Coursework includes groundwater hydrology, aqueous geochemistry, rock and soil physics, numerical hydrology, statistics and probability, and organic contaminant hydrology. Final research projects are arranged individually with faculty supervisors and are designed to give students experience in field, laboratory, or theoretical approaches.

### Admission requirements of Geosciences Department

For admission to the Graduate Program in Geosciences, the following, in addition to the Graduate School requirements, are required:

- A. A bachelor's degree in one of the earth or space sciences or in biology, chemistry, physics, mathematics, or engineering.
- B. A minimum average of B for all undergraduate coursework and a B average for courses in the sciences.
- C. Results of the Graduate Record Examination (GRE) General Test.
- D. Acceptance by both the Department and the Graduate School.

In special cases, a student not meeting requirements A and B may be admitted on a conditional basis. Upon admission, the student will be informed of the requirements that must be satisfied for termination of this status.

The Department of Geosciences offers programs leading to the M.A.T., M.S., and Ph.D. degrees in the Geosciences.

The Master of Arts in Teaching degree in Earth Science is a non-thesis degree for which all requirements can be completed in three semesters.

The M.S. degree with concentration in Hydrogeology is a non-thesis M.S. with most courses offered at times appropriate for working professionals.

The M.S. degree with a concentration in Earth and Space Sciences is a nonthesis program for New York State teachers who have initial certification but need a Master's degree to become fully certified, and to become certified in Earth Science. There are no other residence or language requirements.

The M.S. degree in Geosciences with thesis is typically not a terminal degree. Many students seeking Ph.D. candidacy first earn an M.S. degree.

Students become candidates for the Ph.D. in Geosciences by completing preparatory work leading to successful completion of the Ph.D. preliminary examination. Students are urged to obtain a more detailed description of procedures from the Geosciences Graduate Handbook.

Final responsibility for adhering to degree requirements and meeting all deadlines rests solely with the student.

### Facilities of Geosciences Department

The Department of Geosciences occupies a well-equipped building that houses extensive experimental and analytical labs, faculty and graduate student offices, numerous computers and workstations, a machine shop, an electronics support group, and the Geosciences Resource Room. The Mineral Physics Institute, the Long Island Groundwater Research Institute (LIGRI), the Marine Sciences Research Center (MSRC), and nearby Brookhaven National Laboratory offer additional support and laboratory facilities for graduate student research. In particular, the National Synchrotron Light Source (NSLS) at Brookhaven offers unparalleled opportunities for faculty and graduate students to perform unique experiments requiring high-intensity X-rays and is only 20 miles away.

### Requirements for the Ph.D. Degree in Geosciences

Advancement to Ph.D. candidacy is gained after the successful completion of the Ph.D. preliminary examination. The examination is the culmination of an evaluative process that begins when the student arrives at Stony Brook. In particular, the faculty seek evidence of scientific creativity, originality, vigor, and flexibility, along with the basic background knowledge, skills, and critical faculties needed to carry out advanced independent research in the student's chosen field. The minimum residence requirement is two consecutive semesters of graduate study. There is no language requirement.

### A. Course Requirements

Course requirements are flexible and are determined in consultation with the student's academic advisory committee at the beginning of studies. Academic advisory committees are assigned to students at the time of their arrival at Stony Brook, and the composition of the committee may be changed at the student's request, with the approval of the graduate program director. During their first two years in the program, students generally take one to three courses per semester. In addition, they participate in appropriate formal and informal seminars. During their first Fall semester, all students must take GEO 500, Geosciences Research Seminar. In addition, all students must register for GEO 696, Geoscience



Colloquium, and GEO 697, Geoscience Seminar, each semester, and GEO 600, Practicum in Teaching, at least once. Among the courses offered are:

GEO 500 Geosciences Research Seminar  
GEO 502 GIS for Geologists  
GEO 503 Mineral Equilibria  
GEO 504 Geology of the Turkana Basin  
GEO 507 Petrogenesis  
GEO 510 Dimensions of Global Change  
GEO 511 Computer Programming for the Geosciences  
GEO 512 Structure and Properties of Materials  
GEO 513 GIS Fundamentals I  
GEO 514 Introduction to Physical Hydrogeology  
GEO 515 Geohydrology  
GEO 517 Crystal Chemistry  
GEO 518 Carbonate Sediments  
GEO 519 Geochemistry of Natural Waters  
GEO 520 Glacial Geology  
GEO 521 Isotope and Trace Element Geology  
GEO 523 Geodatabase and Design  
GEO 524/MAR 524 Organic Contaminant Hydrology  
GEO 525 GIS Fundamentals II  
GEO 526 Low Temperature Geochemistry  
GEO 530 The Geology of Mars  
GEO 533 Geochemistry of the Terrestrial Planets  
GEO 540 Solid Earth Geophysics  
GEO 543 Stratigraphy  
GEO 546 Mineralogy and Petrology  
GEO 547 Remote Sensing in Geosciences  
GEO 549 Structural Geology  
GEO 550 Global Tectonics  
GEO 551 Physics of the Earth I  
GEO 552 Physics of the Earth II  
GEO 556 Solid State Geophysics  
GEO 564/AMS 562 Numerical Hydrology  
GEO 573 Physics of Rocks  
GEO 581 Coastal Engineering Geology  
GEO 585 Directed Studies  
GEO 588 Geological Field Methods for Earth Science Teachers

GEO 589 Research for Earth Science Teachers

GEO 590 Research Project

GEO 599 Research

GEO 600 Practicum in Teaching

GEO 696 Geoscience Colloquium

GEO 697 Geoscience Seminar

GEO 698 Geoscience Special Seminar

GEO 699 Dissertation Research on Campus

GEO 700 Dissertation Research off Campus Domestic

GEO 701 Dissertation Research off Campus – International

A number of courses are offered periodically according to student demand, either in a formal classroom setting or as Directed Studies (GEO 585). These include the following courses

GEO 505 Experimental Petrology Laboratory

GEO 506 Theoretical Petrology

GEO 508 The Rock Forming Minerals

GEO 522 Planetary Sciences

GEO 528 Carbonate Geochemistry

GEO 531 Crystalline Solids

GEO 532 Solid State Geochemistry

GEO 535 Regional Structure and Tectonics

GEO 542 Inverse Theory

GEO 562/MAR 562 Early Diagenesis of Marine Sediments

GEO 567 Sedimentary Rocks and Crustal Evolution

GEO 570 Earthquake Mechanics

GEO 571 Mechanics of Geologic Materials

GEO 572 Advanced Seismology

Specialized, advanced seminars are offered periodically by various faculty members. These include the following courses

GEO 603 Topics in Petrology

GEO 604 Topics in Planetary Science

GEO 605 Topics in Sedimentary Geology Paleontology

GEO 607 Topics in Geophysics

GEO 609 Topics in Mineralogy and Crystallography

### **B. Research Projects**

Each student carries out individual research projects, commonly with two or more faculty members, as part of the requirements leading up to the Ph.D. qualifying exam. The requirements for each of these projects are determined by the individual professors with whom the research is carried out. When working on such a project, students register for either GEO 590 or GEO 599 Research, after consultation with the appropriate

professor. A student who has completed an M.S. thesis before arriving at Stony Brook will generally complete only one research project before the preliminary exam.

### **C. Ph.D. Preliminary Examination**

The preliminary examination consists of the preparation and oral defense of a thesis proposal. There are three separate steps in this procedure: (1) submission of a proposal abstract to the graduate committee, who then selects an examining committee, (2) submission of the thesis proposal to the examining committee, and (3) oral defense of the proposal.

### **D. Thesis Proposal Abstract**

A one-page document stating the most essential aspects of the student's proposed thesis, the thesis proposal abstract must be signed by three faculty members before being given to the graduate committee. One of the three faculty members must be identified as a potential sponsor, meaning that he or she is tentatively willing to be the student's thesis advisor. This implies no commitment, either on the part of the professor or the student.

Upon receipt of the abstract, the graduate committee selects the members of the student's Ph.D. preliminary examination committee and sets a deadline (usually six weeks) for the submission of the thesis proposal to the examination committee. This committee is to consist of five scientists holding Ph.D. degrees who are experts in fields related to the proposal, at least four of whom must be members of the program.

### **E. Thesis Proposal**

The Ph.D. thesis proposal specifies the scientific rationale for the proposed thesis work, the relevant work done thus far, and the techniques and effort required to reach the research objective. When the thesis proposal is completed, copies are given to each member of the examination committee. Within a week of receiving the proposal, the examination committee will meet to determine whether or not the thesis proposal is defensible. If it is not deemed defensible, the student is informed as to whether a resubmittal will be permitted. If the thesis proposal is deemed acceptable, the examination committee sets a date for the Ph.D. preliminary examination.

### **F. Oral Preliminary Examination**

The student gives a short public presentation of the thesis proposal, after which there is a closed oral examination. Although much of the questioning inevitably focuses on the proposed thesis work, any topic in the geosciences and related fields may be covered in the questioning. At the end of the examination, the student and any others present who are not part of the preliminary examination committee are excused. The committee will then judge whether the student has demonstrated the ability to conceive, plan, and carry out original research.

The examination committee has a range of options open to it. It may vote to deny Ph.D. candidacy, either with or without a second opportunity to pass the Ph.D. preliminary examination. It may vote to accept the proposal, but fail the student on other grounds. In doing so, the examination committee may either bar a second opportunity to take the exam, require specific remedial actions, or schedule a second opportunity to take the examination. The committee has the option to vote to reconvene in order to re-evaluate its decision, based upon actions the student has taken in response to the examination committee's recommendations.

The examination committee may also vote to pass the student contingent upon changes in or rewriting of the proposal. It is free to establish any mechanism it deems necessary to affirm whether or not its requirements have been met. All decisions must be agreed to by a majority vote and must be conveyed in writing to the graduate program director and to the student.

When the graduate program director has been informed by the chairperson of the examination committee that the student has passed the Ph.D. preliminary examination, the department recommends to the Graduate School that the student be advanced to Ph.D. candidacy.

### **G. Teaching Requirement**

All graduate students must register for GEO 600, Practicum in Teaching, at least once, as outlined in Course Requirements on the preceding page.

### **H. Dissertation**

The Ph.D. dissertation is the document summarizing the original scientific research in recognition of which the Ph.D. candidate seeks the doctoral degree. The University has very specific rules about the format of the thesis, but the nature of its scientific content is at the discretion of the student, his or her advisor(s), and the Ph.D. thesis defense committee. In many cases, the thesis consists of a linked set of published or soon-to-be-published scientific papers.

When informed by the student's advisor that the thesis is ready to be defended, the graduate committee selects a Ph.D. thesis defense committee. The defense committee consists of five or six members, a majority of whom must be members of the department. One defense committee member, other than the thesis advisor, is appointed as committee chairperson by the graduate committee. Within two weeks of receiving the thesis, the defense committee chairperson polls the committee members to ascertain that the thesis is actually defensible. If it is, the defense committee chairperson formally schedules the oral defense.

### **I. Ph.D. Thesis Oral Defense**

The student makes a public presentation of the major results of the thesis. There is then a closed session, during which the student is examined primarily, but not exclusively, on the dissertation topic. The committee has the option of voting to accept the thesis, reject it, or accept it with revisions. If the thesis is accepted with required revisions, the committee will decide the mechanism for determining compliance with its requirements. Voting is by majority.

### **Requirements for the M.S. Degree with Thesis in Geosciences**

The M.S. in Geosciences with thesis is typically a nonterminal degree completed by some students before seeking Ph.D. candidacy. All requirements for the M.S. degree must be completed within a period of three years after entry. There are no residence or language requirements.

**A. Course Requirements**

Students must successfully complete a program of 30 graduate credits, including a minimum of 18 credits in approved academic courses. A student must achieve a 3.0 overall grade point average in all graduate courses taken at Stony Brook to receive a degree.

**B. M.S. Thesis**

An M.S. thesis proposal of no more than two pages must be submitted to the graduate committee at the end of the first year. The proposal must be signed by two faculty members, one of whom must be designated as a potential sponsor of the research and research advisor. After the proposal has been accepted, the student may proceed with the preparation of the M.S. thesis.

When the M.S. thesis is nearing completion, the student's advisor asks the graduate committee to appoint a defense committee. This committee consists of three experts in the field who hold Ph.D.s, at least two of whom must be members of the program faculty. Within two weeks of receiving the thesis, the defense committee decides whether the thesis is defensible. If it is, then an oral thesis defense is scheduled.

The M.S. thesis defense consists of a short public presentation of the major results of the thesis. This is followed by a closed examination that may cover any topic within the student's general field of study, but generally concentrates upon the thesis topic. The thesis defense committee may vote to accept the thesis, return it to the student for revisions, or reject it outright.

**Requirements for the M.S. Degree with Concentration in Hydrogeology**

The non-thesis M.S. with a concentration in Hydrogeology requires a total of 30 credits. Of these 30 credits, at least 21 credits must be in the required and approved courses and at least six credits must be in approved research. A minimum overall grade point average of B is required. Students are required to complete the four core courses in category A; one course from category B (if a student is deficient in either writing or communication skills, computer programming, or statistics); and one, two, or three courses from category C. There are no residence or language requirements.

**Category A**

- GEO 515 Geohydrology
- GEO 564/AMS 562 Numerical Hydrology
- GEO 526 Low-Temperature Geochemistry
- GEO 519 Geochemistry of Natural Waters

**Category B**

- AMS 576 Statistical Methods for Social Scientists
- EST 588 Technical Communication for Management and Engineering

**Category C**

- GEO 573 Hydromechanical Behavior of Geomaterials
- GEO 521 Isotope and Trace Element Geology
- GEO 524/MAR 524 Organic Contaminant Hydrology
- EST 593 Risk Assessment
- EST 595 Principles of Environmental Systems Analysis
- EST 596 Simulation Models for Environmental Waste Management
- EST 597 Waste Management: Systems and Principles
- CEY 503 Environmental Law
- CEY 509 Man, Environment, and Health

**Research**

In addition to formal coursework, the curriculum for the M.S. with concentration in Hydrogeology includes a minimum of six credits of research, either GEO 590 or GEO 599, after consultation with the appropriate professor. This research is to be carried out over a period of two or more semesters, and will be designed through a mutual consultation between the student and one or more members of the participating faculty. The purpose of the research is to give the student experience at solving hydrogeological problems. It may utilize field, laboratory, or theoretical approaches. The program of research will culminate in a written report to be approved by three designated faculty.

**Requirements for the M.S. Degree with Concentration in Earth and Space Science**

The non thesis M.S. with a concentration in Earth and Space Science requires a total of 31 credits. Of these 31 credits, 30 credits must be from courses with the ESS designator or other approved graduate courses in the fields of astronomy, atmospheric sciences or geosciences. Individual course programs will be developed for each student in consultation with the Earth Science education advisor based on the student's academic background and intended goals.

All students are required to complete

- ESS 501 Foundations of Earth Science

- ESS 610 Capstone Project in Earth and Space Sciences

#### Requirements for the M.A.T. Degree in Earth Science

The Master of Arts in Teaching Earth Science leads to provisional certification for teaching earth science in secondary schools in New York State. It also prepares the student for the examination for permanent certification. There is no residence requirement. Students must complete at least one year of college-level study of a foreign language.

Students in the M.A.T. program must register through the School of Professional Development.

#### A. Formal Coursework

Students are required to complete with an average grade of B or higher 15 credits in earth science courses and 27 credits in pedagogical courses and teaching experience. The departmental M.A.T. advisor in consultation with the student will determine a set of earth science courses for the M.A.T. degree in Earth Science.

#### B. Recommendation of the Department for the M.A.T.

When all program requirements are completed, the departmental M.A.T. advisor will consult with the director of the Science Education Program to determine whether all state-mandated education courses have been completed. If they conclude that all requirements have been met, they will inform the associate dean of the School of Professional Development that the requirements for provisional certification have been fulfilled and recommend to the dean of the Graduate School that the M.A.T. degree should be granted.

#### C. Time Limit

Although full-time students can complete all requirements for the M.A.T. degree within three semesters, part-time students will require additional time to complete the degree requirements.

Faculty of Geosciences Department

#### Distinguished Professors

McLennan, Scott M., Ph.D., 1981, Australian National University: Geochemistry of sedimentary rocks; sedimentary petrology.

Parise, John, Ph.D., 1980, James Cook University of North Queensland: Synthesis and characterization of zeolites for use as selective catalysts; characterization using normal X-ray and neutron diffraction techniques; investigation of crystallizing gels using small-angle neutron scattering; structural modeling of silicates.

Weidner, Donald J., Ph.D., 1972, Massachusetts Institute of Technology: Structure of the Earth's interior as revealed by seismic waves and laboratory determinations of physical properties.

#### Distinguished Service Professors

Hanson, Gilbert N., Ph.D., 1964, University of Minnesota: Application of radiometric and geochemical methods to petrologic and tectonic problems.

#### Professors

Davis, Daniel M., Department Chair, Ph.D., 1983, Massachusetts Institute of Technology: Quantitative geophysical modeling of fold and thrust belts; Field geophysics.

Holt, William E., Ph.D., 1989, University of Arizona: Seismotectonics; kinematics and dynamics of crust and mantle deformation; earthquake source parameter studies.

Nekvasil, Hanna, Undergraduate Program Director, Ph.D., 1986, Pennsylvania State University: Experimental and thermodynamic investigations of mineral/melt equilibria in silicic magmas.

Phillips, Brian L., Ph.D., 1990, University of Illinois at Urbana-Champaign: Aqueous geochemistry, NMR spectroscopy, mineralogy and structural chemistry of silicates and other oxides.

Reeder, Richard J., Ph.D., 1980, University of California, Berkeley: Low-temperature geochemistry; mineralogy; crystal chemistry.

Schoonen, Martin A.A., Ph.D., 1989, Pennsylvania State University: Kinetics and thermodynamics of low-temperature and hydrothermal water-rock interaction; theoretical geochemical modeling; geochemistry of natural waters.

Wen, Lianxing, Ph.D., 1998, California Institute of Technology: Mantle rheology and dynamics; seismic structures of the Earth's mantle; new techniques for calculating viscous flow and seismic wave propagation

#### Associate Professors

Glotch, Timothy, Graduate Program Director, Ph.D., 2004, Arizona State University: Planetary geology; remote sensing; Martian surface mineralogy.

Rasbury, E. Troy, Ph.D., 1998, Stony Brook University: Sedimentary geochemistry; geochronology; chronostratigraphy.

Rogers, Andrea Deanne, Ph.D., 2005, Arizona State University: Remote sensing; planetary surface processes; GIS.

#### **Assistant Professor**

Henkes, Gregory A., Ph.D., 2014, The Johns Hopkins University: Stable isotope geochemistry, paleoclimatology, biogeochemistry

Hurowitz, Joel, Ph.D., 2006, Stony Brook University: Planetary geology, planetary exploration, Sedimentary geochemistry.

Shen, Weisen, Ph.D., 2014, University of Colorado Boulder: Seismic tomography

#### **Emeritus**

Lindsley, Donald H., Emeritis, Ph.D., 1961, Johns Hopkins University: Application of phase equilibrium studies of silicate and oxide minerals to metamorphic and igneous petrology.

#### **Lecturer**

Stidham, Christiane Wilson, Ph.D., 1999, University of California, Berkeley: Geophysics.

#### **Affiliated Faculty**

#### **Distinguished Professor**

Aller, Robert C.1, Ph.D., 1977, Yale University: Marine geochemistry; early marine diagenesis

#### **Distinguished Service Professor**

Bokuniewicz, Henry J., Ph.D., 1976, Yale University: Marine geophysics.

Krause, David W., Ph.D., 1982, University of Michigan: Vertebrate paleontology; mammalian evolution, including primates.

#### **Professors**

Cochran, J. Kirk , Ph.D., 1979, Yale University: Marine geochemistry; use of radionuclides as geochemical tracers; diagenesis of marine sediments.

Flood, Roger D., Ph.D., 1978, Massachusetts Institute of Technology, Woods Hole Oceanographic Institution: Marine geology; sediment dynamics; continental margin sedimentation.

#### **Associate Professor**

O'Leary, Maureen, Ph.D., 1997, Johns Hopkins: vertebrate paleontology, phylogenetic systematics, mammalian evolution.

#### **Research Professor**

Li, Baosheng, Ph.D., 1996, SUNY Stony Brook: mineral physics, elasticity of minerals, high-pressure research.

Liebermann, Robert C., Emeritus, Ph.D., 1969, Columbia University: Mineral physics; elastic and anelastic properties of rocks and minerals and their applications to the Earth's interior.

Oganov, Artem, Ph.D., 2002, University College London: Theoretical and computational physics; simulation of minerals at high pressures and temperatures; structure and properties of solids.

Wong, Teng-fong, Ph.D., 1980, Massachusetts Institute of Technology: Experimental rock physics; fault mechanics.

#### **Research Associate Professors**

Sperazza, Michael, Ph.D., 2006, University of Montana, Paleoclimatic change over the Pleistocene and Holocene.

Vaughan, Michael T., Ph.D., 1979, SUNY Stony Brook: experimental geophysics, crystallography, synchrotron X-ray studies

#### **Research Assistant Professor**

Ehm, Lars, Ph.D., 2003, Christian--Albrechts University zu Kiel, Germany

1) School of Marine and Atmospheric Sciences

2) Department of Anatomical Sciences

3) Brookhaven National Laboratory

4) Mineral Physics Institute

NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

Spring 2018

**Geospatial Science (GSS)**

The Geospatial Science program is part of the Sustainability Studies Program.

**Sustainability Studies Program Director**

Katherine Aubrecht, W0511 Melville Library, (631) 632-5360

**Graduate Program Director**

Sung Gheel Jang, W0516 Melville Library, (631) 632-5364

**Graduate Coordinator**

GINNY CLANCY, 105 Endeavour Hall, 631.632.8681

**Web Address**

<http://www.stonybrook.edu/commcms/gss/>

**Degrees Awarded**

Advanced Graduate Certificate

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-gs](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-gs)

**Geospatial Science**

The Geospatial Science program supports the Geographical Information Systems (GIS) and Remote Sensing needs for a wide range of departments on the Stony Brook campuses. These tools are extensively used in the sciences (including geology, marine, environmental, anthropology, etc.), the social sciences (including sociology, political science, urban planning), in the corporate and non-profit world, public health, security, and disaster response. The program is designed to give each student a firm foundation in Geospatial Science while allowing the flexibility to learn the tools needed for their chosen discipline.

The Advanced Graduate Geospatial Science (GSS) Certificate will allow graduate students and working professionals to advance their GIS knowledge and employment opportunities with an industry-recognized certificate. The program will require students to earn 18 credits in addition to holding a BA, BS, or graduate degree. The program courses will be offered in the traditional semester format (both on campus and online) and during summer sessions. The flexible scheduling is intended to allow students to complete the certificate requirements quickly and at times that are convenient for the working profession.

**Admission requirements of Geospatial Science Certificate**

Admission to the Graduate Certificate in Geospatial Science is open to any student enrolled in a graduate degree-granting program at Stony Brook University or to free-standing certificate students who have completed their bachelor's degree or higher from an accredited college or university who meet the admissions criteria.

For applicants already admitted to the university, admission involves completing a "Permission to Enroll in a Secondary Certificate" form. For admission to the free-standing Certificate Program in Geospatial Science, students are required to have earned a minimum of a bachelor's degree with a cumulative grade point average of 3.0 on a 4 point scale and the following:

- A. A letter of application stating the purpose of study
- B. A Graduate School application form
- C. An official transcript of undergraduate record culminating in a bachelor's degree and graduate degree transcript if applicable
- D. Two letters of recommendation from teaching supervisors and/or professors
- E. GRE Scores not required

The forms and additional information are available through the Sustainability Studies Program office.

**Geospatial Science**

The Geospatial Science program is an umbrella program that includes the graduate educational components of Geographical Information Systems (GIS) and Remote Sensing from many different departments across campus. The main teaching lab and the Geospatial Center is in Earth and Space Sciences with other GIS and remote teaching sensing labs in Marine Sciences, Anthropology, Geology, Engineering, and Public Health. The Geospatial Center supports education and research, and houses large format print capabilities for GIS and remote sensing projects.

**Requirements for the Geospatial Science Certificate**

**Prerequisites:** All applicants are required to hold either a BA, BS degree, or graduate degree. Some basic knowledge of operating personal computers is necessary to complete the course work.

**Required Courses** or equivalent (9 credits):

GSS513 GIS Fundamentals I, 3cr or GEO513 or GSS 517 or MAR587



GSS525 GIS Fundamentals II, 3cr or GEO525

GSS526 GIS Project Management, 3cr

**Elective Courses** (9 credits):

ANT526 Environmental Analysis Using Remote Sensing and GIS, 3cr

EST576 Geographic Information Systems in Education and Research, 3cr

GSS509 Digital Cartography, 3cr

GSS523 Geodatabase and Design, 3cr or GEO523

GSS550 Applied Spatial Analysis, 3cr

GSS554 Geospatial Science for the Coastal Zone, 3cr

GSS570 Topics in Geospatial Science, 1-3cr

GSS575 Geospatial Teaching Practicum, 0-3cr

GSS587 Geospatial Research, 1-3cr

GSS588 GIS Internship, 1-3cr

HPH534 Spatial Analysis: Health Applications, 3cr

Only one of the following will count towards Certificate

GEO547 Remote Sensing in Geosciences, 3cr

GSS555 GIS and Remote Sensing, 3cr

MAR558 Remote Sensing, 3cr

No more than 6 credits used to satisfy another graduate degree can be applied to the certificate.

**Geospatial Science Faculty**

Faculty information for this program can be found at:

<http://www.stonybrook.edu/commcms/gss/people.html>

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

## Health and Rehabilitation Sciences

**Chairperson:** Eric Lamberg, Health Sciences Center, School of Health Technology and Management, Level 2, Stony Brook, NY 11794-8200, (631) 444-3058 (eric.lamberg@stonybrook.edu)

**Graduate Program Director:** VACANT

**Graduate Coordinator:** Regina Biasetti, R & D Park, Building 17, Suite 120, Stony Brook, NY 11794-6018, (631) 444-6057, (regina.biasetti@stonybrook.edu)

**Website:** <http://healthtechnology.stonybrookmedicine.edu/programs/hrs>.

**Application**

This program has been suspended and is not currently accepting new applications.

**Program Concentrations:****Behavioral and Community Health (BCH)**

The BCH concentration is uniquely crafted to train students in leadership and community-based participation, in the domains of healthcare and health policy. This program is designed to meet the aspirations of students seeking to create change in the intersection of healthcare, policy, and the social experience. Fundamentally participatory in nature, this PhD track expects students not only to become proficient in research and theory, but also to acquire the tools and experience to apply theory to practice. This program establishes the necessary intellectual framework to understand community-based leadership, and then provides the opportunities to exercise it, professionally and personally. The BCH track and is designed for social scientists, behavioral scientists, community health researchers, clinicians, community organizers, and health policy specialists. This track will develop proficiency in various research methods, both qualitative and quantitative in nature. Particular emphasis will be given to translating theory to practice and understanding the applied nature of policy measures. The BCH track will provide students with proficiency in policy evaluation, community intervention, leadership development, community engagement, and community-based participatory research. Students in the BCH track will understand the intersection of health, policy, and society, and the shared relationship among them. In the shifting healthcare environment, attention will be given to marginalized groups, like immigrants, those of racial minority, those with disability, those of lower socioeconomic status, and others. It is expected that graduates of the BCH track will be trained to be experts in community leadership, policy analysis, grass roots mobilization, and community health.

**Disability Studies (DS)**

The DS concentration focuses on multiple social and environmental factors that influence the experience of chronic conditions and functional impairments. These factors range from architectural barriers to social discrimination and have a profound influence on access to education, employment, recreation, and participation in other community activities across the life cycle. Disability Studies draws from philosophy, history, anthropology, sociology, law, political sciences, economics, occupational sciences, bioethics, and many other fields. The goal of this concentration is to train researchers from clinical and non-clinical backgrounds to use quantitative, qualitative and community participatory methodologies to operationalize critical theories and focus on the practical and policy implications of disability with the intent of improving quality of life and community access to health services for the disabled. In addition to a critical consideration of ICF conceptualizations of health, activity, and participation, the DS concentration will: (1) examine the role of power, social identity, and status as related to disability (2) consider the role of social and regional inequalities, and (3) assess desired changes at the organizational, community, national, and international levels that might positively affect the disabled.

Only two Ph.D. programs in Disability Studies exist nationally. Neither program is embedded in a Health and Rehabilitation Sciences Ph.D. program, but the connections strengthen this program of study. Additionally, a growing number of DS programs are currently being developed. Graduating students from this Ph.D. program will find employment in academic departments, public policy and administrative positions, with nongovernmental organizations and in rehabilitation centers engaged in research.

**Rehabilitation and Movement Sciences (RMS)**

The concentration aims to train rehabilitation research clinicians and scientists who will focus on the understanding of movement control through multiple types of measurement. This concentration will examine body function/structure and activity in the able-bodied and in people with movement impairments to potentially enhance physical and psychosocial functioning. Additionally, research will focus on increasing participation among the functionally impaired, thereby impacting the quality of life of people with disabilities. This pursuit of scientific inquiry for RMS crosses all levels of the ICF model. Special emphasis will be placed on the measurement of movement, including kinematics (position), kinetics (forces and moments) and EMG (muscle activity); muscle physiology and function (muscle physiological cross-sectional area), and energetics (metabolic and mechanical). These body and structure measurements will be studied around the neuro-musculoskeletal basis of movement, given central nervous system mechanisms and the neurophysiology and neuroscience mechanisms underlying movement disorders. The RMS concentration will be supported by theories of motor control, motor learning, and biomechanics. Areas of study may include balance and vestibular-ocular disorders; athletic performance; diabetes and wound healing physiology; body composition and obesity; physical interventions for cancer, and movement deficits in other disorders such as Parkinson's Disease, Multiple Sclerosis, Huntington's Disease, stroke and spinal cord injury. The RMS concentration uses quantitative methods in the measurement of body structure and function such as what is available in the Rehabilitation Research and Movement Performance Lab. In addition, students may experience studies in the Locomotion Learning Lab and the Shah Spinal Cord Injury Basic Science Lab. Students will also be required to relate these measurements to functional activities and societal participation and learn how these discoveries can not only improve clinical practice, but also inform health policy.

**Admission Requirements for the PhD in Health and Rehabilitation Sciences**

The point of entry into the Ph.D. program is based on a “Mentor Match” of students with faculty from the SHTM. This match ensures a highly individualized program of study for the student based on existing research projects of the faculty. The Mentor will ensure that every student is exposed to related research from the three other branches of research in order to provide a successful translational research experience. Mentors and their collaborators, who are conducting research in other branches of this translational continuum, will expand the research experience of the students. At the same time, these translational research opportunities may facilitate the discovery of relationships between the student’s research and that of other faculty researchers. The Admissions Committee of the program will assign the “Mentor Match” based on requests from the students as well as evaluations of their interests and strengths in relationship to the available faculty.

In addition to the minimum Graduate School requirements, the following are required:

- A. All applicants must hold a bachelor’s degree prior to the application deadline.
- B. Preference given to applicants a grade point average of 3.0 or better on a 4.0 scale and also for applicants with a master’s degree.
- C. Have taken the Graduate Record Examination (GRE) or equivalent graduate entrance exam within the past five years or have completed an American accredited graduate program prior to applying.
- D. Strong letters of recommendation (three references).
- E. Achieved an acceptable score on the TOEFL for international applicants.
- F. Applicant must submit two official transcripts from all post-secondary schools.
- G. One essay, no more than 1000 words on the candidate’s research interests and how those interests match to research at Stony Brook University’s School of Health Technology and Management.

The Admissions Committee will consider all factors including grades, standardized test scores, recommendation letters, essays, prior training, professional experience, and match in research interest. The goal of the committee is to select applicants who have the academic capability, personal qualities, and commitment to provide future value to society through a career in interdisciplinary health sciences research.

**Important Note:**

Health and Rehabilitation Sciences has an application deadline in early January each year (please check website for exact date). Please note that our application deadline may be earlier than the typical University Graduate School deadline of January 15. All applicants must submit by the deadline to be considered.

Apply online. Applicants must complete a Stony Brook University Graduate School application via the “Apply Yourself” electronic application.

[http://grad.stonybrook.edu/ProspectiveStudents/app\\_info.shtml](http://grad.stonybrook.edu/ProspectiveStudents/app_info.shtml)

**Facilities of Health and Rehabilitation Sciences**

Rehabilitation Research and Movement Performance (RRAMP) Laboratory at the Research and Development Park is a one-of-a-kind 7,000-square-foot laboratory dedicated to helping individuals with disabilities, assessing athletic performance and aiding recovery after disease or injury through the use of a state-of-the-art motion analysis system. This system is coupled with four in-ground force plates, electromyography and an eye tracking system. There is a large computer lab for graduate students, which will be the site for student work for the Ph.D. Program in Health and Rehabilitation Sciences program. The laboratory houses talented faculty from the School of Health Technology and Management whose research explores ways to improve the lives of individuals with spinal cord injury, traumatic brain injury, stroke, Huntington’s disease and multiple sclerosis, Parkinson’s disease, amputations, orthopedic disorders, cerebral palsy, pediatric cancer, geriatric disorders, cardiovascular disease, and obesity. The RRAMP lab also includes a locomotor training center, a motor control / motor learning lab to probe motor recovery, a musculoskeletal lab currently using ultrasound diagnostic equipment to assess and train muscle control of the spine and pelvic floor, prosthetic and orthotic lab, a transcranial magnetic stimulation and a body composition lab to explore physical changes of muscle, fat, and bone. Plans are being made to add a community fitness and wellness center for people with disabilities; this building will be housed adjacent to the RRAMP lab. The RRAMP lab is operated by faculty and staff from the School of Health Technology and Management. Located at the facility are the research director, assistant to the director, and research professors.

The PhD in Health and Rehabilitation Sciences program is housed in the RRAMP Lab (Rehabilitation Research and Movement Performance) Lab. The RRAMP lab office suite is located in the Research and Support Services Building. In addition to office space, there are four research laboratories within the secured portion of the suite. Within the building, but outside the suite proper, are a conference room, staff/student lounge, disabled patient restroom and shower, and laundry facility.

The curriculum consists of 78 credits requiring a minimum of four years of full-time effort. Although the direction of the students’ research will be highly individualized, all students must complete 21 credits of core courses, 27 credits of concentration courses (of which 12 are required), and 30 credits of dissertation research. In addition, there will be a no-credit doctoral seminar every semester for discussion and advancement of doctoral projects by professor and peers.

**Core Course Requirements:**

HAX 600 Doctoral Seminar

HAX 602: Frameworks, Models and Classification Systems in Health and Rehabilitation Sciences

HAX 653: Research Design and Methods

SOC 501: Multivariate Stats for Social Science

SOC 502: Multivariate Regression Techniques  
HAX 656: Qualitative Research  
HAX 605: Research Ethics  
HAX 632: Teaching and Learning

### **Concentration-Specific Requirements**

#### **Behavioral and Community Health Concentration Required Courses**

HAX 647: Health Care Systems/Policy Analysis  
HAX 640: Community Health and Community Based Participatory Research  
HAX 642: Participation and Health in Pediatric and Educational Settings  
HAX 641: Community Mental Health

#### **Disability Studies Concentration Required Courses**

HAX 667/EGL 592 Disability Studies Language, Narrative and Rhetoric  
HAX 668 Emerging Topics in Disability Studies  
HAX 665 Disability Participation and Justice  
HAX 664 Conceptual Foundations of Disability Studies

#### **Rehabilitation and Movement Science Concentration Required Courses**

HAX 620 Rehabilitation and Disability.  
HAX 635 Biomechanics of the Musculoskeletal System and Movement I  
HAX 631: Electro/Neurophysiology: Topics for Rehabilitation Research  
HAX 634 Motor Learning and Motor Control

#### **Other Requirements:**

All students are to be enrolled as full time students (12 credits/semester for year 1 and 9 credits/semester for subsequent years)  
All courses taken outside the department for application to the Ph.D. degree requirement are subject to approval of the student's advisor and the graduate program director. The advisor may pose additional course requirements.  
A maximum of 6 graduate credits from other programs, including those of other institutions, may be transferred toward the Ph.D. degree. Credits used to obtain any prior degrees are not eligible for transfer. Requests of credits must be approved by the graduate program director. Each student is required to complete a teaching practicum before graduation. Planning for this requirement is to be made with the student's primary advisor/mentor. Students who are currently educators or have experience teaching in their field of study may have the teaching practicum waived, which must be approved by the graduate program director.

#### **Written Qualifying Examination**

The written qualifying exams are offered every year after completion of the first 2 academic years, usually in the summer before the 3rd year. The written qualifying exam consists of 2 parts, Part I covers the required core courses and Part II consists of the required concentration course for each student's concentration. Upon passing the qualifying exams the Ph.D. student advances to candidacy.

#### **Dissertation**

Students choose their dissertation topics in consultation with his/her advisors as soon as possible. Dissertation research is a training experience for the candidate who, under the supervision of the primary advisor/mentor, carries out independent original work of significance. The student, in collaboration with his/her advisor must select a dissertation examining committee as soon as possible after the qualifying exams. The committee must include a Chair who must be within the department of Health and Rehabilitation Sciences, and a minimum of 3 other members of whom one is typically the primary advisor/mentor, and the remaining members are from within and outside Stony Brook University. The committee must be approved by the graduate program director upon the recommendation of the primary advisor. The dissertation examining committee provides a means of exposing the candidate to ideas, methodologies, and helps guide the research process. Each year the committee meets to review the progress of the student.

#### **Dissertation Proposal**

The student is required to submit a written dissertation proposal and present it at an oral examination conducted by the dissertation examining committee. The written dissertation proposal must be distributed to the committee members at least 2 weeks before the oral examination. This examination probes the student's ability and examines progress and direction, methodology and feasibility, which can be based on pilot data. The student will be examined based on knowledge and background on the topic, the aims/hypotheses or research questions, the methodology and any preliminary data.

#### **Dissertation Defense**

At the completion of the dissertation, approval of the dissertation involves a formal oral defense which is open to all interested members of the University community. The candidate must fill out a doctoral dissertation defense form (available on the graduate school webpage) and must include the dissertation abstract and all relevant information. The form should be submitted to the graduate program director at least 4 weeks before the defense. This form is then submitted to the Dean of the Graduate School who is responsible for advertising the event to the University community. Copies of the dissertation are distributed at least 2 weeks before the defense date. One copy is kept in the department for examination by the faculty. The final approval of the dissertation must be a majority vote by the dissertation examining committee.

Faculty information can be found at <http://healthtechnology.stonybrookmedicine.edu/programs/hrs/facultyresearch>

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

Higher Education Administration

### Faculty Director

Richard Gatteau, E3310 Melville Library (631) 632-1197 richard.gatteau@stonybrook.edu

### Assistant Director

Samantha Lodato, E3310 Melville Library (631) 632-7378 samantha.lodato@stonybrook.edu

### Graduate Degree Awarded

MA in Higher Education Administration

### Certificate Awarded

Advanced Graduate Certificate in Higher Education Administration

### Website

Higher Education Administration: <http://www.stonybrook.edu/spd/hea>

### Application

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-edl](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-edl)

Higher Education Administration

The Higher Education Administration program is designed to provide the academic preparation and credentials necessary for college and university professionals to enhance their expertise and advance their careers. The curriculum combines aspects of theory and practice within the changing landscape of American higher education. It is suitable for individuals working in community colleges, 4-year colleges and universities —both public and private—as well as government agencies that address higher education planning and regulation.

### Two Program Options: Master of Arts and Advanced Graduate Certificate

The 36-credit **Master of Arts** degree offers a comprehensive program of study that explores student affairs, academic affairs, and college and university administration. Students complete an 18-credit core requirement and then choose from a variety of electives that address their individual interests. The program provides an experiential learning practicum and culminates in a master's project.

The 18-credit Advanced Graduate Certificate is designed to deliver the core knowledge of the administrative processes that drive higher education institutions.

### Flexible Scheduling: On-campus, Fully Online or In Combination

To meet the demands of working professionals, courses are offered **weeknights** on-campus or **completely online**. Students may choose to combine both face-to-face and online courses in our traditional Higher Education Administration (HEA) program, or they may apply to the HEA *Online* program and **take all of their courses via the internet**. Online students are never required to come to campus.

»Learn more about **online learning** at the School of Professional Development.

### Diverse Student Body

There are approximately 250 students matriculated in our Higher Education Administration programs. Most are working full time while taking courses on a part-time basis. They come from a variety of institutions — from small private colleges to large state universities — and hold positions in student affairs, residence life, admissions, advancement, financial aid and administration. One of the benefits of our online courses is that our students have the opportunity to interact with and learn from their peers outside of their region, allowing them to build a broad network of professional contacts that will serve them even after graduation.

### Study Abroad

Higher Education Administration students have the opportunity to gain international perspectives on higher education as part of a 15-day study-tour outside of the United States. »More on the HEA Study Abroad Program.

Gainful Employment Regulation Disclosures

Higher Education Administration (HEA) Program Admissions

### Master of Arts or Advanced Graduate Certificate

A. Personal statement.

B. Resume that includes degree(s) awarded, employment history, and past/current leadership, volunteer, or other relevant involvement and experience. The program accepts students who do not have professional experience in higher education, though the Admissions Committee gives preference to applicants who have some work experience and/or student leadership experience in a higher education setting.

C. A bachelor's degree, applicants with at least a 3.0 cumulative GPA are preferred. Applicants who have less than a 3.0 GPA are considered, in part, on the basis of their years and depth of professional experience in higher education.

D. Essay. Applicants are required to submit a 750-1000-word essay that addresses the following question: What are three critical issues facing colleges and universities today?

E. Two letters of recommendation. Recommendation letters should be written by individuals who can speak about your academic ability, commitment to the higher education field, and attributes and experiences that will make you a successful student in this program. Recommendations from current or former employers and/or faculty members are strongly encouraged.

F. In those cases where the departmental admissions committee deems it desirable, personal interviews with departmental representatives may be necessary.

#### Requirements for the MA in Higher Education Administration

The Master of Arts in Higher Education Administration is a 36-credit program that can be taken after completing a bachelor's, master's, or other advanced degree. It is the appropriate degree for someone who wishes to work in the higher education field in a student affairs or administration capacity—either working directly with students or in a service-related or administrative department.

Current and upcoming course offerings are updated for every semester and can be found on the HEA Course Schedule webpage. For details on scheduling, course load, format and other important information please review the Higher Education Curriculum.

All Master of Arts requirements must be completed within five years from the student's first semester of matriculation.

**Core Courses** - 18 credits. *The following 6 courses are required.*

HEA 501 - Foundations of Higher Education Administration  
HEA 502 - Survey of College Student Development Theory  
HEA 503 - Leadership in Higher Education  
HEA 504 - Research and Assessment in Higher Education  
HEA 521 - Diversity and Higher Education  
HEA 595 - Project Seminar (A grade of "B" or better is required for degree clearance.)

**Electives** - 18 credits. *Select 6 courses from the list below.*

HEA 520 - Advising and Counseling in Higher Education  
HEA 522 - Crisis Management and Prevention in Higher Education  
HEA 523 - Student Affairs Administration  
HEA 524 - Enrollment Management  
HEA 525 - The Contemporary Undergraduate  
HEA 526 - Career Counseling and the Psychology of Work  
HEA 527 - Community College Administration  
HEA 528 - External Relations in Higher Education  
HEA 530 - Legal Issues in Higher Education  
HEA 531 - Finance Issues in Higher Education  
HEA 532 - Facilities Management in Higher Education  
HEA 533 - Intercollegiate Athletics in Higher Education  
HEA 534 - Philanthropy in American Higher Education  
HEA 535 - International Higher Education  
HEA 540 - Critical Issues in Higher Education  
HEA 560 - Comparative University Systems  
HEA 586 - Practicum in Higher Education  
HEA 587 - Advanced Practicum in Higher Education Administration

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#### Requirements for the Advanced Graduate Certificate in Higher Education Administration

The Advanced Graduate Certificate (AGC) is an 18-credit program that can be taken after completing a bachelor's, master's, or other advanced degree. It is a good option for someone who may not want to complete the full 36-credit master's degree, but would like to develop a solid background and skills in the higher education and student affairs field.

All advanced graduate certificate requirements must be completed within three years from the student's first semester of matriculation. If the certificate program is taken in collaboration with a graduate degree program, then the student has five years for completion of the certificate.

**Required Core Courses** - 12 credits

HEA 501 - Foundations of Higher Education Administration  
HEA 502 - Survey of College Student Development Theory  
HEA 503 - Leadership in Higher Education  
HEA 504 - Research and Assessment in Higher Education

**Electives** - 6 credits. *Select two courses from the list below.*

HEA 520 - Advising and Counseling in Higher Education  
HEA 521 - Diversity and Higher Education  
HEA 522 - Crisis Management and Prevention in Higher Education  
HEA 523 - Student Affairs Administration  
HEA 524 - Enrollment Management  
HEA 525 - The Contemporary Undergraduate  
HEA 526 - Career Counseling and the Psychology of Work  
HEA 527 - Community College Administration  
HEA 528 - External Relations in Higher Education  
HEA 530 - Legal Issues in Higher Education  
HEA 531 - Finance Issues in Higher Education  
HEA 532 - Facilities Management in Higher Education  
HEA 533 - Intercollegiate Athletics  
HEA 534 - Philanthropy in American Higher Education  
HEA 535 - International Higher Education  
HEA 540 - Critical Issues in Higher Education  
HEA 560 - Comparative University Systems

### **Time to Completion**

All certificate requirements must be completed within three (3) years from the semester date of admission as a matriculated student unless the student is also matriculated in a master's degree program. Master's students have five (5) years to complete the certificate requirements.

### **Faculty**

The Higher Education Administration faculty is composed of practitioners and researchers who are leaders in the field—including deans, provosts, and directors—who represent a range of colleges and universities. While they may present at national conferences and publish in respected journals, most also retain their full-time administrative positions. Their experience informs their instruction, allowing them to connect the theories that they are teaching to the real-world situations that face higher education professionals. This applied approach benefits students who are currently working in the field. From their very first course, students can start using what they have learned to improve their professional practice.

### **»Read All Faculty Biographies**

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at [COURSE SEARCH](#).*

## Hispanic Languages and Literature

**Chairperson (Interim)**

Pamela Block, (631) 444-3197

**Graduate Program Director**

Adrian Perez Melgosa, N3014 Melville Library (631) 632-6877

**Senior Staff Assistant**

Mary Moran-Luba, N3020 Melville Library (631) 632-6935

**Degrees Awarded**

M.A. in Hispanic Languages and Literature; M.A. in Teaching Spanish; M.A. in Romance Languages and Literature (Spanish); Ph.D. in Hispanic Languages and Literature

**Web Site**<http://www.stonybrook.edu/commcms/hispanic/>**Application**[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-gs](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-gs)

## Description of Hispanic Languages and Literature Program

The Department of Hispanic Languages and Literature, in the College of Arts and Sciences, offers different curricula leading to the degrees of Doctor of Philosophy, and Master of Arts. A candidate for the Ph.D. degree engages in research leading to a dissertation. Part-time study is permitted with graduate courses usually offered during the late afternoon.

**Teaching Assistantships (TAs)**

The Department of Hispanic Languages and Literature has a yearly allocation of teaching assistantships for its graduate students. Each year, the assistantships are awarded to the most promising applicants.

Teaching assistants are assigned to teach one section of a course each semester. During the first semester of their assistantship, they are required to attend an orientation session and a practicum given by the department in order to provide instruction in the methodology of language teaching. In the performance of their teaching duties, teaching assistants must conform to the program and University regulations regarding examinations, class attendance, textbooks, office hours, grading systems, and syllabi.

Meetings with a supervisor and a coordinator of language courses are regularly scheduled and attendance is mandatory. Written evaluations of each TA's teaching performance are done periodically by the department. Renewal of assistantships will depend upon compliance with the regulations listed above.

Teaching assistantships are renewable for three years. Students who are ABD (all but dissertation) may be eligible for a fifth year assistantship. Renewal is subject to passing the qualifying examination and satisfactory course grades and teaching. There is a limited opportunity for summer teaching at an appropriate stipend. Other fellowships, loans, and work-study programs are available.

Several W. Burghardt Turner fellowships are awarded each year to promising minority students who hold American citizenship.

## Hispanic Languages and Literature

Besides filing the official graduate application forms, the prospective student must provide transcripts covering all previous college-level studies. This usually includes a bachelor's degree with a major in Spanish, three letters of reference, and a sample of written work (an essay or term paper). GRE scores, while not required, are taken into consideration. The department encourages students to take it, but all applicants with strong academic records will be considered for admission.

International applicants must score at least 90 on the Internet-Based Test of English as a Foreign Language (TOEFL IBT) with a minimum score of 22 on each of the four subsections (Reading, Listening, Speaking, Writing) and must show that they have the necessary funds to finance their education (living expenses plus tuition). It is strongly recommended that applicants take the TOEFL exam in their country of origin. An applicant whose qualifications seem deficient may be admitted on a part-time basis as a Graduate School special student (GSP) through the School of Professional Development.

All doctoral students and students with a TA/GA stipend whose native language is not English must also demonstrate a sufficient level of English-speaking proficiency. For information on the minimum scores required on the spoken English portion of the TOEFL and IELTS please see the following information at the Graduate School website: <http://grad.stonybrook.edu/ProspectiveStudents/faq.shtml#scores>.

## Requirements for Hispanic Languages and Literature Program

Before registering for each semester, students should consult with a member of the graduate committee of their program to schedule an approved combination of courses. All new M.A. or Ph.D. students are required to meet with the graduate program director during the first week of classes in order to fill out information sheets. Normally, for the M.A., three or four semesters of full-time study are required. For the Ph.D., the number of semesters necessary before advancement to candidacy varies (see below). A minimum of two consecutive semesters of full-time graduate study in



residence is required for the Ph.D. It is recommended that the number of Independent Studies not exceed two. However, this is determined on an individual level.

Undergraduate courses may also be considered as part of a full-time course load, but do not count toward a graduate degree. Since undergraduate courses are not covered by a tuition waiver, students must pay for such courses. Graduate reading proficiency courses (FRN 500, ITL 500, POR 500) fulfill the language requirement and count toward a full-time course load but not toward a graduate degree. According to University requirements, a minimum of a B average must be maintained in all graduate coursework. After taking the practicum (SPN 691), students may choose to enroll in SPN 693 as part of a required 12-credit load until they reach the point where their full-time credit load is nine credits. Equivalent courses taken at other universities may be certified as fulfilling specific required courses in this department, but only six graduate course credits of any kind may be transferred.

#### M.A. in Hispanic Languages and Literature

The curriculum leading to the Master of Arts degree may be terminal or may be combined with Doctor of Philosophy program. In addition to proficiency in Spanish and English, reading knowledge in a third language is required. There is a general requirement of 36 graduate credit hours. At least 30 of these credits must consist of the following courses: (1) a minimum of one course in linguistics, (2) SPN 691, Practicum in the Teaching of Spanish Language, (3) SPN 509, Literary Theory (or another theory course), (4) a minimum of two courses in Peninsular literature at the 500 level, and (5) a minimum of two courses in Latin American literature at the 500 level.

After completion of 30 graduate credit hours, a student must either take a basic comprehensive examination or complete a thesis/project. Each of these options is equivalent to six graduate credit hours. Students working on a part-time basis should complete all requirements within five years after their first regular graduate registration.

The M.A. comprehensive examination is based on a reading list consisting of 75 titles: 50 in the field of major emphasis (Spanish Peninsular or Spanish-American) and 25 in the minor field. The student, with the advice of the graduate program director, will choose three members of the graduate faculty to form the examining committee, with one of them to act as chairperson. The examination consists of five hours of written work: three on the field of major emphasis and two on the minor field.

The M.A. thesis is written under the supervision of a member of the graduate faculty with the advice of a second reader.

The M.A. thesis does not require an oral defense. The recommended length for an M.A. thesis is between 70 and 100 pages, including notes and bibliography. Regulations regarding the writing of the M.A. thesis are the same as those applicable to the Ph.D. dissertation. These regulations are contained in the *Guide to the Preparation of Theses and Dissertations*, available on the Graduate School Web site.

#### M.A. in Hispanic Languages and Literature with a Concentration in Hispanic Linguistics

Students must complete 36 credits, consisting of (1) at least 30 credits of coursework (see list of required courses); (2) a comprehensive examination (three credits); and (3) either a research project and report (three credits) or an additional three credits of coursework. Students must demonstrate proficiency in English, Spanish, and another language and must achieve a grade point average of B or higher in all graduate courses taken. The student's program must be arranged in consultation with the advisor in Hispanic linguistics.

##### Required Courses

A. LIN 530 Introduction to Linguistics, LIN 522 Phonetics, LIN 521 Syntax or LIN 527 Structure of English, an additional course in linguistics

B. SPN 583 Contrastive Phonology, SPN 503 Semantics of Spanish Grammar or SPN 504 Contrastive Analysis, SPN 501 History of the Spanish Language, SPN 505 Spanish Dialectology and Sociolinguistics

C. SPN 512 Medieval Spanish Literature

#### M.A. in Romance Languages

The M.A. in Romance Languages is offered for students who wish to follow a traditional M.A. Program with the intention of possibly proceeding toward further study on the Ph.D. level. Its flexibility allows students to design a curriculum that includes studies in literature, linguistics, or cultural studies in a combination of two Romance languages. This M.A. gives the students a choice of writing a Master's Thesis or passing a Comprehensive Examination to qualify for the degree. For further information contact the Department of European Languages.

#### M.A. in Teaching Spanish

The Master of Arts in Teaching Spanish is offered in conjunction with the School of Professional Development (SPD), and the Professional Education Program (PEP). This degree is designed as a course of study leading to New York State certification for teaching Spanish in secondary schools, grades 7-12. The M.A.T. normally entails a minimum of three semesters of study including courses on literature, linguistics and culture, professional education courses, and a supervised student teaching experience. In order to be eligible for admission to the M.A.T. in Spanish program, students must have completed an academic major in Spanish or its equivalent with a minimum cumulative GPA of 3.0 overall in a bachelor's degree program.

The program consists of 44 required credits of course work: a minimum of 29 credits of education course work and 15 credits in the Spanish content area. Students select their five Spanish content area courses in consultation with the Graduate Director. Teacher candidates are also required to participate in 100 hours of field experience prior to their student teaching placement. A full description of the education courses and field experience may be found in this bulletin under the School of Professional Development.

#### Doctor of Philosophy

The Ph.D. degree is the highest teaching and research degree offered by the University. The Ph.D. prepares the recipient for an academic career at the level of the four-year college and/or research university, or for other careers in humanistic study, research, and writing. The entering graduate student who is considering working toward a Ph.D. should immediately consult with the graduate director to plan a broad program of reading and coursework in all areas offered by the department.

The total number of required credits for the Ph.D. degree is usually 48 (16 courses). These 16 courses include the 12 general requirements specified below and four courses of the student's choosing. Each student is also required to take at least one graduate-level course outside of the department (this course may, upon consultation with the graduate program director, be used to satisfy one of the general requirements). While this sets a general standard for Ph.D. coursework, each student's actual plan of study will continue to be developed on an individual basis. The exact number and type of required courses will be determined based on the student's transcript and performance during his or her first semester(s) at Stony Brook. For example, exemptions from particular subareas may be granted depending on the student's prior study, while in cases of less-than-adequate preparation in any period of Peninsular or Latin American literature (which will vary in the cases of students coming from Spanish, Latin American, or North American universities) the student will be required to take additional coursework.

#### Required Courses

A. Unless exempted, teaching assistants are required to take SPN691, Practicum in the Teaching of Spanish Language.

B. Theory/Applied Theory (a minimum of three courses), SPN 609 Literary Theory, Applied Theory (two courses)

Note: Courses qualify as applied theory if approximately 50 percent of the course material is drawn from critical and/or theoretical texts.

C. General Literary Corpus (6 courses)

Note: A minimum of one course from each subarea to be tested in the comprehensive examination. Courses from area B (above) may be included, depending on content, but no one course may be used to satisfy both requirements B and C.

D. Special Field (2 seminars)

These courses may be taken as independent studies, but generally only after the student has fulfilled requirements A, B, and C. The goal of these courses is to prepare papers for presentation and publication that may also serve as the basis for part of the thesis.

Sample of a four-year study plan for the Ph.D.:

1st year: Fall, 12 credits (including SPN 691); Spring, 12 credits (including SPN 693)

2nd year: Fall, 9 credits; Spring, 9 credits

3rd year: Fall, 6 credits; Spring, comprehensive exam

4th year: Fall and Spring, thesis

#### Language Requirements

In addition to proficiency in Spanish and English, the Ph.D. student must demonstrate a reading knowledge of two languages among French, Latin, Portuguese, Italian, German, Galician, Catalán, Basque and another language if related to the field chosen for the dissertation. The student is urged to demonstrate a reading knowledge of this language by the beginning of his or her second year of full-time study; he or she is required to fulfill both language requirements prior to being advanced to candidacy. A language requirement may be fulfilled by (1) passing the Princeton Graduate School Foreign Language Test (GSFLT), (2) successful completion (grade of B or higher) of a graduate reading course or regular graduate course in the foreign language, or (3) passing a special reading examination administered under the supervision of the Department of Hispanic Languages and Literature. If option three is chosen, the student should consult with the graduate program director, who, along with the department chairperson, will designate an appropriate examiner. Texts will be assigned for the examination, during which a dictionary may be used for the translation of sight passages.

#### Qualifying Examination

The qualifying examination is an instrument designed to give the entire faculty of the department an opportunity to evaluate the student's academic abilities and promise. The exam seeks to assess the student's sensitivity to literature, capacity to deal critically with the text, and ability to express him- or herself cogently. Elaborate bibliographical information regarding the texts, while not discouraged, is not required.

The qualifying examination is only offered once a year, at the beginning of the Fall semester. Students who wish to be confirmed as Ph.D. students must take and pass the qualifying examination (1) at the beginning of their third semester if they enter the program with a BA or MA in Spanish in the Fall; (2) at the beginning of their fourth semester if they enter with a BA in the Spring; (3) at the beginning of their second semester if they enter with and M.A. or its equivalent in the Spring.

The department selects six texts and submits the list to the student not later than four months before the exam. It consists of (1) six hours of written work; the student answers four of six questions, omitting the one that he or she has selected for the oral presentation, each response

is expected to be a minimum of four typed, double spaced pages, at least two of the responses must be written in Spanish, and (2) an oral presentation of some 20 minutes on the selected text; notes may be used, but the student should not read from a text. The oral presentation must be given in Spanish. Following the presentation, the faculty will ask questions.

Students who pass the qualifying exam are automatically admitted to the Ph.D. program. Students who do not pass the exam will be allowed to finish their master's degree but will not be permitted to advance to the Ph.D. program. Students are informed of the results of the exam only after all students have finished the oral portion of the exam. Traditionally, the chairperson or the graduate program director informs students privately about the exam results, and later meets with each student in order to discuss the results.

### **Procedure for Renewing Teaching Assistantships**

All teaching assistants (M.A., Ph.D.) are evaluated by the department as a whole to determine whether their teaching assistantships will be continued during the second year. This evaluation will be conducted according to the following criteria, which include but go beyond the strict grade point average: (1) previous intellectual experience, both general and in the area of Hispanism: breadth of courses taken in related fields, and other features that can help to determine the quality of each student. If the recent experience (i.e., the work done while at Stony Brook) is significantly better or worse than the student's previous experience, this shall be taken into consideration; (2) serious research capacity of each student as demonstrated by papers written for courses; (3) theoretical capacity of each student, as demonstrated by papers written for courses; (4) writing and speaking ability in the Spanish language; and (5) quality of each student as a teaching assistant.

The graduate committee receives evaluations from each faculty member who has worked with the student. The committee may also reread term papers written for courses. Students holding Incompletes will inevitably find themselves at a disadvantage in the process of evaluation.

Third-year support for all students will be automatic provided that students remain in good academic standing and have received adequate written reviews of their teaching.

### **Comprehensive Examination**

During their fifth semester in the PhD program, all full-time graduate students will select a Comprehensive Exam committee of three faculty members from the department. By the sixth week of the fifth semester, these students must file a Comprehensive Exam Committee Form with the Director of Graduate Studies. This form will contain the names and signatures of the faculty who have agreed to serve on the student's Comprehensive Exam Committee. The student's dissertation advisor must be among the members in this exam committee. Once the Comprehensive Exam Committee Form has been submitted, any changes to this committee must be approved by the Director of Graduate Studies.

#### **Scope and timing of the Exam**

During the sixth semester in the program all full-time doctoral students take the Comprehensive Examination. In close consultation with the members of their Comprehensive Exam Committee the student will define four thematic text-clusters. Each of these text-clusters will explore a specific topic, genre, debate, problematic, or issue within a research area in our discipline and/or its connections to other academic fields. The preparation of these text-clusters is an exercise designed to develop each student's specific research interests and serve as preparation work towards their dissertation. The exam should also be considered a fundamental step in the preparation of a teaching portfolio for the student. Thus each cluster will also contain the main thematic threads to develop a proto-syllabus for a course. The text-clusters will be organized according to the following guidelines:

- 1) The primary specialization cluster will focus on the main area of concern for the student's dissertation research. This cluster will consist of no fewer than 20 items between primary sources, theory, and criticism.
- 2) Each of the three secondary clusters will consist of no fewer than 10 primary and 4 theoretical and critical texts.
- 3) Both the primary and each of the secondary clusters must include an introduction (of at least one page and a maximum of two pages) articulating the main critical issues addressed in it. This introduction must also explain why the student has selected a particular combination of areas, genres, theories, and periods.
- 4) Each of the four clusters must also contain a set of at least three questions that invite reflection on the central issues and approaches proposed in the cluster.

#### **Cluster preparation:**

The primary texts in each of the four clusters can include literature, film, art, and other cultural objects or practices. The theoretical and critical bibliography should be selected with relevance to the topic. Creative thinking about sources is encouraged: "literary" texts can be used as "secondary" sources to think about a topic (for example, Borges's short story "Pierre Menard" for a topic related to issues of reading and interpretation, the *Historia verdadera de la conquista de Nueva España* as performed theory debating, for example, the links between legal, testimonial, and fictional writing). Correspondingly, theoretical texts can be used as primary texts (for example, in a cluster about film studies in the Hispanic world, or *La ciudad letrada* as a post-chronicle).

Clusters may be based on one literary genre and/or geographical/temporal area of study (e.g., "Novels of the Spanish Civil War," Modernista poetry) but multi-genre/ transnational/ transatlantic/ transhistorical approaches and connections are required in at least 2 of the 4 clusters (for example, "Post-dictatorship transatlantic texts", which could include novels, films, art, and legal writing from Argentina, Chile, Brazil, Spain and/or other countries in addition to sites such as museums, monuments, "lugares de la memoria", etc.).

Text-clusters should engage with the geographic and temporal breadth of Latin American/Iberian/Latino cultures:

- Every cluster should include a mix of canonical and non-canonical texts.
- If the primary thematic focus of the clusters is on modern and contemporary issues, at least two of the clusters should also include pre-modern or early-modern works, and vice-versa. This aspect can be addressed in a trans-historical manner, showing connections between pre-modern and modern/contemporary issues.
- If the primary thematic focus of the clusters is on Latin America, at least two of them should also include a comparative Iberian aspect, and vice-versa.

The oral exam:

The date for the exam should be agreed on with the Committee at least one month prior. Two weeks before the exam, the student will hand in a final draft of her or his four text-clusters to the Comprehensive Exam Committee. The exam will consist of a 10-minute presentation of the primary cluster and a five-minute presentation for each of the three secondary clusters. Each presentation will be followed by 30 minutes of questions and suggestions from the faculty on the Exam Committee. The primary cluster presentation should describe the underlying rationale connecting the four clusters, foregrounding the disciplinary, interdisciplinary and theoretical dimensions of the student's research. All the presentations should address the issues that provide coherence for the cluster, describe the main issues at work in the texts, the way the existing critical/theoretical bibliography addresses these issues, and formulate questions that need to be explored within that topic and those texts. The Exam will be conducted in Spanish and English. Upon successful completion of the exam and the approval of the dissertation proposal students will be granted ABD status.

### **Dissertation Proposal**

Following successful completion of their Comprehensive Examination, students will work closely with the Dissertation Advisor (and other members of their Dissertation Committee as appropriate) on completing their dissertation proposal. The Advisor will approve the final draft, which will then be submitted to the full committee for approval. The deadline for submission is the fourth week of the student's seventh semester in the doctoral program. The Dissertation Committee will then move to approve the proposal or to suggest modifications and enhancements.

The proposal should be composed of three parts: (1) an introduction and description of the project consisting of approximately 15-20 pages commenting on the methodology, relevance to the field (2); an overview of each of the proposed chapters; (3) a detailed but selected bibliography of primary and critical sources. A copy of the proposal containing the signatures of the dissertation committee should also be forwarded to the Director of Graduate Studies.

### **Dissertation Committee**

The student forms a dissertation committee with the advice of the graduate program director. This committee reviews the prospectus, the open draft, and the final draft of the dissertation. There will normally be five members: a dissertation director, who will be the first reader; a second reader; and three others (one of whom must be from outside the department). The dissertation director and student will arrange a date and a time for the defense with the committee and will take care of all necessary paperwork. A faculty member other than the dissertation director will preside as chairperson at the oral defense.

### **Dissertation**

The initial draft of the dissertation is given first to the director of the dissertation (or the director and co-director as the case may be). After the approval of the director(s), each member of the dissertation committee should be provided with his or her own corrected draft of the dissertation and given at least one month to read it and make comments. The length of the dissertation should be a minimum of 225 pages, including notes and bibliography.

When the dissertation is nearing completion, the director of the dissertation and the student will jointly agree on a date for the defense. The candidate and/or the director will inform the members of the defense committee, the graduate program director, and the graduate secretary of the defense date. Candidates should be aware that the department will not ordinarily reimburse outside readers for their travel to the defense or the cost of postage and other expenses related to the defense.

The defense will consist of two parts. The first part, lasting normally about 30 minutes, consists of an oral presentation of the dissertation. The public is welcome to this portion of the defense. Following the presentation, each member of the examining committee will have an opportunity to ask questions and make final suggestions regarding the dissertation. The candidate shall bring a final draft of the dissertation to the defense, not the final copy to be carried subsequently to the Graduate School, in case the committee suggests last minute changes. The candidate should also bring a draft of the dissertation abstract to the defense which has been previously approved by the Graduate Director and submitted to the Graduate School. The abstract is to be written in English and should not exceed 350 words. The abstract should consist of a short statement of the student's research, a brief exposition of the methods and procedures employed in gathering data, and a condensed summary of the dissertation's conclusion.

Following the dissertation period, the candidate and any others not on the dissertation committee will be asked to leave the room while deliberations are made. If all members agree to accept the dissertation, they will sign the final version of the sign-off sheet or signature sheet, which the candidate will bring to the defense (together with the appropriate pen, which must use black permanent ink). This document must also be shown to the graduate secretary of the department so that the "Clearance for Graduation" form may be typed and forwarded to the Graduate School.

All members of the department, including graduate students, should be notified at least four weeks prior to the date and time of the public defense.

### **Sample Four-Year Study Timeline for PhD:**

1st year:

-1st Semester: 12 credits (including SPN 693)\*

-2nd Semester: 12 credits (including SPN 693)\*

2nd year:

-3rd Semester: 9 credits

-4th Semester: 9 credits

3rd year:

-5th Semester: 3 credits course work, 6 credits of preparation for comprehensive exam

- By the 6th week of 5th Semester: Comprehensive Exam Committee Form completed

-6th Semester: Comprehensive Examination. Student selects Dissertation Committee.

4th year: Dissertation

-Fourth week of 7th Semester: Proposal Submitted to Dissertation Committee.

\*12 credits for students entering with a B.A. or equivalent; 9 credits for students entering with an M.A. or equivalent. Students without M.A. take 693 during both semesters of their first year.

Faculty of Hispanic Languages and Literature Program

Professors

Roncero-López, Victoriano, Ph.D., 1988, University of Illinois, Champaign, 1987 Universidad Complutense de Madrid: 15th- to 17th-century literature of Spain, historiography, European humanism, modern theory.

Charnon-Deutsch, Lou<sup>1,3,4</sup>, Ph.D., 1978, University of Chicago: 18th- and 19th-century Peninsular literature, feminist theory, women writers.

De la Campa, Román, Emeritus, Ph.D., 1976, University of Minnesota: Latin American and Caribbean literature, contemporary critical theory.

Read, Malcolm K., Emeritus, Ph.D., 1978, University of Wales: Sociology of literature, literary theory, marxism and psychoanalysis.

Lastra, Pedro, Emeritus, Ph.D., 1967, Universidad de Chile: Modern and contemporary Spanish-American literature.

Vasvari, Louise. Emeritus<sup>1</sup>, Ph.D., 1969, University of California, Berkeley: Medieval literature, translation theory; literature and linguistics, romance philology.

Associate Professors

Firbas, Paul<sup>5</sup>, Ph.D., 2001, Princeton University: Colonial Latin American Literature, Modernity in Perú, Textual Criticism.

Pérez-Melgosa, Adrián<sup>3,5</sup>, Ph.D., 1995, University of Rochester: Film and literature in the Americas, cultural studies, film studies.

Flesler, Daniela<sup>3</sup>, Ph.D., 2001, Tulane University: Contemporary Spanish literature, postcolonial theory, cultural studies.

Vernon, Kathleen M.<sup>3,4,5</sup>, Ph.D., 1982, University of Chicago: 20th-century Spanish and Latin American literature, cinema and popular culture, gender and cultural studies.

McKenna, James B., Emeritus. Ph.D., 1965, Harvard University: 20th-century Hispanic culture and literature.

Assistant Professors

Burgos-Lafuente, Lena<sup>5</sup>, Ph.D., 2011, New York University: Latin American and Caribbean literature, poetry, literary politics, Transatlantic literature.

Pierce, Joseph M., Ph.D., University of Texas, Austin, 19<sup>th</sup> and early 20<sup>th</sup>-century Latin American literature, queer theory, kinship studies.

Uriarte, Javier, Ph.D. 2012, New York University: 19th century Latin American literature and culture; travel writing, war and state-sponsored violence.

Vialette, Aurelie, Ph. D., University of California, Berkeley, 19th century Iberian Cultures, Working class Culture, Catalan Studies, Gender Studies, Transatlantic Studies (Mexico).

Director of the Spanish Language Program and Senior Lecturer

Ruiz-Debbe, Lilia, Ph.D., 1997, University of Geneva, Switzerland: Applied linguistics, second language research, and language pedagogy.

Lecturers

Davidiak, Elena, M.A., 2004 Northern Iowa State University: TESOL, Spanish Linguistics.

Rzhevsky, Tatiana G., M.A., 1981, University of Illinois: Spanish language and literature; foreign language pedagogy.

Ambio, Marissa, Ph.D. 2010, Columbia University: 19th and 20th century Latin American literature; the Hispanic diaspora in New York.

Number of teaching, graduate, and research assistants, fall 2016: 16

- 1) Recipient of the State University Chancellor's Award for Excellence in Teaching
- 2) Recipient of the State University Chancellor's Award for Excellence in Research
- 3) Comparative Literature
- 4) Women and Gender Studies
- 5) Latin American and Caribbean Studies

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

History Department

### Chairperson

Paul Gootenberg, Ward Melville Social and Behavioral Sciences Building N-319 (631) 632-7510/-7507

### Graduate Program Director

Jennifer Anderson, Ward Melville Social and Behavioral Sciences Building N-319 (631) 632-7485

### Graduate Program Coordinator

Roxanne Fernandez, Ward Melville Social and Behavioral Sciences Building S-303 (631) 632-7490

### Degrees Awarded

M.A. in History; Ph.D. in History

### Web Site

<http://www.stonybrook.edu/commcms/history/>

### Application

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-gs](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-gs)

### Description of the History Department

The Department of History has a faculty of 30 distinguished researchers and teachers. Each year we admit 6 to 8 students into the doctoral program and around the same number of students into the terminal master's program. The department currently has approximately 60 full- and part-time graduate students.

While the department has strength in a number of traditional areas of historical study, it also has a long tradition of comparative, interdisciplinary, and theoretically informed research. The graduate program has been structured around four areas of thematic inquiry—1) Empire, Colonialism, and Globalization; 2) Nation-State, Civil Society, and Popular Politics; 3) Environment, Health, Science, and Technology; and 4) Gender, Race, and Sexuality—to bring these theoretical issues to the fore and insure that our students learn how to apply such concepts as class, gender, race, culture, power, religion and environment in an explicit and sophisticated manner to the study of the past. To further these interests, the department maintains close connections with the Stony Brook Humanities Institute, the doctoral program in Comparative Literature and Cultural Studies, the Women's Studies Program, Africana Studies, the Latin American and Caribbean Studies Program, and the Center for Global History, as well as the departments from which these programs draw their core faculty.

The master's program, which requires students to complete 30 credits of graduate study with a grade of B or higher, allows students to explore the history and historiography of their chosen area of concentration. Students in the master's program have the option of choosing between a Professional Track and an Academic Track, based on their goals and interests. Students in both tracks follow a course of study similar to that followed by doctoral students during their first two semesters, and the oral examination during the third or fourth semester serves as the capstone experience for the master's program.

The Ph.D. program is designed to prepare students to carry out original research and to ultimately pursue a career at the university level. Doctoral students may choose to focus their study on a particular region and period or they may concentrate in one of the thematic areas of study described above, and all students are encouraged to work with faculty in other departments. Full-time students in the doctoral program typically take courses for their first six semesters in the program and take their Oral Examinations at the end of their third year.

Students pursuing a M.A. Degree in History must choose one of two tracks, the Professional Track or the Academic Track. The following chart explains the differences between the two tracks:

| Professional Track                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Academic Track                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>The professional track allows students to follow as rigorous a curriculum as they wish without requiring them to take courses that are better suited for doctoral students. It is designed for both social studies teachers who need a master's degree for professional certification and those seeking advanced preparation for careers government service, journalism, and other fields that demand a combination of research, writing skills, and knowledge of the past. This program provides a stronger grounding in history than do master's programs in liberal studies and teaching.</p> <p>The professional track is also open to individuals seeking personal enrichment, whether or not history is directly related to their occupation. Students may enter the program in either the fall or spring semester and may enroll on either a full- or part-time basis.</p> | <p>The academic track is designed for individuals who aspire to a career in teaching or writing history at the college level, but who are not yet ready to enter a Ph.D. program. Students in the academic track are required to enroll in the two-semester Core Seminar in historical theory and research and generally follow the course of study of incoming doctoral (Ph.D.) students. Students are only admitted to this track for studies beginning in the fall.</p> <p>Students in this track are expected to develop a concentration in a region or period, or in an interdisciplinary field, and to conduct research in this area of concentration in the Core Seminar.</p> <p>As with the professional track, students in the academic track can earn their degree either through coursework alone or by choosing to write a 6-credit master's thesis. The thesis will give students the opportunity</p> |

|                                                                                                                                                                                                                                                              |                                                                               |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| Students in this track can earn their degree either through coursework alone or by choosing to write a 6-credit master's thesis. The thesis will give students the opportunity to conduct independent research on a topic of interest using primary sources. | to conduct independent research on a topic of interest using primary sources. |
| Students can also take up to 6 credits of content-based pedagogy courses, and we hope to be able to offer such courses as Teaching American History Through Popular Culture, Introduction to Economics Education, and Teaching Geography.                    | Students may begin the program only in the Fall semester.                     |
| Students may begin the program either in the Fall or the Spring semester.                                                                                                                                                                                    |                                                                               |

#### Admission to the M.A. and Ph.D. Programs

In addition to the requirements of the Graduate School, the minimum requirements for admission to the graduate program in history are:

- A. A bachelor's degree in history or its equivalent with a minimum grade point average of 3.0 (B) in all undergraduate coursework and in history courses.
- B. Three letters of recommendation that address the applicant's potential to succeed in a rigorous course of graduate study.
- C. Submission of scores from the Graduate Record Examination (GRE) General Test. The subject area test in history is not required.
- D. Students whose first language is not English must submit scores from the Test of English as a Foreign Language (TOEFL). Students must score at least a 550 (paper), 213 (computer), or 90 (iBT).

With the approval of the dean of the Graduate School and the History Department, a student holding an M.A. degree from another accredited institution may be admitted directly to the Ph.D. program at Stony Brook. In special cases, students who do not have a bachelor's degree in history or whose GPA does not meet the requirements stated above may be admitted on a provisional basis for M.A. study only. After completing the master's program, such students may apply for admission to the doctoral program.

Please note that students are only admitted to the Ph.D. program and the Academic Track of the M.A. program for study beginning in the fall semester; students are admitted to the Professional Track of the M.A. program for study beginning in both the fall and the spring semesters.

#### Requirements for the M.A. Degree in History

The History Department offers two separate M.A. tracks to meet the differing needs of our students:

##### 1. Professional Track

The professional track is designed for both social studies teachers who need a master's degree for professional certification and those seeking advanced preparation for careers government service, journalism, and other fields that demand a combination of research, writing skills, and knowledge of the past. This program provides a stronger grounding in history than do master's programs in liberal studies and teaching. Students benefit from exposure to doctoral students, but are not required to take courses designed for Ph.D. candidates.

The professional track is also open to individuals seeking personal enrichment, whether or not history is directly related to their occupation. Students may enter the program in either the fall or spring semester and may enroll on either a full- or part-time basis.

Students in this track can earn their degree either through coursework alone or by choosing to write a 6-credit master's thesis. The thesis will give students the opportunity to conduct independent research on a topic of interest using primary sources.

Students can also take up to 6 credits of content-based pedagogy courses, and we hope to be able to offer such courses as Teaching American History through Popular Culture, Introduction to Economics Education, and Teaching Geography.

Students must begin the program in Fall semester.

##### 2. Academic Track

The academic track is designed for individuals who aspire to a career in teaching or writing history at the college level, but who are not yet ready to enter a Ph.D. program. Students in the academic track are required to enroll in the two-semester Core Seminar in historical theory and research and generally follow the course of study of incoming doctoral (Ph.D.) students. Students are only admitted to this track for studies beginning in the fall.

Students in this track are expected to develop a concentration in a region or period, or in an interdisciplinary field, and to conduct research in this area of concentration in the Core Seminar.

As with the professional track, students in the academic track can earn their degree either through coursework alone or by choosing to write a 6-credit master's thesis. The thesis will give students the opportunity to conduct independent research on a topic of interest using primary sources. Students must begin the program in Fall semester.

In addition to the requirements imposed by the Graduate School, the following are required:

##### A. Coursework

The coursework requirements for the Professional Track and the Academic Track differ somewhat, as can be seen in the chart below:



| Professional Track                                                                                                                                                                                                                                                                                | Credits |  | Academic Track                                                                                                                                                                                                                                                                                   | Credits |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
|                                                                                                                                                                                                                                                                                                   |         |  | Core Seminar (HIS 524/6 & 525/7)                                                                                                                                                                                                                                                                 | 6       |
| Three Field Seminars                                                                                                                                                                                                                                                                              | 9       |  | Two Field Seminars                                                                                                                                                                                                                                                                               | 6       |
| Two Theme Seminars                                                                                                                                                                                                                                                                                | 6       |  | Two Theme Seminars                                                                                                                                                                                                                                                                               | 6       |
| One Directed Readings                                                                                                                                                                                                                                                                             | 3       |  | One Directed Readings                                                                                                                                                                                                                                                                            | 3       |
| The remaining 12 credits can be selected from Field Seminars, Theme Seminars, directed readings and graduate courses offered in conjunction with other departments (e.g. Sociology, Africana Studies, and Cultural Analysis & Theory). There will be an option for a Master's Thesis (6 credits). | 12      |  | The remaining 9 credits can be selected from Field Seminars, Theme Seminars, directed readings and graduate courses offered in conjunction with other departments (e.g. Sociology, Africana Studies, and Cultural Analysis & Theory). There will be an option for a Master's Thesis (6 credits). | 9       |
| Total Credits                                                                                                                                                                                                                                                                                     | 30      |  | Total Credits                                                                                                                                                                                                                                                                                    | 30      |

**Additional Notes on Coursework:**

1. Core Seminar (HIS 524/HIS 526, HIS 525/HIS 527: 3 credits each semester): This course provides an intensive, year-long introduction to historical theory and research. It also familiarizes students with the thematic organization of the graduate program. All full-time students in the Academic Track of the master's program, as well as in the doctoral (Ph.D.) program, are required to take this course, which is offered only as a fall/spring sequence, during their first year.
2. Two or Three Field Seminars (3 credits each): The department offers a number of field seminars designed to familiarize students with the history and historiography of specific regions and periods in US, European, Latin American, and Asian history. Master's students in the Academic Track are required to take two field seminars, while master's students in the Professional Track are required to take three field seminars. A minimum of two field seminars are offered each semester. Topics change regularly, and students are free to choose among the field seminars being offered. Students interested in concentrating in the history of a specific region are encouraged, but not required, to complete both parts of the Field Seminar sequence for that region where available.
3. Two Theme Seminars (3 credits each): The theme seminars are the heart of the department's commitment to the theoretically informed, interdisciplinary study of history. Topics, approaches, and instructors vary, but these seminars generally fall within the rubric of our program's theme clusters: Gender, Race, and Sexuality; Nation-State, Civil Society, and Popular Politics; Empire, Colonialism, and Globalization; and Environment, Health, Science, and Technology. Master's students in both the Professional and Academic Tracks are required to take two theme seminars. A minimum of two theme seminars are offered each semester. Topics change regularly, and students are free to choose among the theme seminars being offered.
4. Directed Readings for M.A. Candidates (HIS 584/HIS 585, 3 credits each): Three credits of directed readings will normally be taken in the Fall of the initial year, to enable the student to meet regularly with his or her Advisor and address any deficiencies in preparation for the graduate program. The course may be repeated with the same or other members of the faculty as an elective in later semesters.
5. Three or Four Electives (3 credits each). The remaining 12 credits (for students in the Professional Track) or 9 credits (for students in the Academic Track) can be selected from Field Seminars, Theme Seminars, the graduate courses offered in conjunction with other departments (e.g., Sociology, English, Art History, Africana Studies, Women's and Gender Studies, and Cultural Analysis and Theory), and Directed Readings for M.A. Candidates. Directed Readings may or may not be in connection with preparation for the Oral Exam or for an optional Master's Thesis (see below.)

**B. Oral Examination:** By the time the student has completed 24 credits (e.g. fall semester of his/her second year for full-time students), he or she must secure the agreement of two faculty members (one of whom must be the student's Advisor) to serve on the orals examination committee. The Advisor will examine the student in his or her major geo-political field (Modern Europe, Colonial North America, etc.); the second faculty member will examine the student in a complementary field (usually based on a theme seminar). The exam will be taken at the end of the student's course of study. At least two months, preferably three, before the student's desired date for the Oral Exam, the student will present the members of his or her orals committee with a preliminary list of books and topics to be examined. Students may enroll in a Directed Readings course (sometimes termed an "Orals workshop") to prepare for the examination. Students are responsible for arranging a mutually acceptable date and time for the exam (and for notifying the Graduate Program Coordinator well in advance so that the necessary paperwork can be processed). The exam will last approximately one hour, and it will be graded as "pass with distinction," "pass," or "fail." In the event of failure, the student may petition to take the exam a second time at a later date.

**C. Master's Thesis Option:** Students may elect to write a master's thesis. While there is no specified length for this, the expectation is that the thesis will be in the range of 40 to 70 pages. Students pursuing this option must enroll in HIS 586 (Orals and Thesis Preparation for M.A.

Candidates) and/or HIS 584/585 (Directed Readings for M.A. Candidates). The thesis writing will be supervised by the student's Advisor, and—for students pursuing this option—a substantial portion of the oral examination will be devoted to the defense of the thesis.

**D. Language Requirement:** Master's students with a concentration in European history must pass a written exam in an appropriate foreign language. Students in Latin American history must pass a written exam in Spanish or Portuguese. The other areas of concentration currently do not require a foreign language for the master's degree.

**E. Master's Students Seeking to Enter the Ph.D. Program:** Master's students seeking to enter the Ph.D. Program must submit a formal application to the Graduate School. Admission into the Ph.D. program is not guaranteed. Meanwhile, M.A. students are welcome and indeed encouraged to participate in all departmental activities.

#### Requirements for the Ph.D. Degree in History

The Stony Brook doctoral program offers an intensive, far-ranging education, culminating in an original research and writing project. It prepares students for a professional career in higher education, or for jobs in media, government or other fields which rely upon the skills and knowledge of the historian. In addition to acquiring thorough training in a chosen specialty defined by time (medieval, early modern, 18th, 19th, or 20th centuries) and by place (Latin American, U.S., European, Asian or African), students of different periods and regions of the world take many of the same courses, on topics drawn from the department's thematic areas. Our innovative approach, now taken by other history departments as a model, prepares students for research and teaching about the past not just for a single corner of the world, but in its relationship and interdependence with other places. At Stony Brook, many courses and much teaching now revolve around fundamental sets of ideas which are continuing to reshape historical scholarship about many times and locales. Our graduate students still receive solid grounding in the national or regional histories and periods of their choosing. Whether Europeanist or Latin Americanist or Asianist or Americanist, graduate students have ample chances to study with faculty in their own geographic specialty, as well as to work with other faculty specializing in the thematic clusters of interest to them. And our thematic emphasis enables them also to think across and beyond these boundaries, in ways that make for cutting-edge scholarship, as well as timely and insightful teaching. Our current thematic clusters are Empire, Colonialism, and Globalization; Nation-State, Civil Society, and Popular Politics; Environment, Health, Science, and Technology; and Gender, Race, and Sexuality (see the department's web page for theme descriptions, as well as information on associated faculty and their research interests).

The first phase of the doctoral program consists of coursework. During their first year, all students take a Core Seminar that covers fundamental readings in several thematic areas, as well as basic methods of research and historical writing. Early on, students also take Field Seminars in conventional geographic and chronological specialties, Theme Seminars devoted to readings in the department's topical areas of specialty, as well as a Teaching Practicum. In the second year, they may begin taking Research Seminars, organized around the production and presentation of major research papers. During the third year, all students must take a comprehensive oral examination in their primary and secondary fields. In addition, all students must take the Dissertation Prospectus Seminar, in which they compose and discuss their dissertation projects and prepare preliminary fellowship proposals. Upon satisfactory passage of the required courses, the orals, and any language requirement, students are then "advanced to candidacy." In the final phase of their doctoral education, students work closely with a faculty Advisor to research and write the Ph.D. dissertation—a book-length manuscript that offers a significant contribution to the historical literature. In accordance with Graduate School rules, the official "time limit" is seven years from a student's completion of 24 graduate-level courses (whether at Stony Brook or elsewhere) to the defense and submission of the dissertation.

#### Course of Study and Program Requirements

##### A. Coursework

Students in the doctoral program are expected to complete three years of coursework distributed in the manner outlined below. All students take the team-taught Core Seminar in the first year. Course requirements also include 2 Field, 3 Theme, and 2 Research Seminars, plus an additional Field or Theme Seminar (depending on the student's academic needs and course availability). At the end of the third year, students take a comprehensive oral examination designed to assess their mastery of the subject matter, conceptual tools, and research skills necessary to undertake independent research for the dissertation. The dissertation is to be a substantial piece of original research completed independently by the student, and all students are required to defend their dissertation orally before their Doctoral Defense Committee at the end of their course of study.

1. Core Seminar (HIS 524/HIS 526, HIS 525/HIS 527: 3 credits each semester): This course provides an intensive, year-long introduction to historical theory and research. It also familiarizes students with the thematic organization of the graduate program. All full-time students in the doctoral program, as well as the Academic Track of the master's program, are required to take this course, which is offered only as a fall/spring sequence, during their first year.

2. Two or Three Field Seminars (3 credits each): The department offers a number of Field Seminars designed to familiarize students with the history and historiography of specific regions and periods. These courses include: Medieval and Early Modern Europe (HIS 501) and Modern Europe (HIS 502); Early American History (HIS 521) and Modern American History (HIS 522); Colonial Latin America (HIS 541) and Modern Latin America (542), all of which are offered on a one- or two-year cycle. In addition, the following Field Seminars are offered in African and Asian history: Introduction to African and/or Asian History (HIS 562), South Asian History (HIS 563), Chinese History (HIS 564), and Japanese History (HIS 565); note that some of these Field Seminars may be offered slightly less frequently. Some Field Seminars are populated with students in the Master of Arts in Teaching program (M.A.T.), as well as with M.A. and Ph.D. students. Students may choose to take either two or three Field Seminars, in accordance with their intellectual interests and needs.

Students choosing to concentrate in the history of Europe, U.S., or Latin America are encouraged to complete both parts of the Field Seminar sequence in their area of concentration. If more survey or focused reading is required in a specific area, students have the option of taking a third Field seminar or a relevant Theme seminar. With the approval of the Graduate Director and Advisor, students may also satisfy their Field Seminar requirements by taking an appropriate course in an outside department or institution.

3. Three or Four Theme Seminars (3 credits each): The Theme Seminars are the heart of the department's commitment to the theoretically informed, interdisciplinary study of history. Topics, approaches, and instructors vary, but these seminars generally fall within the rubric of our program's theme clusters: Gender, Race, and Sexuality; Nation-State, Civil Society, and Popular Politics; Empire, Colonialism, and Globalization; and Environment, Health, Science, and Technology. On occasion, students may apply to take seminars in outside departments or institutions (that is, other universities in the NY Consortium) that may serve as a Theme Seminar. There is also some flexibility for those students wishing to take either three or four Theme Seminars. On occasion, students may also wish to "convert" a Theme Seminar into a Research Seminar (by completing the readings and writing a research paper, with the prior arrangement of the seminar professor and the student's Advisor).

4. Two Research Seminars (3 credits each): One Research Seminar is offered each semester. It gives students the opportunity to carry out individual research projects using primary sources in areas related to their developing scholarly interests. Research seminars are generally taken during the second and third years. Third-year students often use the Research Seminar to begin preliminary work on their dissertations.

5. Supervised Teaching (HIS 581, 3 credits): All students who hold teaching assistantships and are not enrolled in Teaching Practicum (HIS 582; see below) are expected to register for this course, if possible; if this is not possible, the student should notify the Graduate Director.

6. Teaching Practicum (HIS 582, 3 credits): Required of all Teaching Assistants, as well as those expecting to TA for undergraduate courses in the future. It is generally taken during Fall semester of Year 1. This course gives students the opportunity to discuss the pleasures and pitfalls of undergraduate classroom teaching in a large, diverse public university. Stony Brook offers a laboratory for future college teachers to develop and try out "lesson plans," as well as to broach such universal concerns as classroom authority, student participation, student-teacher relations, the problem of plagiarism, sexual harassment, etc. Students may be required to attend teaching workshops offered by the Graduate School in addition. These workshops, as well as the Teaching Practicum, are also open to students who do not hold teaching assistantships.

7. Dissertation Prospectus Workshop (HIS 695, 3 credits): This course must be taken by all students and should be completed in the Spring semester of Year 3. Students are expected to work closely with their own Advisors during the semester, as they prepare their dissertation plan. By the end of the course, students will produce and present to the History Department a formal Dissertation Prospectus (usually a 15-20 page proposal). The prospectus must be acceptable both to the instructor of the workshop and to the student's Ph.D. Advisor. Completion of the workshop and written approval of the dissertation prospectus by the student's Ph.D. Advisor and committee members are required for advancement to candidacy. The course grade is S/U.

As part of the coursework taken prior to the qualifying examination, students may also enroll in the following workshops:

8. Directed Readings (HIS 682, 3 credits each): Students who enter the program without a master's degree may choose to take three credits of Directed Readings will normally be taken in the Fall and/or Spring of the initial year, to enable the student to meet regularly with his or her Advisor and address any deficiencies in preparation for the Ph.D. program. In addition, on the rare occasion that a student's needs are not met by the department's Field and Theme seminars, he/she may wish to arrange a Directed Readings with an individual faculty member so as to undertake a specific set of readings on a topic of mutual interest.

9. Orals Workshop (HIS 684, 3 or 6 credits): This workshop provides a space for students to work semi-independently in the scholarly literature of their developing fields of specialization. Normally, students enroll in Orals Workshop (for either 3 or 6 credits, depending on their remaining course requirement needs) in the Fall semester of Year 3. To prepare for the Orals, students have to define three areas of specialization (two in their major geo-political field, and one in a comparative field). Ideally, students should develop their Orals book lists and topics on the basis of the most relevant Field and Theme seminars they have taken and in consultation with their Orals committee. Students may use the Orals Workshop to read independently or in small groups, as well as to meet periodically with Orals committee members. All students should make sure they have dress rehearsals before the exam actually takes place. (See below for details on the Oral Examination.)

10. Courses in Other Departments and Institutions: Students are encouraged to take courses in other departments in order to acquire the theoretical tools offered by other disciplines and gain an interdisciplinary perspective on their fields of interest. Many of our students take courses in such departments as Sociology, English, Art History, and Cultural Analysis and Theory, as well as such interdisciplinary programs as Women's and Gender Studies and Latin American and Caribbean Studies. Such courses should be selected in consultation with the student's Advisor. In addition, Stony Brook belongs to a NY-area Consortium of universities. Students are welcome to take graduate seminars for credit at Columbia, NYU, or other institutions. The Graduate School has a form for this (what else is new?!), and the student should obtain prior permission from his/her Advisor and the Graduate Director. Whether the outside course is to count for a Field, Theme, or Research course is negotiated on a case-by-case basis.

Below is a sample course of study that might be followed by a first-year doctoral student without a master's degree who also holds a teaching assistantship. Graduate School regulations stipulate that new students without MA degrees must take 12 credits per semester during Year 1; those students with MA degrees or who have obtained at least 24 credits at the graduate level are required (and permitted) to register for only 9 credits per semester.):

| Fall                            | Credits   | Spring                                       | Credits   |
|---------------------------------|-----------|----------------------------------------------|-----------|
| Core Seminar I (HIS 524 or 526) | 3         | Core Seminar II (HIS 525 or 527)             | 3         |
| Teaching Practicum (HIS 582)    | 3         | Supervised Teaching (HIS 581)                | 3         |
| Theme Seminar                   | 3         | Theme or Field Seminar                       | 3         |
| Field Seminar                   | 3         | Theme or Field Seminar, or Directed Readings | 3         |
| <b>Total</b>                    | <b>12</b> |                                              | <b>12</b> |

#### B. Full-time Status

Students who have not yet advanced to G4 status (i.e. who have completed fewer than 24 graduate-level credits) are required to register for 12 credits in order to maintain full-time status. Full-time enrollment for students who have achieved G4 status is 9 credits. Students acting as teaching assistants must carry a full-time load (including, if possible, the 3-credit Supervised Teaching, HIS 581). Once a student has advanced to candidacy, s/he must register for 9 credits of dissertation research (HIS 699, HIS 700, HIS 701) each semester until the degree is awarded in order to remain on full-time status.

#### C. Award of Master's Degree to Doctoral Students

Doctoral students who have completed the requirements for the master's degree may petition the Graduate School to be awarded the master's degree while continuing in the doctoral program.

#### D. Foreign Language Requirement

All students (except native speakers of the language of their field of specialization) must demonstrate proficiency in at least one relevant foreign language before being advanced to Ph.D. candidacy. This is a Graduate School requirement that may not be waived. Minimal proficiency in a language means the ability to translate a given passage clearly and accurately with the aid of a dictionary. Relevant language(s) are determined by the student's area of specialization.

Proficiency may be demonstrated either through a written exam administered by the department or a satisfactory grade in a graduate language course (e.g., French 500). The in-department exam consists of translating a passage from a scholarly work in History, with the aid of a dictionary. It is administered and evaluated by an appropriate faculty member. The results of the Language Exam must be reported to the department's Graduate Program Coordinator and entered into the student's file.

At the discretion of the Advisor, a student may be required to study additional languages as part of his or her degree program. It is the student's responsibility to establish with her or his Advisor which foreign languages are necessary for the completion of the Ph.D. and to make sure they have completed the language requirement in a timely fashion so that they may advance to candidacy. Ideally, students take their written language exams by the Fall semester of year 3.

#### E. Oral Examination and Advancement to Candidacy

By the end of the second year in the doctoral program, each student should name a Ph.D. Advisor (a History Department faculty member who has agreed to serve as the student's dissertation advisor) and, in consultation with that Ph.D. Advisor, name two additional members of the department who agree to serve on his/her Oral Exam Committee. The committee will help the student define his or her examination fields,

language requirements, and coursework, as well as monitor the student's progress on the dissertation. Members of the committee must also review and, once it meets their standards, endorse in writing the student's dissertation prospectus before the Oral Exam may be scheduled.

It is the student's responsibility to coordinate the examination date and time with his or her committee. The examination may not be taken until all University and History Department requirements (including but not limited to the completion of all coursework, the passing of the Foreign Language Requirement, and the written approval of the Dissertation Prospectus by the Ph.D. Advisor and by all committee members) have been met. Students should check with our Graduate Program Administrator, well in advance to make sure their records are up-to-date and to process the paperwork.

Full-time students are expected to take their Oral Exam no later than the end of the sixth semester of graduate study. The student, in consultation with the examination committee, will arrange the day, time, and place of the Oral Exam. In addition, the student shall present to each member of the examination committee—no later than the middle of the semester that precedes the Ph.D. oral examination—a suggested list of books and topics. Committee members will advise the student of any changes or additional reading that is to be completed for the examination. The Oral Exam usually lasts about 1 ½ or 2 hours and is graded as “pass with distinction,” “pass,” “weak pass,” or “fail.” Students who fail the Oral Exam may petition to take the exam a second time at a future date.

#### **F. Dissertation Committee**

As the doctoral student is near completion of the dissertation, he/she must constitute a four-person Dissertation Defense Committee. The Ph.D. Advisor plus three other faculty members (including one “outside faculty” member) compose the Dissertation Committee. If, in the rare case, a Ph.D. Advisor is no longer willing to serve as dissertation advisor or if the student wishes to work with a new Advisor, the student must identify some other faculty member in the History Department to serve. The new Advisor must declare in writing his/her willingness to serve as dissertation advisor *before* the student may be advanced to candidacy. Normally, the Ph.D. Advisor meets with the student at least once each semester (or, if the student is not in Stony Brook, will correspond) to discuss progress on the dissertation.

#### **G. Dissertation and Defense**

Following Advancement to Candidacy, students are required to enroll for one credit of dissertation research each semester (whether through HIS 699, HIS 700, or HIS 701, depending on each student's location) until the dissertation defense. Teaching assistants must register for 9 credits of Dissertation Research on Campus (HIS 699).

The dissertation is the basic requirement for the conferral of the Ph.D. The student must present the completed dissertation in such a way that the dissertation committee has a reasonable period in which to read, critique, and suggest changes to be incorporated into the final version before the dissertation defense. In other words, the completed dissertation **MUST** be in the hands of the committee *at least* two full months before the scheduled date of the dissertation defense, so the dissertation committee can have at least a month to read and correct the dissertation and to give the student their written criticisms and suggestions. If the committee is indeed given this proper amount of lead time, committee members' comments must be in the student's hands one month before the dissertation defense. If the criticisms are not written out, the student can assume the dissertation is approved in the form submitted. The student must answer all written objections and corrections by revising the dissertation to each faculty member's satisfaction before it is submitted to the Graduate School.

The Dissertation Committee is composed of four faculty members, including the student's Ph.D. Advisor and one faculty member outside the field of History or the institution of Stony Brook. The Graduate School must give advance approval of the Dissertation Committee. The defense is also open to interested students and faculty. Please see the Graduate School website for further information on deadlines and regulations concerning dissertation submission and scheduling of the dissertation defense.

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Faculty of History Department

#### **Professors**

Barnhart, Michael, Ph.D., 1980, Harvard University: U.S. foreign policy; 20th-century U.S. history; modern Japan.

Gootenberg, Paul, Ph.D., 1985, University of Chicago: Modern Latin America (Andes and Mexico); economic, state-formation, commodities, drugs.

Hong, Young-Sun, Ph.D., 1989, University of Michigan: Modern Germany; social theory; culture and politics in Germany; culture and politics in modern Europe; gender history.

Landsman, Ned, Ph.D., 1979, University of Pennsylvania: Early American History and Scotland.

Larson, Brooke, Ph.D., 1978, Columbia University: Colonial and modern Latin America; Andean rural societies; race, ethnicity, and nation-making.

Lebovics, Herman, Ph.D., 1965, Yale University: Modern Europe; intellectual and cultural history; Germany and France.

Lipton, Sara, Ph.D., 1991, Yale University: Medieval cultural and religious history, Jewish-Christian relations, gender.

Marker, Gary J., Ph.D., 1977, University of California, Berkeley: Russian social and intellectual history; history of printing; European labor history.

Miller, Wilbur R., Ph.D., 1973, Columbia University: U.S. social and political history, Civil War and Reconstruction, crime and criminal justice history.

Roxborough, Ian, Ph.D., 1977, University of Wisconsin (joint appointment with Sociology): social history of Latin America; modern Mexico; war and the military.

Schäfer, Wolf, Dr. Phil., 1983, University of Bremen, Germany: history of technoscience, social history, and global history.

Sellers, Christopher, Ph.D., 1992, Yale University; M.D., University of North Carolina, Chapel Hill, 1992: U.S. environmental, industrial and cultural history; history of medicine and the body.

Tomes, Nancy J., Ph.D., 1978, University of Pennsylvania: American social and cultural history; medicine, nursing and psychiatry, women and the family.

Wilson, Kathleen, Ph.D., 1985, Yale University: British social, cultural and political, 17<sup>th</sup>- 19<sup>th</sup> centuries; cultures of imperialism; gender studies; cultural, feminist, and postcolonial theory.

Zimansky, Paul, Ph.D., 1980, University of Chicago: Ancient Near East.

#### **Associate Professors**

Anderson, Jennifer, Ph.D., 2007, New York University: Atlantic history; Early American history.

Beverley, Eric, Ph.D., 2007, Harvard University: South Asia; colonial and postcolonial studies; Muslim world.

Cooper, Mary Alexandra ("Alix"), Ph.D., 1998, Harvard University: Early modern Europe/world; history of science, medicine and technology; environmental history; cross-cultural encounters.

Farmer, Jared, Ph.D., 2005, Stanford University: Environmental history and policy; geography; U.S. cultural history; history of the U.S. West.

Frohmman, Larry, Ph.D., 1992, University of California, Berkeley: European intellectual history; history of welfare and social policy; social studies education.

Lim, Shirley, Ph.D., 1998, UCLA: Asian American women's cultural history.

Newman, Elizabeth Terese, Ph.D., 2008, Yale University: Mexico, ethnohistory, agrarian studies, historical archaeology, zooarchaeology.

Man-Cheong, Iona, Ph.D., 1991, Yale University: Modern China; Late Imperial China; women and gender; Chinese Diaspora.

Masten, April, Ph.D., 1999, Rutgers University: U.S. cultural history, 19<sup>th</sup> century.

Mimura, Janis, Ph.D., 2002, University of California, Berkeley: Japan.

Rilling, Donna J., Ph.D., 1993, University of Pennsylvania: Early national U.S. history; business, legal, urban and labor history.

Shankar, Shobana, Ph.D., 2003, UCLA: African history, religion, urban, health/disease.

Zolov, Eric, Ph.D., Ph.D., 1995, University of Chicago: Modern Latin America, U.S.-Latin American relations, popular culture, global 1960s.

#### **Assistant Professors**

Chase, Robert, Ph.D., 2009, University of Maryland: U.S. history, state and racial politics, African American and Latino/a history, urban history, labor history and working-class culture, civil rights.

Flores, Lori, Ph.D., 2011, Stanford University: U.S. history; immigration, ethnicity, and civil rights; labor history; Latino history.

Teplitsky, Joshua Z., Ph.D., 2012, New York University: Early modern Europe 1500-1750, German principalities 1500-1750, diaspora studies.

#### **Lecturers**

Backfish, Charles, A.M., New York University, 1968: Social studies education.

Earley, Terry, Ph.D., 1998, New York University: Educational leadership.

Hinely, Susan, Ph.D., 1987, Stanford University; J.D., 1983, Harvard Law School: European history and women's history.

#### **Emeriti Faculty**

Bottigheimer, Karl S., Ph.D., 1965, University of California, Berkeley: Tudor-Stuart England and Ireland; early modern Europe; modern Ireland.

Cowan, Ruth Schwarz, Ph.D., 1969, Johns Hopkins University: modern science, technology and medicine.

Garber, Elizabeth, Ph.D., 1966, Case Western Reserve University: Social and intellectual history of science; 19th- and 20th-century physics; European intellectual and social history.

Goldenberg, Robert, Ph.D., 1974, Brown University: Jewish history and religion in late antiquity; rabbinic literature and exegesis; history of Jewish thought; rabbinic hermeneutics; ancient history.

Lemay, Helen R., Ph.D., 1972, Columbia University: Medieval and Renaissance intellectual history; paleography; history of science and medicine; women's history.

Rosenthal, Joel T., Ph.D., 1963, University of Chicago: Medieval history; medieval England; social history.

Weinstein, Fred, Ph.D., 1962, University of California, Berkeley: Theory in history; Russian and European history.

Williams, John A., Ph.D., 1963, University of Wisconsin: British Empire; Africa; the Commonwealth; expansion of Europe.

Wishnia, Judith, Ph.D., 1978, Stony Brook University: Modern Europe; France; labor history; women's history.

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*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

Spring 2018

**History of Philosophies, East and West (HPEW)****Chairpersons of the Participating Departments**

Agnes Weiyun He, Department of Asian & Asian American Studies, Humanities 1116 (631) 632-7590

Mary Rawlinson, Department of Philosophy, Harriman Hall (631) 632-4098

**HPEW Program Director**

Jeffrey Edwards, Department of Philosophy, Harriman Hall 246 (631) 632-7570 [jeff.edwards@stonybrook.edu](mailto:jeff.edwards@stonybrook.edu)

**Graduate Secretary**

Kathleen-Anna Amella, Harriman Hall 216 (631) 632-7580

**Degree Awarded**

MA in History of Philosophies, East and West

**Website**

[www.stonybrook.edu/hpew](http://www.stonybrook.edu/hpew)

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-gs](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-gs)

**History of Philosophies, East and West (HPEW)**

The HPEW curriculum includes courses on Islamic philosophy, Buddhist philosophy, Chinese philosophy, Japanese philosophy, Hindu philosophy, ancient Greek philosophy, as well as medieval and modern western philosophy. The systematic areas covered from historical perspectives are ethics, political philosophy, metaphysics, cosmology, psychology, aesthetics, theology and theories of knowledge. The program's courses and seminars on eastern thought include treatments of its western interpretations, and vice versa. Teaching is based on primary texts, with selective use of secondary sources. Special emphasis is put on the understanding of native terms and concepts from the original languages of the works read. (Languages may include German, French, Italian, Greek, Latin, Arabic, Persian, Sanskrit, Pali, Chinese, Japanese, and Korean. Achieving reading competency in one or more of these languages is strongly encouraged.) This program is one of the few in the western world allowing students to earn a philosophy graduate degree while pursuing coursework in both eastern and western thought. Because of its distinctive character, it aims to attract students with a comparative perspective who wish to deepen their understanding of the history of philosophy under the guidance of internationally renowned scholars of modern, medieval, and classical philosophical traditions.

**Program Administration and Advising**

The administration of this joint MA program is carried out by HPEW's program director in consultation with the Graduate Program Committee (GPC). The GPC consists of HPEW core faculty (see below) and one graduate student representative. Academic advising is carried out primarily by the core faculty, who also meet regularly to evaluate all individual students' progress toward graduation.

Students must fulfill most degree requirements by taking HPEW's regularly scheduled graduate courses and seminars. Any student who takes the MA thesis option (6 credits) will request the formation of a faculty committee for the thesis project. This committee consists of the thesis advisor and one other faculty member.

**Admissions**

- At the program level, decisions on admission are made by the faculty members of the HPEW Graduate Program Committee. Admission requirements are as follows:
- Bachelor's degree (Some knowledge of the history of philosophies, East and/or West, is highly desirable but not required.)
- Two official transcripts of undergraduate record and of any work completed at the graduate level
- Letters of recommendation from three previous or current instructors
- Writing sample (This may be a paper written for a previous course.)
- Graduate Record Examination (GRE) General Test scores\*
- TOEFL scores for applicants whose native languages are not English\*\*
- Acceptance by HPEW and the Graduate School

\* HPEW's Graduate Program Committee may request that the GRE requirement be waived for qualified applicants.

\*\*HPEW adheres to Graduate School standards setting the acceptable score on the TOEFL test for international students at 550 and above, or a minimum score on the Internet-based TOEFL (IBT) of 90 with a minimum score on each subsection of 22 respectively.

Application dossiers, including cover letter, recommendations and writing sample, should be submitted electronically through the Graduate School's admissions website. Official transcripts should be sent to: HPEW Program Director, Department of Philosophy, Stony Brook University, Stony Brook, New York, 11794.



[www.stonybrook.edu/hpew](http://www.stonybrook.edu/hpew)

### Financial support

At this point in time, no financial support in the form of fellowship funding or tuition scholarships is available. It should be noted, however, that tuition and fees (set by the State University of New York) may be quite considerably below those of comparable MA programs. For current tuition and fee schedules, please consult the Stony Brook University website.

### Facilities

In addition to the broad array of scholarly resources offered by Stony Brook University's Melville Library, the following specialized libraries and collections are open to HPEW students:

- The Stony Brook Philosophy Department's Solzberg Library (218 Harriman Hall)
- The Center for India Studies Library (Melville E5350)
- The Ino Collection of Japanese and Chinese literature, (Melville Library)
- The Korean Studies Collection (Melville Library)

HPEW students are also strongly urged to take advantage of some of the world's premier research and professional networking organizations for philosophy, which are based in the New York area. Organizations particularly relevant to HPEW students and faculty are the following:

- New York German Idealism Workshop
- New York City Workshop in Early Modern Philosophy
- New York/New Jersey Research Group in Early Modern Philosophy
- Society for Ancient Greek Philosophy
- Ancient Philosophy Society
- Society for the Study of Islamic Philosophy and Science
- Columbia University Society for Comparative Philosophy

### Requirements for the M.S. Degree

The 30-credit HPEW curriculum can be completed in one year. But it is recommended that full-time students complete the HPEW program as follows:

- Year one: 24 credits (four 3-credit courses per semester)
- Year two: (two 3-credit courses in the semester of full-time enrollment)

It is also possible to enroll in HPEW on a part-time basis (i.e., by taking fewer than 12 credit hours per semester).

### Program Requirements

Students will choose a concentration in either eastern or western philosophy. The relevant distribution requirements are these:

- 6 credits earned in the program's foundational survey courses on eastern philosophy
- 6 credits earned in the program's foundational survey courses on western philosophy
- 3 credits earned in a seminar outside the declared concentration (in eastern or in western philosophy)
- EITHER 9 credits earned in seminars in the declared concentration plus 6 credits of thesis research OR, if the MA thesis option is not chosen, 15 credits in the declared concentration, 6 of which may be earned in a graduate-level language course relevant to the chosen concentration.

### HPEW Core Faculty

William Chittick, Professor, Department of Asian and Asian American Studies. Ph.D. 1974, Tehran University. Islamic philosophy and intellectual history. <http://www.stonybrook.edu/commcms/asianamerican/facultystaff/WilliamChittick.html>

Allegra De Laurentiis, Associate Professor, Department of Philosophy. Ph.D., 1982, University of Frankfurt, Germany. Nineteenth-century philosophy, especially Hegel; ancient Greek philosophy, especially Aristotle. [http://www.stonybrook.edu/commcms/philosophy/people/faculty\\_pages/delaurentiis.html](http://www.stonybrook.edu/commcms/philosophy/people/faculty_pages/delaurentiis.html)

Jeffrey Edwards, Associate Professor, Department of Philosophy. Ph.D., 1987, Universität Marburg, Germany. Early modern European philosophy; Kant. [http://www.stonybrook.edu/commcms/philosophy/people/faculty\\_pages/edwards.html](http://www.stonybrook.edu/commcms/philosophy/people/faculty_pages/edwards.html)

Sachiko Murata, Professor, Department of Asian and Asian American Studies. Ph.D., 1971, Tehran University. Islamic and far eastern thought. <http://www.stonybrook.edu/commcms/asianamerican/facultystaff/SachikoMurata.html>

Andrew Nicholson, Associate Professor, Department of Asian and Asian American Studies. Ph.D., 2005, University of Chicago. Indian philosophy and intellectual history. <http://www.stonybrook.edu/commcms/asianamerican/facultystaff/AndrewNicholson.html>

### Associated Faculty

Alan Kim, Assistant Professor, Department of Philosophy. Ph.D., 2001, McGill University. German and ancient Greek philosophy; phenomenology; neo-Kantianism; Plato. [http://www.stonybrook.edu/commcms/philosophy/people/faculty\\_pages/kim.html](http://www.stonybrook.edu/commcms/philosophy/people/faculty_pages/kim.html)

Sung Bae Park, Professor (*emeritus*), Department of Asian and Asian American Studies. Ph.D. 1978, University of California / Berkeley. Buddhism, East Asian Philosophy and Religion. <http://www.stonybrook.edu/commcms/asianamerican/facultystaff/SungBaePark.html>

Andrew Platt, Assistant Professor, Department of Philosophy. Ph.D., 2010, University of Massachusetts, Amherst. History of 17th and 18th century philosophy; social-political philosophy;

philosophy of religion. [http://www.stonybrook.edu/commcms/philosophy/people/faculty\\_pages/platt.html](http://www.stonybrook.edu/commcms/philosophy/people/faculty_pages/platt.html)

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

Spring 2018

## Human Resource Management

**Faculty Director**

John Coverdale, Ward Melville Social and Behavioral Sciences Building N-237 (631) 632-7092 [John.Coverdale@stonybrook.edu](mailto:John.Coverdale@stonybrook.edu)

**Degree Awarded**

MS in Human Resource Management

**Certificate Awarded**

Advanced Graduate Certificate in Human Resource Management

**Website**

Human Resource Management: <http://www.stonybrook.edu/spd/hrm>

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-edl](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-edl)

## Human Resource Management

The ability to effectively manage human resources is critical to the success of any organization. HR professionals must possess the broad-based knowledge and specific competencies necessary to align human resource functions with organizational goals. Stony Brook University's Human Resource Management programs are designed to provide the academic preparation required for professionals to enter the field or advance their careers.

The curriculum integrates theory and practice within the dynamic context of human resource administration. Students may choose from a wide selection of courses — in subjects such as organizational development, benefits and compensation and employment law — in combination with foundational courses in business, HR management, and employee relations.

**Flexible Scheduling**

To accommodate the needs of working adults, SPD schedules courses online with some courses offered on-campus in the evenings. Both programs may be taken completely online, or students may combine online and on-campus courses. The Human Resource Management programs have been approved by the New York State Education Department for both in-person and online delivery. *Find out more about online learning at the School of Professional Development.*

**Career Prospects**

According to the Bureau of Labor Statistics, the job outlook for human resources personnel has not been dimmed by the shrinking economy. Jobs for human resource specialists are expected to grow **21 percent through 2020**, faster than the average for all occupations. HR managers who possess certification and a master's degree in human resource management **should have the best prospects** in the job market. (View the mandated Gainful Employment Disclosure Information for the Advanced Graduate Certificate program.)

**Student Involvement**

The **Society for Human Resource Management** (SHRM) is the world's largest association devoted to human resource management. Stony Brook University's SHRM Student Chapter launched in 2012 with more than 20 student members representing SPD and the College of Business. Student members gain access to networking opportunities and myriad resources — including how-to guides, sample documents, news, research, **conferences** and free webcasts— that will assist them with their graduate work and serve them in their career. Find out more about the **SHRM Student Chapter**.

**Academic Excellence**

The HRM program fully aligns with the **Society for Human Resource Management's** educational standards, which are designed to advance the professional practice of human resource management.

Stony Brook University, a member of the **Association of American Universities**, has ranked in the top 100 public universities by *U.S. News and World Report* and the top 100 best values in public colleges by *Kiplinger*. The University is accredited through the Middle State Association of Colleges and Schools. In addition, the HRM degree and certificate programs are fully approved by the New York State Education Department for online delivery.

## Human Resource Management Program Admissions

**MS in Human Resource Management**

A. Personal statement.

B. Resume.

C. A bachelor's degree, with a cumulative 3.0 grade point average.

D. Two letters of recommendation. Letters of recommendation should be from teachers or professors with whom you have studied. Letters from professionals in fields of work related to the area of specialty you wish to pursue are also appropriate.

E. In those cases where the departmental admissions committee deems it desirable, personal interviews with departmental representatives may be necessary.

### Advanced Graduate Certificate Program in Human Resource Management

Please note this program is being revised and is not currently admitting new students.

#### MS in Human Resource Management Program Requirements

The Master of Science in Human Resource Management program consists of 10 three-credit courses as outlined below. Students are expected to take HRM 532 and HRM 533 as their first courses. The capstone course, HRM 595, may be taken after the completion of 24 hours of course work in the program.

- HRM 532 Foundations of Human Resources
- HRM 533 Employee Relations and Labor Management
- HRM 537 Employee Learning and Professional/Career Development
- HRM 538 Organizational Development and Change Management (prerequisite: HRM 532)
- HRM 541 Human Relations and Workforce Planning
- HRM 545 Employment Law and Policy (prerequisite: HRM 533)
- HRM 546 Job Evaluation, Compensation Systems, and Benefits
- HRM 547 Performance Management in Organizations (may substitute MBA 592 Organizational Behavior)
- HRM 548 Diversity and Global Issues in the Workplace (prerequisite: HRM 532 or HRM 541)
- HRM 595 Strategic Human Resources Master's Project (prerequisite: 24 credits of HRM course work)
  - A grade of "B" or better is required for degree clearance.

#### Advanced Graduate Certificate in Human Resource Management Program Requirements

**This program is undergoing revision and is not currently accepting applications. The information below is offered for currently matriculated students.**

Students admitted in Spring 2015 are expected to complete seven three-credits courses distributed among the areas below. Students who are matriculated in the MS in HRM, MPS in HRM or MALS program will only need to complete six three-credit courses.

#### REQUIRED COURSES - 6 credits

- CES 516 or HRM/MBA 533 Survey of Employee Relations
- CES 515 or HRM/MBA 532 Foundations of Human Resource Management

#### AREA COURSES - 15 credits (12 credits if also matriculated in the MS, MALS, or MPS program)

At least one course must be from each of the two main categories: Human Resource Administration and Employee Relations. Only one elective course may be taken.

##### Human Resource Administration

- CES 510/MBA 510 Employee Benefits
- CES 511/MBA 513 or HRM 541 Human Relations in the Workplace
- CES 523/MBA 523 Human Resource Management Workshop
- CES 526/MBA 526 or HRM 546 Job Evaluation and Compensation Systems (prerequisite: CES 515 or CES 523)
- CEX 537/HRM/MBA 537 Employee Learning and Development
- CEX 538/MBA 538 Organizational Change Management (prerequisite: CES 515 or CES 523)

##### Employee Relations

- CES 514/MBA 514 Collective Bargaining in Public Sector (prerequisite: CES 515)
- CES 518/MBA 534 Contemporary Issues in Employee Relations
- CES 519/MBA 519 Grievance Handling and Arbitration (prerequisite: CES 516)
- CES 524/MBA 524 Employee Negotiations Workshop
- CES 525/MBA 525 or HRM 545 Employment Law (prerequisite: CES 516)
- CEX 547/MBA 530 Employee Dispute Resolution and Conflict Management

**Electives** (only one elective may be used in this Advanced Graduate Certificate)

- CEI 585 Principles of Adult Learning
- CES 513/MBA 531 New Developments in Human Resource Management (prerequisite CES 515 or CES 523)
- CES 523/MBA 523 Human Resource Management Workshop
- CES 517/MBA 527 Women in the Workplace (formerly: Women, Work and Dollars)
- CES 521/MBA 520 History of Labor Relations

**Time to Completion**

All certificate requirements must be completed within three (3) years from the semester date of admission as a matriculated student unless the student is also matriculated in a master's degree program. Master's students have five (5) years to complete the certificate requirements.

**Faculty**

The program's faculty is composed of practitioners and researchers who are leaders in the field. While they may present at national conferences, most also retain their full-time administrative positions. Their experience informs their instruction, allowing them to connect the theories that they are teaching to real-world situations.

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

Spring 2018

## Industrial Management

**Program Director**

David Ferguson, 347 Harriman Hall (631) 632-8763 David.Ferguson@stonybrook.edu

**Graduate Certificate Awarded**

Advanced Graduate Certificate in Industrial Management

**Website**

<http://www.stonybrook.edu/spd/graduate/industrial.html>

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-edl](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-edl)

## Industrial Management Program

Managers and knowledge workers face the challenges of rapid change, evolving technology and burgeoning information in today's global economy. This program's goals are to enable individuals to understand the integration of an enterprise's processes, as well as how to utilize modern tools, techniques and technologies to make their organization more competitive and profitable. The curriculum introduces the strategic fundamentals of the customer/value driven enterprise, the management concepts of organizational design and structure, and the basic business processes for running a successful enterprise.

The program is offered in conjunction with the Department of Technology and Society and articulates with its MS in Technological Systems Management as well as SPD's Master of Arts in Liberal Studies. Matriculation in either of these master's degree programs requires a separate application.

## Gainful Employment Regulation Disclosures

## Educational Computing Admissions

A. Personal statement.

B. A bachelor's degree, with a cumulative 3.0 grade point average.

C. In those cases where the departmental admissions committee deems it desirable, personal interviews with departmental representatives may be necessary.

## Certificate Requirements

This certificate program consists of 6 three-credit courses, selected from the list below.

**1. Core Courses** - 9 credits

EMP 502 Engineering Economics  
EMP 506 Engineering Enterprise Management  
EMP 509 Management Information Systems

**2. Required Courses** - 6 credits

Two of the following five courses must be taken:

EMP 501 Behavioral and Organizational Aspects of Management  
EMP 503 Legal and Regulatory Aspects of Management  
EMP 504 Quantitative Methods of Management  
EMP 511 Starting the High Technology Venture  
EMP 517 Quality Management

**3. Elective** - 3 credits

Select one of the required courses or one course from the following list:

EST 520 Computer Applications and Problem Solving  
EST 530 Internet Electronic Commerce  
EST 581 Methods of Socio-Technological Decision Making  
EST 582 Systems Approach to Human-Machine Systems

**Time to Completion**

All certificate requirements must be completed within three (3) years from the semester date of admission as a matriculated student unless the student is also matriculated in a master's degree program. Master's students have five (5) years to complete the certificate requirements.

#### Faculty

The program's faculty is composed of full-time faculty from the Department of Technology and Society as well as practitioners and researchers who are leaders in the field.

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

Spring 2018

School of Journalism

**Dean of the School of Journalism**

Howard Schneider, Melville Library N-4004, (631) 632-7403

**Graduate Program Director**

Richard E. Ricioppo, Melville Library N-4004, (631) 632-1073

**Administrative Coordinator**

Maureen Robinson, Melville Library, N-4004, (631) 632-7403

**Degree awarded**

Master of Science (M.S.) in Journalism

For information about the School of Journalism, please visit [www.stonybrook.edu/journalism](http://www.stonybrook.edu/journalism)

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-gs](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-gs)

**The School of Journalism Graduate Program**

The M.S. program in Journalism focuses on coverage of science, health, the environment and technology, while providing grounding in the skills of print, multimedia, video and broadcast reporting. In-depth reporting and engaging presentation are emphasized. The program is designed to meet the needs of students of varying backgrounds, including those with a strong science or health background who may be new to journalism, as well as journalism majors and working journalists who want to specialize or update their skills. The 40-credit program, can be completed by fulltime students in three semesters and two summers. It is SUNY's only journalism master's program.

Faculty with real-world experience, working in a state of the art \$1.3 million newsroom, will help students build their skills, while proximity to New York City provides access to valuable internships and distinguished visiting lecturers. The program also takes advantage of the rich resources in science and health at Stony Brook and its affiliated institutions, Brookhaven National Laboratory and Cold Spring Harbor Laboratory. But although the program focuses on coverage of science and related fields, the skills learned will serve graduates well no matter what kind of journalism they pursue. For more on the M.S. program, please visit <http://www.stonybrook.edu/journalism/ms>

In addition, the School of Journalism offers innovative courses in Communicating Science to the Public, developed in cooperation with Stony Brook's Alan Alda Center for Communicating Science. These courses, which do not lead to a journalism degree, are intended to help graduate students in the sciences learn to communicate more effectively with the public, public officials, the press, and others outside their own field, including colleagues in other disciplines. These courses can be taken separately or as part of the Advanced Certificate in Health Communications, which is offered jointly by the School of Journalism and the Program in Public Health. For more on the Advanced Certificate, please visit: <http://publichealth.stonybrookmedicine.edu/>

**Admission to the M.S. in Journalism**

Students can be admitted with degrees in any field. Admissions requirements include:

- Bachelor's degree with a 3.0 GPA or better from an accredited college or university.
- Official transcripts from all postsecondary schools.
- Official GRE (verbal, quantitative, and analytical) scores. Applicants can submit scores from the MCAT, DAT, or GMAT instead of the GRE. This requirement is waived for applicants who have a doctoral degree from an accredited college or university.
- Three references that can address the applicant's capacity to succeed in the field of health and science journalism or related fields and complete a course of graduate study. If the applicant is a student or has graduated within the last two years, at least one letter must be from a faculty member with whom the applicant has studied. If the applicant has been working as a journalist, at least one letter must be from an editor or supervisor familiar with the applicant's work.
- Portfolio of journalistic work (3-5 samples of your work) or a 500-word essay on an issue of current interest in science, health, the environment or technology, explaining why you think this issue is important.
- An interview, if requested by the Admissions Committee. We expect to interview candidates whenever possible.
- Licensed health professionals need proof of licensure and good standing
- International students who trained in non-English-speaking schools and live in a non-English-speaking country are required to take the TOEFL exam. The expected minimum score is 100 for the Internet-Based Test, 250 for the Computer-Based Test and 600 for the Paper-Based Test.

**School of Journalism Facilities**



The School of Journalism maintains a technologically advanced, \$1.3 million, bi-level Newsroom. It is located on the ground floor of Melville Library, with an electronic news ticker that faces the Academic Mall. The Newsroom is equipped with 38 Mac Pro Workstations, with a system that allows any piece of work to be displayed simultaneously on any or all desktops, as well as on a large projection screen. Each workstation has dual 23-inch Apple HD Cinema Displays and Mac Final Cut Pro video editing software, the industry standard, as well as PhotoShop, Dreamweaver, Adobe Audition, Adobe After Effects, Google Earth Pro, InDesign and Illustrator. Students have access to national and local news wires.

Besides housing classes, the Newsroom serves as a bustling home base and informal workspace for journalism students. Video conferencing software allows guest lectures, remote interviews and course collaboration between the Newsroom and other sites.

The School of Journalism also has a fully equipped TV studio, with three studio cameras, teleprompters, an anchor desk, an interview set, chroma key green-screen set and a control room. Mobile equipment available for use by journalism students in the field includes Sony and JVC high-definition video cameras, Nikon D610 and D7100 SLR video/still cameras SB700 Speedlights and digital audio recorders.

Students in the M.S. program will have access to a wide range of library and online resources.

### **Requirements for the M.S. Degree in Journalism**

To earn the master's degree in journalism, students must complete 40 credits. Faculty advisors will guide students in creating educational plans that best fit their backgrounds, interests and aspirations. The curriculum is built around a core group of required courses:

- JRN 500, Introduction to News Media Concepts and Institutions, or JRN 507, Introduction to Science and Health Concepts and Institutions. (JRN 500 is intended for students with little journalism background, JRN 507 for students with little science background.)
- JRN 525, the 6-credit intensive core course, Health, Environment, Science and Technology Reporting (HESTR)
- JRN 530, The Big Story: Science Issues Seminar
- JRN 550, Investigative Reporting Techniques
- JRN 555, Seminar in Ethics and Law
- JRN 588, Internship
- JRN 600, Long-Form Reporting: Master's Project

Students must attain a grade of at least B, or 3.0, in the core courses to have them count toward the degree.

In addition, a course in statistics or epidemiology, such as HPH 585: Introduction to Biostatistics & Epidemiology or **HAS 550 Statistics and Data Analysis**, will be required for students who have not had a college-level course or equivalent experience in basic statistics.

Along with the core courses, students will take skills courses in broadcast, print, or online multimedia reporting and presentation, as well as electives in the sciences, health, environmental studies or technology.

### **School of Journalism Faculty**

#### **Professor**

Schneider, Howard S. Founding Dean of the School of Journalism. M.S., Journalism, 1967, Columbia University Graduate School of Journalism. News literacy, media law and ethics, communication of science, new models of news delivery.

#### **Visiting Professors**

Alda, Alan. B.S., 1956, Fordham University. Actor, writer, director, founding advisory board member of the Alan Alda Center for Communicating Science, Communication of science, improvisational techniques for scientists.

Klurfeld, James. B.S., 1967, Syracuse University. News literacy, beat reporting, political reporting, the presidency and the press.

#### **Associate Professors**

Haddad, Charles H. MPA, 1989, Kennedy School, Harvard University; M.S. Journalism, 1977, Northwestern University. News writing, advanced reporting techniques, business journalism, study abroad program (China).

Reiner, Steven. BA, 1970, University of Wisconsin, Madison. News literacy, international outreach, advanced reporting techniques, broadcast news, audio journalism, new models of digital journalism.

Sanders, Jonathan. Ph.D., History, 1985, Columbia University; M.A., 1975, Columbia University. Broadcast journalism, history of the press.

Selvin, Barbara. M.S., Journalism, 1983, Columbia University Graduate School of Journalism. The impact of the digital revolution on journalism, grammar, numerical literacy, advanced reporting, reporting in New York City, internship coordinator. Winner of President's Award for Excellence in Teaching as Part-Time Faculty, 2005.

#### **Assistant Professors**

Calvi, Pablo. Ph.D., Journalism, 2011, Columbia University School of Journalism. Multimedia journalism, Latin American literary journalism. Associate Director for Latin America for the Marie Colvin Center for International Reporting.

Kaplan-Liss, Evonne. MPH, 2005, Mailman School of Public Health, Columbia University. M.D., 1997, Mount Sinai School of Medicine. Health and science communications.

**Lecturers**

Bass, Elizabeth. MPH, 2010, Stony Brook University. Director Emeritus of the Alan Alda Center for Communicating Science. Health and science reporting, communication of science.

Firstman, Richard. B.A., Journalism, 1976, Ohio State University. News and feature writing and reporting, long-form writing, social impacts of medical developments.

Giokas, George. B.A., Journalism, 1973, Long Island University. News literacy, business journalism, health news editing.

Hornik, Richard. M.A., Russian Studies, 1972, George Washington University. News literacy, business reporting and editing, international political reporting, the press in wartime.

Moore, Elizabeth. M.S., Columbia University Graduate School of Journalism. Investigative reporting, health, science, environmental and technology reporting.

Ricioppo, Richard E. M.S., Communication, 2006, Illinois State University. Interim director of the School of Journalism's graduate program. Broadcast writing and reporting, video camera operation and nonlinear video editing.

Schreiber, Paul. B.A., 1965, University of Miami. Undergraduate Director of the School of Journalism. Principles of editing, news literacy, business editing, feature writing.

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

## Liberal Studies

**Faculty Director**Elisa Scott, [elisa.scott@stonybrook.edu](mailto:elisa.scott@stonybrook.edu)**Program Coordinator**Sharon Brown, [sharon.brown@stonybrook.edu](mailto:sharon.brown@stonybrook.edu)**Degree Awarded**

MA in Liberal Studies

**Website**<http://www.stonybrook.edu/spd/mals>**Application**[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-edl](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-edl)

## Liberal Studies

The Master of Arts in Liberal Studies (MALS) is an interdisciplinary degree program that examines issues and themes in the arts and humanities, social and behavioral sciences, and natural and applied sciences. The program is offered primarily to working adults who seek educational enrichment and professional development on a part-time basis, and does not specifically serve as a prerequisite for a more advanced degree.

## Flexible Scheduling: On-campus and Online

To meet the demands of working professionals, courses are scheduled on-campus during the evening or online. Students may choose to combine face-to-face and online courses in our traditional MALS program, or they may apply to the MALS Online program and take all of their courses via the Internet. Prospective online students should review the online course schedules from prior semesters to see the scope of the courses we offer prior to applying.

» Learn more about online learning at the School of Professional Development.

Important note for teachers: The MALS degree is valid toward meeting requirements for a professional license (certification), provided the degree course work contains 12 credits relevant to your area of initial certification. It does not, however, lead directly to an initial certification. Please read the Teacher Certification page before applying.

## Master of Arts in Liberal Studies Admissions

A. Personal statement.

B. Resume.

C. A bachelor's degree, with a cumulative 3.0 grade point average.

D. Two letters of recommendation. Letters of recommendation should be from teachers or professors with whom you have studied. Letters from professionals in fields of work related to the area of specialty you wish to pursue are also appropriate.

E. In those cases where the departmental admissions committee deems it desirable, personal interviews with departmental representatives may be necessary.

## Master of Arts in Liberal Studies

(New requirements – effective Fall 2017)

This degree program consists of 11 three-credit courses, distributed among the three areas listed below. All degree requirements must be completed within five (5) years from the semester date of admission as a matriculated student. Students are advised to print and keep this student advisement worksheet (PDF) for reference.

## 1. Liberal Studies Core - 15 credits

\*\* Please note that at least two (2) of the four (4) LSF courses must be taken within the first twelve (12) credits taken as a student in the MA in Liberal Studies program. All four (4) LSF courses must be taken within the first 24 credits taken in the program.\*\*

- 3 credits – LSF 501 - Effective Professional Communication
- 3 credits – LSF 502 - Effective Professional Thinking
- 3 credits – LSF 503 - Effective Professional Global and Cultural Awareness

- 3 credits – LSF 504 - Effective Professional Action and Leadership
- 3 credits – NSLS Elective – Any course with the NSLS designator
- There are no transfer credits or substitutions permitted for the Liberal Studies Core curriculum.

## 2. Thematically-Related Concentration - 15 credits

A concentration is a group of courses that represents a focused area of interest. Students are allowed considerable freedom and flexibility in designing their concentrations, and may choose from most of the courses offered through SPD. (Teachers must read the Teacher Certification page prior to developing their concentrations.)

Students may also choose to incorporate a 3- or 6-credit internship into their thematically related concentration. Visit the Liberal Studies Internship information page for details and an application.

In addition, students may choose courses from one of Stony Brook's Advanced Graduate Certificate (AGC) programs to fulfill concentration requirements. A separate application is required; restrictions may apply. See a list of SPD's AGC programs on our Graduate Programs page. Students should also consider earning any of SPD's University Badges; no additional application or fee is required for earning a University Badge.

## 2. Capstone Seminar (CED 595) - 3 credits

The goal of the Capstone Seminar is to teach students to understand and conduct graduate-level research. Students will be guided in selecting a topic for their research paper. Methodology and resources will be reviewed as the student's work is developed.

Prerequisites: Matriculation in MALS, MPS or MS degree program; completion of 24 graduate credits within the program.

Note: There are no transfer credits or substitutions permitted for CED 595 Project Seminar. Students must earn a minimum of a "B" grade in this course to fulfill the degree requirement.

## Faculty

Program faculty are drawn from various University departments, as well as K-12 educators and practitioners who are leaders in their respective fields.

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

## Linguistics Department

**Chairperson**

Richard Larson, Ward Melville Social and Behavioral Sciences Building S-219 (631) 632-7776

**Master (CompLing) Program Director**

Thomas Graf, N-249 Social and Behavioral Sciences, t.graf@stonybrook.edu

**Masters (LIN) Program Director**

Francisco Ordóñez, N-243 Social and Behavioral Sciences

**Masters (TESOL) Program Director**

Daniel Finer, S-223 Social and Behavioral Sciences, daniel.finer@stonybrook.edu

**Director of the Computational Linguistics Program**

Jeffrey Heinz, N-237 Social and Behavioral Sciences

**Doctoral Program Director**

John Bailyn, S-217 Social and Behavioral Sciences, (631) 632-7779

**Degrees Awarded**

M.A. in Computational Linguistics; M.A. in Linguistics; M.A. in Teaching English to Speakers of Other Languages; Ph.D. in Linguistics

**Web Site**

<http://www.linguistics.stonybrook.edu/>

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-gs](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-gs)

## Description of the Linguistics Department

The Stony Brook Linguistics Department, in the College of Arts and Sciences, is a leading center for research and training in all areas of modern linguistics. The Department offers graduate training that leads to the Master of Arts and Doctor of Philosophy in Linguistics, an M.A. program in Computational Linguistics, as well as a course of study that leads to the Master of Arts in Teaching English to Speakers of Other Languages (TESOL).

The department has a long-standing focus on theoretical linguistics, with core research areas including syntax, semantics, morphology, phonology, phonetics and first and second language acquisition as well as experimental and computational approaches to these areas. Recently, the department has introduced two new Experimental Linguistics laboratories supplementing our existing laboratories in Semantics and Phonetics, and we have developed new specializations in Speech and Language Pathology for undergraduates and Computational Linguistics for graduate students. In addition to the full range of theoretical areas of linguistics, faculty have expertise in a wide range of languages/language areas including Amazonian, Austronesian, East Asian, Romance, Semitic, Slavic and signed languages, as well as in language documentation and revitalization.

The Ph.D. program is designed to prepare students for advanced research in all branches of theoretical linguistics. Students develop their research interests further through advanced seminars in Phonetics, Phonology, Morphology, Syntax, Semantics and Computational Linguistics as well as courses in Psychology, Music, Computer Science, Philosophy, and Institute for Advanced Computational Science (IACS).

The M.A. in Computational Linguistics focuses on the computational mechanisms that are required to process language. This includes both theoretical issues --- how is language computed by humans and what is the computational complexity of natural language --- and practical ones. The latter subsumes a large and growing area of modern software engineering that is concerned with problems such as the automatic translation of text from one language into another, reading out written text, or using linguistic criteria to optimize the placement of online ads. Just like the theoretical questions, these applications require a good understanding of contemporary linguistics as well as programming skills and general training in computer science.

The M.A. in TESOL is designed to prepare students to become professional teachers, teacher educators, and curriculum designers. The program offers courses in theoretical linguistics and its applications as well as pedagogy. It provides extensive supervised field experience in schools and in the English courses offered by the university for International students. Graduates of the program are successfully employed in public and private schools at K-12 levels, colleges, and universities in the United States and abroad. The requirements of the M.A. TESOL program satisfy a substantial portion of the requirements for New York State certification in TESOL, and students may arrange to complete the requirements for state certification in conjunction with pursuit of the M.A. The M.A. in Linguistics is a stand-alone 30 credit degree in Theoretical Linguistics designed to give students an opportunity to carry out graduate work in linguistics without making the long-term commitment required for a doctoral degree.

## Admission requirements for Linguistics Department

Students interested in the PhD in Linguistics should begin the application process as early as possible, especially if they plan to apply for financial aid. New applications will be considered for admission to the Ph.D. program for the fall semester only. Usually only applications for full-time study will be considered. M.A. applications are normally considered for fall admission....

M.A. applications are normally considered for fall admission.

Ph.D. application materials should be submitted by January 15. M.A. applications should be received by March 1 for best consideration, but the final deadline for M.A. applications is April 1 for international students and July 1 for domestic students. Admission to all programs is competitive and no single factor (GRE scores, letters, grades, etc.) will exclude anyone from being admitted. Similarly, no single factor will ensure admission.

For admission to Ph.D. and the M.A. in Linguistics graduate programs in the Department of Linguistics, the following, in addition to the minimum Graduate School requirements, are normally required:

**A. Baccalaureate Degree:** A baccalaureate degree is required. Students must present evidence that such a degree will be awarded by the time they begin graduate work. A final transcript is also required prior to registration.

**B. Cumulative Grade Point Average:** A minimum cumulative grade point average of 3.0 (or its foreign equivalent) on a four-point scale. If you have attended graduate school and obtained a master's degree, and the GPA is over 3.00, then the GPA of the undergraduate school can be below 3.00 for regular admission.

**C. Letter of Recommendation:** Letters of recommendation from three former instructors are required.

**D. Graduate Record Examination:** There is no subject test for linguistics; the general test is all that is required. Please have the testing service send a copy of your score to the Linguistics Department.

**E. Foreign Language Requirement:** Proficiency in a foreign language equivalent to two years of college work is required.

**F. Writing Sample:** The writing sample should be a short paper written for a previous course taken in linguistics, or if that is not available, a paper on any subject is acceptable.

**G. Curriculum Vitae or Resume.**

**H. TOEFL Score:** Non-native speakers of English must have obtained a minimum score of 600 (paper), 250 (computer), or 100 (iBT) on the TOEFL test.

**I. Acceptance:** Students must be accepted by both the Department of Linguistics and the Graduate School.

For admission to the M.A. program in Computational Linguistics, the following, in addition to the minimum Graduate School requirements, are normally required:

**A. Baccalaureate Degree:** A baccalaureate degree is required. Students must present evidence that such a degree will be awarded by the time they begin graduate work. A final transcript is also required prior to registration.

**B. Cumulative Grade Point Average:** A minimum cumulative grade point average of 3.0 (or its foreign equivalent) on a four-point scale. If you have attended graduate school and obtained a master's degree, and the GPA is over 3.00, then the GPA of the undergraduate school can be below 3.00 for regular admission.

**C. Letter of Recommendation:** Letters of recommendation from three former instructors are required.

**D. Graduate Record Examination:** There is no subject test for computational linguistics; the general test is all that is required. Please have the testing service send a copy of your score to the Linguistics Department.

**E. Writing Sample:** The writing sample may take one of two forms: a) a short paper written for a previous course, ideally related to language, mathematics, or computation, or b) a 2-page document describing a completed or ongoing programming project, including a link to an online repository hosting the code.

**F. Curriculum Vitae or Resume.**

**G. TOEFL Score:** Non-native speakers of English must have obtained a minimum score of 600 (paper), 250 (computer), or 100 (iBT) on the TOEFL test.

**H. Acceptance:** Students must be accepted by both the Department of Linguistics and the Graduate School.

For admission to the M.A. TESOL program in the Department of Linguistics, the following, in addition to the minimum Graduate School requirements, are normally required:

**A. Baccalaureate Degree:** A baccalaureate degree is required. Students must present evidence that such a degree will be awarded by the time they begin graduate work. A final transcript is also required prior to registration.

**B. Cumulative Grade Point Average:** A minimum cumulative grade point average of 3.0 (or its foreign equivalent) on a four-point scale. If you have attended graduate school and obtained a master's degree, and the GPA is over 3.00, then the GPA of the undergraduate school can be below 3.00 for regular admission.

**C. Letters of Recommendation:** Letters of recommendation from three former instructors are required.

**D. Graduate Record Examination:** There is no subject test for linguistics or TESOL; the general test is all that is required. Please have the testing service send a copy of your score to the Linguistics Department.

**E. Foreign Language Requirement:** Native speakers of English must provide evidence of at least one year (or six credits) of study of one language other than English at the college level with a grade of C or better. Students who are seeking New York State certification will need to satisfy additional requirements for foreign language study before receiving certification.

**F. English language proficiency: For students whose native language is not English, both (a) and (b):**

- a. **Minimum total TOEFL/IELTS score:** 90 (iBT TOEFL) or 6.5 (IELTS).
- b. **Minimum scores on the speaking component of the TOEFL/IELTS:**
  - 22 (iBT TOEFL) or 6.5 (IELTS). Accepted students with scores 22-24 (iBT TOEFL) or 6.5-7 (IELTS) will be required to complete ESL 598 in their first semester in the program.

Please note that non-native speakers who are seeking New York State certification must achieve a speaking component score of 28 (iBT) or the equivalent.

**G. Curriculum vitae or resume.**

**H. Acceptance:** Students must be accepted by both the Department of Linguistics and the Graduate School.

Note: For all programs, students who do not meet the above requirements may be admitted conditionally. Their status will be reviewed after their first semester of graduate study.

Facilities of the Linguistics Department

The Department of Linguistics has several lab facilities.

**Experimental Linguistics Lab (el.lab) (Director: John Drury)**

Research in the el.lab seeks to better connect linguistics and psycholinguistics with cognitive neuroscience. Ongoing work examines the representation, processing, acquisition, and breakdown of language using behavioral, electrophysiological (EEG/ERPs), and eye-movement monitoring techniques. We study a range of languages (English, Spanish, Mandarin, Turkish, Serbo-Croatian, Korean) and populations (e.g., native-speakers, late second language learners, adult patient groups), aiming to better understand universals and variation in processing/acquisition. The el.lab also investigates the connection between language and music (and emotion) since part of our mission is to help illuminate the extent to which circuitry underlying language carries out similar computational jobs in other cognitive/perceptual domains.

**Laboratory for the Phonetic Documentation of Languages (Director: José Elías-Ulloa)**

The Laboratory for the Phonetic Documentation of Languages' mission is to provide equipment and training to carry out phonetic and phonological documentation of languages in the field. The lab has already been used to document acoustically an Amazonian language (Shipibo-Konibo - Pano) and it is currently being used in the documentation of the intonational patterns of Peruvian and Colombian Spanish. It houses equipment for high quality audio recording in the field (this includes a Marantz solid state digital recorder, several Zoom H4 and H4n digital recorders, omni- and uni-directional XLR SHURE microphones and pre-amps). The lab also has a RAID server for data storage and equipment for carrying out electroglottography (EGG) and measurements of oral/nasal airflow.

**Phonetics Lab (Director: Marie Huffman)**

The phonetics lab provides equipment for investigation of a wide range of linguistic questions, with special emphasis on speech acoustics, dialogue, and speech perception. The lab suite includes a lab classroom, a recording room and a research annex, with digital tape recorders, microphones, and headphones as well as facilities for computer based data acquisition and video recording of spoken or signed language.

**Semantics Lab (Director: Richard Larson)**

The semantics Lab was created in 1992 by Richard K. Larson (Linguistics) and David S. Warren (Computer Science) as part of the NSF-sponsored Grammar as Science Project. Along with primary research in semantics, a focus of the lab has been the creation of software tools for linguistics research and education. Productions to date include *Syntactica*, a program for teaching transformational syntax and *Semantica*, a companion program for teaching truth-conditional natural language semantics. At present we are authoring a web-based application to assist students in developing basic parsing skills with phrase structure trees. This work is part of a new departmental hybrid on-line course The Anatomy of English (developed in collaboration with M. Aronoff and M. Lindsay).

**Computational Linguistics Lab (Directors: Michael Becker, Thomas Graf, Jiwon Yun)**

Research in the Computational Linguistics Lab is concerned with the analysis of natural language phenomena using tools and concepts from mathematics and computer science, in particular statistics and probability theory, formal language theory, machine learning, algebra and logic. The lab suite includes a class room, workstations, a library, and access to a large number of corpora and software.

Requirements for the M.A. Degree in Computational Linguistics

The MA in Computational Linguistics is a 36 credit coursework degree consisting of multiple components.

- Core courses (12 credits)
- Formal methods requirement (3 credits)
- Linguistics requirement (3 credits)
- Electives (12 credits)
- Final project (6 credits)

The program builds on the following 12 credit sequence of core courses:

- LIN 521 Syntax I
- LIN 522 Phonetics or LIN 523 Phonology I
- LIN 537 Computational Linguistics 1
- LIN 637 Computational Linguistics 2

Other requirements are satisfied by passing a fixed number of courses from a pre-defined list. Courses that appear on multiple lists cannot be used to satisfy multiple requirements at once. For example, if LIN 523 is taken as part of the core sequence, it cannot be used to satisfy the linguistics requirement.

Students must demonstrate their knowledge of formal methods by passing one (1) of the following courses:

- LIN 538 Statistics
- LIN 539 Mathematical Methods in Linguistics

Similarly, students must take at least one (1) advanced linguistics course:

- LIN 522 Phonetics
- LIN 523 Phonology I
- LIN 621 Syntax II
- LIN 623 Phonology II
- LIN 624 Morphology and Word Formation
- LIN 625 Semantics

In addition, four (4) elective courses must be chosen from the list below. Courses not listed here can be counted as an elective if 1) this is explicitly stated in the course description, or 2) the student has written permission from the program director.

- CSE 512 Machine Learning
- CSE 537 Artificial Intelligence
- CSE 542 Speech Processing
- CSE 628 Introduction to NLP
- LIN 522 Phonetics
- LIN 523 Phonology I
- LIN 526 Analysis of an Uncommonly Taught Language
- LIN 538 Statistics
- LIN 539 Mathematical Methods in Linguistics
- LIN 621 Syntax II
- LIN 623 Phonology II
- LIN 624 Morphology and Word Formation
- LIN 625 Semantics
- LIN 626 Computational Phonology



- LIN 627 Computational Semantics
- LIN 628 Computational Syntax
- LIN 629 Learnability
- LIN 630 Parsing and Processing
- LIN 651 Syntax Seminar
- LIN 653 Phonology Seminar
- PSY 520 Psycholinguistics

Students must also complete a final project as part of LIN 595.

#### Requirements for the M.A. Degree in Linguistics

The MA LIN is a 30 credit Masters program aimed at students interested in pursuing linguistics beyond the BA level, but not yet ready for, or not planning to go on to, the PhD. The curricular focus of the MA LIN is on theoretical rather than applied linguistics. Students interested in applied linguistics at the MA level are encouraged to consider the MA TESOL program.

The MA LIN is a coursework degree, comprising the following 15 credit base sequence of courses:

LIN 521 Syntax I

LIN 621 Syntax II

LIN 523 Phonology I

LIN 623 Phonology II

plus an additional 18 credits of elective courses at the graduate level. Electives may include courses in other departments. The student's choice of electives is decided in conjunction with faculty and must be approved by the MA program director.

#### Requirements for the M.A. Degree in TESOL

In addition to the minimum Graduate School requirements, the following are required:

##### **A. Coursework**

1. All of the following: 21 credits

LIN 522 Phonetics

LIN 524 TESOL Pedagogy: Theory and Practice (Methods I) and

- LIN 579 Field Experience N-12

LIN 527 Structure of English

LIN 529 TESOL Pedagogy: Content-based Language and Literacy Development Practice (Methods II) and

- LIN 579 Field Experience N-12

LIN 530 Introduction to General Linguistics

LIN 571 TESOL Pedagogy: Curriculum Design and Evaluation and

- LIN 578 Field Experience in Adult and Tertiary Contexts

2. Two of the following: 6 credits

LIN 525 Contrastive Analysis

LIN 526 Analysis of an Uncommonly Taught Language

LIN 532 Second Language Acquisition

LIN 541 Bilingualism

LIN 542 Sociolinguistics

LIN 555 Error Analysis

Or any other TESOL-related courses approved by the program director

3. Elective (3 credits): one elective course to be approved by the department; this may be a third course from the list above.

**B. Performance**

The student must achieve a grade point average (GPA) of B (3.0) or higher in all graduate courses taken at Stony Brook in order to receive a degree.

**C. Course Waivers**

Certain required courses may be waived for students showing an exceptional background in linguistics or TESOL. Application for such waivers must be made in writing to the department. In any case, all students must complete 30 graduate credits of approved coursework to receive a degree.

New York State Teacher Certification: TESOL Teacher Certification program requirements are listed in the Professional Education Program (PEP) section of this bulletin.

**Requirements for the Ph.D. Degree in Linguistics**

In addition to the minimum Graduate School requirements, the following are required:

**A. Course Requirements**

Students must complete a minimum of 60 credits.

**1. Required Courses**

LIN 521 Syntax I

LIN 621 Syntax II

LIN 523 Phonology I

LIN 623 Phonology II

**2. Elective Courses:** Electives may include courses in other departments. The student's choice of electives is decided in conjunction with faculty and must be approved by the doctoral program director.

**B. Qualifying Papers**

Acceptance by the department of two papers of publishable quality in distinct areas of linguistics (qualifying papers) is required. Each paper will be defended orally before a committee of at least three faculty members, at least two of whom will be full-time faculty from within the department. The inside membership of the two qualifying paper committees must not be identical. The pre-defense draft of a qualifying paper must be submitted to the committee at least three weeks before the defense date. Each qualifying paper requirement will be completed after the committee's acceptance of revisions decided upon at the defense. The final version of the first qualifying paper must be submitted not later than the last day of classes of the fourth semester and the final version of the second qualifying paper must be submitted not later than the last day of classes of the sixth semester. Failure to meet the first deadline may affect the student's priority for funding. Students who have not had the final versions of both qualifying papers accepted by their committees by the end of the sixth semester will normally be dismissed from the program. Public presentation of one of these papers is required, as is submission of a revised version of one of the qualifying papers for publication in an appropriate journal.

**C. Language Requirement**

Demonstrated knowledge of two foreign languages other than the student's mother tongue. This requirement may be satisfied by any of the following methods:

1. Submission of an analytic paper demonstrating knowledge of the structure of the language.
2. Satisfactory completion of a course in the structure of the language.
3. Satisfactory performance on a standardized exam designed to measure language proficiency.
4. Satisfactory completion of two years of college-level instruction in the language.

**Advancement to Candidacy:** Advancement to candidacy takes place upon the successful completion of the following before the beginning of the fourth year of full-time study: the required courses in A, the qualifying paper requirement in B, and the language requirement in C.

**D. Teaching and Research**

Students become qualified in teaching and research by working with faculty on an individual basis as teaching assistants and by participating in research projects. They have the opportunity to prepare and teach undergraduate classes during the academic year and in summer sessions.

**E. Dissertation**

Before a student proceeds to write the dissertation, a dissertation proposal must be accepted by the department. The dissertation proposal outlines the topic and how the student plans to go about investigating this topic. The advisor will organize a discussion in which a committee considers the proposal with the student. The purpose of this discussion is to ensure that the topic is manageable and substantive.

The dissertation committee will consist of a minimum of four members, at least three from the full-time faculty in the department and at least one from outside the department (or University). The committee will be chosen in consultation with the dissertation supervisor, who will be a full-time member of the department faculty. The formal public defense of the dissertation requires the full attendance of the dissertation examining committee.

Faculty of Linguistics Department

### Professors

Aronoff, Mark, Ph.D., 1974, MIT: Morphology; orthography.

Bailyn, John F., Ph.D., 1995, Cornell University: Syntax; Russian syntax; Slavic linguistics.

Bethin, Christina Y., Ph.D., 1978, University of Illinois: Slavic linguistics; phonology.

Broselow, Ellen, Ph.D., 1976, University of Massachusetts-Amherst: Phonology; phonetics; second language acquisition.

Finer, Daniel L., Ph.D., 1984, University of Massachusetts-Amherst: Syntax; semantics; language acquisition.

Heinz, Jeffrey, PhD 2007, UCLA, Phonology, Grammatical inference, Formal language theory and learnability, Linguistic typology, Control synthesis and hybrid systems.

Hoberman, Robert, Ph.D., 1983, University of Chicago: Semitic linguistics, phonology, morphology.

Kaufman, Dorit, Ph.D., 1991, Stony Brook University: Language acquisition and attrition; language education.

Larson, Richard K., Ph.D., 1983, University of Wisconsin: Semantics; syntax.

Liu, Jun, Ph.D. 1996, Ohio State University, Second language acquisition, language education, intercultural communication.

Repetti, Lori, Ph.D., 1989, UCLA: Italian linguistics; Romance linguistics; phonology; Italian dialectology.

### Associate Professors

Elías-Ulloa, José Alberto, Ph.D., 2006, Rutgers University: Prosody (syllable weight, metrical stress, intonation) and its interaction with segmental phenomena.

Huffman, Marie K., Ph.D., 1989, UCLA: Phonetics; phonology, second language phonetics.

Ordóñez, Francisco, Ph.D. 1997, City University of New York: Syntax of Spanish, its varieties, and other Romance languages (Catalan, French, Italian and Occitan dialects).

### Assistant Professors

Becker, Michael, Ph.D. 2009, University of Massachusetts-Amherst: Phonology, morphology, learning, modeling, acquisition.

Drury, John E., Ph.D. 2005, University of Maryland: Language processing and acquisition, neurolinguistics, experimental linguistics, syntax, cognitive science.

Graf, Thomas, Ph.D. 2013, UCLA: Mathematical linguistics, syntax, phonology, psycholinguistics.

Yun, Jiwon, Ph.D. 2013, Cornell University: Semantics, prosody, computational linguistics, cognitive science.

### Visiting Assistant Professors and Lecturers

Hoffman, Joseph, Ph.D. 2014, Hofstra University: Speech and Language Pathology.

Janzen, Joy, Ph.D., Northern Arizona University: TESOL, Literacy, Teacher Education.

Shideler, Annette: English as a Second Language Teaching K-12.

### Number of teaching, graduate, and research assistants, Fall 2016: 21/23

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

**Marine and Atmospheric Sciences (MAS)****Interim Dean and Director**

Larry Swanson, Endeavour Hall 145 (631) 632-8700

**Graduate Program Director**

David Black, Discovery Hall 147 (631) 632-8676

**Director Institute of Terrestrial and Planetary Atmospheres and Coordinator of Atmospheric Sciences Program**

Brian Colle, Endeavour Hall 125, (631) 632-3174

**Faculty Director Marine Conservation and Policy Program**

Glenn Lopez, Dana Hall 111 (631) 632-8660

**Graduate Program Coordinator**

Ginny Clancy, Endeavour Hall 105 (631) 632-8681

**Degrees Awarded**

M.A. in Marine Conservation and Policy; M.S. in Marine and Atmospheric Science; Ph.D. in Marine and Atmospheric Science; M. Phil. in Marine and Atmospheric Science; Graduate Certificate in Environmental Management; Graduate Certificate in Geospatial Sciences

**Web Site**

<http://www.somas.stonybrook.edu/>

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-gs](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-gs)

**Marine and Atmospheric Science**

The Marine and Atmospheric Sciences (MAS) graduate program is located within the School of Marine and Atmospheric Sciences (SoMAS). Research activities within SoMAS are coordinated through the Marine Sciences Research Center (MSRC), and the Institute for Terrestrial and Planetary Atmospheres (ITPA). MSRC is the center for research, graduate education, and public service in the marine sciences for the entire State University of New York system. SoMAS faculty have active research programs in all major oceanographic and atmospheric disciplines and many focus on interdisciplinary approaches to understanding environmental processes and issues. Specific areas of cross-disciplinary focus include: biogeochemical transformation of energy and elements, conservation and management of marine resources, environmental health and contaminants, environmental modeling and prediction, and patterns and impacts of global climate change.

SoMAS is ideally situated for studies of a variety of coastal environments including estuaries, lagoons, salt marshes, barrier islands, and continental shelf waters. Long Island has a greater diversity of coastal environments in a limited geographical range than any other comparable area in the United States. The proximity of New York City and the burgeoning population of Long Island and Connecticut make New York coastal waters an excellent laboratory for assessing human impacts on the coastal seas, and understanding land/sea interactions at all levels. In addition to working on coastal issues, SoMAS scientists have active research programs on all the world's oceans and ITPA faculty examine atmospheric processes on the Earth and other planets.

SoMAS offers an M.A. in Marine Conservation and Policy and an M.S. and Ph.D. in Marine and Atmospheric Sciences with concentrations in either oceanography or atmospheric sciences. Interested students should address inquiries to the graduate program director. Tuition scholarships and stipends are available for students in the research based M.S. and Ph.D. programs.

SoMAS also offers an accelerated B.S./M.S. program allowing high achieving Stony Brook undergraduate students in the Marine Sciences (MAR), Marine Vertebrate Biology (MVB), Atmospheric Sciences (ATM), and a B.A./M.A. with the Environmental Studies (ENS) B.A.. Program to allow student to begin working on their masters degree prior to completing their bachelors degree, allowing up to 12 credits of course work to count towards both degrees.

**Graduate Degree Program Descriptions****The M.A. Program in Marine Conservation and Policy**

The Graduate Program in Marine Conservation and Policy will provide students with an understanding of contemporary marine conservation issues and help them develop the necessary skills to apply this knowledge in marine conservation positions that require advanced training and a broad skill-set, but are not research-based. Graduates of this program should be able to compete effectively for positions in government, environmental consultancy and non-governmental organizations, and to apply marine conservation and policy knowledge in other fields such as law, teaching, communications or business. This program requires a minimum of 30 credits of graduate coursework and is designed to be completed in 12 months of full time study.

**The M.S. Program in Marine and Atmospheric Sciences**

The M.S. program offered by SoMAS consists of a rigorous interdisciplinary approach to oceanography and atmospheric sciences based on interdisciplinary course work and a research thesis. It is designed to prepare students for positions in research, management, environmental protection, and resource development. The program provides students with a firm basis for more advanced study, but more importantly, it is designed to equip students with the background and tools needed for effective careers without additional training. Required course work is identical to the Ph.D. program allowing M.S. to continue on in the Ph.D. program provided they have demonstrated adequate performance

and found a suitable faculty advisor. The time required to complete this program depends on the scope of research undertaken. Most students complete their degree in 2-3 years.

#### **Ph.D. Program in Marine and Atmospheric Sciences**

The Ph.D. program is designed to prepare students to independently identify and attack oceanographic and atmospheric problems. It builds on a series of core required courses (taken by both PhD and M.S. students), and allows students to create their own course of advanced study, helping them to become effective, independent problem solvers. The Ph.D. in Marine and Atmospheric Sciences prepares students to compete effectively for academic positions, direct research programs at government or private laboratories, and direct research and assessment programs at non-governmental organizations. A M.S. degree is not required for admission to the Ph.D. program. Most students take 5 to 6 years to complete their Ph.D.

#### **Certificate Programs**

In addition to the M.A., M.S. and Ph.D. programs of study, certificate programs provide the opportunity for advanced study for students who do not wish to pursue a degree. Students interested in either of these programs should contact the Graduate Program Director.

#### ***Graduate Certificate Program in Environment Management***

SoMAS is the home of the Waste Reduction and Management Institute, dedicated to lessening the impacts of a complex array of wastes through research, environmental assessment, public outreach, and policy analysis. A Graduate Certificate in Environmental Management is administered by the School of Professional Development. The 18-credit program provides access to the most current expertise in waste management essential to working effectively in professional careers or public service. The certificate may also be incorporated into the degree of Professional Studies with a concentration in environmental management. For further information refer to the School of Professional Development section in this bulletin.

#### ***Advanced Graduate Certificate Program in Oceanic Science***

The advanced graduate certificate program in Oceanic Science is designed to make the unique resources of the SOMAS available to professionals as well as to scholars both within the SUNY system and at other institutions as well as other professionals. Students admitted to this program complete two full-time semesters (18 credits) of intensive, specialized graduate studies in our core curriculum, or the equivalent, under the supervision of a faculty sponsor. The program is intended to supplement a student's primary educational and professional goals providing the student with a broad background in oceanography as well as opportunity for in-depth course work in highly specialized topics. For further information, contact the SoMAS Graduate Program Director.

#### ***Advanced Graduate Certificate in Geospatial Science (GSS)***

The advanced graduate GSS certificate allows graduate students and working professionals to advance their GIS and/or remote sensing knowledge and employment opportunities with an industry-recognized certificate. The program requires students to earn 18 credits in addition to holding a BA, BS, or graduate degree. Program courses are offered with flexible scheduling that is intended to allow full-time students to complete the certificate requirements in one year. Some basic knowledge of operating personal computers is necessary to complete the course work. No more than 6 credits used to satisfy another graduate degree can be applied to the GSS certificate. For further information contact the GSS program's Faculty Director.

#### **Admission Requirements**

All students must meet the general requirements of the Graduate School which include:

- A. Completion of a B.A. or B.S. with a cumulative grade point average of at least 3.0 (B);
- B. Acceptable scores on the Graduate Record Examination (GRE) General Test;
- C. Acceptable scores on the TOEFL (paper: 600, computer: 230, iBT: 90) or IELTS (6.5) for foreign students;
- E. Three letters of recommendation;
- F. Official transcript(s);

All applications should be submitted electronically through the Graduate School.

For admission to the M.A. program, students must have completed at least 4 semester college courses in math or science, including at least one course in biology.

There are two tracks in the M.S. and Ph.D. programs—one in Marine Sciences and one in Atmospheric Sciences. Students should indicate which track they wish to pursue on their applications.

For admission to either the M.S. or Ph.D. graduate programs in Marine and Atmospheric Sciences, the following are normally required:

- A. B.A. or B.S. degree in atmospheric sciences, biology, chemistry, geology, mathematics, physics, or other suitable science discipline, the course work equivalent to obtain such a degree;
- B. Two semesters of coursework in mathematics through calculus, physics, and chemistry, and as appropriate to specialization area, biology, chemistry, physics, geology, or math, with advanced work in at least one of these disciplines;

In their personal statements, all students should state why they wish to enter the specific SoMAS graduate program and what career they hope to embark upon. In addition, M.S. and Ph.D. students should provide an indication of both the specific research areas they would like to address and potential faculty advisors. Obtaining a position in specific research laboratories is very competitive, so applicants are encouraged to contact potential advisors prior to submitting their application.

#### Facilities

The main laboratories and offices of SoMAS are housed in a cluster of buildings on South Campus with more than 8,000 square meters of usable floor space. Laboratories are well equipped for most analyses, and students and faculty have access, with special arrangements, to nearby Brookhaven National Laboratory (BNL) and Cold Spring Harbor Laboratory. In addition to ITPA, SoMAS is home to the Institute for Ocean Conservation Sciences, the Marine Animal Disease Laboratory, a diagnostic and research facility focused on the health of living marine resources, the Waste Reduction and Management Institute, the Living Marine Resources Institute, the Long Island Groundwater Institute, the New York Sea Grant College Program, and several analytical facilities. The Safina Institute also maintains an office at SoMAS. The Marine and Atmospheric Sciences and Information Center (MASIC) is the branch of the campus library system located at SoMAS. Officially designated as a prototype for technology-based branch libraries on the campus, MASIC offers students and faculty a core collection of journals and monographs relevant to the multi-disciplinary pursuits of SoMAS and its affiliated institutes as well as a state-of-the-art computer teaching laboratory.

SoMAS manages the Flax Pond Marine Laboratory located on a 0.6 square kilometer salt marsh approximately seven kilometers from campus. This facility provides flow-through seawater and space suitable for culture and experimentation on living marine resources. Part of the facility is in a green house offering ambient light and temperature conditions. Laboratory and sea-table space are available to faculty and students at SoMAS and other collaborating university programs. SoMAS also manages the newly renovated marine station at Stony Brook Southampton, located 46 miles away on the beautiful east end of Long Island. State of the art class rooms, laboratories and animal culture facilities are available in the new Southampton Marine Station. Several SoMAS faculty keep research laboratories at Stony Brook Southampton, and additional wet lab space is available in the new Marine Station for student and faculty research.

SoMAS operates a fleet of research vessels, the largest of which is the *R/V SEAWOLF*, a 24-meter research vessel designed specifically for oceanographic research. The *SEAWOLF* is ideally suited for extended research trips, large-scale oceanographic sampling, and trawling. Several other smaller boats are available for local cruises out of either the Stony Brook or Southampton campuses.

#### Requirements for the M.A. Degree in Marine Conservation and Policy

In addition to the minimum Graduate School requirements, the following are required:

##### Skill Area Requirements - 9 courses in 6 different areas (A-F)

- A) Marine Sciences: 2 courses, one of which has to be in a basic biological field
- B) Conservation: 2 courses, MAR 507 Marine Conservation Biology (req.), plus 1 elective
- C) Communications: 2 required courses: MAR 557 Case Study and Project Planning Seminar, and a Journalism Course (either JRN 500, or JNR 501,502,503, 504, 505).
- D) Policy/law/economics/management: 1 course
- E) Quantitative assessment: 1 course
- F) Field biology: 1 course
- G) Capstone Project or Internship in Marine Conservation and Policy, MAR 583 or MAR 592 (6 credits required); can be completed during summer session, or during academic year.
- H) Students make an oral presentation of their Capstone Project or Internship and submit a project or internship report.

#### Requirements for the M.S. Degree in Marine and Atmospheric Sciences

In addition to the minimum Graduate School requirements, the following are required:

- A. An overall B (3.0) average in the required foundation and advanced core courses with no grade lower than a C. See details of required coursework below;
- B. Seminar MAR 580 (two semesters);
- C. Master's research proposal due by end of first year, signed by advisor and two readers;
- D. Sea experience or appropriate field experience for students in the marine track only;
- E. Oral presentation of thesis work;
- F. Submission of approved thesis.

The M.S. degree requires a minimum of 30 credits, composed of at least 10 credits of thesis research in addition to required and elective course work.

#### Requirements for Ph.D. Degree in Marine and Atmospheric Sciences

In addition to the minimum Graduate School requirements, and general requirements for the M.S. Degree, the following are required:

A. Comprehensive Examination: The primary purpose of the Comprehensive Examination is to assess the student's knowledge of his or her field and the student's ability to relate his or her specific research interests to the broader field. The student must demonstrate a general knowledge of oceanography or atmospheric sciences, including an understanding of the current concepts of his or her field. Success on the examination implies the ability to use this information to address questions of a multidisciplinary nature;

B. Ph.D. degree dissertation proposal approved by a dissertation committee and oral preliminary examination;

C. Practicum in teaching;

D. Oral defense of dissertation;

E. Submission of approved dissertation.

#### Required Courses

##### Marine Track:

A. Core Courses: : 1) MAR 508 and MAR 509, Foundations of Marine Sciences I and II; 2) One of the following advanced core courses depending on discipline (MAR 501 Physical Oceanography, MAR 502 Biological Oceanography, MAR 503 Chemical Oceanography, or MAR 506 Geological Oceanography); and 3) One quantitative analysis course from among appropriate offerings at SoMAS or in other departments.

B. Scientific Communication MAR 568;

C. A minimum of six additional credits in specialty courses selected by the student and his or her advisor and approved by the advisor;

D. To ensure satisfactory progress toward the dissertation, Ph.D. students must participate in four credits of research-oriented, seminar-style elective courses. This requirement may be completed after advancing to candidacy.

##### Atmospheric Track:

A. Core courses: 1) MAR 541 and MAR 542, Foundations of Atmospheric Sciences I and II; 2) One of the required oceanography core courses (MAR 501 Physical Oceanography, MAR 503 Chemical Oceanography, MAR 506 Geological Oceanography, MAR 508 Foundations of Marine Science I: Biogeochemical Processes, MAR 545 Paleooceanography and Paleoclimatology); and 3a) for M.S. students, two, or 3b) for Ph.D. students three out of the following advanced courses (MAR 505 General Circulation of the Atmosphere, MAR 544 Atmospheric Radiation, MAR 570 Modern Methods of Data Analysis in Atmospheric and Oceanic Studies Part II, MAR 572, Geophysical Simulation, MAR 593 Atmospheric Physics, MAR 594 Atmospheric Dynamics, MAR 596 Atmospheric Chemistry and MAR 598 Synoptic and Mesoscale Meteorology);

B. MAR 595 Graduate Seminar in Atmospheric Sciences (two semesters);

C. Minimum of 24 course credits for Ph.D. students.

#### Graduate Faculty

##### Distinguished Professors

Aller, Robert C., Ph.D., 1977, Yale University: Marine geochemistry; marine animal-sediment relations.

Fisher, Nicholas S. Ph.D., 1974 State University of New York at Stony Brook: Marine biogeochemistry of metals, marine pollution, phytoplankton, herbivore interactions.

Lee, Cindy, Ph.D., Emeritus, 1975, University of California, San Diego (Scripps): Marine geochemistry of organic compounds; organic and inorganic nitrogen cycle biochemistry.

##### Distinguished Service Professors

Bowman, M.J., Ph.D., 1971, University of Saskatchewan, Canada: Coastal dynamics; oceanic fronts; productivity and physical processes.

Bokuniewicz, Henry J., Ph.D., 1976, Yale University: Near shore transport processes; coastal sedimentation; marine geophysics.

##### Professors

Allam, Bassem, Ph.D., 1998, University of Western Brittany, France: Diseases of shellfish.

- Aller, Josephine Y., Ph.D., 1975, University of Southern California: Marine benthic ecology; invertebrate zoology; marine microbiology; biogeochemistry.
- Chang, Edmund K.M., Ph.D., 1993, Princeton University: Atmospheric dynamics and diagnoses climate dynamics; synoptic meteorology.
- Cochran, J. Kirk, Ph.D., 1979, Yale University: Marine geochemistry; use of radionuclides as geochemical tracers; diagenesis of marine sediments.
- Colle, Brian A., Ph.D., 1997, University of Washington: Synoptic meteorology; mesoscale numerical modeling and forecasting; coastal meteorology.
- Flood, Roger D., Ph.D., 1978, Massachusetts Institute of Technology, Woods Hole Oceanographic Institution: Marine geology; sediment dynamics; continental margin sedimentation.
- Geller, Marvin A., Ph.D., Emeritus, 1969, Massachusetts Institute of Technology: Atmospheric dynamics; climate and the upper atmosphere.
- Gobler, Christopher, Ph.D. 1999, Stony Brook University: Phytoplankton, harmful algal blooms, estuarine ecology, aquatic biogeochemistry.
- Hameed, Sultan, Ph.D., 1968, University of Manchester, England: Atmospheric sciences.
- Kollias, Pavlos, Ph.D. 2000, University of Miami: Radar applications for weather and climate research.
- Lonsdale, Darcy J., Ph.D., 1979, University of Maryland: Zooplankton ecology with special interest in physiology; life history studies.
- Lopez, Glenn R., Ph.D., 1976, Stony Brook University: Benthic ecology; animal-sediment interactions.
- Mak, John E., Ph.D., 1992, University of California, San Diego (Scripps): Atmospheric chemistry and biosphere-atmosphere interactions; isotope geochemistry.
- McElroy, Anne E., Ph.D., 1985, Massachusetts Institute of Technology, Woods Hole Oceanographic Institution: Aquatic toxicity, fate and effects of organic contaminants.
- Pikitch, Ellen, K. Ph.D., 1983, Indiana University: Fisheries science, conservation biology and marine policy
- Scranton, Mary I., Ph.D., 1977, Massachusetts Institute of Technology, Woods Hole Oceanographic Institution: Marine biogeochemistry; geochemistry of reduced gases; chemical cycling in anoxic systems.
- Swanson, R. Lawrence, Ph.D., 1971, Oregon State University: Physical oceanography of coastal waters and estuaries; ocean dumping; coastal zone management.
- Taylor, Gordon T., Ph.D., 1983, University of Southern California: Marine microbial ecology; microbial mediation of biogeochemical processes; biofouling.
- Wang, Dong-Ping, Emeritus, Ph.D., 1975, University of Miami: Coastal ocean dynamics .
- Zhang, Minghua, Ph.D., 1987, Institute for Atmospheric Physics, Academia Sinica, Beijing: Atmospheric sciences; modeling of climate.
- Associate Professors**
- Black, David E., Ph.D., 1998, Rosenstiel School of Marine and Atmospheric Science, University of Miami: Paleoclimatology, paleoceanography, deep-sea sediments, marine micropaleontology.
- Brownawell, Bruce J., Ph.D., 1986, Massachusetts Institute of Technology, Woods Hole Oceanographic Institution: Biogeochemistry of organic pollutants in seawater and groundwater.
- Cerrato, Robert M., Ph.D., 1980, Yale University: Benthic ecology; population and community dynamics; recolonization.
- Collier, Jackie L., Ph.D., 1994, Stanford University: Phytoplankton physiology and ecology; freshwater and marine plankton; molecular microbial ecology.
- Frisk, Michael, Ph.D., 2004, University of Maryland: Biology, life history, and conservation of elasmobranchs.
- Khairoutdinov, Marat, Ph.D. 1997, University of Oklahoma: Climate modeling, high resolution cloud modeling, cloud microphysics, super parameterization, massively parallel super-computing, cloud parameterization.
- Knopf, Daniel A., Ph.D., 2003, Swiss Federal Institute of Technology, Switzerland: Atmospheric Chemistry, Microphysics and Chemistry of Atmospheric Aerosols, Heterogeneous Atmospheric Chemistry and Kinetics, Instrument Development.
- Lwiza, Kamazima M.M., Ph.D. 1990, University of Wales: Structure and dynamics of shelf seas.
- Peterson, Bradley, Ph.D. 1998, University of South Alabama: Community ecology of seagrass dominated ecosystems.
- Warren, Joseph, Ph.D., 2001, Massachusetts Institute of Technology and Woods Hole Oceanographic Institution: Acoustical oceanography, zooplankton behavior and ecology.



Wilson, Robert E., Ph.D., 1973, Johns Hopkins University: Estuarine and coastal ocean dynamics.

Yu, Jie, Ph.D. 2000, Massachusetts Institute of Technology: Theoretical fluid dynamics and applied mechanics, with emphases on wave mechanics, hydrodynamic instabilities, coastal hydrodynamics and seabed mechanics

Zhu, Qingzhi, Ph.D., 1997, Xiamen University, China: Biogeochemistry, environmental analytical chemistry, trace element sensors.

#### **Assistant Professors**

Beaupré, Steven R., Ph.D. 2007: Global carbon cycle, isotope biogeochemistry, isotope reaction analyses.

Dheilley, Nolwenn M. 2010, Macquarie University, Australia: Evolution of host-parasite interactions, functional genomics

Dvaskas, Anthony, Ph.D., 2007, University of Maryland, College Park: Environmental economics, ecosystem services and resilience of coastal ecosystems, economics of restoration, natural capital accounting.

Farhadzadeh, Ali, Ph.D. 2011. University of Delaware: Numerical and experimental modeling of storm surge and wave, sediment transport and nearshore morphology evolution, impacts of sea level rise and storm intensification on coastal infrastructure and communities.

Finn, Donovan, Ph.D. 2009, University of Illinois at Urbana-Champaign.

French, Michael, Ph.D. 2012, University of Oklahoma: Supercell and tornado dynamics, Doppler weather radar applications, mesoscale meteorology

Kim, Hyemi, Ph.D. 2008, Seoul National University: Low frequency climate variability, tropical meteorology, ocean-atmosphere interaction, prediction and predictability, tropical cyclone activity, extreme events.

Nye, Janet. Ph.D., 2008, University of Maryland: Fish ecology, climate variability, global environmental change, ecosystem-based management.

Taylor, David, Ph.D., 1994, University of Tennessee.

Thorne, Lesley. Ph.D. 2010, Duke University: Bio-physical and trophic interactions in marine ecology; application of spatial analysis and landscape ecology techniques to marine conservation.

Reed, Kevin, Ph.D. 2012, University of Michigan: Climate modeling, tropical cyclones, climate extremes, atmospheric dynamics

Volkenborn, Nils, Ph.D. 2005, University of Bremen, Germany: Sediment biogeochemistry, benthic ecology, animal-sediment relationships, benthic-pelagic coupling, environmental change and coastal ecosystem functioning.

Wehrmann, Laura, PhD, 2010, Max Planck Institute for Marine Microbiology, Bremen, Germany: Biogeochemistry, trace-metal cycling in marine environments, early diagenetic processes, geomicrobiology, deep biosphere.

Wolfe, Christopher. Ph.D. 2006, Oregon State University: Physical oceanography, large-scale circulation, theory and modeling

Yager, Karina. Ph.D. 2005, Yale University: Impacts of climate change in mountain environments

#### **Joint and Associate Faculty**

Baines, Stephen, Ph.D. 1993, Yale University: Aquatic biogeochemistry of carbon and trace elements. Assistant Professor, Ecology and Evolution

Levinton, Jeffrey, PhD. 1971, Yale University: Marine ecology. Professor Ecology and Evolution

Lynch, Heather, Ph.D. 2006, Harvard University: Spatiotemporal dynamics of Antarctic penguins and development and application of statistics and mathematics to conservation biology

Padilla, Diana, Ph.D. 1987, University of Alberta: Mollusk ecology; invasive species.

#### **Adjunct Faculty**

Flagg, Charles, Ph.D. 1977, Massachusetts Institute of Technology/Woods Hole Oceanographic Institution: Structure and dynamics of coastal oceans.

Liu, Ping, Ph.D. 1999, Chinese Academy of Sciences: Climate change, dynamics, and modeling.

Pales-Espinosa, Emmanuelle, Ph.D. 1999, University of Nantes, France: Shellfish physiology, particle selection mechanisms in suspension feeding bivalves, algology.

Price, Roy, Ph.D. 2008, University of South Florida: Cycling of elements in coastal marine environmental and hydrothermal vents.

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

Materials Science and Engineering Department

**Chairperson**

Michael Dudley, Old Engineering Building 312 (631) 632-8500

**Graduate Program Director**

T.A. Venkatesh, Old Engineering Building 308 (631) 632-4134

**Graduate Program Coordinator**

TBA

**Department Office**

Old Engineering Building 314, Zip 2275 (631) 632-8484

**Office Staff**

Chandrani Roy, Sr. Staff Assistant

**Degrees Awarded**

M.S. in Materials Science and Engineering; Ph.D. in Materials Science and Engineering

**Web Site**

<http://www.matscieng.sunysb.edu/>

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-gs](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-gs)

Materials Science and Engineering Department

The Department of Materials Science and Engineering offers graduate work leading to the Master of Science and Doctor of Philosophy degrees. The motivating philosophy of the graduate program is to provide the student with a broad synthesis of the theoretical and experimental techniques required to work with all classes of materials. Emphasis is placed on courses that unify the field in terms of fundamentals treated with sufficient depth to enable the student to make technological contributions in diverse areas of materials science and engineering. Laboratory and coursework are structured to provide programs for students who (1) are entering intensive basic research-oriented programs leading to Ph.D. or Master of Science degrees, (2) are currently employed and can complete their studies in the evening, or (3) are working in materials-related industries and can integrate their work experience into their degree requirements.

**Industrial Cooperative Ph.D. Program:** A special extramural Ph.D. degree program is offered by the Department of Materials Science and Engineering for highly qualified individuals working in an industrial materials research area. Candidates for this program must have met the graduate coursework requirements for the Ph.D. typically by earning a master's degree. Doctoral research is generally done at the student's place of employment, rather than on the University campus. Contact the Department for further information.

**Bachelor of Science Degree/Master of Science Degree Sequential Program**

An engineering science, engineering chemistry, or physics student may apply at the end of the junior year for admission to this special program, which leads to a Bachelor of Engineering or Bachelor of Science degree at the end of the fourth year and a Master of Science degree at the end of the fifth year. In the senior year, a student in the program takes six credits of graduate courses. In the fifth year, the student takes 24 credits, of which at least 18 credits are coursework and 6 credits are ESM 599 Research. The advantages of this program over the regular M.S. program is that a student may start his or her M.S. thesis in the senior year, and that he or she needs only 24 credits in the fifth year as opposed to 30 credits for a regular M.S. student. For details of the M.S. degree requirements, see the Graduate Program Director.

**Admission requirements of Materials Science and Engineering Department**

Admission is based on the Graduate Program Committee's assessment of the applicant's aptitude for research and the compatibility of his or her interests with the active research programs and capabilities of the Department. Applicants are advised to pay particular attention to their statements of purpose (page 3 of the application form). Minimum requirements, in addition to those of the Graduate School, are as follows:

- A. A bachelor's degree in engineering, mathematics, physics, chemistry, or a closely related area from an accredited college or university;
- B. A minimum grade average of at least a B in all courses in engineering, mathematics, and science;
- C. Results of the Graduate Record Examination (GRE) general test;
- D. For non-native speakers of English, results of the TOEFL exam with a score of at least 600 (Paper), 250 (Computer) or 90 iBT for PhD applicants and 85 iBT for MS applicants and no sub-score should be below a 22.
- E. Acceptance by both the Department of Materials Science and Engineering and the Graduate School.

Facilities of Materials Science and Engineering Department

**Research Activities**

Since its inception, the Department has had a strong research component, with a major emphasis in surface science and engineering. The Department has been successful in obtaining external funding for research and currently has the highest per capita faculty funding within the University. In 2003, the Department topped the list for research funding in the College of Engineering and Applied Sciences. The Department

boasts more than \$4 million in external funding for 15 total full-time faculty members. The Department hosts two main interdisciplinary centers, one on Polymers and the other on Thermal Spray. These centers offer a unique and rich environment for interdisciplinary graduate research and education.

**Garcia Center for Polymers at Engineered:** The Polymer Center, offers an interdisciplinary program aimed at studying the molecular basis of macroscopic phenomena. With funds from industrial partners, the NSF and the Department of Energy (DOE), research is conducted on polymer dynamics, nanopatterning, thin film and interface engineering, surface modification, blends, polyelectrolytes, adhesion, block polymers, and wetting.

**The Center for Thermal Spray Research:** The Center for Thermal Spray Research (CTSR) conducts both applied and fundamental research on thermal spray technology, which involves melt spray formation of protective coatings and free standing forms. CTSR is a unique facility containing a vast array of industrial-level plasma and combustion spray devices. In 1999, CTSR's research program received a significant boost through a \$5 million award from the Defense Advanced Research Projects Agency (DARPA) to pursue revolutionary applications of thermal spray in electronics. Under the auspices of the Mesoscale Integrated Conformal Electronics initiative, CTSR has expanded its reach in the design, synthesis, and applications of thick film electronics and sensor materials. A new laboratory for both electronics fabrication and characterization has been set up.

Recent awards made to the faculty include two NSF Nanoscale Integrated Research Team awards (totaling \$2 million), one concerning the use of metal oxide electronic noses for use as molecular and biological sensors, and the other concerning molecular electronics on the nanoscale.

The proximity to Brookhaven National Laboratory (BNL) and its advanced national facilities has been a major benefit to both faculty and students within the Department. Several faculty members hold guest appointments at BNL, while Brookhaven scientists participate in research and teaching within the Department. The DOE awarded the contract to manage BNL in 1998 to Brookhaven Science Associates, a consortium of other universities led by Stony Brook and the Battelle Memorial Institute. The University's relationship with this premier research facility greatly enhances both the Department's and Stony Brook's research programs.

At BNL, the facilities available to the Department include particle accelerators for carrying out ion beam surface modification experiments and highly sophisticated surface analysis probes. The National Synchrotron Light Source (NSLS) is also located at BNL. As one of the participating research teams at NSLS, the Synchrotron Topography Research Group, centered in Stony Brook's Department of Materials Science and Engineering, is using special X-ray methods to image nondestructively dislocation microstructures. This enables image-detailed descriptions of dislocation motion and structures attendant to crystal growth and plastic deformation and fracture, as well as to interesting materials behaviors. The topographic method is also being used in department-based studies of surface chemical reactivity. The Department recently was awarded a \$1 million NSF Major Research Instrumentation grant to set up a center for crystal growth. The center is focused on developing capabilities for tackling the most challenging problems in crystal growth of novel advanced materials, and currently includes a high-pressure, high-temperature furnace for crystal growth of III-nitrides from solution-melts, a low-temperature CVD reactor for deposition of ZnO films, a two-zone high-temperature resistance-heater furnace for sublimation growth of ZnO, and a high-temperature RF reactor for SiC sublimation growth.

As a result of the University's Engineering 2000 initiative, our ties with industry are growing stronger: faculty members are working with industry on joint research projects and submitting cooperative proposals to outside agencies. The Materials Science Department has led the effort in joint industry-University projects within the College of Engineering through the New York State Strategic Partnership for Industrial Resurgence (SPIR) program.

#### SPIR

Stony Brook's own facilities include state-of-the-art low-energy electron diffraction LEED; a state-of-the-art scanning electron microscope and a transmission electron microscope, both equipped with analytical capabilities and the latest software for electron diffraction simulation and image processing; an atomic force microscope; and electron spectroscopy for chemical analysis (ESCA) IAES/SIMS Infrared Microscopy units, as well as central characterization facilities that include equipment for microanalysis and X-ray techniques. A well-equipped materials fabrication and processing facility within the department boasts a collection of furnaces capable of reaching 3,000°C in controlled atmospheres or under vacuum, a resist-spinner, ellipsometer, contact angle goniometers, and a high-resolution Nomarsky metallurgical microscope with image processing capability.

The analytical electron facility of the Department consists of both scanning and transmission electron microscopes. The state-of-the-art Schottky Field Emission Scanning Electron Microscope (SEM) (LEO Gemini 1550) includes an In-Lens Secondary Electron Detector in addition to the standard E-T detector, and a Rutherford Backscatter Electron Detector. This SEM allows for high resolution imaging of the surfaces and cross-sections of all types of solid materials. It is also fully equipped with an EDS (energy dispersive X-ray spectroscopy) system using an EDAX detector that provides elemental compositions and X-ray maps of the various phases of the materials examined. Finally, the SEM includes an Electron-Backscattered Electron Diffraction (EBED) analysis system based on the TSL/EDAX orientation imaging and Phase-ID software that allows for nondestructive diffraction analysis and orientation imaging (texture analysis) of the grain structure of the surface of the specimens tested.

This facility also includes a digitally controlled Transmission Electron Microscope (Philips CM12), complete with EDS and PEELS (Parallelreading Electron Energy Loss Spectroscopy) facilities for detailed analytical studies. This tool allows for the direct observation of the "internal" structure of materials at resolutions as low as a few Å and for the determination of the crystal structure of their various components.

There are also facilities for sample preparation for electron microscopy and microanalysis observations, including precision ion milling units (such as VCR Group XLA 2000).

Furthermore, advanced software for electron diffraction patterns simulation and image processing is available (e.g., Desktop Microscopist and Digital Micrograph).

Another research area that is emerging in the Department includes the development and testing of chemical sensors. A gas sensor testing facility is being set up in the Department, and it will be available shortly.

Other surface-related research involves studies of surface/environmental interactions. Using unique combinations of electron and ion spectroscopies, infrared and optical microspectroscopy and synchrotron based techniques; research is being conducted into corrosion behavior and corrosion inhibition of engineering alloys, degradation of paints and other coatings, remediation of contaminated surfaces, and surface cleaning. Much of this work has included collaborations with other universities, industries, national laboratories, and government facilities such as the Army Research Laboratory, Weapons and Materials Directorate (Aberdeen, MD). An evolving area of collaborative research involves related studies of unique thin films and structures formed using femtosecond laser ablation. The structure of epitaxial surface monolayers is being studied using LEED; extension of this research is also performed at the NSLS. The preparation of thin films of magnetic metals is studied using ultrahigh-vacuum (UHV) molecular beam epitaxy (MBE) processing. These materials are used in the computer industry in disk storage devices. The magnetic properties of these materials are studied using a vibrating sample magnetometer (VSM) and magneto-optic Kerr effect (MOKE) spectroscopy. Research is also being performed on the chemical makeup of the newly discovered high-temperature superconductors. Novel methods of rapidly spraying such materials onto surfaces are being developed. Through a Department of Defense instrumentation program, a comprehensive thermal analysis and porosity laboratory has been set up within the Department.

Consistent with Stony Brook's designated mission as a research center, the cornerstone of the Department's academic program is the graduate work leading to the research-oriented M.S. and Ph.D. degrees. The Department has about 50 full-time, fully supported students and as many as 10 part-time students, most of who work in Long Island's high-technology industries.

#### Requirements for the M.S. Degree in Materials Science and Engineering

In addition to the minimum requirements of the Graduate School, the requirements for the M.S. degree in the Department of Materials Science and Engineering can be satisfied by either one of the two following options:

##### ***M.S. Non-Thesis Option***

###### **A. Election**

The election of this option must be made by the student upon admission to the program and is considered a terminal degree.

###### **B. Coursework**

1. A minimum of 30 graduate credits with a grade point average of 3.0 or better in all graduate courses taken is required to graduate. All credits must be from coursework.
2. The 30 credits must include the following three core courses: ESM 511 Thermodynamics of Solids; ESM 513 Strength of Materials; and ESM 521 Diffusion in Solids.
3. Only six credits of ESM 696 Special Problems in Materials Science are allowed.
4. All courses taken outside the Department require permission from the Graduate Program Director.

##### ***M.S. Thesis Option***

###### **A. Election**

The election of this option must be made by the student upon admission to the program and is normally considered part of the Ph.D. sequence. Students may not transfer to the Non-Thesis Option while registered for a Thesis Master's or a Ph.D. degree.

###### **B. Coursework**

1. A minimum of 30 graduate credits is required to graduate; 24 credits must be from coursework.
2. The 30 credits must include the following three core courses: ESM 511 Thermodynamics of Solids; ESM 513 Strength of Materials; and ESM 521 Diffusion in Solids.
3. The 30 credits must include six credits of ESM 599 Research.
4. Only six credits of ESM 696 Special Problems in Materials Science are allowed.
5. All courses taken outside the Department require permission from the Graduate Program Director.

###### **C. Thesis**

For the student who elects to complete a thesis for the M.S. degree, the thesis must be approved by three faculty members, at least two of whom are members of the Department of Materials Science and Engineering, including the research advisor.

###### **D. Final Recommendation**

Upon fulfillment of the above requirements, the Graduate Program Committee will recommend to the Dean of the Graduate School that the Master of Science degree be conferred or will stipulate further requirements that the student must fulfill.

###### **E. Transfer to Other Options**

Transfer to another degree option in the Department can be made only with the written permission of the Graduate Program Director.

## Requirements for the Ph.D. Degree in Materials Science and Engineering

**A. Plan of Work**

Before completion of one year of full-time residence, the student must have selected a research advisor who agrees to serve in that capacity. The student will then prepare a plan of further coursework. This must receive the approval of the student's advisor and of the Graduate Program Committee.

**B. Coursework**

1. An average grade of B or higher is required for all courses.
2. A minimum of 24 graduate course credits is required to graduate (excluding ESM 599, ESM 697, ESM 698, and ESM 699).
3. The 24 course credits must include the following three core courses: ESM 511 Thermodynamics of Solids; ESM 513 Strength of Materials; and ESM 521 Diffusion in Solids. If the student does not receive a minimum of a B in a core course, he or she may repeat that course one other time.
4. All students must complete ESM 501 Teaching and Mentoring Techniques and ESM 514, Technical Writing for Scientist. These 2 courses do not count towards the 24 graduate course credits required.
5. The student must pass at least three credits of ESM 698 Practicum in Teaching and six credits of ESM 699 Dissertation Research on Campus.
6. Only six credits of ESM 696 Special Problems in Materials Science are allowed.
7. All courses taken outside the Department require permission from the Graduate Program Director.
8. All PhD students must register for ESM 698 (Practicum in Teaching) for five (5) semesters.

**C. Preliminary Examination**

The preliminary examination must be taken before the beginning of the student's fifth semester. This is an oral examination designed to test the student's ability to utilize his or her materials science background to carry out research in a chosen field of study, and to make clear written and oral presentations of research. At least ten days prior to the examination, the candidate should submit a research proposal (10-15 pages) to the examiners that places the research in context and outlines a scenario for its completion. The student must have finished the required coursework for the PhD program prior to taking the oral exam.

The examination committee will consist of three(3) Materials Science and Engineering Department faculty members. If a second examination is required, it must be completed by the tenth week of the sixth semester.

**D. Advancement to Candidacy**

After the student has successfully completed all requirements for the degree, other than the dissertation, he or she is eligible to be recommended for advancement to candidacy. This status is conferred by the Dean of the Graduate School upon recommendation of the Chairperson and the Graduate Program Director.

**E. Dissertation**

The most important requirement of the Ph.D. degree is the completion of a dissertation, which must be an original scholarly investigation. The dissertation shall represent a significant contribution to the scientific literature, and its quality shall be compatible with the publication standards of appropriate and reputable scholarly journals. At least two semesters should elapse between the preliminary exam and submission of the dissertation.

**F. Defense**

The candidate shall defend the dissertation before an examining committee consisting of four members, including the research advisor, two members of the Materials Science and Engineering Department, and one member from outside the Department.

**G. Time Limit**

All requirements for the Ph.D. degree must be completed within seven years after completing 24 credit hours of graduate courses in the program.

## Faculty of Materials Science and Engineering Department

## Distinguished Professors

Chu, Benjamin, Ph.D., 1959, Cornell University: Structure and dynamics of supermolecular and polymeric systems, using laser-light scattering, fluorescence recovery after photo bleaching, transient electric birefringence, small-angle X-ray scattering with synchrotron radiation, and other spectroscopic techniques.

Herman, Herbert, Ph.D., 1961, Northwestern University: Protective coatings; thermal spray; composites; marine materials.

Rafailovich, Miriam, Ph.D., 1980, Stony Brook University: Polymeric liquids; phase transitions; thin film wetting phenomena; atomic force microscopy; ion, X-ray, and neutron scattering.

Sampath, Sanjay, Ph.D., 1989, Stony Brook University: Thermal spraying; protective coatings; functioning graded materials; thick film electronics and sensors.

Takeuchi, Esther, Ph.D. B.A., University of Pennsylvania (1975), Double major in Chemistry and History; Ph.D., The Ohio State University (1981), Organic Chemistry: Materials for Energy Storage

## Professors

Clayton, Clive R., Ph.D., 1976, Surrey University, England: Environmental degradation of materials; XPS; AES; dynamic and static SIMS; electrochemical analysis synthesis by ultra-fast laser ablation; RHEED; protective coatings.

Dudley, Michael, Chairperson. Ph.D., 1982, University of Warwick, England: Synchrotron topography; crystal defects; mechanical properties.

Jona, Franco P., Ph.D., 1949, Swiss Polytechnic Institute (E.T.H.), Switzerland: Surface physics; LEED.

Mahajan, Devinder, Ph.D., 1979, University of British Columbia: Inorganic chemistry; fuel cells; catalysis.

Sokolov, Jonathan C., Ph.D., 1983, Stony Brook University: Surface and interface properties of polymers and blends; phase transitions; neutron and X-ray scattering; EXAFS; SIMS.

## Associate Professors

Gersappe, Dilip, Graduate Program Director. Ph.D., 1992, Northwestern University: Polymer theory and simulation.

Gouma, Pelagia-Irene (Perena), Ph.D., 1996, University of Birmingham, England: Advanced materials characterization; electron microscopy and microanalysis techniques; chemical sensors.

Halada, Gary, Ph.D., 1993, Stony Brook University: Electron spectroscopy; electrochemistry; surface engineering; optical spectroscopy; environmental remediation.

## Assistant Professors

Gentleman, Molly, Ph.D. 2006, Materials-University of California Santa Barbara, Santa Barbara, CA 2006; structure-property relationships for structural inorganic materials, particularly as they pertain to the performance of ceramic coatings for harsh environments.

Koga, Tadanori, Ph.D., 1998, Kyushu University, Japan, Physics: green nanofabrication of polymer thin films; chemical recycling of waste plastics and methane hydrate as a future energy resource.

Meng, Yizhi, Ph.D., 2003, Cornell University: Designing novel biomaterials for tissue engineering is the focus of Dr. Meng's research.

Orlov, Alexander, Ph.D., 2005, University of Cambridge, UK, Physical Chemistry: M.Phil. Chemistry University of Cambridge, UK; M.S.E. Engineering, University of Michigan, USA; M.E./B.E. Engineering, National Technical University, Ukraine. Materials for environmental applications; physical chemistry, environmental nanotechnology and photocatalysis.

Trelewicz, Jason, Ph.D., 2008, M.I.T.; thermodynamic and mechanical properties of binary nanocrystalline alloys by implementing a combination of analytical theory and experimental mechanics.

Venkatesh, T.A., Ph.D., 1998, Massachusetts Institute of Technology: Nanomaterials, Smart Materials, Materials for MEMS and biomedical applications.

## Research Professor

Gambino, Richard, M.S., (ret) 1976, Polytechnic Institute of New York: Magnetic thin films; magneto-optical properties; Hall effect and magnetoresistance of magnetic metals; epitaxial growth of magnetic materials.

## Adjunct Faculty

Adzic, Radoslav, Ph.D., 1974, University of Belgrade, Chemistry; Surface electrochemistry; electrocatalysis; direct energy conversion; fuel cells.

Allahverdiyev, Adil M., (M.D. PhD) a professor and the Director of Laboratory of Cell Culture and Tissue Engineering at Yildiz Technical University in Turkey.

Chidambaran, Dev, Ph.D., 2003, Stony Brook University: Corrosion science and surface analysis.

Cooley, Lance, Ph.D., 1993, University of Wisconsin, Madison: Materials science.

Czajkowski, Carl, Ph.D., 1996, Stony Brook University: Nuclear materials engineering.

Dasgupta, Avijit, Ph.D., P.E., 1983, University of Miami: Environmental engineering.

Fortmann, Charles, Ph.D., 1985, Stanford University: Solid State Physics; Protein Dynamics.

Reid-Green, J. Douglas, MS in Geology from Northeast Louisiana University: promoting sustainable development by designing and implementing remediation programs for industrial facilities in North America

Gu, Genda, Ph.D., 1989, Harbin Institute of Technology, Harbin, China; Materials Science & Engineering; Single crystal characterization and physical properties measurement; single crystal growth and solidification of oxide materials and metallic materials.

Huang, Xianrong, Ph.D., 1995, Nanjing University, China: X-ray typography.

Isaacs, Hugh, Ph.D., 1963, Imperial College of Science and Technology, University of London, England: electrochemical research.

Johnson, Peter, Ph.D., 1978, Warwick University, England: Physics;

Jones, Keith, Ph.D., 1955, University of Wisconsin, Madison: Physics.

Kondakis, Nicholas, Ph.D., 1989, Columbia University: High energy physics.

Li, Qiang, 1991, Iowa State University at Ames: Energy and electronic materials; synthesis and characterization.

Liu, Ying, Ph.D. Stony Brook University

Pernodet, Nadine, Ph.D., 1996, Polymers, Institut Charles Sadron, Strasbourg, France: Physical chemistry and polymers

Russo, Lysa, M.S., 1992, Stony Brook University: Materials science.

Samuilov, Vladimir, Ph.D., 1986, Belarus State University: Physics.

Szaladja, Frank, MS, 2006, Stony Brook University, Materials Science.

Tawfik, Hazem, P.E. and a Certified Manufacturing Engineer; Director of the Institute of Research and Technology Transfer (IRTT) at Farmingdale State College - State University of New York

Tobin, Al, Ph.D., 1968, Columbia University: Metallurgy.

Twiley, John, B.S., 1976, University of California, Riverside: Chemistry.

Uchimiya, Sophie Minori, Ph.D, 2005, Environmental Chemistry Department of Geography and Environmental Engineering: Research Chemist, USDA-ARS Southern Regional Research Center, New Orleans, LA

Welch, David O., Ph.D., 1964, University of Pennsylvania: Theoretical materials science; kinetics of diffusion; energetics; statistical mechanics; crystal lattice defects; equations of state phase equilibria; radiation effects.

Zaitsev, Vladimir, Ph.D., 1992, Moscow State University, Russia: Chemistry.

Zhu, Yimei, Ph.D., 1987, Nagoya University, Japan: Materials physics.

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

Mathematics Department

**Chairperson**

Robert Lazarsfeld, Mathematics Building 5-116 (631) 632-8290

**Graduate PhD Program Director**

Samuel Grushevsky, Mathematics Building 3-109 (631) 632-8255

**Graduate Professional Option Program Director**

Marco Martens, Math Tower Room 4-113 (631) 632-4893

**Graduate Secondary Teacher Option Program Director**

Lisa Berger, Mathematics Tower 4-100A (631) 632-8278

**Graduate Secretary**

Donna McWilliams, Mathematics Building P-143 (631) 632-8282

**Undergraduate & Graduate Assistant**

Christine Gathman, Mathematics Building, (631) 632-8250

**Degrees Awarded**

M.A. in Mathematics 7-12; M.A. in Mathematics; Ph.D. in Mathematics

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-gs](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-gs)

**Description of the Mathematics Department**

The Department of Mathematics, in the College of Arts and Sciences, offers degree programs leading to the M.A. in Mathematics (Secondary Teacher Option), the M.A. in Mathematics, and the Ph.D. in Mathematics. Several surveys, including U.S. News and World Report's "America's Best Graduate Schools," have repeatedly ranked the department's Ph.D. program among the top 20 in the nation, with top-five rankings for sub-disciplines such as Geometry.

The Department's research and educational missions are considerably enhanced by its close collaboration with the Simons Center for Geometry and Physics and the Institute for Mathematical Sciences. While these two research institutes function as independent entities, their faculty members may, when appropriate, teach courses or supervise students under the department's auspices.

**Ph.D. Program (with Professional-Option M.A. Track)**

The Mathematics Ph.D. program is internationally prominent and highly selective. It is primarily aimed at students preparing for a career in mathematical research and university teaching. However, some of our graduates have instead opted for highly successful careers in industry or government.

Students admitted to the Ph.D. program may also choose to be considered for our Professional Option MA degree. Even alone, a Master's degree of this type qualifies the recipient for many careers, including teaching at the community-college level.

**Master of Arts in Teaching Mathematics 7-12**

This is a 42-credit master's program, administered by the School of Professional Development, designed for students who already have a bachelors degree in mathematics or the equivalent, and who wish to teach mathematics in grades 7-12. Individuals interested in this program should refer to the School of Professional Development (SPD) online Bulletin: [www.stonybrook.edu/spd/graduate/matmath](http://www.stonybrook.edu/spd/graduate/matmath)

**Combined Bachelors/Masters (BS/MAT) in Teaching Mathematics 7-12**

Individuals interested in this program should refer to the School of Professional Development (SPD) online Bulletin: [www.stonybrook.edu/spd/graduate/matmath](http://www.stonybrook.edu/spd/graduate/matmath)

**The M.A. Program: Secondary Teacher Option**

The Secondary Teacher Option is a 30 credit two-year, part-time program designed for secondary school mathematics teachers who are seeking permanent certification. The nine required courses in the program are given in the evenings and in the summer on a rotating basis; each required course is offered at least once every two and a half years.

**Admission requirements of the Mathematics Department****Ph.D. Program (with Professional-Option M.A. Track)**

In addition to the Graduate School requirements, the minimum requirements for admission to this program are:

A. A bachelor's degree with a major in mathematics, or the equivalent.

B. Evidence that the student is likely to succeed. This must include three letters of recommendation from mathematicians (usually from present or former teachers). Other evidence submitted should include GRE scores and a personal background essay. The breadth and depth of mathematics courses taken, and performance, in these courses will also be carefully considered.



C. Non-native speakers of English must demonstrate an adequate command of the English language, as evidenced by an acceptable score on the TOEFL examination. A paper-based score of 550, computer-based score of 213, or an iBT-based score of 90 would be considered minimally satisfactory for this purpose. The TOEFL exam will be waived only for native speakers of English or, in rare cases, for students whose previous education was conducted almost entirely in English.

D. Acceptance by both the Department of Mathematics and the Graduate School.

#### The M.A. Program: Secondary Teacher Option

The Secondary Teacher Option is a 30 credit two-year, part-time program designed for secondary school mathematics teachers who are seeking permanent certification. The nine required courses in the program are given in the evenings and in the summer on a rotating basis; each required course is offered at least once every two and a half years.

In addition to the Graduate School requirements, the minimum requirements for admission to this program are:

A. A bachelor's degree.

B. Two years of college-level mathematics, including one year of single variable calculus, one semester of linear algebra, and one additional semester of mathematics beyond single variable calculus.

C. Provisional New York State Certification for Teaching Mathematics, Grades 7-12.

D. A grade point average of at least 3.0 in all calculus and post-calculus mathematics courses.

E. Evidence that the student is likely to succeed: this usually consists of three letters of recommendation from former teachers or supervisors.

F. Acceptance by both the Department of Mathematics and the Graduate School.

#### Facilities of the Mathematics Department

##### Simons Center for Geometry and Physics

The Simons Center for Geometry and Physics was started in 2007 by a gift from the James and Marilyn Simons Foundation. This gift includes a new building for the Center, scheduled to be completed in September, 2010, on the campus of Stony Brook University. The building will be contiguous to and have direct connections to the Physics Building and the Mathematics Tower, the latter housing the Mathematics Department, the Institute for Mathematical Sciences, and the C.N. Yang Institute for Theoretical Physics. The Simons Foundation gift also provides an endowment to support the continuing operations of the center.

At full strength, the Center will have a faculty consisting of a director and six permanent members. As currently envisioned, the center will have 12 three-year postdoctoral type positions, called research assistant professorships, as well as a robust visitors' program with roughly 18 visitors in residence at any time. In addition, each year the Center will also host several workshops, which are concentrated activities in a specific area for shorter periods of time with outside invitees and speakers, as well as other special lectures and events.

As the name indicates, the intellectual focus of the Center is at the interface of mathematics, in particular geometry, and theoretical physics. The close proximity of the center building to the Physics Building and the Mathematics Tower is symbolic of the close intellectual and programmatic relationship of the Center to the Mathematics Department and Yang Institute for Theoretical Physics. The Center's activities will be coordinated with the activities in the other two units, and the Center's programs will typically involve significant participation by their faculty and students.

#### Director

Morgan, John, Ph.D. 1969, Rice University: Topology, algebraic geometry, three and four dimensional manifolds

#### Faculty

Douglas, Michael R., Ph.D. 1988, California Institute of Technology: String Theory, Conformal Field Theory

#### Requirements of the MA Degree in Mathematics

In addition to the requirements of the Graduate School, the following are required:

A. Completion of 30 credits in graduate courses approved by the department with a 3.0 overall grade point average.

B. Passing the comprehensive examination.

C. A nine-credit minor.

For students in the Secondary Teacher Option, the 30-credit requirement is ordinarily satisfied by the following courses: MAT 511 Fundamental Concepts of Mathematics, MAT 512 Algebra for Teachers, MAT 513/MAT 514 Analysis for Teachers I-II, MAT 515 Geometry for Teachers, MAT 516 Probability and Statistics for Teachers, MAT 517 Calculators and Computers for Teachers, MAT 518 Seminar in the Uses of Mathematics, MAT 519 Seminar in Mathematics Teaching; and a three-credit elective with a significant mathematical or pedagogical component. The comprehensive examination consists of the final examinations in MAT 512, MAT 513, MAT 514, and MAT 515. The minor requirement is met by the three courses MAT 516, MAT 517, and MAT 518.

For students in the Professional Option, the courses that satisfy the 30-credit requirement are MAT 530/MAT 531 Topology/Geometry I-II, MAT 534/MAT 535 Algebra I-II, MAT 536 Complex Analysis I, MAT 532 Real Analysis I, MAT 533 Real Analysis II, and MAT 598 Teaching Practicum. Unless specifically exempted by the Director of Graduate Studies, all first year graduate students are required to take the core courses, MAT 530, MAT 531, MAT 534, MAT 535, MAT 536, MAT 532, and MAT 533 during their first-year; this requirement is automatically waived for students who have passed the comprehensive examination.

In addition, students preparing for the doctoral program ordinarily take MAT 590 Problem Seminar. The comprehensive examination consists of the final examinations in MAT 530, MAT 531, MAT 534, MAT 535, MAT 542, MAT 544, and MAT 550, or the equivalent. The minor program consists of three courses in an allied area such as applied mathematics, statistics, computer science, or theoretical physics.

#### Requirements for the Ph.D. Degree

In addition to the requirements of the Graduate School, the following are required:

- A. Passing the doctoral comprehensive examination.
- B. Passing the doctoral preliminary examination.
- C. Demonstrating proficiency in reading mathematics in two relevant foreign languages, usually French, German or Russian. Non-English-speaking international students can demonstrate their proficiency in one of these languages, in addition to their native language.
- D. Advancement to candidacy.
- E. Writing an acceptable dissertation.
- F. Two consecutive semesters of full-time study.

#### Doctoral Comprehensive Examination

This examination, which is offered twice a year (just before the start of each semester), is designed to test mastery of the fundamentals of mathematics. This exam is based on the syllabi of the core courses; MAT 530, MAT 531, MAT 534, MAT 535, MAT 542, MAT 544, MAT 550. Students who transfer from graduate programs at other universities may, in some cases, be granted exemption from this requirement.

#### Doctoral Preliminary Examination

This examination is oral. Each student must take this examination no later than 1 ½ years after passing the comprehensive examination or receiving an exemption therefrom. The chairperson and one additional member of the examining committee are chosen by the student; one additional member is chosen by the program.

#### Professional Academic Training Program

All full-time graduate students are required to participate in this program, consisting of supervised teaching/tutoring at the lower undergraduate levels.

Faculty of the Mathematics Department

#### Faculty of the Mathematics Department

##### Professors

Anderson, Michael, Ph.D., 1981, University of California, Berkeley: Differential Geometry, Geometric Analysis, Mathematical Physics.

Bishop, Christopher, Ph.D., 1987, University of Chicago: Geometric Function Theory, Complex Analysis, Applied Math, Riemann Surfaces, Dynamical Systems, Geometric Analysis.

De Cataldo, Mark, Ph.D., 1995, University of Notre Dame: High-Dimensional Algebraic Geometry.

Chen, Xiuxiong 1994, University of Pennsylvania: Differential geometry, Complex Differential Geometry.

Donaldson, Simon<sup>5</sup>, Ph.D., 1983 Oxford University: Differential Geometry, Gauge Theory, topology of Smooth Manifolds, Symplectic Geometry.

Ebin, David, Ph.D., 1967, Massachusetts Institute of Technology: Global analysis, Continuum Mechanics, Partial Differential Equations.

Fukaya, Kenji<sup>5</sup>, Ph.D, 1986 University of Tokyo: Symplectic Geometry, Riemannian Geometry.

Glimm, James<sup>3,6</sup>, Ph.D., 1959, Columbia University: Applied Mathematics, Numerical Analysis, Mathematical Physics.

Grushevsky, Samuel<sup>3,5</sup>, 2002 Harvard University: Complex Geometry, Several Complex Variables.

Hill, C. Denson, Ph.D., 1966, New York University: Partial Differential Equations, Several Complex Variables.

Jones, Lowell, Ph.D., 1970, Yale University: Topology of Manifolds, Differential Geometry.

Kirillov Jr., Alexander, *Undergraduate Program Director*, Ph.D., 1995, Yale University: Representation Theory, Low Dimensional Topology, Mathematical Physics.

Lawson, H. Blaine, Jr.<sup>3</sup>, Ph.D., 1968, Stanford University: Differential Geometry, Topology, Algebraic Geometry.

Lazarsfeld, Robert<sup>3</sup>, *Chairperson*, Ph.D., 1980 Brown University: Algebraic Geometry, Commutative Algebra

LeBrun, Claude, *Graduate Program Director*, Ph.D., 1980, University of Oxford, England: Differential Geometry, Complex Analysis, Mathematical Physics, Algebraic Geometry.

Lyubich, Mikhail<sup>4</sup>, *Director of Institute for Mathematical Sciences*, Ph.D., 1983, Tashkent State University, Russia: Dynamical Systems, Kleinian Groups and their Deformation Spaces.

Martens, Marco, Ph.D., 1990, Delft University, The Netherlands: Dynamical Systems.

Michelson, Marie-Louise, Ph.D., 1974, University of Chicago: Differential Geometry.

Milnor, John W.<sup>3,4</sup>, *Co-Director of Institute for Mathematical Sciences*, Ph.D., 1954, Princeton University: Dynamical Systems Topology, Geometry.

Morgan, John<sup>5</sup>, *Director of Simons Center for Geometry and Physics*, Ph.D., 1969, Rice University: Topology of Manifolds, Algebraic Geometry, Three and Four Dimensional Manifolds.

Phillips, Anthony V., Ph.D., 1966, Princeton University: Differential Topology and Applications to Mathematical Physics.

Schul, Raanan, *Associate Undergraduate Chair*, Ph.D., 2004 Harvard University: Real Analysis, Geometric Measure Theory.

Simons, James H., Ph.D., 1962, University of California, Berkeley: Differential Geometry, Functionals of Riemannian Metrics and Connections.

Starr, Jason, *Associate Graduate Chair*, Ph.D., 2000 Harvard University: Algebraic Geometry.

Sullivan, Dennis<sup>3,4</sup>, Ph.D., 1965, Princeton University: Dynamical Systems, Topology, Geometry, Partial Differential Equations, Quantum Topology.

Takhtajan, Leon, Ph.D., 1975, Leningrad Branch of the Steklov Mathematical Institute, Russia: Mathematical Physics and Applications to Complex and Algebraic Analysis.

Varolin, Dror, *Associate Chair*, Ph.D., 1997, University of Wisconsin-Madison: Complex Analysis and Geometry.

Viro, Oleg, Ph.D., 1974, Leningrad University: Geometry and Topology.

Zinger, Aleksey, Ph.D., 2002, Massachusetts Institute of Technology: Symplectic Topology, Enumerative Algebraic Geometry.

#### Associate Professors

Berger, Lisa, Ph.D., 2007, University of Arizona: Number Theory, Mathematics Education of Teachers.

Chas, Moira, Ph.D., 1998, Universidad Aut3noma de Barcelona: Geometric Topology, Dynamical Systems.

Khuri, Marcus, Ph.D., 2003, University of Pennsylvania: Differential Geometry, Partial Differential Equations, General Relativity.

Laza, Radu, Ph.D., 2006, Columbia University: Algebraic geometry, Several Complex Variables.

Movshev, Michael, Ph.D., 1997, University of Pennsylvania: Algebra

Plamenevskaya, Olga, *Undergraduate Program Associate Director*, Ph.D., 2004, Harvard University: Contact and Symplectic Geometry, Low-Dimensional Topology.

Schnell, Christian, Ph.D., 2008 Ohio State University: Algebraic Geometry.

Sun, Song, Ph.D., 2010 University of Wisconsin-Madison: Differential and Algebraic Geometry.

Sutherland, Scott<sup>2,4</sup>, Ph.D., 1989, Boston University: Dynamical Systems, Computing.

#### Assistant Professors

Hough, Robert, Ph.D., 2012 Stanford University: Probability, Analytic Number Theory.

McLean, Mark, Ph.D., 2008 Cambridge University: Algebraic Geometry; Differential Geometry, Symplectic Topology.

#### Research Assistant Professor

Kamenova, Ljudmila, Ph.D., 2006: Massachusetts Institute of Technology: Complex Geometry.

#### **James H. Simons Instructors**

Bodnár, József, Ph.D., 2013 Eötvös Loránd University: Algebraic Geometry, Low Dimensional Topology.

Foscolo, Lorenzo, Ph.D., 2013 Imperial College, London: Differential Geometry, Geometric Analysis.

Guenancia, Henri, Ph.D., 2013 Université Paris VI-Pierre et Marie Curie: Complex Geometry.

Lombardi, Luigi, Ph.D., 2013 University of Illinois at Chicago: Algebraic Geometry.

Saccà, Giulia, Ph.D., 2013 Princeton University: Algebraic Geometry.

Zhang, Letao, Ph.D., 2014 Rice University: Algebraic Geometry.

Zhang, Ruobing, Ph.D., 2016 Princeton University: Differential Geometry, Geometric Analysis.

#### **Research Training Group Postdoctoral Fellow**

McMillan, Benjamin, Ph.D., 2016 University of California, Berkeley: Differential Geometry, Geometry of PDE.

Ryan, Timothy, Ph.D., 2016 University of Illinois at Chicago: Algebraic Geometry.

#### **National Science Foundation Postdoctoral Fellow**

Brunyate, Adrian, Ph.D., 2015 University of Georgia: Algebraic Geometry.

#### **Lecturers**

Chen, Holly, M.S., 1996 SUNY Buffalo: Mathematics and Computation.

Flynn, Miriam, M.A., 1976 Stony Brook University: Math Education, Director of Field Experience and Clinical Practice.

Viro, Julia, Ph.D., 1991 Leningrad University: Low-Dimensional Topology.

#### **Institute for Mathematical Sciences**

Lyubich, Mikhail, *Director*, Ph.D., 1983, Tashkent State University, Russia: Dynamical Systems.

Milnor, John W.<sup>3</sup>, *Co-Director*, Ph.D., 1954, Princeton University: Dynamical Systems; Topology, Geometry.

#### **Institute for Mathematical Sciences, Lecturers**

Li, Zhiqiang, Ph.D., 2015 University of California, Los Angeles: Dynamical Systems.

Lodge, Russell, Ph.D., 2012 Indiana University: Dynamical Systems.

Mukherjee, Sabayasachi, Ph.D., 2015 Jacobs University, Bremen: Dynamical Systems, Parameter Spaces of Holomorphic Dynamical Systems.

Radu, Remus, Ph.D., 2013 Cornell University: Complex Dynamics in One or Several Variables, Analysis.

Tanase, Raluca, Ph.D., 2013 Cornell University: Dynamical Systems, Computer Science.

#### **Visitors**

Bedford, Eric Ph.D., 1974 University of Michigan: Several Complex Variables, Dynamical Systems, Geometric Function Theory, Geometric Analysis.

Winkler, Bjorn Ph.D., 2011 KTH Royal Institute of Technology: Dynamical Systems.

#### **Professors Emeriti**

Barcus, William Ph.D., 1955 University of Oxford, England: Algebraic Topology.

Knapp, Anthony Ph.D., 1965 Princeton University: Lie Groups, Representation Theory.

Kra, Irwin Ph.D., 1966 Columbia University: Complex Analysis, Kleinian Groups.

Maskit, Bernard Ph.D., 1964 New York University: Complex analysis, Riemann surfaces, Kleinian Groups and Deformation spaces, Computational Psycholinguistics.

McDuff, Dusa Ph.D., 1971 Cambridge University, England: Geometry, Symplectic Topology.

Pincus, Joel Ph.D., 1959 New York University: Operator Theory, Integral Equations.

- 1) Recipient of the State University President's and Chancellor's Award for Excellence in Teaching, 1990
- 2) Recipient of the State University President's and Chancellor's Award for Faculty Service, 2006
- 3) Distinguished Professor
- 4) Member, Institute for Mathematical Sciences
- 5) Member, Simons Center for Geometry and Physics
- 6) Joint appointment, Applied Mathematics and Statistics

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

Spring 2018

Mechanical Engineering Department

**Chairperson**

Jeffrey Ge, Light Engineering Building 113 (631) 632-8305

**Graduate Program Director**

Toshio Nakamura, Light Engineering Building 137 (631) 632-8312

**Graduate Secretary**

Dianna Berger, Light Engineering Building 113A (631) 632-8340 email: MechanicalEngineeringGraduate@stonybrook.edu

**Degrees Awarded**

M.S. in Mechanical Engineering; Ph.D. in Mechanical Engineering

**Web Site**

<http://me.eng.sunysb.edu/>

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-gs](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-gs)

**Description of the Mechanical Engineering Department**

The Department of Mechanical Engineering, in the College of Engineering and Applied Sciences, offers graduate work leading to the Master of Science and Doctor of Philosophy degrees. The department offers a broad curriculum with concentrations in Design and Manufacturing, Solid Mechanics, and Thermal Sciences and Fluid Mechanics. Departmental brochures that provide a more detailed description of the graduate program are available upon request. Additional information is also available at the department's Web site: <http://me.eng.sunysb.edu>.

**Admission Requirements for the Department of Mechanical Engineering**

For admission to the M.S. and Ph.D. programs in Mechanical Engineering the following are required:

- A. A bachelor's degree in mechanical engineering, or a related field such as another engineering discipline, physical science, or mathematics.
- B. A grade point average of at least B or equivalent in engineering, mathematics, and science courses.
- C. Completion and submission of the Graduate Record Examination (GRE) General Test.

**Accelerated B.E./M.S. Degree**

Undergraduate mechanical engineering majors with strong academic performance (GPA of 3.0 or above) may apply for admission to the Accelerated Bachelor of Engineering/Master of Science (B.E./M.S.) degree program in mechanical engineering at the end of their junior year. Once accepted into this program, students will be permitted to take up to 9 graduate credits in replacement of the required technical electives. These credits will be applied towards both their Bachelor's degree and Master's degree, which will be awarded together at the end of the program after they have fulfilled the requirements for both degrees. More information about this program may be obtained from the graduate program director or the [Department Web site](#).

**Facilities and Areas of Specialization for the Mechanical Engineering Department****Design and Manufacturing***Design and Manufacturing:*

Studies include CAD/CAM, kinematics and mechanisms, robotics, vehicles, manufacturing systems, dynamics and vibration, control, design optimization, mechatronics, microelectromechanical systems (MEMS), micro/nano-technologies, smart structures, and energy harvesting. Research topics cover task driven creative design of mechanical and electro-mechanical systems, such as high performance machinery and robots, mechanisms, and sensors, including dynamics, motion, control, and vibration-related problems; traditional and advanced manufacturing, manufacturing process modeling, human augmented systems, and intelligent fault detection and diagnosis; clean energy systems. Applied courses emphasize case studies, dynamics and control, finite element methods, and computer graphics. Also featured are an array of equipment and software for research and teaching, such as mechatronic systems, robots, CAD/CAM stations, CMM, desktop rapid prototyping machine, software for computer aided engineering.

*Mechatronics:*

Mechatronics synergistically integrates mechanical engineering, electrical engineering, software, and controls into smart electromechanical products and systems. Research in this area highlights modeling, analysis, design, control, and prototyping in a system-level approach, which requires a broad knowledge of mechanics, materials, mechanical design, manufacturing, vibration, dynamics, sensors, actuators, electronics, signals and control. Applications include industrial and laboratory automation, biomedical devices, servo machines, vehicle systems, smart structures, and energy systems.

**Solid Mechanics**

The mechanical behavior of advanced materials and structures is studied with emphasis on mathematical modeling and simulation of deformation, failure, stability, and microstructural transformation. These issues span a wide range of interests that focus on various materials, systems, and multiple length scales. Research topics include fracture mechanisms of embedded flaws in coatings and thin films, delamination in composites, and the mechanical properties and behavior of micron-scale structures and systems, such as microelectromechanical systems

(MEMS) and microelectronic components. Also investigated are the constitutive modeling and failure characterization of ceramics, polymers, and heterogeneous multi-component materials, and nano- and micromechanics of defect formation and motion in bulk materials and thin films.

Experimentally based research programs focus on the mechanical, thermomechanical, and failure behavior of a wide variety of materials such as metals, polymers, ceramics, hard and soft biological tissues, and composites under both static and dynamic loading conditions. Optical techniques of strain analysis including moiré methods, laser and white-light speckle methods, holographic interferometry, photoelasticity, and classical interferometry are developed and applied to solid mechanics problems such as fracture, wave propagation, metal forming, vibration, and deformation of micron-scale structures and systems such as MEMS. Characterization of micron and nano-scale materials and structures is accomplished with instrumented-indentation and scanning probe microscopy techniques for wear and harsh environment applications. Research is also conducted to characterize the failure mechanics of various engineered heterogeneous materials systems, ranging from functionally layered/graded coatings to nanocomposites under impact loading and high-temperature conditions. Specialized equipment includes high-speed digital cameras, scanning electron microscope, and split Hopkinson pressure bars, and in situ micromechanical high temperature fatigue testing system. Current research topics also include the characterization of mechanical properties of soft tissues and the pumping efficiency of an ischemic heart, both in vitro and in vivo.

### **Thermal Sciences and Fluid Mechanics**

*Fluid Mechanics:* Current topics include advanced combustor design and flow control, and the behavior of chemically reacting species in turbulent flows. Numerical and theoretical studies include direct simulation of turbulent flows and turbulent transport at modest Reynolds numbers, stochastic modeling of the turbulent transport of temperature, and spectral closure approximations for chemically reactive flows. Other areas include microfluidics, interfacial fluid phenomena and wetting, multiphase flows, miscible flows, and complex fluids.

*Thermal Sciences:* Current topics include measurement of thermophysical properties, laser-material interaction, materials processing, and heat transfer in advanced energy systems. The ultra fast thermal processing and laser-based measurement laboratory has an amplified oscillator/regenerative amplifier, a femtosecond autocorrelator, and a host of optoelectronics and light sources. The thermal sciences research laboratory has a visualization and digital image processing system. Studies also include methods and analytical tools for predicting, modeling and correlating the thermodynamic/thermophysical properties of the fluids. Current studies include the development of statistical mechanical techniques to assess the relation between intermolecular forces and the thermodynamic, dielectric, optical, and transport properties of fluids, fluid mixtures, and suspensions. Research is also being conducted on the modern formalism of thermodynamics; on combustion heat engines, aiming at achieving high fuel efficiency and engine performance; and on building energy dynamics.

*Energy Technologies:* Thermal sciences and fluid mechanics are the core disciplines of the emerging field of energy technologies and sustainability science—a vibrant field of research and innovation. Although the broader field of sustainability science is an interdisciplinary field defined by the problems it addresses rather than by the disciplines it employs, the application of thermal sciences and fluid mechanics to energy technologies is and will remain an important part of global transition toward a sustainable future. The Graduate Program includes doctoral-thesis research projects in Energy Technologies and Sustainability Science as well as a course of study in Energy Technologies leading to a Masters Degree in Mechanical Engineering, which offers ‘hands on’ laboratory and design experience as well as theory-based courses focusing on energy transformation, transfer, and storage. The Energy Technologies Laboratory contains fuel cell, wind turbine, photovoltaic, thermoelectric, heat pump, optical and infrared sensors, and motor/generator/battery facilities.

### **Civil Engineering**

The civil engineering specialization allows graduate students to develop fundamental and applied knowledge and explore advanced research topics in the area of civil engineering, including civil engineering materials, structural engineering, geotechnical engineering, coastal engineering, transportation, water resources, and environmental engineering. Current areas of research include sustainable structural materials, synchrotron-based multiscale experiments, multiscale simulations of construction materials, structural health monitoring systems, sensor technology development (wireless, fiber optics, electromagnetic), structural dynamics & control, sustainable infrastructure, historic materials & structural systems, adaptive reuse & historic preservation of historic city centers, water and wastewater treatment, fate and transport of emerging contaminants, membrane technology, water-energy nexus, harmful algal blooms.

Graduate students pursuing the civil engineering specialization have access to advanced facilities and equipment for conducting state-of-the-art research. Equipment in the civil and environmental engineering laboratories, above and beyond the normal, include a consolidation load frame, direct residual shear testing device, master loader for triaxial testing, 300K concrete compression testing instrument, 100 kN universal testing machine, Shimadzu TOC-L total organic carbon (TOC) analyzer, Hewlett Packard capillary electrophoresis, Flow - Field Flow Fractionation (FFF). In addition, the laboratory possess a variety of equipment to support basic research, including pH meters, centrifuges, and analytical balances. In addition to facilities within the environmental engineering laboratory, graduate students also have access to state-of-the-art facilities at Brookhaven National Laboratory (BNL), which is located less than 20 miles from campus and is accessible via direct campus shuttle. Available facilities include the National Synchrotron Light Source (NSLS) I, NSLS II, and the Center for Functional Nanomaterials (CfN). The NSLS II is the next generation light source to be completed in 2014 and when completed will be the brightest synchrotron available. The CfN houses state-of-the-art equipment such as a Leica SP5 confocal laser scanning fluorescence microscopy, a Hitachi HD2700C scanning transmission electron microscope, a FEI Titan 80-300 environmental transmission electron microscope, JEOL 1400 Soft/Bio materials electron microscope, a RHK Technology UHV 7500 atomic force microscope, and a Veeco Multimode V Scanning Probe Microscope. The university also operates numerous computer sites with 24-hour access. Stony Brook University is a partner with BNL to operate the Blue Gene/Q supercomputer.

Requirements of the Mechanical Engineering Department

### **Academic Advisor**

Each graduate student is assigned an academic advisor in his or her area of interest before registration. The academic advisor will guide the student in course selection, research, and other areas of academic importance. Students receiving financial aid must select a thesis research advisor before the start of their second semester.

**Academic Standing**

An average GPA of 3.0 or higher in all coursework, exclusive of MEC 599 (M.S. Thesis Research), MEC 698 (Practicum in Teaching II), and MEC 699 (Ph.D. Dissertation Research), is a minimum requirement for satisfactory status in the graduate program. In the doctoral program, a 3.5 grade point average is expected.

**Requirements for the M.S. Degree in Mechanical Engineering**

A minimum of 30 credits is required for the M.S. degree.

**A. Course Requirements**

1. M.S. with thesis: 21 approved graduate course credits and an accepted thesis, which is registered as 9 credits of MEC 599 and MEC 696 (Special Problems in Mechanical Engineering) combined.
2. M.S. without thesis: 30 approved graduate credits. No credit for MEC 599 is approved for fulfilling this requirement. No more than 6 credits of MEC 696 may be applied toward the course requirements.
3. All full-time graduate students are required to register for MEC 691 (Mechanical Engineering Seminar) each semester and obtain a satisfactory grade.
4. A minimum of 18 graduate credits, of which 15 credits are in courses other than MEC 599 and MEC 696, must be taken in the Department of Mechanical Engineering. All courses taken outside the department for application to the graduate degree requirements are subject to approval of the student's advisor and the graduate program director.

**B. Transfer Credits**

A maximum of 12 graduate credits may be transferred from other programs toward the M.S. degree. These may include up to 6 credits from other institutions. The maximum also includes any credits received from taking Mechanical Engineering courses while having non-degree status at Stony Brook as an SPD or GSP student. Credits used to obtain any prior degrees are not eligible for transfer. All requests for transfer of credits require the approval of the graduate program director.

**C. Thesis Requirements**

A student choosing the thesis option must select a research advisor. Upon completion, the thesis must be defended in an oral examination before a faculty committee of at least three members of which at least two must be Mechanical Engineering faculty. A student choosing the thesis option may not switch to the non-thesis option without permission of the graduate program committee. A student who has ever been appointed as a teaching, graduate, or research assistant must choose the thesis option unless otherwise approved by the graduate program committee.

**Requirements for the Ph.D. Degree in Mechanical Engineering****A. Course Requirements**

1. 18 approved graduate course credits beyond the M.S. degree requirement. A minimum of 9 credits, excluding MEC 599, MEC 696 and MEC 699, must be taken in the department.
2. MEC 507. The graduate program director may waive this requirement if the student has taken sufficient applied mathematics courses elsewhere.
3. All full-time graduate students are required to register for MEC 691 each semester and obtain a satisfactory grade.
4. All courses taken outside the department for application to the graduate degree requirements are subject to approval of the student's advisor and the graduate program director. The advisor may impose additional course requirements.

**B. Transfer Credits**

A maximum of 6 graduate credits from other programs, including those of other institutions, may be transferred toward the Ph.D. degree. Credits used to obtain any prior degrees are not eligible for transfer. Requests for transfer of credits must be approved by the graduate program director.

**C. Written Qualifying Examination**

The written qualifying examination is offered once every year, usually in January. Students who enter the graduate program with an M.S. degree from another institution are encouraged to take the examination the first time it is offered after they begin academic residency. Students who enter the graduate program without an M.S. degree are encouraged to take the examination the first time it is offered following three academic semesters in residence. Both categories of students who fail to take this opportunity must take the examination the next time it is offered during their residency. Part-time students should follow a rule based on graduate course credit hours (determined by the equivalence of 9 credits with one semester in residence). Each student can take the written qualifying examination two times before being dismissed from the Ph.D. program.

The written qualifying examination consists of two parts. Part I covers applied mathematics. Part II corresponds to the student's core area of concentration, selected from one of the following:

1. Design and Manufacturing
2. Solid Mechanics



### 3. Thermal Sciences and Fluid Mechanics

More precise information on the exam, including a list of suggested courses for each subject in the exam, is available in the departmental office, as are samples of previous examination questions.

Each student taking the examination is required to submit a written statement to the graduate program director with a declaration of both areas chosen at least one month before the announced exam date.

#### **D. Minor Area of Concentration**

In addition to the major area of concentration, each student must select a minor area from the following list: Thermodynamics and Heat Transfer, Fluid Mechanics, Solid Mechanics, Design and Manufacturing, Electrical Engineering, Material Science and Engineering, Computer Science, Applied Mathematics, and Biomedical Engineering. A petition to select a minor area that is not contained in this list must be approved by the Graduate Program Director.

A student will be required to take a coherent sequence of three graduate level courses in the minor area and obtain a grade of B or better in each of the courses. However, students must submit a list of five courses from the proposed minor field no later than the time he or she applies to take the qualifying exam. The courses in the minor field must be approved by the Graduate Program Director, with the recommendation of the student's advisor. Upon submission of the list of five courses, students must provide an explanation for the list, how the courses are related, and the rationale for the courses. Note that students are not required to have taken the courses in the minor field before taking the qualifying exam. However, the minor requirement must be satisfied before the student can be admitted to candidacy.

#### **E. Advancement to Candidacy**

A student will be advanced to candidacy for the Ph.D. degree when all formal coursework has been completed and all the requirements listed in items A through E have been satisfied. These requirements must be completed within one calendar year after passing the written qualifying examination. Advancement to candidacy must be one year before the beginning of the semester in which a student plans to defend his/her dissertation.

#### **F. Teaching**

Ph.D. students are required to take 3 credits of MEC 698 Practicum in Teaching II or obtain approval of equivalent teaching experience from the Graduate Program Director as part of the degree requirement. MEC 698 is taken under a faculty advisor who is responsible for providing feedback and making a formal evaluation of the student's work. The form of this practicum may include making class presentations, teaching in recitation classes, and preparation and supervision of laboratory classes. All Teaching Assistants are required to take MEC 697 Practicum in Teaching I, which does not meet this requirement.

#### **G. Dissertation**

The student chooses a dissertation topic in consultation with his/her doctoral dissertation advisor as soon as possible after passing the written qualifying examination. Dissertation research is an apprenticeship for the candidate, who, under the supervision of the dissertation advisor, independently carries out original work of significance. Within one year after passing the written qualifying examination, a dissertation examining committee is established. The committee must include at least three members from the Department of Mechanical Engineering, including the dissertation advisor, and at least one member from another program or from outside the University. The committee must be approved by the graduate program director upon recommendation by the dissertation advisor. The official recommendation for the appointment of the dissertation examining committee is made to the Dean of the Graduate School.

The dissertation examining committee provides a means of exposing the candidate's ideas to a variety of views, and helps to guide and oversee the candidate's research progress, which is reviewed by the committee each year. The chairperson of the committee must submit a written report to the graduate program director on the student's progress after each review.

*Dissertation Proposal:* In addition, the student is required to submit a written dissertation proposal and present it in an oral examination conducted by the dissertation examining committee. The written dissertation proposal must be distributed to the committee members at least two weeks before the oral examination. The oral examination probes the doctoral student's ability and examines the progress, direction and methodology of the dissertation research. The student will be examined on the dissertation topic and its objective, the problem formulation, research approach, and knowledge in related areas. The majority of the dissertation examining committee must approve the student's performance.

*Dissertation Defense:* At the completion of the dissertation, approval of the dissertation involves a formal oral defense. The formal defense is open to all interested members of the University community. A candidate must fill out the Doctoral Degree Defense Form (available on the Graduate School Web page) with dissertation abstract as well as other relevant details, and submit the Form to the graduate program director at least three weeks in advance of the proposed event. The Form is forwarded by the graduate program director to the dean of the Graduate School, which will be responsible for advertising the defense to the University community. Copies of the dissertation are to be distributed to the committee members at least two weeks before the dissertation defense; one copy is to be kept in the departmental office for examination by the faculty. The final approval of the dissertation must be by a majority vote of the dissertation examining committee.

Faculty of Mechanical Engineering Department

Professors

Chiang, Fu-pen, SUNY Distinguished Professor, Ph.D., 1966, University of Florida: Experimental mechanics; solid mechanics; photoelasticity; moiré and laser methods for stress analysis; mechanics of soft tissues and heart.

Ge, Q. Jeffrey, Professor and Chair, Ph.D., 1990, University of California, Irvine: Design kinematics; robotics; CAD/CAM; mechanical systems analysis and simulation.

Kao, Imin, Professor. Ph.D., 1991, Stanford University: Robotics; stiffness control; wiresaw manufacturing process; manufacturing automation; Taguchi methods.

Longtin, Jon P. Professor, P.E., Ph.D., 1995, University of California, Berkeley: Heat transfer at fast time scales; ultrafast laser liquid- and laser-solid interactions; laser processing, sensors, building energy, energy efficiency, novel heating and cooling technologies.

Nakamura, Toshio, Professor, Ph.D., 1986, Brown University: Solid mechanics; composite materials; computational fracture mechanics.

#### Associate Professors

Chang, Qing (Cindy), Associate Professor. Doctor of Engineering, 2006, University of Michigan: Real-time production control, manufacturing system modeling, simulation and intelligent maintenance, real-time energy management of manufacturing system.

Cubaud, Thomas, Associate Professor, Ph.D., 2001, Paris-Sud University/ESPCI, France: microfluidics, interfacial fluid phenomena and wetting, multiphase flows, miscible flows, and complex fluids.

Hwang, David (Jae-Seok), Associate Professor. Ph.D., 2005, University of California at Berkeley: Micro- and nanoscale heat transfer, laser-assisted solar photovoltaic manufacturing and diagnostics, advanced diagnostics of light-matter interaction.

Kukta, Robert V., Associate Professor, Ph.D., 1998, Brown University: Solid mechanics; mechanics of thin films; micromechanical modeling of defects in crystals, crystal growth, self-assembly, surface science.

Ladeinde, Foluso, Associate Professor, Ph.D., 1988, Cornell University: Turbulent flows, High-speed chemically-reacting flows; Noise source prediction and propagation.

Purwar, Anurag, Research Associate Professor. Ph.D., 2005, Stony Brook University: CAD/CAM, Computational Kinematics, Design Automation, Robotics

Rastegar, Jahangir, Associate Professor. Ph.D., 1976, Stanford University: Kinematics, dynamics and control of high performance machinery, optimal design of mechanical systems.

Wang, Lin-Shu, Associate Professor, Ph.D., 1966, University of California, Berkeley: Thermodynamic theory; heat extraction principle; dynamic design of eco-dwellings.

#### Assistant Professors

Chakraborty, Nilanjan, Assistant Professor, Ph.D., 2008, Rensselaer Polytechnic Institute, Troy, NY. Robot Motion Planning, Multi-robot Coordination, Human-Robot Interaction, Mechanism Design, Multi-body Dynamics, Distributed Intelligent Systems for Energy Automation, Sensor Networks, Distributed Algorithms, Combinatorial Optimization.

Chen, Shikui, Assistant Professor. Ph.D., 2010, Northwestern University: Mechanical Engineering. Ph.D., 2006, Chinese University of Hong Kong: Automation and Computer Aided Engineering.

Colosqui, Carlos, Assistant Professor, Ph.D. 2009, Boston University: Thermal-fluids, Microfluidics, Colloidal systems, Fuel Cells, and Nano/Micro-Electromechanical Systems (N/MEMS).

Kirane, Kedar, Assistant Professor. Ph.D. 2014, Northwestern University: Solid mechanics, fracture mechanics, scaling, fatigue quasibrittle materials, geo-mechanics, poro-mechanics, poly-crystal plasticity, probabilistic mechanics, multi-scale modeling

Lawler, Benjamin, Assistant Professor, Ph.D., 2013, University of Michigan: Efficiency and emissions of internal combustion engines, drive-cycle modeling and simulation of various vehicle architectures to evaluate the fuel economy benefits of each next-generation technology.

Mamalis, Sotirios, Assistant Professor, Ph.D. 2012, University of Michigan: Internal combustion engines, modeling of advanced combustion processes, thermodynamic analysis of power generation and propulsion systems.

Wang, Lifeng, Assistant Professor. Ph.D., 2006, Tsinghua University: materials modeling, computational mechanics, micro- and nano-mechanics, materials testing and characterization, rapid prototyping and 3D printing, and composites.

Wang, Ya, Assistant Professor, Ph.D., 2012, Virginia Tech: Energy harvesting, structural dynamics, vibration control, smart structures, multifunctional composites.

Number of teaching, graduate, and research assistantships, fall 2017: 21

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

**Medical Humanities, Compassionate Care & Bioethics (HCB)****Graduate Program Director**

Stephen G. Post, HSC Level 3, Room 80, (631) 444-9797

**Degree Awarded**

Medical Humanities, Compassionate Care & Bioethics

**Website**

<http://stonybrook.edu/bioethics/masters>.

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-gs](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-gs)

**Masters in Medical Humanities, Compassionate Care & Bioethics (HCB)**

Our Program devotes equal attention to the mutually enhancing themes of bioethics, medical humanities, and the dynamic of compassionate care in a time when both patients and healthcare professionals find the healthcare system dehumanizing. Recognizing the need for an interdisciplinary approach to education, our faculty includes experts in Medicine, Ethics, History, Law, Literature, Philosophy, Religious Studies, the Social Sciences and Disability Studies. Our clinical faculty integrate perspectives from the humanities with their experience as health-care providers.

Those who should consider applying for the program include

- 1.) current MDs, RNs, JDs, PhDs, and other professionals seeking further expertise and career development;
- 2.) medical students and others pursuing professional degrees in fields such as health care, health sciences, humanities, pastoral care, law, business, social work, and journalism; and
- 3.) post-baccalaureate students in transition from the BA or BS to a professional degree who wish to expand their knowledge.

**Admission**

Requirements for admission to the MA in Medical Humanities, Compassionate Care & Bioethics include:

1. The admissions requirements of the Graduate School.
2. Writing Sample: A personal statement describing the applicant's relevant academic and work experience, and immediate and long-term goals.
3. Letter of Recommendation: Three letters of recommendation. At last two need to be from professors/instructors.

Note: Students who do not meet the above requirements may be admitted conditionally. Their status will be reviewed after the first semester of graduate study.

Make sure to check the program website for more the latest instructions, <http://stonybrook.edu/bioethics/apply>

**Requirements for the MA Degree in Medical Humanities, Compassionate Care & Bioethics**

The program requires students to complete 30 credit hours (10 courses) and can be completed in one to three years. Four core courses, including our capstone course, are required. For the remaining six elective courses, students must take at least four with our Center faculty and may take the remaining two either from our own courses or from select courses across campus that meet the criteria for credit in the program.

For a list of required courses, elective courses and course descriptions please visit our website.

**Required Courses**

HCB 501 Compassionate Care, Medical Humanities, and the Illness Experience

HCB 502 Landmark Cases in Bioethics and Law

HCB 503 Traditions and Values in Bioethical Conflicts

HCB 599 Capstone Course

**Electives**

HCB 504 Special Topic in Biotechnology

HCB 510 Literature, Compassion, and Medical Care

HCB 511 Bioethics, Disability & Community

HCB 512 Altruism and Bioethics

HCB 513 Disease and Society

HCB 514 Global Bioethics

HCB 515 Health Policy, History & Ethics

HCB 516 Ethical Issues in Human Reproduction

HCB 517 The Problem of Evil: Philosophical, Biological, and Social Dimensions

HCB 518 Empirical Bioethics

HCB 519 Public Health Law

HCB 520 Bioethics and Film

HCB 521 The Role of Virtue Ethics in Medicine

HCB 522 Clinical Ethics Practicum

HCB 523 Special Topics in Medical Humanities

HCB 524 Special Topics in Bioethics

### **Program Faculty**

#### **Director**

Stephen G. Post, PhD

Center Director

History of Bioethics; Geriatrics; Dementia; Religion; Healthcare; Compassion and Altruism

#### **Research & Teaching Faculty**

Maria A. Basile, M.D.

Clinical Assistant Professor

Human Values and Medicine; Literature and Medicine; Medical Professionalism; Medical Education; Leadership

Richard A. Bronson, M.D.

Professor of Obstetrics/Gynecology and Pathology

Reproductive Medicine; Poetry; Narrative in Medicine; Medical Education

John L. Coulehan, MD, MPH

Director Emeritus

Literature and Medicine, Empathy, Narrative, Clinical Ethics

Brooke Ellison, Ph. D.

Research Assistant Professor

Hope and Medical Ethics, Stem Cell Research, Sociology and Healthcare

Lynn Hallarman, MD

Clinical Assistant Professor

Cancer Pain Management, Medical-Legal Issues at End of Life

S. Van McCrary, PhD, JD, MPH

Associate Professor

Clinical Biomedical Ethics (Neonatal and Adult)

Health Law and Policy, Medical Decision Making, Psychiatric Issues in Bioethics

Carla Keirns, MD, PhD, MSc.

Assistant Professor

Clinical Ethics, History of Medicine, Sociology of Medicine, Health Services Research

Craig Malbon, PhD, MDiv

Leading Professor of Pharmacology

Medical Ethics, Social Justice, End-of-Life Ethical Issues

Dylan Smith, Ph.D.

Associate Professor

Quality of Life Measurement (Ecological Momentary Assessment, Day Reconstruction Method); Psychology of and Emotional Adaption to Illness and Disability

Michael Vetrano, PhD

Associate Course Director, Medicine in Contemporary Society

Clinical Ethics and Decision Making, Doctor-Patient Communication, Spirituality and Health Care

Religion and Bioethics

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

Spring 2018

**Dean**

Kenneth Kaushansky, M.D., Health Sciences Center, Level 4, Room 170 (631) 444-1785

**Degrees Awarded**

M.D., M.D./Ph.D., Ph.D.

[The School of Medicine](#) Health Sciences Center Bulletin

**School of Medicine**

**Dean**

Kenneth Kaushansky, M.D., Health Sciences Center, Level 4, Room 170 (631) 444-1785

**Degrees Awarded**

M.D., M.D./Ph.D., Ph.D.

[The School of Medicine](#) Health Sciences Center Bulletin

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at [COURSE SEARCH](#).*

Spring 2018

Molecular Genetics and Microbiology Department

**Interim Chairperson**

David Thanassi, Life Sciences Building 280C (631) 632-4549

**Graduate Program Director**

Janet Hearing, Life Sciences Building 250B (631) 632-8778

**Graduate Program Coordinator**

Jennifer Jokinen, Life Sciences Building 130 (631) 632-8812

**Degree Awarded**

Ph.D. in Molecular Genetics and Microbiology

**Web Site**

<http://www.mgm.stonybrook.edu/index.shtml>

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-gs](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-gs)

Molecular Genetics and Microbiology Department

Graduate study in Molecular Genetics and Microbiology offers a diversified course of study leading to the Ph.D. degree. The major areas of study are the basic mechanisms of viral, bacterial, and fungal pathogenesis, and cancer biology.

Studies are directed toward an understanding of cell biology, molecular genetics, and microbial pathogenesis and are designed to prepare a student to become an effective research scientist.

The student prepares for a program of study in consultation with an advisory committee composed of faculty members active in several research areas. A research advisor, selected by the student at the end of the first year of study, then joins the advisory committee. The individualized program aims to develop breadth of understanding in the basic disciplines through active participation in laboratory research, coursework, and seminars.

**Admission Requirements of Molecular Genetics and Microbiology**

Pre-doctoral trainees in Molecular Genetics and Microbiology are admitted to the Graduate School of Stony Brook University by application to the Program.

In addition to the minimum Graduate School requirements, the following are taken into account:

- A. Undergraduate performance in science courses.
- B. Percentile on the Graduate Record Examination (GRE) General Test.
- C. Three letters of recommendation.

The program does not require, but prefers to see, evidence of research activity as an undergraduate student. Whenever possible, prospective students are invited to Stony Brook for interviews with the Program faculty.

All students who are accepted into the Molecular Genetics and Microbiology Program are accepted with full support. The level of support for 2017 is \$29,000 per calendar year plus full tuition scholarship. Health insurance is provided for all students as a fringe benefit.

**Facilities of Molecular Genetics and Microbiology Department**

The Department of Molecular Genetics and Microbiology occupies the second floor of the Life Sciences Building as well as space on the lower level, first and third floors of the Life Sciences Building. Program faculty members' laboratories are also located on the first, second and third floors of the Centers for Molecular Medicine (CMM) and within other departments at Stony Brook University, Brookhaven National Laboratory, Cold Spring Harbor Laboratory and the Feinstein Institute for Medical Research. Approximately 47,000 square feet of research space are available within the Department of Molecular Genetics and Microbiology. Each research laboratory is fully equipped and, in addition, the Department provides access to a variety of communal central facilities and services. These include a microinjection facility, flow cytometry, glassware washing and sterilization facility, analytical equipment lab, deconvolution microscopy facility, environmental rooms, darkrooms, and fermentor facility. Major items of equipment are organized into these central facilities, which are readily available to trainees. The Centers for Molecular Medicine, a new state-of-the-art research and teaching facility, serves as a physical and intellectual bridge between investigators in the adjacent Life Sciences Building and the nearby University Health Sciences Center. The Health Sciences Library and Barry S. Collier Learning Center, located in the Health Sciences Center, contains collections of biological and medical books and journals presently totaling 262,000 volumes, including more than 3,200 journal titles. In addition, the Health Sciences Library provides access to more than 2,300 full-text electronic journals. Other campus libraries include the Frank Melville, Jr. Memorial Library.

**Requirements for the Ph.D. Degree in Molecular Genetics and Microbiology**

The predoctoral training program offers its students the opportunity to study questions in virology, bacteriology, mycology, immunology, biochemistry, cancer biology, and cell and developmental biology utilizing the experimental approaches of the molecular biologist and geneticist.

Instruction and course planning involve faculty members from the Department of Molecular Genetics and Microbiology and selected members from the Departments of Biochemistry and Cell Biology, Medicine, Pathology, Physiology and Biophysics, and Pharmacology, and from three outside institutions (Cold Spring Harbor Laboratory, Brookhaven National Laboratory and the Feinstein Institute for Medical Research). The general philosophy of the Program is that a successful research career in the diverse and heterogeneous area of molecular biology requires a broadly based background, familiarity with at least all of the above areas, and a frame of mind that is receptive to new approaches.

The Department of Molecular Genetics and Microbiology has an active seminar program of outside speakers who present topics relevant to molecular genetics and microbiology, and there is a yearly retreat in which ongoing research in the Department and recent progress in the field are presented and discussed. This retreat is held early in the fall in order to introduce new students to the faculty, to other students, and to the areas of ongoing research within the Department. The Department also presents a colloquium periodically on human diseases, with outstanding scientists from throughout the world presenting their current work on the selected topic. Students in the program are encouraged to attend all of these programs as part of their training.

In addition to the minimum requirements of the Graduate School, the following are required:

#### **A. Course Requirements**

It is the policy of the Department of Molecular Genetics and Microbiology that a student must obtain a grade of B or higher in each course. The decision to have students who receive a final grade below 3.0 re-take a course will be made by the Program's Executive Committee on a case-by-case basis.

##### *First Year*

###### *Fall*

MCB 520 Graduate Biochemistry I

HBM 503 Molecular Genetics

HBM 509 Experimental Molecular Genetics and Microbiology (laboratory rotations)\*

HBM 690 Molecular Genetics and Microbiology Seminar

###### *Spring*

HBM 522 Biology of Cancer

MCB 656 Cell Biology

HBM 510 Experimental Molecular Genetics and Microbiology (laboratory rotations)\*

HBM 690 Molecular Genetics and Microbiology Seminar

HBM 692 Experimental Methods in Molecular Genetics and Microbiology

GRD 500 Integrity in Science

Teaching Practicum

\*Students rotate through three different laboratories over the course of their first year. At the end of that year, students must identify and enter the laboratory in which they will conduct their dissertation research.

##### *Second Year*

###### *Fall*

HBM 640 Molecular Mechanisms of Microbial Pathogenesis

HBP 533 Immunology

HBM 599 Graduate Research

HBM 690 Molecular Genetics and Microbiology Seminar

HBM 691 Readings in Molecular Genetics and Microbiology Literature

Teaching Practicum

###### *Spring*

HBM 599 Graduate Research

HBM 690 Molecular Genetics and Microbiology Seminar

HBM 693 Research Proposal Preparation in Molecular Genetics and Microbiology

#### **B. Qualifying Exam**



After the successful completion of all required courses, the student must write and defend a research proposal in an area distinct from his/her graduate research for the qualifying exam.

### C. Dissertation Proposal Exam

Within 10 months of passing the qualifying exam, each student submits a written proposal of his or her dissertation research (similar to an NIH grant proposal) and orally defends the proposal before his or her dissertation committee shortly thereafter.

### D. Advancement to Candidacy

After successfully completing all required and elective courses, the qualifying exam, and the dissertation proposal exam, the student will be recommended to the Graduate School for advancement to candidacy.

### E. Attendance and Participation in Student Seminar

After being advanced to candidacy, the student is expected to participate actively in the Program's student seminar series.

### F. Ph.D. Dissertation

The research for the Ph.D. dissertation is conducted under the supervision of the dissertation committee, which is appointed by the Program and approved by the Dean of the Graduate School. A formal public oral defense of the dissertation is scheduled, at which the student presents his or her findings and is questioned by members of the dissertation committee and other members of the audience. A closed oral examination before the dissertation committee follows the seminar.

### G. Teaching Practicum

It is expected that each graduate student completing a doctoral degree will have functioned as a teaching assistant during at least one semester of his or her graduate studies.

### H. Publication Requirement

All students must be the first author of at least one publication of original research in order to graduate. Students may schedule the dissertation defense, with the approval of the dissertation advisor, once the first-author manuscript has been submitted for publication.

Faculty of Molecular Genetics and Microbiology Department

### Toll Distinguished Professors

Benach, Jorge, Ph.D., 1971, Rutgers University: Pathogenesis of spirochetal infections and their host responses. Distinguished Professors

Wimmer, Eckard, Ph.D., 1962, University of Gottingen, Germany: The molecular biology of poliovirus replication and the molecular basis of picornaviral pathogenesis.

### Professors

Bliska, James B., Ph.D., 1987, University of California, Berkeley: Molecular and cellular basis of bacterial-host interactions. Carter, Carol A., Ph.D., 1972, Yale University: HIV and retroviral assembly and replication.

Del Poeta, Maurizio, M.D., 1992, University of Ancona, Italy: Role of sphingolipids in mediating signaling pathways and fungal pathogenesis.

Fries, Bettina<sup>1</sup>, M.D., 1991, Albert Ludwig Universitaet Freiburg, Germany: Staphylococcal enterotoxin B; Cryptococcal neoformans pathogenesis

Futcher, Bruce, D.Phil., 1981, University of Oxford, England: Control of cell division in eukaryotic cells.

Hayman, Michael J., Ph.D., 1973, National Institute for Medical Research, England: Mechanism of transformation by retroviral oncogenes; erythroid differentiation.

Hearing, Patrick, Ph.D., 1980, Northwestern University: Viral molecular genetics; eukaryotic transcriptional regulation; gene therapy.

Konopka, James B., Ph.D., 1985, University of California, Los Angeles: G-protein coupled receptor signal transduction; fungal pathogenesis (*Candida albicans*).

Li, Ellen<sup>1</sup>, M.D., Ph.D., 1986, Washington University: inflammatory bowel diseases. Mackow, Erich R., Ph.D., 1984, Temple University: Rotavirus and hantavirus pathogenesis.

Marshall, Nancy Reich, Ph.D., 1983, University at Stony Brook: Signaling switches in gene expression by hormones or viral infection.

Thanassi, David, Ph.D., 1995, University of California, Berkeley: Secretion of virulence factors by bacterial pathogens; pilus biogenesis by uropathogenic *E. coli*.

### Associate Professors

Bhaduri-McIntosh, Sumita<sup>3</sup>, M.D., Ph.D., 1991, Byramjee Jeejeebhoy Medical College: Epstein-Barr virus-host interactions Carpino, Nicholas, Ph.D., 1997, University at Stony Brook: Positive and negative regulation of T cell receptor signaling.

Hearing, Janet C., Ph.D., 1984, University at Stony Brook: Influenza virus drug development.

Karzai, Wali<sup>4</sup>, Ph.D., 1995, Johns Hopkins University: Structure and function of RNA-binding proteins and biochemical studies of the SmpBsrA quality control system.

Krug, Laurie, Ph.D., 2001, Emory University: Virus-host interactions during chronic gammaherpesvirus infection. Leatherwood, Janet, Ph.D., 1993, The Johns Hopkins University: Cell cycle control of DNA replication.

van der Velden, Adrianus, Ph.D., 2000, Oregon Health and Science University : Salmonella pathogenesis. Assistant Professors

Kumar, Pawan, DVM, PhD, 2009, University of Southampton, UK; Immunology and intestinal microbiota. Sheridan, Brian, Ph.D., 2008, University of Pittsburgh: Mucosal immunity to microbial pathogens

### Adjunct Faculty

Stillman, Bruce W., Professor.7 Ph.D., 1979, Australian National University: Mechanism of eukaryotic DNA replication. Research Faculty

Boon, Elizabeth, Assistant Professor.8 Ph.D., 2002, California Institute of Technology: Biofilms.

Hannun, Yusef, Professor.9 M.D. American University in Beirut, Lebanon, 1983: lipid mediators of cancer cell signaling.

Kew, Richard, Assistant Professor.10 Ph.D., 1986, Stony Brook University: Leukocyte chemotaxis; inflammation; pulmonary immunopathology.

Krainer, Adrian, Professor.7 Ph.D., 1986, Harvard University: Posttranscriptional control of gene expression; alternative splicing; splicing in genetic diseases and cancer; antisense therapeutics.

London, Erwin, Professor.11 Ph.D., 1979, Cornell University: Membrane protein folding and lipid interaction. Moll, Ute, Professor.10 M.D., 1985, University of Ulm: Tumor suppressor genes; role of p53 in human cancer.

Neiman, Aaron, Professor.11 Ph.D., 1994, University of California, San Francisco: Vesicle trafficking and intracellular signaling in yeast. Obeid, Lina, Professor.9, M.D., 1983, American University in Beirut, Lebanon: signaling lipids in cell stress and disease.

Seeliger, Jessica, Assistant Professor.12, Ph.D., 2007, Stanford University: synthesis and assembly of cell membranes in Mycobacterium tuberculosis.

Tonge, Peter J., Professor.8 Ph.D., 1986, University of Birmingham: Enzyme mechanisms and rational drug design.

Vakoc, Christopher, Assistant Professor.7 M.D., Ph.D., 2007, University of Pennsylvania: chromatin regulators and oncogenic signal transduction cascades.

Wigler, Michael, Professor.7 Ph.D., 1978, Columbia University: Signal transduction and growth control in eukaryotes.

Number of teaching, graduate, and research assistants, fall 2017: 23

- 1) Joint appointment, Department of Medicine
- 2) Joint appointment, Department of Pathology
- 3) Joint appointment, Department of Pediatrics
- 4) Joint appointment, Department of Biochemistry and Cell Biology
- 5) Brookhaven National Laboratory
- 6) The Feinstein Institute for Medical Research
- 7) Cold Spring Harbor Laboratory
- 8) Department of Chemistry
- 9) Department of Medicine
- 10) Department of Pathology
- 11) Department of Biochemistry and Cell Biology
- 12) Department of Pharmacological Sciences

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

## The Molecular and Cellular Biology Program

### Graduate Program Director

Wali Karzai, CMM Building, Room 244, (631) 632-1688

### Graduate Program Coordinator

Amy Saas, Life Sciences Building, Room 338, Tel: (631) 632-8613

### Degree Awarded

Ph.D. in Molecular and Cellular Biology

### Web Site

<http://www.stonybrook.edu/biochem/mcb/>

### Application

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-gs](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-gs)

### Description of the Molecular and Cellular Biology Program

The Molecular and Cellular Biology (MCB) Graduate Program offers a multidisciplinary course of study leading to the Ph.D. degree. Diverse biological systems of study from plants to humans are pursued in MCB research laboratories. These systems are used to investigate a variety of biological topics including: Cancer, Infectious Disease, Gene Expression, Structural Biology, Neurobiology, DNA Replication, Development, Immune Response, Cell Cycle, Protein Trafficking, Signal Transduction, and Biological Membranes. The MCB Program provides students with the opportunity to select an academic program in one of three specializations:

1. Molecular Biology and Biochemistry
2. Cellular and Developmental Biology
3. Immunology and Pathology.

Each of the specializations enhances knowledge within the field to ensure our graduates are well equipped for a successful career in research.

The program of study in Molecular Biology and Biochemistry includes Physical Biochemistry and any of a number of electives. Training stresses biochemical and structural approaches to solve biological problems. The program of study in Cellular and Developmental Biology includes a course in Developmental Biology and any of a number of electives. Emphasis is placed on the control mechanisms that define and regulate growing and developing systems. The program of study in Immunology and Pathology includes courses in Immunology and General Pathology. This area of specialization emphasizes the cellular and molecular basis of human disease to foster a bridge between basic and clinical research.

The goal of this approach is to provide the student with the widest range of research possibilities. During the first year students participate in several core courses that serve to build a scholastic foundation for further study. The core courses include Graduate Biochemistry, Molecular Genetics, and Cell Biology. In addition, students receive training to critically evaluate original research articles in a Journal Club/Readings course. Students can select an area of specialization at the time of enrollment or they can decide on a course of study during their first year.

The MCB Program involves students in ongoing research projects as soon as they arrive on campus. During the first academic year, students train in four different research laboratories to help in choosing a mentor for thesis dissertation. The first laboratory training, or rotation, is usually at Stony Brook University, but subsequent rotations can be performed at Cold Spring Harbor Laboratory or Brookhaven National Laboratory. The MCB Program crosses departmental boundaries and institutions to offer the student thesis research training in nearly 100 different laboratories. A decision for a thesis advisor is generally made by the end of the first academic year and research studies will subsequently form the foundation of a Ph.D. thesis.

All students in the MCB Program gain experience and skills in teaching and oral presentation of their research studies. Students assist in teaching undergraduate laboratory or lecture courses during two consecutive semesters, usually the second and third semesters. The teaching experience can include assistance in formulation/grading of examinations and individual tutoring sessions. In the third and subsequent years graduate students present their research progress to other students and faculty in a seminar forum. The student seminars are an opportunity to gain communication skills and to learn about ongoing research of other students in different laboratories. In addition to student seminars, a number of faculty from outside the institution are invited for weekly seminars. These are opportunities to meet visiting scientists who are leaders in their field and to learn of their latest findings.

In the second year of the MCB Program students take a comprehensive qualifying exam. Following successful performance, students focus on their thesis research. By the end of the second year, students prepare a written Ph.D. Thesis Proposal in consultation with their faculty thesis advisor. The proposal is defended orally before a proposal committee comprised of faculty selected by the student. Following successful defense of the proposal, the student advances to candidacy and the proposal committee along with the faculty advisor become the student's Ph.D. Thesis Committee. The Ph.D. Thesis Committee meets at least once a year with the student to assess progress and discuss research strategies.

For more information, visit [www.sunysb.edu/biochem/mcb](http://www.sunysb.edu/biochem/mcb).

### Admission requirements for the Molecular & Cellular Biology Graduate Program

In addition to the minimum requirements of the Graduate School, the following are suggested requirements:

A. A bachelor's degree with the following minimal preparation: mathematics through one year of calculus, chemistry (including organic chemistry and laboratory), general physics, and one year of biology (including laboratory);

B. A minimum grade point average of 3.0 (B) in undergraduate courses including science and mathematics courses;

C. Letters from three previous instructors;

D. A report of Graduate Record Examination (GRE) General Test scores;

E. Acceptance by both the Graduate Program in Molecular and Cellular Biology and the Graduate School. In special cases, students not meeting requirements A and B may be admitted on a provisional basis. These students must act to remedy deficiencies within the first year according to the program's requirements.

#### Facilities of the Molecular and Cellular Biology Program

The Biological Sciences Division and Health Sciences Center are well equipped for work in developmental and cellular biology. Individual faculty laboratories and central services provide a full array of state-of-the-art equipment. These include the Flow Cytometry Facility, the Cell Culture and Hybridoma Facility, the Transgenic Mouse Facility, the University Microscopy Imaging Center, and the Center for Analysis and Synthesis of Macromolecules. (proteomic and metabolomics). The Health Sciences Library contains a comprehensive collection of biomedical journals and books and is complemented by the Melville Library on the main campus.

#### Requirements for the PhD in Molecular and Cellular Biology

##### A. Course Requirements

##### **Biochemistry and Molecular Biology Specialization:**

1. Molecular Genetics (MCB 503)
2. Graduate Biochemistry (MCB 520)
3. Biomembranes (MCB 517)
4. Cell Biology (MCB 656)
5. Structural Biology and Spectroscopy (MCB 512)
6. One approved elective graduate course
7. Students in their first academic year also rotate in four laboratories with the goal of selecting an environment for their thesis research.
8. Participation in Journal Club (MCB 531, MCB 532); Student Seminars (MCB 603, MCB 604); Visiting Scientists Seminars (MCB 601, MCB 602)
9. Enrollment in the first year in Ethics (GRD 500)
10. Enrollment in the first semester in Computational Methods in Biochemistry and Structural Biology (BSB 515)

##### **Cell and Developmental Biology Specialization:**

1. Molecular Genetics (MCB 503)
2. Graduate Biochemistry (MCB 520)
3. Biomembranes (MCB 517)
4. Cell Biology (MCB 656)
5. Developmental Biology (MCB 657)
6. One approved elective graduate course
7. Students in their first academic year also rotate in four laboratories with the goal of selecting an environment for their thesis research.
8. Participation in journal club (MCB 531/532); Student Seminars (MCB 603, MCB 604); Visiting Scientists Seminars (MCB 601, MCB 602)
9. Enrollment in the first year in Ethics (GRD 500)
10. Enrollment in the first semester in Computational Methods in Biochemistry and Structural Biology (BSB 515)

##### **Immunology and Pathology Specialization:**

1. Molecular Genetics (MCB 503)
2. Graduate Biochemistry (MCB 520)
3. Biomembranes (MCB 517)

4. Cell Biology (MCB 656)
5. General Pathology (HBP 531)
6. Immunology (HBP 533)
7. Students in their first academic year also rotate in four laboratories with the goal of selecting an environment for their thesis research.
8. Participation in journal club (HBP 590); Student Seminars (MCB 603, MCB 604); Visiting Scientists Seminars (MCB 601, MCB 602)
9. Enrollment in the first year in Ethics (GRD 500)
10. Enrollment in the first semester in Computational Methods in Biochemistry and Structural Biology (BSB 515)

Students must achieve a B or better in all required courses and must maintain a B average in elective courses.

#### **B. Qualifying Examination**

At the beginning of the fourth semester, the student must pass a written qualifying examination.

#### **C. Research Proposal**

Following successful completion of the qualifying examination, the student writes a research proposal based on the probable area of the student's Ph.D. dissertation. The proposal is defended orally to a faculty examination committee that does not include the student's research advisor. The proposal examination normally takes place by the end of the second year. After passing the proposal examination, the faculty committee and Ph.D. research advisor usually become the student's Ph.D. thesis committee and meet with the student at least once a year to follow his or her thesis progress.

#### **D. Teaching Experience**

All students are required to gain experience in teaching by assisting in laboratory sections, leading discussion sections, or helping to formulate and grade examination papers. The teaching experience may be in either undergraduate or graduate courses, and extends over a period of two semesters.

#### **E. Advancement to Candidacy**

When the above requirements have been satisfactorily completed, a recommendation for advancement to candidacy for the Ph.D. will be forwarded to the Graduate School.

#### **F. Ph.D. Dissertation**

During the second year, the student initiates a dissertation research project in the laboratory of a particular member of the program faculty. After the student has passed the proposition examination, a research committee is appointed to guide the dissertation research, and when the research nears completion, a dissertation examining committee is appointed by the dean of the Graduate School.

#### **G. Dissertation Defense**

The dissertation defense, which completes the requirements for the Ph.D., consists of a public seminar presentation of the dissertation work followed by an oral examination before the dissertation examining committee. Successful completion of the Ph.D. degree requires that a candidate publish a first-authored paper in a refereed journal. The paper must be published, accepted, or in press by the time of the thesis defense.

#### **H. Residence Requirement**

The University requires at least two consecutive semesters of full-time graduate study. The demands of the course of study necessitate a longer period of residence.

#### **I. MCB Policies for Masters Degrees**

The MCB program does not enroll new students in a Masters program; however, the program does provide its active Ph.D. students the option for a terminal Masters degree.

In addition, the student must:

1. 30 credits of Graduate Course work from the approved PhD curriculum in Molecular and Cellular Biology, with a minimum GPA of 3.0.
2. Take the qualifying exam and achieve a grade considered satisfactory for a M.A.
3. Prepare a written Thesis. The thesis need not contain a significant amount of experimental data. It will be sufficient for such a thesis to review the background of a research project initiated by the student, plus a description of the experimental strategy that was to be undertaken, and any results obtained.

For a student who has achieved a satisfactory grade in the qualifier exam, maintained progress towards the Ph.D., and has conditionally passed the Proposition Exam, a written Thesis will not be required. The written portion of the Proposition Exam will be considered an acceptable substitute for the thesis.

**Please note that students who opt for either an M. A. or M. Phil. degree are no longer eligible to pursue a Ph.D. degree in the MCB program.**

Faculty of the Molecular and Cellular Biology Graduate Program

### **Distinguished Professors**

- Benach, Jorge L.2, Ph.D., 1972, Rutgers University: Host response to bacterial infections.
- Citovsky, Vitaly1, Ph.D., 1987, Hebrew University, Israel: Nuclear targeting and intercellular communication in plants.
- Grollman, Arthur, P.4, M.D., 1959, John Hopkins University: DNA damage, mutagenesis and repair; chemical carcinogenesis.
- Lennarz, William, J.1, Ph.D., 1959, University of Illinois: Biosynthesis and function of glycoproteins in cell-cell interactions.
- London, Erwin1, Ph.D., 1979, Cornell University: Membrane protein structure/translocation/folding Structure and function of sphingolipid/cholesterol rafts in membranes.
- Sternglanz, Rolf1, Ph.D., 1967, Harvard University: Chromatin structure and function in yeast; histone modifying enzymes.
- Wimmer, Eckard2, Ph.D., 1962, University of Gottingen, Germany: RNA virus genetics, replication, and pathogenicity; cellular virus receptors; whole viral genome synthesis; development of novel vaccines.

### **Professors**

- Bingham, Paul M.1, Ph.D., 1979, Harvard University: Genetic control of development and gene expression in animals.
- Bogenhagen, Daniel F.4, M.D., 1977, Stanford University: Mitochondrial DNA; Mitochondrial proteomics.
- Brown, Deborah1, Ph.D., 1987, Stanford University: Cholesterol/sphingolipid-rich membrane domains; role in endocytosis.
- Bynum, David R.1, Ph.D., 1981 Dartmouth College: Director, Long Island Group Advancing Science Education, Stony Brook University.
- Chen, Wen-Tien8, Ph.D., 1979, Yale University: Proteases and integrins in cancer invasion, metastasis, and angiogenesis.
- Dean, Neta1, Ph.D., 1988, University of California, Los Angeles: Protein glycosylation, fungal cell wall biosynthesis; fungal pathogenesis.
- Demple, Bruce4, Ph.D., Defining new repair pathways for oxidative DNA damage in the nucleus and the mitochondria of mammalian cells.
- Deutsch, Dale1, Ph.D., 1972, Purdue University: Metabolism and uptake of the endocannabinoids (anandamide and 2-AG).
- Frohman, Michael A.4, M.D./Ph.D., 1986, University of Pennsylvania: Mammalian signal transduction, development, vesicular trafficking, mitochondrial fusion diabetes.
- Furie, Martha5, Ph.D., 1980, Rockefeller University: Interactions among pathogenic bacteria, endothelium, and leukocytes.
- Futcher, Bruce2, Ph.D., 1981 Oxford University; Cell cycle control, microarrays, genomics.
- Gergen, J. Peter1, Ph.D., 1982, Brandeis University: Pattern information and the regulation of gene expression during Drosophila development.
- Ghebrehiet, Berhane8, D.V.M./D.Sc., 1974, University of Paris, France: Biochemistry; Role of complement C1q receptors during infection and inflammation.
- Halegoua, Simon3, Ph.D., 1978, Stony Brook University: Control of the neuronal phenotype and survival by growth factors using biochemical, molecular and cell biological approaches.
- Haltiwanger, Robert1, Ph.D., 1986, Duke University: Glycobiology; role of glycosylation in signal transduction and development. Hannun, Yusuf, 1,7, MD, 1, Bioactive lipids in cancer pathogenesis and therapeutics.
- Hayman, Michael2, Ph.D., 1973, Institute for Medical Research, England: Viral/cellular oncogenes; differentiation of erythroid cells.
- Hearing, Patrick2, Ph.D., 1980, Northwestern University: Adenovirus-host cell interactions, adenovirus assembly and vectors for gene therapy.
- Hollingsworth, Nancy1, Ph.D., 1988, University of Washington, Seattle: Regulation of meiotic recombination in yeast. Katz, Eugene2, 14, Ph.D., 1969, University of Cambridge, England: Genetics/development in cellular slime molds.
- Konopka, James2, Ph.D., 1985 University of California, Los Angeles: Signal transduction, morphogenesis, and genetics of pathogenic fungi.
- Levine, Joel M.3, Ph.D., 1980, Washington University: Cell-surface molecules of the developing nervous system.
- Lin, Richard6, M.D., 1988, University of California, San Francisco: Physiology of phosphoinositide 3-kinase signaling
- Ma, Yupo12 M.D., Jinan University, Ph.D., University of South Alabama: Leukemic stem cells, stem cell therapy and tissue repair.

Mackow, Erich R.2, Ph.D., 1984, Temple University: Viral regulation of cell signaling responses. Hantavirus, Influenza, Dengue and Rotavirus pathogenesis.

Malbon, Craig C.4, Ph.D., 1976, Case Western Reserve University: Signal transduction and gene regulation in differentiation and development: Roles of G-proteins.

Marcu, Kenneth B.1, Ph.D., 1975, Stony Brook University: NF-kappaB kinase signaling in stress, immunity and cancer; mechanisms of action of AID in adaptive immune responses.

McLaughlin, Stuart6, Ph.D., 1968, University of British Columbia, Canada: Calcium/phospholipid second messenger system. Miller, Todd W.6, Ph.D., 1989, Rockefeller University: The regulation and substrate specificity of tyrosine kinases.

Moll, Ute M.5, M.D., 1985, Ulm, Germany: Function/regulation of the p53 gene family in apoptosis and cancer.

Neiman, Aaron1, Ph.D., 1994, University of California, San Francisco: Vesicle trafficking and intracellular signaling in yeast.

Obeid, Lina, 7, Ph.D Bioactive lipids in Inflammation, Aging and Cancer.

Powers, Scott13, Ph.D., 1982, Columbia University: Genetic basis of cancer.

Reich, Nancy L.2, Ph.D., 1983, Stony Brook University: Signal transduction and gene expression in response to cytokines and virus.

Scarlata, Suzanne6, Ph.D., 1984, University of Illinois: Structure/function studies of G proteins and effectors.

Schechter, Nisson1, Ph.D., 1971, Western Michigan University: Homeobox and filament proteins in neuronal differentiation, growth and regeneration.

Shroyer, Kenneth5, Ph.D. 1983, M.D. 1987, University of Colorado. Cancer biomarkers as diagnostic adjuncts in cervical pathology and cytopathology; cervical cancer and HPV.

Simon, Sanford R.1.5, Ph.D., 1967, Rockefeller University: Proteinases and their inhibitors in invasiveness inflammation and tumor metastasis; Inhibition of bacterial metalloproteinases.

Smith, Steven O.1, Ph.D., 1985, University of California, Berkeley: Structure and function of membrane proteins.

Steigbigel, Roy T.8, M.D., 1966, University of Rochester: Immune dysfunction induced by HIV infection.

Simmerling, Carlos9, Ph.D. 1994, University of Illinois at Chicago: Development of tools for efficient and simulation of chemical systems and using them to study the structure and dynamics of molecules involved in biological processes.

Thanassi, David G.2, Ph.D., 1995 University of California at Berkeley: Virulence factors of pathogenic bacteria.

Thomson-Carino5, Patricia, Ph.D., The evolution of molecular and cellular changes during the development of colorectal and breast cancer

Thomsen, Gerald H.1, Ph.D., 1988, Rockefeller University: Embryonic development mechanisms and their evolution.

Tsirka, Styliani-Anna4, Ph.D., 1989, University of Thessaloniki, Greece: Neuronal-microglial interactions in the physiology and pathology of the central nervous system.

Tonge, Peter J.4, Ph.D., 1986, University of Birmingham, England: Chemical biology and spectroscopy; Enzyme mechanisms, rational inhibitor design and antibacterial drug discovery; Fluorescent and light-activated proteins.

Van Nostrand, William E.17, Ph.D. 1985, University of California at Irvine: Molecular pathogenic mechanisms in cerebrovascular pathology of Alzheimer's disease and related disorders.

White, Thomas6, Ph.D., 1994, Harvard University: Molecular biology and physiology of gap junction channels.

Wollmuth, Lonnie3, Ph.D., 1992 University of Washington: Molecular mechanisms regulating excitatory synaptic transmission in the brain.

Yang, Vincent W., Ph.D., Princeton University; 1984, M.D., Rutgers Robert Wood Johnson Medical School: Mammalian stem cell biology and oncogenesis.

#### **Associate Professors**

Boon, Elizabeth M.9, Ph.D., 2003, California Institute of Technology: Nitric oxide signaling in bacteria.

Bowen, Mark6, Ph.D., 1998, University of Illinois, Chicago: Molecular recognition at the synapse.

Cao, Jian8, M.D., 1986, Zhengzhou University School of Medicine; M.S., 1992, Peking Union Medical College/Chinese Academy of Medical Sciences: Cancer invasion/metastasis and anti-cancer drug discovery.

Carpino, Nicholas6, Ph.D., 1997, Stony Brook University: Positive and negative regulation of T cell receptor signaling.

Carrico, Isaac9, Ph.D., 2003, California Institute of Technology: Site-specific protein labeling; glycoproteins.

- Chen, Emily<sup>4</sup>, Ph.D., 2002, University of California, San Diego: identifying determinants of breast cancer metastasis and mass spectrometrybased proteomics.
- Colognato, Holly<sup>4</sup>, Ph.D., 2000, Rutgers University: Extracellular matrix in the brain; roles during development and during neurodegeneration.
- Czaplinski, Kevin<sup>1</sup>, Ph.D., 1999, UMDNJ-Robert Wood Johnson Medical School: Post transcriptional control of gene expression in the nervous system.
- Fleit, Howard B.<sup>5</sup>, Ph.D., 1980, New York University: Leukocyte Fc receptors; macrophage differentiation.
- Garcia-Diaz, Miguel<sup>4</sup>, Ph. D., 2003, UAM University (Madrid, Spain): DNA repair and mitochondrial gene expression.
- Ghazizadeh, Soosan<sup>10</sup>, Ph.D., 1994, Stony Brook University: Epithelial stem cell biology; skin bioengineering and gene therapy.
- Holdener, Bernadette<sup>1</sup>, Ph.D., 1990, University of Illinois: The role of protein folding and O-fucosylation during embryonic development and stem cell differentiation
- Ju, Jingfang<sup>8</sup>, Ph.D., 1996, University of Southern California: The mechanism of translational control mediated by non-coding RNAs in cancer.
- Karzai, Wali<sup>1</sup>, Ph.D. 1995, Johns Hopkins University: Post-transcriptional Regulation of Gene Expression
- Kernan, Maurice<sup>3</sup>, Ph.D., 1990, University of Wisconsin: Genetics of touch and hearing in *Drosophila*; ciliogenesis and ciliarysignaling.
- Kew, Richard R.<sup>5</sup>, Ph.D, 1986, Stony Brook University: Role of complement activation and leukocyte chemotaxis in inflammation.
- Krug, Laurie<sup>6</sup>, Ph.D., 2001, Emory University: Virus-host interactions during chronic gammaherpesvirus infection.
- Leatherwood, Janet<sup>2</sup>, Ph.D., 1993, Johns Hopkins University: Cell-cycle control and DNA replication; fission yeast molecular biology. Lyman, Harvard<sup>1</sup>, Ph.D., 1960, Brandeis University: Photocontrol of chloroplast development.
- McKinnon, David<sup>3</sup>, Ph.D., 1987, John Curtin School of Medical Research, Australia: Molecular physiology of sympathetic neurons and cardiac muscle.
- Moriya, Masaaki<sup>4</sup>, Ph.D. 1981, Nagoya University, Japan: Cellular responses to DNA damage.
- Martinez, Luis A.<sup>5</sup>, PhD, understanding how alterations in the p53 gene contribute to the development of cancer.
- Prives, Joav<sup>4</sup>, Ph.D., 1968, McGill University, Canada: Cytoskeletal membrane interactions in muscle cells.
- Quitschke, Wolfgang<sup>7</sup>, Ph.D., 1983, Stony Brook University: Gene regulation of proteins associated with neurodegenerative diseases.
- Rebecchi, Mario J.<sup>8</sup>, Ph.D., 1984, New York University: Phospholipases and signal transduction.
- Schärer, Orlando D.<sup>4,9</sup>, Ph.D., 1996, Harvard University: Chemistry and biology of DNA damage and repair.
- Seeliger, Markus<sup>4</sup>, Ph.D., 2003, Cambridge University: Function and mechanism of protein kinases and ubiquitin ligases.
- Simmerling, Carlos<sup>9</sup>, Ph.D. 1994, University of Illinois at Chicago: Development of tools for efficient and simulation of chemical systems and using them to study the structure and dynamics of molecules involved in biological processes.
- Sirotkin, Howard<sup>3</sup>, Ph.D., 1996, Albert Einstein College of Medicine: Vertebrate neural development and patterning.
- Spector, Illan<sup>6</sup>, Ph.D., 1967, University of Paris, France: Neuronal differentiation and microfilaments.
- Spitzer, Eric D.<sup>5</sup>, M.D./Ph.D., 1985, Johns Hopkins University: Molecular biology of *Cryptococcus neoformans*.
- Takamaru, Ken-Ichi<sup>4</sup>, Ph.D., 1997, The Graduate University for Advanced Studies, Japan: Wnt signaling in development and disease. Thanassi, David G.<sup>2</sup>, Ph.D., 1995 University of California at Berkeley: Virulence factors of pathogenic bacteria.
- Thomsen, Gerald H.<sup>1</sup>, Ph.D., 1988, Rockefeller University: Embryonic development mechanisms and their evolution.
- Tsirka, Styliani-Anna<sup>4</sup>, Ph.D., 1989, University of Thessaloniki, Greece: Neuronal-microglial interactions in the physiology and pathology of the central nervous system.
- van der Velden, Adrianus<sup>6</sup>, Ph.D., 2000, Oregon Health and Science University: The mammalian T cell response to *Salmonella enterica* serovar Typhimurium.
- Wang, Hsien-yu<sup>6</sup>, Ph.D., 1989, Stony Brook University: Wnt/Frizzled and G-protein signal transduction in development. White, Thomas<sup>6</sup>, Ph.D., 1994, Harvard University: Molecular biology and physiology of gap junction channels.
- Zieve, Gary<sup>5</sup>, Ph.D., 1977, Massachusetts Institute of Technology: Assembly/transport of snRNP particles.
- Zong, Wei-Xing<sup>2</sup>, Ph.D., 1999, University of Medicine & Dentistry of New Jersey: Molecular regulation of apoptotic and necrotic cell death.



**Assistant Professors**

Aguirre, Adan9Adan4, Ph.D., 2002, Centro de Investigacion y de Estudios Avanzados IPN, Mexico: Endogenous NG2 progenitor cells as cell-based replacement for a variety of brain pathologies

Michael Airola1, Ph.D., Structural biology of lipid modifying enzymes

Nurit, Ballas 1, Ph.D., 1989, Hebrew University, Israel: The cellular and molecular mechanisms underlying the initiation and rescue of Rett syndrome.

Chan, Chia-Hsin9Hsin4, Ph.D. 2007, National Taiwan University: Molecular mechanisms of cancer development; cancer metabolism and stemness.

Chen, Jiang8, M.D., Ph.D., 1995, Henan Medical University, China; 2001, University of Heidelberg, Germany: Planar cell polarity and primary cilia in skin and hair follicle development and skin cancers.

French, Jarrod1, Ph.D., Structural Biology, Chemical Biology and Enzymology of Metabolic Pathways and Protein complexes

Gao, Liang, Ph.D., 2009, Purdue University: Optical imaging, fluorescence microscopy, analytical instrumentation. Glynn, Steven 1 Ph.D.Glynn, Steven1, Ph.D., Structure and mechanism of protein-unfolding machines in mitochondria

Kaczocha, Martin, Ph.D., 2009, Stony Brook University: Endocannabinoids, lipid metabolism, inflammation, and pain.

Kim, Hyungjin4, Ph.D., Genome instability, Ubiquitin/SUMO Signaling, Cancer pathogenesis - Regulation of DNA repair in cancer susceptibility pathways.

Kumar, Pawan 2, Ph.D., Immunology, gut microbiota-immune cells interaction. Intestinal and autoimmune inflammation.

Levy, Sasha F. 41, Ph.D., 2005, University of California, Santa Barbara: Physical and quantitative biology.

Luk, Ed2Ed1, Ph.D., 2003, John Hopkins University: Chromosome biology and genome regulation.

Martin, Benjamin L.21, Ph.D., 2005, University of California, Berkeley: Stem cell maintenance and differentiation; developmental mechanisms of cancer pathogenesis.

Matus, David Q.21, Ph.D., 2006, University of Hawaii: Evolutionary, cellular, and developmental approaches to studying nematode uterine-vulval morphogenesis.

Seeliger, JessicaJessica4, Ph.D., 2007, Stanford University: Chemical biology, biochemistry, microbiology. Mechanisms of lipid biosynthesis and transport in bacterial pathogens; developing tools for inducible gene .

Sheridan, Brian 2, Ph.D., Mucosal Immunology, T cell memory, Vaccine design, Host-pathogen interactions

Sneider, Ashly, Ph.D., Bioactive lipids and dietary fatty acids in inflammation and cancer.

Tan, Dongyan3, Ph.D., Structure and function of macromolecules involved in epigenetic regulation; biophysical behavior of model lipid membranes. Primary appointment: Department of Pharmacological Sciencesgene expression.

**Adjunct Faculty**

Dunn, John, Microbiologist.13 Ph.D., 1970, Rutgers University: Structure/function of bacteriophage T7 RNA polymerase.

Hannon, Gregory15 Ph.D., 1992, Case Western Reserve University: Genetics of growth in mammalian cells and dsRNA-induced gene silencing.

Joshua-Tor, Leemo15 Ph.D., 1991, The Weizmann Institute of Science: Structural biology; X-ray crystallography; molecular recombination; nucleic acid regulation; RNAi.

Krainer, Adrian 15 Ph.D., 1986, Harvard University: mRNA splicing; gene expression; RNA-protein interaction. Lazebnik, Yuri, Professor.15 Ph.D., 1986, St. Petersburg State University, Russia: Molecular mechanisms of apoptosis.

Lowe, Scott, Professor.15 Ph.D. Massachusetts Institute of Technology: Modulation of apoptosis; chemosensitivity; senescence by cancer genes. Martienssen, Robert, Professor.15 Ph.D., Cambridge University: Plant genetics; transposons; development; gene regulation; DNA methylation.

Mills, Alea, A., Associate Professor.15 Ph.D., 1997 University of California: Cancer; development; aging; senescence; epigenetics.

Muthuswamy, Senthil, K., Assistant Professor15, Ph.D., 1995 McMaster University: Understanding cancer initiation using three-dimensional epithelial structures.

Setlow, Richard, Professor.1,13 Ph.D., 1947, Yale University: DNA damage and repair; carcinogenesis and mutagenesis in fish, light-induced malignant melanoma.

Spector, David L., Director of Research & Professor.15 Ph.D., 1980, Rutgers University: Spatial organization of gene expression.

Stenlund, Arne, Associate Professor.15 Ph.D., 1984, Uppsala University, Sweden: DNA replication of papillomaviruses.

Stillman, Bruce, President & Professor.15 Ph.D., 1979, Australian National University: DNA replication and chromatin assembly in human and yeast cells.

Studier, William, Professor.1,13 Ph.D., 1963, California Institute of Technology: Molecular genetics of phage T7: recombinant protein productions. Tansey, William P., Professor.15 Ph.D., 1991, University of Sydney, Australia: Regulation of oncoprotein stability.

Tonks, Nicholas, Professor.15 Ph.D., 1985, University of Dundee, Scotland: Characterization of protein tyrosine phosphatases.

Trotman, Lloyd C., Associate Professor, Ph.D., 2001, University of Zurich: Cancer modeling and treatment; senescence and tumor progression; cancer visualization; PTEN regulation.

Vakoc, Christopher, Assistant Professor.615 M.D., Ph.D., 2007, University of Pennsylvania: chromatin regulators and oncogenic signal transduction cascades.

Van Aelst, Linda, Associate Professor.15 Ph.D., 1991, University of Leuven, Belgium: Role of ras in mammalian cell transformation. Wigler, Michael, Professor.15 Ph.D., 1978, Columbia University: Genomics and cancer.

Wigler, Michael, Professor.15 Ph.D., 1978, Columbia University: Genomics and cancer.

Number of teaching, graduate, and research assistantships, fall 2011-12: 95

- 1) Department of Biochemistry and Cell Biology
- 2) Department of Molecular Genetics and Microbiology
- 3) Department of Neurobiology and Behavior
- 4) Department of Pharmacological Sciences
- 5) Department of Pathology
- 6) Department of Physiology and Biophysics
- 7) Department of Psychiatry
- 8) Department of Medicine
- 9) Department of Chemistry
- 10) Department of Oral Biology and Pathology
- 11) Department of Obstetrics and Gynecology
- 12) Department of Anatomical Sciences
- 13) Brookhaven National Laboratory
- 14) Recipient of the State University Chancellor's Award for Excellence in Teaching, 1975
- 15) Cold Spring Harbor Laboratory
- 16) Department of Applied Math and Statistics
- 17) Department of Neurosurgery

NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.

NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.

## Molecular and Cellular Pharmacology Program

**Chairperson**

Michael A. Frohman, Center for Molecular Medicine CMM 438 (631) 444-3050

**Graduate Program Director**

Miguel Garcia-Diaz, Basic Sciences Tower Level 7, Room 122 (631) 444-3054

**MS Program Director**

Holly Colognato, Basic Sciences Tower Level 8, Room 189 (631) 444-7815

**Graduate Program Administrator**

Odalis Hernandez, Basic Sciences Tower (BST)-8, Room 140 631-444-3057 Fax: (631) 444-9749

**MS Program Administrator**

Janice Kito, Basic Sciences Tower (BST) 8, Room 140 (631)444-3027

**E-mail**

phmgradadmit@stonybrook.edu

**Web Site**

<http://www.pharm.stonybrook.edu/graduate-program-0>

**Degree Awarded**

Ph.D. in Molecular and Cellular Pharmacology; MS in Biomedical Science (Molecular and Cellular Pharmacology track)

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-gs](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-gs)

## Molecular and Cellular Pharmacology Department

The faculty of the Department of Pharmacological Sciences, in conjunction with faculty in other departments at Stony Brook, offers the Graduate Program in Molecular and Cellular Pharmacology leading to the Ph.D. degree. Because the program emphasizes early research experience and provides a broad curriculum, students lay the foundation for subsequent independent research. Graduate research opportunities are provided in a broad range of areas including biochemical and molecular pharmacology, chemical pharmacology and toxicology, and cellular and physiological pharmacology. Students, in consultation with faculty advisors, pursue basic and elective courses and begin thesis research during the first two years of training. During this time, they participate in several research projects directed by faculty members associated with the program. Students then select a research advisor from the faculty and, upon completion of the qualifying exam, devote full effort to dissertation research. Students have the opportunity to perform research rotations and/or thesis research in any of 52 associated laboratories in Department of Pharmacological Sciences or other University departments or at Brookhaven National and Cold Spring Harbor Laboratories. Further details may be obtained from the graduate program director.

## Admission Requirements of Molecular and Cellular Pharmacology Department

For admission to the Graduate Program in Molecular and Cellular Pharmacology, the following, in addition to the minimum Graduate School requirements, are normally required:

- A. A bachelor's degree in an appropriate field (biology, chemistry, biochemistry, microbiology, physics) with evidence of superior performance in science courses. Coursework in biochemistry, physical chemistry, organic chemistry, and physiology is highly recommended.
- B. Three letters of reference are required.
- C. Graduate Record Examination (GRE) General Test scores are required, as is the TOEFL for foreign students. An advanced test in biochemistry, biology, chemistry, computer science, physics, or mathematics is desirable.
- D. Acceptance by both the Department of Pharmacological Sciences and the Graduate School.
- E. Students accepted into the graduate program receive stipend support and full tuition scholarships. The current stipend level (2015-2016) is \$27,630 and includes health insurance coverage.

## Facilities of Molecular and Cellular Pharmacology Department

The Department of Pharmacological Sciences is the primary training facility for graduate studies in Molecular and Cellular Pharmacology. The department occupies 32,000 square feet in the University's Basic Sciences Tower, 5,000 square feet in the Center for Molecular Medicine, and 5,000 square feet in the Graduate Chemistry Building. Faculty laboratories are equipped for all types of modern molecular and cell biological, biochemical, neurochemical, chemical, biophysical, and toxicological research. Specialized facilities are provided for tissue culture, recombinant DNA work, ultracentrifugation, scintillation and gamma spectrometry, transgenic mouse research, electron microscopy, confocal microscopy, molecular modeling, gas and high-performance liquid chromatography, proteomics, nuclear magnetic resonance, X-ray crystallography, and mass spectrometry. Research activities are supported by various shops, University computing facilities, animal-care facilities, and media services. Excellent library facilities, including include the Health Sciences Library, the Pharmacological Sciences Library and online resources, comprising of databases, E-books and E-journals, Program faculty members currently receive more than \$14 million in annual research support from federal and private agencies.

**Requirements for the Ph.D. Degree in Molecular and Cellular Pharmacology**

In addition to the minimum Graduate School requirements, the following are required:

**A. Course Requirements**

1. Biomolecular Structure & Analysis (CHE 541)
2. Graduate Physiology (HBY 501)
3. Biochemical Laboratory Techniques (HBH 545, HBH 546)
4. Cell Biology (MCB 656)
5. Principles of Pharmacology series (HBH 631, HBH 632)
6. Integrity in Science (GRD 500)
7. Proposal Preparation in Regulatory Biology (HBH 560)
8. One elective
9. Practicum in Teaching Pharmacology (HBH 601)
10. Journal Club (HBH 580)
11. Seminar (HBH 590)—every semester
12. Research (HBH 599 before advancement to candidacy, HBH 699 after advancement to candidacy).

Depending on prior course work, students may adjust these requirements with the consent of the Steering Committee of the Graduate Program.

**B. Research Rotations**

Students are required to complete three rotations in laboratories affiliated with the program during the first two semesters and the following summer. The host laboratory for thesis research is typically selected from one of these three rotations.

**C. Qualifying Exam**

In the second year, students are required to write and orally defend a research proposal on a topic unrelated to their thesis research.

**D. Thesis Proposal Examination**

In the fall semester of the third year, students select a thesis committee including three program faculty and one extramural faculty member to evaluate their written thesis proposal and their oral defense of the proposal.

**E. Advancement to Candidacy**

Following completion of coursework, and satisfactory performance on the qualifying examination and research proposal examination, students will be recommended to the Graduate School for advancement to Ph.D. degree candidacy.

**F. Ph.D. Dissertation**

The research for the Ph.D. dissertation is conducted under the supervision of the thesis committee. Upon approval of the completed dissertation by this committee, a dissertation examining committee is appointed by the Dean of the Graduate School. A formal public oral defense of the dissertation is scheduled, at which the student presents his or her findings and is questioned by members of the examining committee and by other members of the audience.

**G. Teaching Requirement**

It is expected that each graduate student completing a doctoral degree will have functioned as a teaching assistant during at least one semester of his or her graduate career (HBH 601).

**H. Residence Requirement**

The University requires at least two consecutive semesters of full-time graduate study. The demands of the program necessitate a longer period of residence.

**I. Electives**

To complete their course requirements, students must take one elective course. The following is a list of courses offered by other programs in the university. This subset of elective courses represents courses that are recommended or that students have taken in the last several years.

Biology: MCB 657 Principles of Development

Biology: MCB 517 Biomembranes

Biology: MCB 503 Molecular Genetics

Chemistry: CHE 542 Chemical Biology

Genetics: BGE 510 Graduate Genetics

Biochemistry: BMO 512 Physical Biochemistry

Microbiology: HBM 640 Mol. Mechanisms of Microbial Pathogenesis

Pathology: HBP 533 Immunology

Pharmacology: HBH 550 Statistics in the Life Sciences Pharmacology/Neurobiology: HBH 655 Neuropharmacology Pharmacology: HBH 585 Advanced Structure Biology/Structural Methods in Drug Discovery

Physiology: HBY 561 Statistical Analysis of Physiological Data

Physiology: HBY 564 Experimental Techniques in Systems Physiology

### **Requirements of the MS Degree in Biomedical Science (Molecular and Cellular Pharmacology track)**

Completion will require 33 graduate level credits and a thesis. 23-28 credits in required courses, up to 6 credits in electives and 5-10 research credits.

#### **Thesis-Option Requirements:**

1. Principles of Pharmacology (HBH 501)
2. Advanced Pharmacology (HBH 502)
3. Seminar (three times) (HBH 590)
4. Graduate Biochemistry (MCB 520)
5. Cell Biology (MCB 656)
6. Integrity in Science (GRD 500)

7. Lab Methods (HBH 545, HBH 546)

8. Statistics (HBH 550)

9. Research (HBH 599)

Electives (choose 0 to 6 credits)

1. Principles of Development (MCB 657)
2. Signal Transduction (HBH 553)
3. Neuropharmacology (HBH 655)

4. Molecular Genetics (MCB 503)

5. Communicating Science (JRN 501-505)

7. Pharmacology Colloquium (HBH 506)

#### **Final Written Thesis**

In their final semester of the Program, students will select a thesis committee that includes three program faculty to evaluate their written thesis. Students will also give a seminar on their research during their final semester in the program.

#### **Non-Thesis-Option Requirements:**

1. Principles of Pharmacology (HBH 501)
2. Advanced Pharmacology (HBH 502)

3. Pharmacology Colloquium (HBH 506)

4. Seminar (three times) (HBH 590)

5. Graduate Biochemistry (MCB 520)

6. Cell Biology (MCB 656)

7. Integrity in Science (GRD 500)

8. Lab Methods (HBH 545, HBH 546)

9. Research (HBH 599)

Electives (choose 0 to 6 credits)

1. Principles of Development (MCB 657)
2. Signal Transduction (HBH 553)
3. Neuropharmacology (HBH 655)

4. Molecular Genetics (MCB 503)

5. Communicating Science (JRN 501-505)

6. Statistics (HBH 550)

The non-thesis option requires a total of 33 graduate level credits and a culminating literature review project that must be developed in consultation with the Program Director. Additional approved elective courses are also required, and must be chosen in consultation with the Program Director.

### Faculty of the Molecular and Cellular Pharmacology Program

#### Distinguished Professors

Frohman, Michael A., *Chair*, M.D., Ph.D., 1985, University of Pennsylvania: Neural differentiation and signal transduction.

Grollman, Arthur P.,<sup>1</sup> M.D., 1959, Johns Hopkins University: Chemical carcinogenesis and mutagenesis.

#### Leading Professor

Cohen, Ira S.,<sup>14</sup> M.D., Ph.D., 1974, New York University: Electrophysiology of the heart.

#### Professors

Biegon, Anat, Ph.D.,<sup>11</sup> Weizmann Institute of Science; Brain response to traumatic, ischemic or inflammatory insults

Bliska, James, Ph.D.,<sup>10</sup> 1988, University of California, Berkeley : Molecular and cellular basis of bacterial-host cell interactions.

Bogenhagen, Daniel, M.D., 1977, Stanford University School of Medicine: Replication, transcription and repair of mammalian mitochondrial DNA; mitochondrial proteomics.

Demple, Bruce, Ph.D., UC Berkeley; Mechanisms and roles of human enzymes that repair oxidative (free radical) damage in DNA

Enikolopov, Grigori, Ph.D., Moscow State University; Adult neural stem cells and adult neurogenesis

Ghebrehwet Berhane,<sup>9</sup> D.V.M., D.Sc.: C1q receptor mediated cellular responses with particular emphasis on inflammation and microbial infection.

Haltiwanger, Robert,<sup>7</sup> Ph.D., 1986, Duke University: Regulation of signal transduction by glycoproteins.

Hannun, Yusuf<sup>9</sup>, M.D., 1981, American University in Beirut. Sphingolipid metabolism.

Hearing, Patrick<sup>10</sup>, Ph.D., 1980, Northwestern University: Adenovirus regulation of cellular proliferation and gene expression; adenovirus vectors for human gene therapy.

Joshua-Tor, Leemor<sup>17</sup>, Ph.D., 1991, The Weizmann Institute of Science. Nucleic acid regulation; RNAi; molecular recognition.

Lin, Richard<sup>9</sup>, M.D., University of California San Francisco. Intracellular signaling molecules that regulate cell growth.

Ma, Yupo, M.D., Ph.D., Jinhan College of Medicine/University of South Alabama. Leukemic stem cells/Stem cell therapy.

McKinnon, David,<sup>11</sup> Ph.D., 1987, Australian National University, Australia: Molecular physiology of neurons and cardiac muscle. Miller, W. Todd,<sup>14</sup> Ph.D., 1987, Rockefeller University: Signal transduction by tyrosine kinases.

Miller, Lisa<sup>6</sup>, Ph.D., 1995, Albert Einstein College of Medicine. The chemical makeup of tissue in disease using high-resolution infrared and x-ray imaging.

Moll, Ute M.,<sup>12</sup> M.D., 1970, Ulm, Germany: Tumor suppressor gene research; mechanism of p53 inactivation.

Obeid, Lina<sup>9</sup>, M.D., 1983, American University in Beirut. Varied roles of signaling lipids in cell stress and implications in disease

Reich, Nancy C.,<sup>10</sup> Ph.D., 1983, University at Stony Brook: Signal transduction and gene expression induced by cytokines and viral infection.

Rigas, Basil<sup>1</sup>, M.D. 1972, Athens Univ Med School; D.Sc. 1975, Athens Univ. Med. School, Greece: NSAIDs in the prevention of colon cancer.

Rizzo, Robert,<sup>19</sup> Ph.D. 2001, Yale University: Computational Research Projects in Cancer, HIV/AIDS, Influenza, and Method Development.

Sampson, Nicole,<sup>2</sup> Ph.D., 1990, University of California, Berkeley: Integrin receptor interactions in mammalian fertilization/enzymology of cholesterol oxidase.

Simmerling, Carlos, <sup>2</sup> Ph.D., 1994, University of Illinois, Chicago: Computational chemistry and structural biology; molecular dynamics of biological macromolecules.

Shroyer, Kenneth, M.D. 1987, Ph.D. 1983, University of Colorado. The molecular characterization of benign, premalignant, and malignant lesions of the female genital tract

Talmage, David,<sup>10</sup> Ph.D., 1981, University of Minnesota; Interactions between retinoids and receptor tyrosine kinase signaling pathways.

Tonge, Peter,<sup>2</sup> Ph.D. 1986, University of Birmingham, England: Biological chemistry and enzyme mechanisms; quantitating substrate strain in enzyme-substrate complexes using vibrational spectroscopy; rational drug design.

Tsirka, Styliani-Anna (Stella) E.<sup>16</sup>, *Graduate Program Director*, Ph.D., 1989, University of Thessaloniki, Greece: Neuronal-microglial interactions in the physiology and pathology of the central nervous system.

Tuveson, David, M.D./Ph.D., Johns Hopkins University; Detection and treatment of pancreatic cancer

Van Nostrand, William,<sup>9</sup> Ph.D., 1985, University of California: Cerebrovascular pathology in Alzheimer's disease and related disorders

White, Thomas<sup>14</sup>, Ph.D., 1994, Harvard University; Molecular biology and physiology of gap junction channels.

Wollmuth, Lonnie<sup>11</sup>, Ph.D., 1992, University of Washington: Molecular mechanisms of synaptic transmission.

#### Associate Professors

Boon, Elizabeth<sup>8</sup>, Ph.D., California Institute of Technology, 2003, Chemical Biology, Enzymology, Bioinorganic Chemistry, and Spectroscopy

Bowen, Mark<sup>14</sup>, Ph.D., University of Illinois, 1998, Single molecule spectroscopy; Coordination of post-synaptic glutamate receptor signaling by the MAGUK family of scaffolds.

Carpino, Nicolas,<sup>10</sup> Ph.D., 1997, Stony Brook University. Positive and Negative Regulation of T cell Receptor Signaling.

Carrico, Isaac<sup>8</sup>, Ph.D., 2003, California Institute of Technology. Chemical Biology, Bioorganic Chemistry and Protein Engineering

Colognato, Holly, Ph.D. 1999, Rutgers University: Extracellular matrix in the brain: roles during development and during neurodegeneration.

Chung, Jun, Ph. D. 1999, Washington University in St. Louis. Cancer invasion and metastasis.

Egeblad, Mikala<sup>17</sup>, Ph.D., University of Copenhagen, 2000. Tumor microenvironment; intravital imaging; tumor-associated myeloid cells; breast cancer.

Enikolopov, Grigori N.,<sup>17</sup> Ph.D. 1978, Institute of Molecular Biology, USSR Academy of Science: Stem cells; neurogenesis; development; signal transduction

Garcia-Diaz, Miguel; Ph.D. 2003, University Autonoma of Madrid, Spain: Mechanisms of mitochondrial gene expression/Mechanisms of DNA synthesis and repair.

Girnun, Geoffrey<sup>12</sup>, Ph.D. Cancer Metabolomics.

Karzai, Wali A.<sup>7</sup>, Ph.D., 1995, Johns Hopkins University: Biochemistry and structural biology of RNA-protein interactions, translational control of gene expression, and drug discovery.

Krug, Laurie<sup>10</sup>, Ph.D. 2001, Emory University. Host signaling pathways in herpesvirus infection.

Martinez, Luis<sup>12</sup>, Ph.D. 1994, University of Texas at Austin. Alterations of p53 in cancer development.

Okeoma, Chioma, Ph.D.; Host factors in viral pathogenesis and breast oncogenesis

Takemaru, Ken-Ichi, Ph.D., 1997, Graduate University for Advanced studies, Japan: Wnt Signaling in Development and Disease.

Van der Velden, Adrianus, Ph.D., Oregon Health and Science University; The mammalian T cell response to Salmonella enterica serovar Typhimurium

#### Assistant Professors

Aguirre, Adan, Ph.D. 2002, Centro de Investigacion y de Estudios Avanzados IPN (CINVESTAV-IPN), Mexico; Using endogenous NG2-progenitor cells for cell-based replacement for a variety of brain pathologies.

Brouzes, Eric<sup>20</sup>, Ph.D. Institut Curie, Paris. Analyzing heterogeneity of cancer tissues.

Chan, Chia-Hsin, Ph.D. National Taiwan University. Cancer Metabolism and Stemness.

Ge, Shaoyu<sup>11</sup>, Ph.D. University of Science and Technology (China). To examine the functional integration of new neurons into brain circuits

Glynn, Steven<sup>7</sup>, Ph. D. The University of Sheffield. Proteolytic machines in mitochondria.

Kim, Hyungjin, Ph.D., Washington University in St. Louis. Regulation of DNA repair in cancer susceptibility pathways.

Luk, Ed<sup>7</sup>, Ph.D., How cells organize chromatin structure to accommodate and control gene expression.

Martin, Benjamin<sup>7</sup>, Ph.D., Molecular basis of stem cell development and cancer pathogenesis.

Matus, David, Ph.S., University of Hawaii; Cell, developmental and evolutionary biological approaches to understand cell invasion

Puopolo, Michelino, Ph.D., University of Ferrara; Ion channels and neuronal excitability. Mechanisms of pain.

Seeliger, Markus, Ph.D., 2003, Cambridge University, Trinity College; Using NMR and ligand binding kinetics to study Abl and Src kinase domains.

Seeliger, Jessica, Ph.D., Stanford University. Membrane biosynthesis, structure & behavior in bacterial pathogenesisTan, Dongyan, Ph.D., Albert Einstein College of Medicine; Structure and function of macromolecules in epigenetic regulation

Number of teaching, graduate, and research assistants, Fall 2017: 42

- 1) Joint appointment, Department of Medicine
- 2) Joint appointment, Department of Chemistry
- 3) Joint appointment, Department of Neurobiology and Behavior
- 4) Joint appointment, Department of Physiology and Biophysics
- 5) Joint appointment, Cold Spring Harbor Laboratory
- 6) Joint appointment, Brookhaven National Laboratory

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*



Department of Music

**Chairperson**

Perry Goldstein, Staller Center 3332 (631) 632-7330

**Graduate Program Director**

Daniel Weymouth, Staller Center 3332 (631) 632-7345

**Degrees Awarded**

M.A. in Music History and Theory; M.A. in Composition; M.M. in Music Performance; Ph.D. in History and Theory; Ph.D. in Composition; D.M.A. in Music Performance.

**Web Site**

<http://www.stonybrook.edu/commcms/music/>

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-gs](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-gs)

**Description of the Department of Music**

The Department of Music offers programs that normally lead to the Doctor of Philosophy degree in Music History and Theory, and in Composition. The Department also offers programs that normally lead to the Doctor of Musical Arts degree in Music Performance. Masters Degrees in Music History and Theory, in Composition, and in Music Performance are also available.

Stony Brook's programs have grown out of an unusual partnership between the academy and the conservatory. The Music Department has a distinguished and well-balanced faculty in the areas of music history, theory, ethnomusicology, composition, and performance. The degree programs are designed to favor interaction among musical disciplines that have traditionally been kept separate. For example, the performance programs at Stony Brook all have an academic component. Graduate courses typically have a healthy mix of students from all areas. A number of courses are team taught by two or more faculty members, examining topics from several disciplinary viewpoints. Several examine music in a broader social context, drawing on such disciplines as ethnomusicology, cultural studies, and feminist theory. Interdisciplinary studies are central to the educational philosophy of the department. The Department encourages the development of professional competence in more than one area of musical study. For students at the Doctoral level who propose to do serious work both in performance and in some other area, a variety of options are available, including double degrees.

The music of the 20th and 21st centuries is a particular emphasis of both the performance and academic programs, but other areas are also amply represented. Students can choose seminars from a broad spectrum of topics, ranging from medieval music theory to popular music. Performing organizations include Baroque Chamber Ensemble, Chamber Music, Jazz Ensemble, Contemporary Chamber Players, Camerata Singers, Stony Brook Symphony Orchestra, and Opera Workshop.

**Admission to the M.A./Ph.D. Programs at the Masters Level in Music History and Theory or Composition**

The following are required for admission to the Graduate program in Music History and Theory, and in Composition leading to an M.A. and/or Ph.D. degree, in addition to the Graduate School requirements:

- A. A bachelor's degree from a recognized institution.
- B. Official transcripts of undergraduate records.
- C. A minimum average of B in undergraduate music courses.
- D. Three letters of recommendation from persons familiar with the student's work.
- E. Examples of undergraduate work:
  - 1. For history and theory applicants, essays in music research, analysis, theory, or criticism.
  - 2. For composition applicants, musical scores and recordings.
- F. Results of the Graduate Record Examination (GRE) General Test.
- G. Acceptance by both the Department of Music and the Graduate School.

Applicants are invited to submit any other evidence of their abilities in support of their application for admission, such as recordings of music performances or the score on the GRE Area Test in music.

All students entering the M.A. program will be examined in the following areas:

- 1. Ear training
- 2. Basic keyboard skills
- 3. The harmonization of a chorale in four voices (for composition students only).

4. The composition of a passage in free two-part counterpoint in either 16th-century or 18th-century style (required only for composition students only)
5. The history of music (for history and theory students only).
6. An Exam in the analysis of music (advisory requirement for history-theory students only).

The examinations in harmony and counterpoint for composition students and the examination in music analysis for students in the music history and theory program will be sent to students in mid-summer after they have been admitted in the spring. The other examinations will be given in the week before the beginning of classes.

Students who are found deficient in any of the above areas will be required to take appropriate courses in the first year of study to remedy the deficiencies.

### **Admission to the M.M./D.M.A. Program at the Master's Level**

The following are required for admission to the M.M. Program in Performance, in addition to the requirements of the Graduate School:

- A. A bachelor's degree from a recognized institution.
- B. Official transcripts of undergraduate records.
- C. An audition in the major field of performance. Students residing at a distance from the University may gain provisional acceptance by sending a recorded audition. Audition dates, usually designated for February, are announced by the Department mid-fall. These dates, as well as specific requirements for auditions, are posted at the Departmental website.
- D. Letters of recommendation from the former principal teacher and at least two other persons familiar with the student's work.
- E. While acceptance into the program is based primarily upon excellence in performance, the program contains a significant academic component. Applicants to the DMA program are therefore required to submit two examples of their work in music history or music theory, such as papers completed as coursework in either area.
- F. Acceptance by both the Department of Music and the Graduate School.

Entering students will be examined in ear training and foreign languages (voice and harpsichord only) (for students with prior foreign language experience) during the week before the beginning of classes, and will be placed in the appropriate courses.

### **Admission to the Ph.D. Programs in Music History and Theory or Composition**

See Admission to the M.A./Ph.D. Program, above. In addition, a master's degree, usually in the pertinent area of competence, is required. As evidence of ability to carry on doctoral work in the area of specialization, applicants should submit examples of recent work as follows:

1. For composition: recordings and scores
2. For history and theory: essays that demonstrate a breadth of knowledge in two or more of the following areas: music history, theory analysis, or criticism.

Applicants who plan to include study in performance as a part of their degree program should follow the audition procedure outlined under Admission to the D.M.A. Program, above. Students who intend to work in a secondary area of specialization must demonstrate to the pertinent faculty competence commensurate with a master's degree at a distinguished level in that area.

Students who do not possess the Master of Arts degree in music from Stony Brook will be asked to demonstrate achievement commensurate with that degree by the end of the first year of study by taking the relevant M.A. comprehensive examinations.

Entering students who have not already done so must successfully complete the appropriate advisory examinations described under Admission to the M.A./Ph.D. Program. Any remedial work must be completed by the end of the first year of study.

Although most students will move directly from the Masters to the Doctoral level of the M.A./Ph.D. program, successful completion of the Stony Brook M.A. degree does not guarantee acceptance into the Ph.D.-level program. Students wishing to continue from the masters to the doctorate degree must indicate their intention to do so, in a formal letter, to reach the Graduate Program Coordinator by 15 December for fall admission. This should be accompanied by two letters of recommendation from Stony Brook faculty. In order to demonstrate the ability to continue on at the doctoral level, students must submit appropriate examples of work: Masters papers for History and Theory; the Master's composition portfolio for Composition. Students may also elect to finish with the M.A. degree.

### **Admission to the D.M.A. Program**

See Admission to the M.M./D.M.A. Program, above. In addition, a master's degree, usually in the pertinent area of performance, is required. Applicants must audition in person before a faculty committee. Audition dates, usually designated for February, are announced by the Department mid-fall. These dates, as well as specific requirements for auditions, are posted at the Departmental Web site.

Students who do not possess a Master of Music degree from Stony Brook must demonstrate a level of achievement in ear training, and demonstrate preparation in music history and theory, commensurate with the M.M. requirements. Voice students who do not possess a Master of Music degree from Stony Brook must also satisfy the piano proficiency and foreign language requirements of the Stony Brook M.M. degree in voice. Harpsichord students who do not have a Stony Brook M.M. must also satisfy the foreign language requirement of the Stony Brook M.M. in harpsichord.

Applicants who plan to include a secondary area of specialization in composition, history, or theory within their D.M.A. program must submit examples of work in the proposed secondary area and must demonstrate to the pertinent faculty competence commensurate with a master's degree at a distinguished level in that area. Students who are accepted in a secondary area of specialization must pass the appropriate advisory examinations described under Admission to the M.A. Program. Any remedial work must be completed by the end of the first year of study.

Although most students will move directly from the Masters to the Doctoral level of the M.M./D.M.A. program, successful completion of the Stony Brook M.M. degree does not guarantee acceptance into the D.M.A.-level program. Students wishing to continue from the masters to the doctorate degree must indicate their intention to do so, in a formal letter, to reach the Graduate Program Coordinator by 15 December for fall admission. This should be accompanied by two letters of recommendation from Stony Brook faculty. In order to demonstrate the ability to continue at the doctoral level, students must play an audition. Students may also elect to finish with the M.M. degree.

### **Facilities of the Department of Music**

Stony Brook's Staller Center for the Arts includes an acoustically excellent theatre-concert hall and a more intimate recital hall. The music building contains a full range of rehearsal and teaching facilities, more than 70 practice rooms and studios for graduate students, and more than 40 Steinway grand pianos. A fully-equipped electronic and computer music studio complex provides advanced facilities for electronic and computer music composition. Within the Department, students have access to computing resources in the graduate student computing lounge, as well as the emedia SINC site (run by Instructional Computing) which has multimedia software and hardware. The department also has a collection of early instruments, including several harpsichords and organs, a consort of viols, and Renaissance wind instruments. Our music library contains an extensive research collection of books, periodicals, scores, microfilms and recordings, and includes a state of the art listening facility.

### **Degree requirements\***

#### **General requirements for the M.A Degree :**

Thirty graduate credit hours (exclusive of those in MUS 501 Compositional Skills of Tonal Music, MUS 505 Foundations of Musicianship, and MUS 591 Practicum in Teaching) chosen in consultation with the student's advisor. A student must achieve an overall 3.0 grade point average in order to receive a degree. The program must include:

1. MUS 502 Proseminar in Tonal Analysis, to be taken during the spring semester of the first year of study. Students who are well prepared in analysis may be exempted from this requirement through an examination that the student takes in the summer before matriculating.
2. MUS 505 Foundations of Musicianship, and MUS 506 Graduate Musicianship, to be taken during the first year of study. Qualified students may be exempted from these courses through a placement exam given at the beginning of the fall semester.

If a course in a department or program other than Music is taken toward the degree, approval from the Graduate Studies Committee must be obtained.

\*Note: All graduate students whose programs have a foreign language requirement (M.A. in Music History and Theory, Ph.D., D.M.A., and M.M. in harpsichord) must take the appropriate foreign language exam during their first semester of residence. Students who fail the examination must take an appropriate language course or retake the examination (depending on the program) after demonstrating evidence of formal preparation (such as a course or private tutoring).

### **Specific Requirements for the M.A. Degree, Graduate Program in Music History and Theory**

#### **A. Course Requirements**

In addition to the general course requirements for the M.A. degree listed above, the M.A. in Music History and Theory requires:

1. MUS 500 Proseminar in Musicology
2. MUS 503 Music in the 20th and 21<sup>st</sup> centuries.
3. At least two courses, of which one must be in the group 543, 545, and 547, and the other in the group 541, 542, 549, 553, and 555.
4. At least two courses chosen from the following courses in theory and analysis: MUS 538, MUS 557, MUS 559.
5. Music 534 Opera Studies.

#### **B. Foreign Languages**

A reading knowledge of German and either French or Italian is required. One examination should be taken at the beginning of the first semester of study. The second should be taken no later than the second year of study.

### C. Comprehensive Examinations

Written and oral examinations in the history of music and music theory and in the analysis of tonal and post-tonal compositions.

### D. M.A. Research Paper

A substantial essay, normally one from an advanced seminar that the student has expanded and revised, is required. The revised paper should be submitted no later than the twelfth week of the semester in which the student expects to receive the degree.

## Requirements for the M.A. Degree, Graduate Program in Composition

### A. Course Requirements

In addition to the general course requirements for the M.A. degree listed above, the M.A. in Composition requires:

- 1 MUS 501 Compositional Skills of Tonal Music, to be taken during the fall semester of the semester of the first year if study. Qualified students may be exempted from this course through a placement exam that will be given the summer before they begin the program. (This course does not count towards the degree)
2. A course in the history of music, normally MUS 503, Music in the 20th Century or MUS 507, Studies in Music History.
3. MUS 504 Analysis of 20th-Century Music. Students who are well prepared in 20th-century analysis may be exempted from this course by examination, and must substitute an advanced course in 20th-century theory or analysis (for example, MUS 557, Topics in Theory, or MUS 559, Topics in Analysis, when either of these courses is devoted to a 20th-century topic).
4. MUS 515 The Fundamentals of Electronic Music.
5. MUS 516 Electronic Music Workshop or MUS 517 Introduction to Computer Music.
6. MUS 523 Advanced Composition, to be taken every semester of residence.

### B. Comprehensive Examination

Written examination in the analysis of pre-assigned compositions is required.

### C. Compositions

Students must satisfy the Departmental requirement that they have written compositions of sufficient quality and variety during the period of study after admission to the Graduate School. Fair copies of all these compositions must be submitted to the Graduate Program Coordinator by the eighth week of the semester in which the student intends to graduate. The last day for graduate students to submit theses and dissertations, as specified in the academic calendar, will be the final deadline for all works to be submitted.

Note: There is no foreign language requirement for the M.A. in Composition. However, students should be aware that a reading knowledge of French, German, Italian, or Spanish is required for the Ph.D. in Composition.

## Requirements for the M.M. Degree in Music Performance

### A. Course Requirements

Thirty graduate credit hours (exclusive of those in MUS 501 Compositional Skills of Tonal Music, MUS 505 Foundations of Musicianship, and MUS 591 Practicum in Teaching) chosen in consultation with the student's advisor. A student must achieve a 3.0 overall grade point average or better to receive a degree. Up to 15 credits in individual study of the major instrument or voice may be counted toward the degree. None of the remaining 15 degree credits may be in individual study of another instrument or voice.

The program must include at least one course in music history (MUS 503 or 507) and one course in music theory (MUS 502, MUS 504, MUS 508, MUS 514, MUS 515, MUS 517, or MUS 521). Students who can demonstrate adequate preparation may take more advanced courses to fulfill this requirement.

Students who play orchestral instruments are required to enroll in MUS 565, Stony Brook Symphony Orchestra, every semester of full-time residence until graduation. Students who are registered part-time are required to participate in the Stony Brook Symphony Orchestra on a part-time basis. Under extraordinary circumstances a student may petition to have this requirement waived on a per-concert basis; a memorandum outlining policies and procedures for such a waiver is available from the Music Department's Graduate Office. Students in voice are required to enroll in chamber music for two semesters, chosen from Music 584, Baroque Ensemble, and Music 596, Contemporary Chamber Players. This requirement may be waived at the request of either the conductor or the major teacher. All pianists must sign up for Music 586 (Fall)/587 (Spring) Collaborative Keyboard in every semester. Participation in the accompaniment pool is required of all pianists and harpsichordists during each semester of full-time residence. Students in harpsichord are expected to participate in Baroque Chamber Ensemble for two semesters. All students except those in the conducting programs must be enrolled in MUS 571 (lessons) during each semester of full-time residence. All full-time performance students are required to take MUS 590 (Practicum in Professional Skills) each semester.

All students are required to enroll in a formal chamber music course during the first four semesters of residency: MUS 573 Chamber Music, MUS 584 Baroque Chamber Ensemble, MUS 595 Chamber Players, MUS 596 Contemporary Chamber Players, or MUS 568 Jazz Ensemble.

If a course in a department other than Music is taken toward the degree, approval from the Graduate Studies Committee must be obtained.

**B. Ear Training**

MUS 505, Foundations of Musicianship, and MUS 506, Graduate Musicianship, must be taken during the first year of study. Qualified students may be exempted from these courses through a placement exam given at the beginning of the fall semester.

**C. Jury Examinations**

Jury examinations are offered each semester. Students must take one jury examination, generally the semester before the degree recital. For students in harpsichord, the examination will include continuo realization.

**D. Foreign Language**

Knowledge of French or German is required of students in harpsichord. The requirement is satisfied by taking and passing the exam given by the relevant Stony Brook language departments during the advisory exam period before the first semester of study. Students who do not pass the examination must take the courses recommended by the relevant language department and achieve a grade of B or higher. Students who have not had any previous foreign language study must take a year of college-level elementary foreign language courses and achieve a grade of B or higher to satisfy the requirement.

**E. Public Recital**

The student's major teacher must determine whether or not the recital is of passing quality. If unable to attend the recital in person, the major teacher may hear a recording of it.

**Requirements for the Doctor of Philosophy Degree, Contract Toward Candidacy**

A plan of study in the form of a working contract toward candidacy will be drawn up by the student and a directing committee early in the student's first semester. The directing committee will consist of the student's advisor and at least two other faculty members. The Graduate Program Director will appoint the directing committee and will designate its chairperson, who shall not be the student's advisor. The committee may include faculty members from outside the department when appropriate. Final approval of the contract, and of any revisions that may be necessary, rests with the Graduate Studies Committee.

The design of the program is to be developed around the requirements given below, and the contract should specify such terms as the core of courses to be taken, the length of full-time residence, and the schedule and subject areas of various examinations including the preliminary examination. The terms of the contract should normally be completed within two or three years, depending upon the scope of the program. Successful completion of relevant master's requirements is assumed for the Ph.D. degree; see Admission to the Ph.D. Program.

**A. Work in the Student's Area(s) of Specialization**

Progress during residence in the program will be demonstrated to the directing committee in the following ways:

1. Evidence of advanced scholarly and creative work:

a) Students in History and Theory: The presentation of a number of essays demonstrating proficiency in various aspects of musicological research, theoretical studies, analysis, or criticism. The essays may have been prepared as part of coursework

b) Composition students: The presentation of a number of musical compositions demonstrating fluency in working with a variety of contemporary performance media.

2. Composition students: A field exam demonstrating knowledge of scholarship and repertoire in the broad field of study that will situate dissertation research.

3. A public lecture or colloquium. The topic will be determined by the student, in consultation with his or her directing committee. For composers, the lecture or colloquium must be on a topic of significant interest in 20th- or 21st-century music. See section B, paragraph 2 below.

Students who propose to do work in performance as an integral part of the program must, in addition, present at least two recitals showing mastery of a broad range of musical styles.

**B. Work in the Area of 20th and 21st Century Music**

Competence is to be demonstrated to the directing committee through the following:

1. An essay dealing with 20th or 21st century music from a historical, theoretical, critical, or analytical point of view.

2. A public lecture or colloquium on a topic of significant interest in 20th- or 21st-century music. See the description of MUS 696.

In order to satisfy the requirement, composers must complete both the essay and the lecture or colloquium. Historians and theorists may satisfy the requirement either with the essay or with the lecture or colloquium.

**C. Foreign Language**

Reading knowledge of French or Italian and German, as demonstrated through translation exams given at the start of every semester, for students in History and Theory is required. For Composition students, reading knowledge of one language (from French, German, Italian, or Spanish) is required. (See M.A. language requirements, above.) The contract toward candidacy may specify further or alternate language proficiency depending on the area of the dissertation, subject to the approval of the Graduate Studies Committee.

**D. Teaching**

A minimum of two semester-long courses, at least one of which shall be an introductory college course in musicianship, theory, or literature, is required. Students must also participate in the seminar on the teaching of music for a minimum of one semester.

**E. Advancement to Candidacy**

After completing the terms of the contract, a student is eligible for advancement to candidacy. To be advanced, the student must:

1. Submit a prospectus outlining the nature and aims of the dissertation.
2. Pass a preliminary examination that will demonstrate preparation in his or her special competence. For history-theory students, the examination will focus on the field of scholarship within which their dissertation is situated and on the detailed prospectus for the dissertation. For composers, the examination will cover the composer's musical craft and aesthetics, as revealed in the contract pieces (copies of which must be provided to the Graduate Program Director), and the projected thesis composition.

**F. Dissertation**

The dissertation shall be a significant original work of scholarship or composition. Approval of the dissertation will rest upon a formal oral defense, which is also a public colloquium on the dissertation work, to be conducted by the dissertation committee.

**Requirements for the Doctor of Musical Arts Degree with a Concentration in Performance**

A plan of study in the form of a working doctoral contract will be drawn up by the student and a directing committee early in the student's first semester. The directing committee will consist of the student's performance advisor (major teacher) and a member of the academic faculty, to be appointed by the Graduate Program Director. The committee may include additional faculty members from within or outside the department if appropriate. Final approval of the contract, and of any revisions that may be necessary, rests with the Graduate Studies Committee.

The design of the program is to be developed around the requirements given below, and the contract should specify the core of courses to be taken; the length of full-time residence; and the schedule and substance of various recitals, essays, and examinations. The terms of the contract should normally be completed within two years of full-time residence.

**A. Work in the Student's Area of Specialization**

Progress during residence in the program will be demonstrated to the directing committee through the presentation of four recitals, not including the doctoral degree recital, showing mastery of a broad range of musical styles. Two of these must be solo recitals, unless otherwise specified by the directing committee. Three of these recitals must be presented before the student can advance to candidacy; the fourth may be presented after advancement to candidacy. Students who propose to work in a second area of specialization should see section K below.

Students in the choral conducting program present three recitals, not including the doctoral degree recital. Two of these recitals must be completed before the student can advance to candidacy.

**B. Academic Coursework and the D.M.A. Research Essay**

During the first year of residency, students must take two academic courses and receive a grade of B or better in each, as well as a course on music research methodologies (Music 520). One academic course must be a history course from the group: MUS 503, MUS 507, MUS 534, MUS 535, MUS 536, or MUS 539, MUS 540, MUS 541, MUS 542, MUS 543, MUS 547, MUS 549, MUS 553, MUS 555. The other course must be an analysis or theory course from the group: MUS 502, MUS 504, MUS 538, MUS 557, or MUS 559. Students will develop one of the term papers generated in these two academic courses into the D.M.A. Research Essay. Only papers receiving a "B" or better may serve as the basis for the D.M.A. Research Essay. After conferring with the academic advisor on which paper to use for the research paper, the student must enroll in MUS 695, Doctoral Essay Tutorial, during the third term of residency to develop and revise the original course term paper.

**C. Public Lecture-Recital**

A colloquium illustrated by live performance, the lecture-recital may deal with performance problems, historical or analytical matters, or with interpretative or critical issues. The music performed in the lecture-recital may also appear on one of the doctoral recital programs, but not in the final doctoral recital. Students must enroll in MUS 696, Doctoral Colloquium, and present the lecture recital during that semester.

**D. Work in the Area of 20th- and 21st-Century Music**

The recitals, described above in section C, should include a substantial amount of music from the 20th and 21st centuries (the equivalent of at least one full recital's worth) including recent and challenging works. The lecture-recital may also be devoted to music of the 20th and 21st centuries.

**E. Foreign Language**

Proficiency in one or more foreign language is required for the D.M.A. degree. There are two types of requirements, 1) knowledge equivalent to a year's college-level study or 2) reading knowledge. Depending on the program, the student may have to satisfy one or both types of requirements.

*Instrumental students* other than harpsichordists must demonstrate knowledge equivalent to a year's college-level study of any *one* of the following languages: French, German, Italian, or Spanish.

Equivalency is determined by taking the exam given by the language departments at Stony Brook University; this examination is offered at the beginning of every semester. Students with prior language experience should take the exam given by these departments during the advisory exam period before the first semester of study. Students who do not pass the examination must take the courses recommended by the relevant language department during the first year of residency and achieve a grade of B or higher. Students who have not had any previous foreign language study must take a year of college-level elementary foreign language courses and achieve a grade of B or higher to satisfy the requirement. The graduate review courses FRN 500, GER 500, and ITL 500 will not satisfy the Music Department's foreign language requirement for the DMA degree.

*Harpsichord students* must demonstrate knowledge equivalent to a year's college-level study of any *two* of the following languages: French, German or Italian

*Voice Students:* Since the study of foreign languages is central to a singer's craft, the foreign language requirement for singers is more demanding than it is for instrumentalists. Voice students must demonstrate knowledge equivalent to a year's college-level study of *all three* of the following languages: French, German, and Italian. Students with prior language experience should take the exam given by the Stony Brook language departments during the advisory exam period before the first semester of study. Students who do not pass the examination must take the appropriate courses and achieve a grade of B or higher to satisfy the requirement. Voice students must also demonstrate a reading knowledge of any *two* of the following languages: French, German, Italian, or Russian. Reading knowledge is determined solely by the Music Department Translation Exam.

For all D.M.A. programs, the foreign language requirement must be satisfied in a timely manner, preferably by the end of the first year of study. In any case, all language requirements must be satisfied before advancement to candidacy, except in programs where more than one language is required. In these programs only, all but one language requirement must be satisfied before advancement; the remaining language may be satisfied after advancement to candidacy.

The contract toward candidacy may specify further or alternate language proficiency depending upon the proposed plan of study, subject to the approval of the Graduate Studies Committee.

#### **F. Teaching**

A minimum of two semester-long courses, either or both of which may comprise individual lessons, ensemble coaching, or classroom teaching, is required. In certain cases, this requirement may be met by private teaching or teaching at another institution (see the Graduate Program Director for details).

#### **G. Practicum in Professional Skills**

A professional performing musician, who is more likely than ever before to assemble a career and a livelihood from a wide variety of music-related activities, needs a wide variety of practical skills, not all of which can be acquired in formal courses or even necessarily within the confines of the academy. Thus, every full-time D.M.A student in residence must register for MUS 690, Practicum in Professional Skills, in every semester they are enrolled. This course covers practical training in activities related to the professional work of a performing musician, including solo and ensemble performance, teaching, internships, and related work, both on-campus and off-campus.

#### **H. Orchestra/Accompaniment**

Students who play orchestral instruments are required to enroll in MUS 565, Stony Brook Symphony Orchestra, every semester of full-time residence. Students who are registered part-time are required to participate in the Stony Brook Symphony Orchestra on a part-time basis. Under extraordinary circumstances, a student may petition to have this requirement waived on a per-concert basis; a memorandum outlining policies and procedures for requesting such a waiver is available on-line. Students in voice are required to enroll in MUS 579, Opera Workshop, for four semesters. This requirement may be waived at the request of either the conductor or the major teacher.

**Pianists and Harpsichordists :** In lieu of large ensemble requirements, keyboard players are required to enroll in Music 586 (Fall)/587 (Spring), Collaborative Keyboard (one credit), for four semesters. After the fulfillment of four semesters of Music 586/587, keyboard players must also enroll in Music 586/587 in each semester in which they take lessons or in which they want to be paid for accompanying. Pianists enrolled in Music 586/587 are required to accompany the equivalent of two full recitals (or other approved events such as auditions, juries, etc.) for each academic year in which they are enrolled. (After fulfilling the two-recital equivalent requirement, pianists may play additional recitals/events and will be compensated by the department.) The Music 586/587 requirement for harpsichordists is considered to be fulfilled when they are concurrently signed up for Music 584, Baroque Ensemble. (Harpsichordists will be paid for additional accompaniment.)

#### **I. Chamber Music**

All instrumental students are required to participate in a formal chamber music course for four semesters. Students may satisfy the requirements by enrolling each semester in one of the following courses: MUS 573 Chamber Music, MUS 584 Baroque Chamber Ensemble, 596 Contemporary Chamber Players, or MUS 568 Jazz Ensemble. In the case of MUS 573, students will enroll in the section of a particular faculty member who will supervise the semester's work. Voice students must take two semesters of Music 584 Baroque Ensemble and or/Music 596 Contemporary Chamber Players.

Genre requirements have been added to the D.M.A. contract. These genre requirements can be fulfilled by a performance on a degree recital or on the end-of-semester chamber music recitals. The degree recital does not need to be the student's own recital. However, if the student's genre requirement is fulfilled by playing on a colleague's degree recital, documentation must be provided for his or her doctoral file in the form of a program.

The genre requirements are as follows:

Violin, viola, 'cello: Every DMA student must include a string quartet and a piece for mixed ensemble larger than two on a concert or concerts during the course of their DMA.

Bass: Two mixed groups larger than two.

Winds: A piece for mixed ensemble larger than two.

Brass: A piece for mixed ensemble larger than two

Piano: One piece, trio or larger

Harpsichord: Harpsichord literature is centered on music written either before 1780 or after 1920. Therefore harpsichord students should be enrolled during their entire residency in either Baroque Ensemble or CCP. More specifically, they should enroll in Baroque Ensemble all four semesters with the possible replacement of one semester with CCP. This enrollment will guarantee that every student will be performing in numerous chamber pieces having at least 4 people in a group either for their degree recitals or public baroque ensemble concerts.

Percussion: Percussionists are required to participate in chamber music activities within the percussion studio, as well as with other studios. They must be available for participation in percussion pieces performed as part of the annual season of the Contemporary Chamber Players, and they must participate on other chamber music activities, either as small ensembles (duos, trios, etc) with other musicians in the department. Each full-time percussion student should perform at least once in a piece with percussionists and once in a mixed ensemble piece every academic year.

#### **K. Secondary Area of Specialization**

Students who propose to do advanced work in composition, history and theory as an integral part of the program must do one or both of the following:

1. Present a number of musical compositions demonstrating fluency in working with a variety of contemporary performance media.
2. Present a number of essays demonstrating proficiency in various aspects of musicological research, theoretical studies, analysis, or criticism. The essays may have been prepared as part of coursework.

#### **L. Doctoral Jury Examinations**

A preliminary doctoral jury will be played during the first full year of residency. A second, 20-minute jury examination will be taken at the end of the period of residency covered under the contract toward candidacy. Both juries must be passed as a condition for advancement to candidacy.

#### **M. First-Year Academic Review**

In order to be in good standing, D.M.A. students must have taken the two academic courses required (History and Theory) by the end of the first year of the program, and must have taken the foreign language proficiency exam, or be in the appropriate language course, by the beginning of the second semester. The Graduate Program Director will monitor the academic progress of D.M.A. students by asking all academic advisors to submit contract checklists in February of each year.

#### **N. Advancement to Candidacy**

The student may advance to candidacy after completion of the following requirements:

1. Three of the four contract recitals (see Requirement A).
2. Completion of Requirements B through M. In programs which require more than one language, all but one language.

Advancement to candidacy is granted by the Graduate School upon recommendation from the departmental Graduate Program Director.

#### **O. Completion of the Doctoral Contract**

The Doctoral Contract will be completed after presentation of the fourth public recital (see Requirement A) and completion of any remaining language requirement (see Requirement E).

#### **P. Doctoral Degree Recital Examination**

After the doctoral contract is completed, the student must:

1. Submit a program of the proposed doctoral degree recital, bearing the signature of the major teacher, to the graduate program director and Graduate Studies Committee for approval. The program must not include works previously performed to satisfy other graduate degree requirements.
2. Submit a doctoral examination prospectus, approved by both members of the directing committee that focuses on significant analytical, historical, and interpretative aspects of the works to be performed. The prospectus will serve as the basis of the doctoral examination. Students may view sample prospectuses on Blackboard and should review the Oral Exam Guidelines prior to the exam (this document is also available on Blackboard).
3. Appear before an examining committee to demonstrate mastery of the doctoral degree recital program and of areas pertinent to the works to be performed. The doctoral degree recital examination normally takes place within one year after advancement to candidacy.

#### **Q. Doctoral Degree Recital**

The doctoral degree recital should be performed after the degree recital examination has been passed. It must demonstrate a distinguished, professional level of performance and be presented on campus, except under extraordinary circumstance for students in Choral Conducting. A recording of this recital, along with the program and the doctoral examination prospectus, is submitted to the Graduate School and is eventually deposited in the University library.

#### **Faculty of the Department of Music**

##### **Professors**

Anderson, Ray, Director of Jazz Studies, B.A., 2010, Empire State College: Jazz studies and jazz improvisation.

Carr, Colin, Certification of Performance, 1974, Yehudi Menuhin School: Cello.

Dutton, Lawrence, M.M., 1978, The Julliard School of Music# Mus.D., 1995, Middlebury College: Viola# chamber music.

Goldstein, Perry,<sup>3, 5</sup> Chair, Director of Musicianship, D.M.A., 1986, Columbia University: Analysis# Composition# musicianship; analysis; theory.

Haas, Arthur, M.A., 1974, University of California, Los Angeles: Harpsichord# performance of early music.



Kalish, Gilbert, B.A., 1956, Columbia University: Piano# chamber music# 20<sup>th</sup>-century piano repertory.

Lawton, David, Ph.D., 1973, University of California, Berkeley: Opera workshop# 19<sup>th</sup>-century studies.

Lochhead, Judith, <sup>4</sup> Ph.D., 1982, Stony Brook University: Theory and history of recent music# phenomenology and music# performance and analysis.

Silver, Sheila, Ph.D., 1976, Brandeis University: Composition# analysis; orchestration; theory.

Setzer, Philip, M.M., 1974, The Julliard School of Music# Mus.D., 1995, Middlebury College: Violin# chamber music.

#### **Associate Professors**

Dahl, Christina, M.M., 1989, Peabody Conservatory of Music: Piano, accompaniment, chamber music.

Schedel, Margaret, Director of Undergraduate Studies, Director of cDACT (Consortium for Digital Arts, Culture and Technology), Co-Director of the Computer Music Studio; DMA, 2007, University of Cincinnati, College Conservatory of Music: Composition; computer music; digital music and art.

Semegen, Daria, Director of the Electronic Music Studio; M.Mus., 1971, Yale University: Composition# electronic music# history and aesthetics of electronic music; theory.

Leandro, Eduardo, M.M., 1999, Yale University: Percussion# chamber music.

Long, Timothy, M.M., 1992, Eastman School of Music: Vocal coach, conducting.

Minor, Ryan, Graduate Program Director, Ph.D., 2005, University of Chicago: Opera studies and dramaturgy; performance studies; 19<sup>th</sup>-century musical cultures; Wagner; nationalism.

Weymouth, Daniel, Co-Director of the Computer Music Studio#. Ph.D., 1992, University of California, Berkeley: Composition# computer music# analysis; multimedia and performance technologies; theory.

#### **Assistant Professors**

Adams, Margarethe, Ph.D., 2011, University of Illinois at Urbana-Champaign. Kazakhstan and Northwest China; political ideology; popular culture; Islam in Central Asia.

Barnson, Matthew, D.M.A., 2012, Yale University: Composition; theory; analysis.

Bradley, Catherine, Ph.D., 2011, University of Cambridge: 13<sup>th</sup>-century motets; analysis and compositional process; sacred-secular interactions.

Honisch, Erika Supria, Ph.D., 2011, University of Chicago: 16<sup>th</sup>- and 17<sup>th</sup>-century sacred music; historical sound studies; historiography of Central Europe

Sheehy, August, Ph.D., 2016, University of Chicago: History of music theory and analysis; musical subjectivity; improvisation studies; music and ethics

Smith, Stephen Decatur, Ph.D., 2012, New York University: 19<sup>th</sup>- and 20<sup>th</sup>-century Germany; musical modernism; music and philosophy, especially the Frankfurt School and German Idealism.

Tausig, Benjamin, Ph.D., 2013, New York University: Thai and Southeast Asian music; sound studies; protest movements; labor and migration

#### **Visiting Assistant Professor**

Kaczorowska, Joanna, Director of Undergraduate Performance; D.M.A., 2008, Stony Brook University: Violin# chamber music.

#### **Adjunct Lecturer**

Heckert, Deborah, Ph.D., 2003, Stony Brook University: Music of Britain; 19<sup>th</sup>- and early 20<sup>th</sup>-century music; music and the visual arts.

#### **Performing Artists in Residence**

Cobb, Kevin, M.M., 1995, Julliard School: Trumpet.

Cords, Nicholas, B.M., 1997, The Curtis Institute of Music: Viola; chamber music.

Diaz, Pedro, B.M., 1989, The Juilliard School of Music# Oboe# chamber music.

Finckel, David, Mus.D., 1995, Middlebury College: Chamber music; career development.

Frautschi, Jennifer, Performance Certificate, 1998, The Juilliard School: Violin; chamber music.

Harris, Brenda# B.M and B.M.E., 1979, Illinois Wesleyan University# Graduate Study University of Illinois# Voice; opera studies.

Hinson, Blake, B.M., 2010, The Curtis Institute of Music: Bass; chamber music.

Jolley, David, M.S., 1971, The Juilliard School of Music: Horn; chamber music.

Kay, Alan, M.M., 1983, The Juilliard School of Music: Clarinet# chamber music.

Lavendera, Pablo, D.M.A., 2009, Stony Brook University: Undergraduate piano; chamber music.

Morelli, Frank, 1980, The Juilliard School of Music# Bassoon; chamber music.

Powell, Michael, B.M., 1973, Wichita State University: Trombone# chamber music.

Scarlata, Randall, M.M., 1998, The Juilliard School of Music: Voice; opera studies.

Shaham, Hagai, M.A., 1984, Brandeis University: Violin# chamber music.

Sussmann, Arnaud, M.M., 2007, The Juilliard School of Music: Violin; chamber music.

Willard, Jerry, pupil of Sophocles Papas: Guitar# lute.

Wincenc, Carol, M.M., 1972, The Juilliard School of Music: Flute# chamber music.

### **Emeritus Faculty**

Fuller, Sarah,<sup>1</sup> Ph.D., 1969, University of California, Berkeley: Medieval and Renaissance music# history of music theory.

Kramer, Richard, Ph.D., 1974, Princeton University: 18<sup>th</sup>- and 19<sup>th</sup>-century music history and theory.

Mount, Timothy, D.M.A., 1981, University of Southern California: Director of Choral Studies.

Winkler, Peter,<sup>2</sup> M.F.A., 1967, Princeton University: Composition# theory and history of popular music.

### **Quartet-in-Residence**

The Emerson String Quartet: In Fall 2002, the celebrated Emerson String Quartet became the quartet-in-residence at Stony Brook. This prestigious ensemble presents a series of concerts, chamber music instruction, and workshops at the University every year.

Drucker, Eugene, Mus.D., 1995, Middlebury College: Chamber music.

Dutton, Lawrence, M.M., 1978, The Juilliard School of Music# Mus.D., 1995, Middlebury College: Viola# chamber music.

Setzer, Philip, M.M., 1974, The Juilliard School# Mus.D., 1995, Middlebury College: Violin# chamber music.

Watkins, Paul, Certificate of Performance, 1988, The Menuhin School: Cello; chamber music.

### **Directors**

Deaver, Susan, D.M.A., 1994, Manhattan School of Music: Director of the University Orchestra.

Engel, Bruce, M.M., 1974, The Juilliard School of Music: Director of the Stony Brook Wind Ensemble# conducting.

Hershkowitz, Shoshana. M.M., 2001, Crane School of Music, SUNY Potsdam: Director of the Stony Brook Chorale and Camerata Singers.

Number of teaching, graduate, and research assistants, Fall 2016: 78 (full or partial support)

- 1) Recipient of the President's Award for Excellence in Teaching, 1984
- 2) Recipient of the State University Chancellor's Award for Excellence in Teaching, 1977
- 3) Recipient of the President's Award and the State University Chancellor's Award for Excellence in Teaching, 1997
- 4) Recipient of the Chancellor's Award for Excellence in Faculty Service, 2004
- 5) Recipient of SUNY Distinguished Service Professor, 2016
- 6) Recipient of SUNY Distinguished Professor, 2016
- 7) Recipient of SUNY Distinguished Academy Honorary Inductee

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

Department of Music

**Chairperson**

Perry Goldstein, Staller Center 3332 (631) 632-7330

**Graduate Program Director**

Daniel Weymouth, Staller Center 3332 (631) 632-7345

**Degrees Awarded**

M.A. in Music History and Theory; M.A. in Composition; M.M. in Music Performance; Ph.D. in History and Theory; Ph.D. in Composition; D.M.A. in Music Performance.

**Web Site**

<http://www.stonybrook.edu/commcms/music/>

**Description of the Department of Music**

The Department of Music offers programs that normally lead to the Doctor of Philosophy degree in Music History and Theory, and in Composition. The Department also offers programs that normally lead to the Doctor of Musical Arts degree in Music Performance. Masters Degrees in Music History and Theory, in Composition, and in Music Performance are also available.

Stony Brook's programs have grown out of an unusual partnership between the academy and the conservatory. The Music Department has a distinguished and well-balanced faculty in the areas of music history, theory, ethnomusicology, composition, and performance. The degree programs are designed to favor interaction among musical disciplines that have traditionally been kept separate. For example, the performance programs at Stony Brook all have an academic component. Graduate courses typically have a healthy mix of students from all areas. A number of courses are team taught by two or more faculty members, examining topics from several disciplinary viewpoints. Several examine music in a broader social context, drawing on such disciplines as ethnomusicology, cultural studies, and feminist theory. Interdisciplinary studies are central to the educational philosophy of the department. The Department encourages the development of professional competence in more than one area of musical study. For students at the Doctoral level who propose to do serious work both in performance and in some other area, a variety of options are available, including double degrees.

The music of the 20th and 21st centuries is a particular emphasis of both the performance and academic programs, but other areas are also amply represented. Students can choose seminars from a broad spectrum of topics, ranging from medieval music theory to popular music. Performing organizations include Baroque Chamber Ensemble, Chamber Music, Jazz Ensemble, Contemporary Chamber Players, Camerata Singers, Stony Brook Symphony Orchestra, and Opera Workshop.

**Admission to the M.A./Ph.D. Programs at the Masters Level in Music History and Theory or Composition**

The following are required for admission to the Graduate program in Music History and Theory, and in Composition leading to an M.A. and/or Ph.D. degree, in addition to the Graduate School requirements:

- A. A bachelor's degree from a recognized institution.
- B. Official transcripts of undergraduate records.
- C. A minimum average of B in undergraduate music courses.
- D. Three letters of recommendation from persons familiar with the student's work.
- E. Examples of undergraduate work:
  - 1. For history and theory applicants, essays in music research, analysis, theory, or criticism.
  - 2. For composition applicants, musical scores and recordings.
- F. Results of the Graduate Record Examination (GRE) General Test.
- G. Acceptance by both the Department of Music and the Graduate School.

Applicants are invited to submit any other evidence of their abilities in support of their application for admission, such as recordings of music performances or the score on the GRE Area Test in music.

All students entering the M.A. program will be examined in the following areas:

- 1. Ear training
- 2. Basic keyboard skills
- 3. The harmonization of a chorale in four voices (for composition students only).
- 4. The composition of a passage in free two-part counterpoint in either 16th-century or 18th-century style (required only for composition students only)

5. The history of music (for history and theory students only).
6. An Exam in the analysis of music (advisory requirement for history-theory students only).

The examinations in harmony and counterpoint for composition students and the examination in music analysis for students in the music history and theory program will be sent to students in mid-summer after they have been admitted in the spring. The other examinations will be given in the week before the beginning of classes.

Students who are found deficient in any of the above areas will be required to take appropriate courses in the first year of study to remedy the deficiencies.

### **Admission to the M.M./D.M.A. Program at the Master's Level**

The following are required for admission to the M.M. Program in Performance, in addition to the requirements of the Graduate School:

- A. A bachelor's degree from a recognized institution.
- B. Official transcripts of undergraduate records.
- C. An audition in the major field of performance. Students residing at a distance from the University may gain provisional acceptance by sending a recorded audition. Audition dates, usually designated for February, are announced by the Department mid-fall. These dates, as well as specific requirements for auditions, are posted at the Departmental website.
- D. Letters of recommendation from the former principal teacher and at least two other persons familiar with the student's work.
- E. While acceptance into the program is based primarily upon excellence in performance, the program contains a significant academic component. Applicants to the DMA program are therefore required to submit two examples of their work in music history or music theory, such as papers completed as coursework in either area.
- F. Acceptance by both the Department of Music and the Graduate School.

Entering students will be examined in ear training and foreign languages (voice and harpsichord only) (for students with prior foreign language experience) during the week before the beginning of classes, and will be placed in the appropriate courses.

### **Admission to the Ph.D. Programs in Music History and Theory or Composition**

See Admission to the M.A./Ph.D. Program, above. In addition, a master's degree, usually in the pertinent area of competence, is required. As evidence of ability to carry on doctoral work in the area of specialization, applicants should submit examples of recent work as follows:

1. For composition: recordings and scores
2. For history and theory: essays that demonstrate a breadth of knowledge in two or more of the following areas: music history, theory analysis, or criticism.

Applicants who plan to include study in performance as a part of their degree program should follow the audition procedure outlined under Admission to the D.M.A. Program, above. Students who intend to work in a secondary area of specialization must demonstrate to the pertinent faculty competence commensurate with a master's degree at a distinguished level in that area.

Students who do not possess the Master of Arts degree in music from Stony Brook will be asked to demonstrate achievement commensurate with that degree by the end of the first year of study by taking the relevant M.A. comprehensive examinations.

Entering students who have not already done so must successfully complete the appropriate advisory examinations described under Admission to the M.A./Ph.D. Program. Any remedial work must be completed by the end of the first year of study.

Although most students will move directly from the Masters to the Doctoral level of the M.A./Ph.D. program, successful completion of the Stony Brook M.A. degree does not guarantee acceptance into the Ph.D.-level program. Students wishing to continue from the masters to the doctorate degree must indicate their intention to do so, in a formal letter, to reach the Graduate Program Coordinator by 15 December for fall admission. This should be accompanied by two letters of recommendation from Stony Brook faculty. In order to demonstrate the ability to continue on at the doctoral level, students must submit appropriate examples of work: Masters papers for History and Theory; the Master's composition portfolio for Composition. Students may also elect to finish with the M.A. degree.

### **Admission to the D.M.A. Program**

See Admission to the M.M./D.M.A. Program, above. In addition, a master's degree, usually in the pertinent area of performance, is required. Applicants must audition in person before a faculty committee. Audition dates, usually designated for February, are announced by the Department mid-fall. These dates, as well as specific requirements for auditions, are posted at the Departmental Web site.

Students who do not possess a Master of Music degree from Stony Brook must demonstrate a level of achievement in ear training, and demonstrate preparation in music history and theory, commensurate with the M.M. requirements. Voice students who do not possess a Master of Music degree from Stony Brook must also satisfy the piano proficiency and foreign language requirements of the Stony Brook M.M. degree in voice. Harpsichord students who do not have a Stony Brook M.M. must also satisfy the foreign language requirement of the Stony Brook M.M. in harpsichord.

Applicants who plan to include a secondary area of specialization in composition, history, or theory within their D.M.A. program must submit examples of work in the proposed secondary area and must demonstrate to the pertinent faculty competence commensurate with a master's degree at a distinguished level in that area. Students who are accepted in a secondary area of specialization must pass the appropriate advisory examinations described under Admission to the M.A. Program. Any remedial work must be completed by the end of the first year of study.

Although most students will move directly from the Masters to the Doctoral level of the M.M./D.M.A. program, successful completion of the Stony Brook M.M. degree does not guarantee acceptance into the D.M.A.-level program. Students wishing to continue from the masters to the doctorate degree must indicate their intention to do so, in a formal letter, to reach the Graduate Program Coordinator by 15 December for fall admission. This should be accompanied by two letters of recommendation from Stony Brook faculty. In order to demonstrate the ability to continue at the doctoral level, students must play an audition. Students may also elect to finish with the M.M. degree.

### **Facilities of the Department of Music**

Stony Brook's Staller Center for the Arts includes an acoustically excellent theatre-concert hall and a more intimate recital hall. The music building contains a full range of rehearsal and teaching facilities, more than 70 practice rooms and studios for graduate students, and more than 40 Steinway grand pianos. A fully-equipped electronic and computer music studio complex provides advanced facilities for electronic and computer music composition. Within the Department, students have access to computing resources in the graduate student computing lounge, as well as the emedia SINC site (run by Instructional Computing) which has multimedia software and hardware. The department also has a collection of early instruments, including several harpsichords and organs, a consort of viols, and Renaissance wind instruments. Our music library contains an extensive research collection of books, periodicals, scores, microfilms and recordings, and includes a state of the art listening facility.

### **Degree requirements\***

#### **General requirements for the M.A Degree :**

Thirty graduate credit hours (exclusive of those in MUS 501 Compositional Skills of Tonal Music, MUS 505 Foundations of Musicianship, and MUS 591 Practicum in Teaching) chosen in consultation with the student's advisor. A student must achieve an overall 3.0 grade point average in order to receive a degree. The program must include:

1. MUS 502 Proseminar in Tonal Analysis, to be taken during the spring semester of the first year of study. Students who are well prepared in analysis may be exempted from this requirement through an examination that the student takes in the summer before matriculating.
2. MUS 505 Foundations of Musicianship, and MUS 506 Graduate Musicianship, to be taken during the first year of study. Qualified students may be exempted from these courses through a placement exam given at the beginning of the fall semester.

If a course in a department or program other than Music is taken toward the degree, approval from the Graduate Studies Committee must be obtained.

\*Note: All graduate students whose programs have a foreign language requirement (M.A. in Music History and Theory, Ph.D., D.M.A., and M.M. in harpsichord) must take the appropriate foreign language exam during their first semester of residence. Students who fail the examination must take an appropriate language course or retake the examination (depending on the program) after demonstrating evidence of formal preparation (such as a course or private tutoring).

### **Specific Requirements for the M.A. Degree, Graduate Program in Music History and Theory**

#### **A. Course Requirements**

In addition to the general course requirements for the M.A. degree listed above, the M.A. in Music History and Theory requires:

1. MUS 500 Proseminar in Musicology
2. MUS 503 Music in the 20th and 21<sup>st</sup> centuries.
3. At least two courses, of which one must be in the group 543, 545, and 547, and the other in the group 541, 542, 549, 553, and 555.
4. At least two courses chosen from the following courses in theory and analysis: MUS 538, MUS 557, MUS 559.
5. Music 534 Opera Studies.

#### **B. Foreign Languages**

A reading knowledge of German and either French or Italian is required. One examination should be taken at the beginning of the first semester of study. The second should be taken no later than the second year of study.

#### **C. Comprehensive Examinations**

Written and oral examinations in the history of music and music theory and in the analysis of tonal and post-tonal compositions.

**D. M.A. Research Paper**

A substantial essay, normally one from an advanced seminar that the student has expanded and revised, is required. The revised paper should be submitted no later than the twelfth week of the semester in which the student expects to receive the degree.

**Requirements for the M.A. Degree, Graduate Program in Composition****A. Course Requirements**

In addition to the general course requirements for the M.A. degree listed above, the M.A. in Composition requires:

- 1 MUS 501 Compositional Skills of Tonal Music, to be taken during the fall semester of the semester of the first year if study. Qualified students may be exempted from this course through a placement exam that will be given the summer before they begin the program. (This course does not count towards the degree)
2. A course in the history of music, normally MUS 503, Music in the 20th Century or MUS 507, Studies in Music History.
3. MUS 504 Analysis of 20th-Century Music. Students who are well prepared in 20th-century analysis may be exempted from this course by examination, and must substitute an advanced course in 20th-century theory or analysis (for example, MUS 557, Topics in Theory, or MUS 559, Topics in Analysis, when either of these courses is devoted to a 20th-century topic).
4. MUS 515 The Fundamentals of Electronic Music.
5. MUS 516 Electronic Music Workshop or MUS 517 Introduction to Computer Music.
6. MUS 523 Advanced Composition, to be taken every semester of residence.

**B. Comprehensive Examination**

Written examination in the analysis of pre-assigned compositions is required.

**C. Compositions**

Students must satisfy the Departmental requirement that they have written compositions of sufficient quality and variety during the period of study after admission to the Graduate School. Fair copies of all these compositions must be submitted to the Graduate Program Coordinator by the eighth week of the semester in which the student intends to graduate. The last day for graduate students to submit theses and dissertations, as specified in the academic calendar, will be the final deadline for all works to be submitted.

Note: There is no foreign language requirement for the M.A. in Composition. However, students should be aware that a reading knowledge of French, German, Italian, or Spanish is required for the Ph.D. in Composition.

**Requirements for the M.M. Degree in Music Performance****A. Course Requirements**

Thirty graduate credit hours (exclusive of those in MUS 501 Compositional Skills of Tonal Music, MUS 505 Foundations of Musicianship, and MUS 591 Practicum in Teaching) chosen in consultation with the student's advisor. A student must achieve a 3.0 overall grade point average or better to receive a degree. Up to 15 credits in individual study of the major instrument or voice may be counted toward the degree. None of the remaining 15 degree credits may be in individual study of another instrument or voice.

The program must include at least one course in music history (MUS 503 or 507) and one course in music theory (MUS 502, MUS 504, MUS 508, MUS 514, MUS 515, MUS 517, or MUS 521). Students who can demonstrate adequate preparation may take more advanced courses to fulfill this requirement.

Students who play orchestral instruments are required to enroll in MUS 565, Stony Brook Symphony Orchestra, every semester of full-time residence until graduation. Students who are registered part-time are required to participate in the Stony Brook Symphony Orchestra on a part-time basis. Under extraordinary circumstances a student may petition to have this requirement waived on a per-concert basis; a memorandum outlining policies and procedures for such a waiver is available from the Music Department's Graduate Office. Students in voice are required to enroll in chamber music for two semesters, chosen from Music 584, Baroque Ensemble, and Music 596, Contemporary Chamber Players. This requirement may be waived at the request of either the conductor or the major teacher. All pianists must sign up for Music 574 Accompanying in every semester. Participation in the accompaniment pool is required of all pianists and harpsichordists during each semester of full-time residence. Students in harpsichord are expected to participate in Baroque Chamber Ensemble for two semesters. All students except those in the conducting programs must be enrolled in MUS 571 (lessons) during each semester of full-time residence. All full-time performance students are required to take MUS 590 (Practicum in Professional Skills) each semester.

All students are required to enroll in a formal chamber music course during the first four semesters of residency: MUS 573 Chamber Music, MUS 584 Baroque Chamber Ensemble, MUS 595 Chamber Players, MUS 596 Contemporary Chamber Players, or MUS 568 Jazz Ensemble.

If a course in a department other than Music is taken toward the degree, approval from the Graduate Studies Committee must be obtained.

**B. Ear Training**

MUS 505, Foundations of Musicianship, and MUS 506, Graduate Musicianship, must be taken during the first year of study. Qualified students may be exempted from these courses through a placement exam given at the beginning of the fall semester.

**C. Jury Examinations**

Jury examinations are offered each semester. Students must take one jury examination, generally the semester before the degree recital. For students in harpsichord, the examination will include continuo realization.

**D. Foreign Language**

Knowledge of French or German is required of students in harpsichord. The requirement is satisfied by taking and passing the exam given by the relevant Stony Brook language departments during the advisory exam period before the first semester of study. Students who do not pass the examination must take the courses recommended by the relevant language department and achieve a grade of B or higher. Students who have not had any previous foreign language study must take a year of college-level elementary foreign language courses and achieve a grade of B or higher to satisfy the requirement.

**E. Public Recital**

The student's major teacher must determine whether or not the recital is of passing quality. If unable to attend the recital in person, the major teacher may hear a recording of it.

**Requirements for the Doctor of Philosophy Degree, Contract Toward Candidacy**

A plan of study in the form of a working contract toward candidacy will be drawn up by the student and a directing committee early in the student's first semester. The directing committee will consist of the student's advisor and at least two other faculty members. The Graduate Program Director will appoint the directing committee and will designate its chairperson, who shall not be the student's advisor. The committee may include faculty members from outside the department when appropriate. Final approval of the contract, and of any revisions that may be necessary, rests with the Graduate Studies Committee.

The design of the program is to be developed around the requirements given below, and the contract should specify such terms as the core of courses to be taken, the length of full-time residence, and the schedule and subject areas of various examinations including the preliminary examination. The terms of the contract should normally be completed within two or three years, depending upon the scope of the program. Successful completion of relevant master's requirements is assumed for the Ph.D. degree; see Admission to the Ph.D. Program.

**A. Work in the Student's Area(s) of Specialization**

Progress during residence in the program will be demonstrated to the directing committee in the following ways:

1. Evidence of advanced scholarly and creative work:

a) Students in History and Theory: The presentation of a number of essays demonstrating proficiency in various aspects of musicological research, theoretical studies, analysis, or criticism. The essays may have been prepared as part of coursework

b) Composition students: The presentation of a number of musical compositions demonstrating fluency in working with a variety of contemporary performance media.

2. Composition students: A field exam demonstrating knowledge of scholarship and repertoire in the broad field of study that will situate dissertation research.

3. A public lecture or colloquium. The topic will be determined by the student, in consultation with his or her directing committee. For composers, the lecture or colloquium must be on a topic of significant interest in 20th- or 21st-century music. See section B, paragraph 2 below.

Students who propose to do work in performance as an integral part of the program must, in addition, present at least two recitals showing mastery of a broad range of musical styles.

**B. Work in the Area of 20th and 21st Century Music**

Competence is to be demonstrated to the directing committee through the following:

1. An essay dealing with 20th or 21st century music from a historical, theoretical, critical, or analytical point of view.

2. A public lecture or colloquium on a topic of significant interest in 20th- or 21st-century music. See the description of MUS 696.

In order to satisfy the requirement, composers must complete both the essay and the lecture or colloquium. Historians and theorists may satisfy the requirement either with the essay or with the lecture or colloquium.

**C. Foreign Language**

Reading knowledge of French or Italian and German, as demonstrated through translation exams given at the start of every semester, for students in History and Theory is required. For Composition students, reading knowledge of one language (from French, German, Italian, or Spanish) is required. (See M.A. language requirements, above.) The contract toward candidacy may specify further or alternate language proficiency depending on the area of the dissertation, subject to the approval of the Graduate Studies Committee.

**D. Teaching**

A minimum of two semester-long courses, at least one of which shall be an introductory college course in musicianship, theory, or literature, is required. Students must also participate in the seminar on the teaching of music for a minimum of one semester.

**E. Advancement to Candidacy**

After completing the terms of the contract, a student is eligible for advancement to candidacy. To be advanced, the student must:

1. Submit a prospectus outlining the nature and aims of the dissertation.
2. Pass a preliminary examination that will demonstrate preparation in his or her special competence. For history-theory students, the examination will focus on the field of scholarship within which their dissertation is situated and on the detailed prospectus for the dissertation. For composers, the examination will cover the composer's musical craft and aesthetics, as revealed in the contract pieces (copies of which must be provided to the Graduate Program Director), and the projected thesis composition.

#### **F. Dissertation**

The dissertation shall be a significant original work of scholarship or composition. Approval of the dissertation will rest upon a formal oral defense, which is also a public colloquium on the dissertation work, to be conducted by the dissertation committee.

#### **Requirements for the Doctor of Musical Arts Degree with a Concentration in Performance**

A plan of study in the form of a working doctoral contract will be drawn up by the student and a directing committee early in the student's first semester. The directing committee will consist of the student's performance advisor (major teacher) and a member of the academic faculty, to be appointed by the Graduate Program Director. The committee may include additional faculty members from within or outside the department if appropriate. Final approval of the contract, and of any revisions that may be necessary, rests with the Graduate Studies Committee.

The design of the program is to be developed around the requirements given below, and the contract should specify the core of courses to be taken; the length of full-time residence; and the schedule and substance of various recitals, essays, and examinations. The terms of the contract should normally be completed within two years of full-time residence.

#### **A. Work in the Student's Area of Specialization**

Progress during residence in the program will be demonstrated to the directing committee through the presentation of four recitals, not including the doctoral degree recital, showing mastery of a broad range of musical styles. Two of these must be solo recitals, unless otherwise specified by the directing committee. Three of these recitals must be presented before the student can advance to candidacy; the fourth may be presented after advancement to candidacy. Students who propose to work in a second area of specialization should see section K below.

Students in the choral conducting program present three recitals, not including the doctoral degree recital. Two of these recitals must be completed before the student can advance to candidacy.

#### **B. Academic Coursework and the D.M.A. Research Essay**

During the first year of residency, students must take two academic courses and receive a grade of B or better in each, as well as a course on music research methodologies (Music 520). One academic course must be a history course from the group: MUS 503, MUS 507, MUS 534, MUS 535, MUS 536, or MUS 539, MUS 540, MUS 541, MUS 542, MUS 543, MUS 547, MUS 549, MUS 553, MUS 555. The other course must be an analysis or theory course from the group: MUS 502, MUS 504, MUS 538, MUS 557, or MUS 559. Students will develop one of the term papers generated in these two academic courses into the D.M.A. Research Essay. Only papers receiving a "B" or better may serve as the basis for the D.M.A. Research Essay. After conferring with the academic advisor on which paper to use for the research paper, the student must enroll in MUS 695, Doctoral Essay Tutorial, during the third term of residency to develop and revise the original course term paper.

#### **C. Public Lecture-Recital**

A colloquium illustrated by live performance, the lecture-recital may deal with performance problems, historical or analytical matters, or with interpretative or critical issues. The music performed in the lecture-recital may also appear on one of the doctoral recital programs, but not in the final doctoral recital. Students must enroll in MUS 696, Doctoral Colloquium, and present the lecture recital during that semester.

#### **D. Work in the Area of 20th- and 21st-Century Music**

The recitals, described above in section C, should include a substantial amount of music from the 20th and 21st centuries (the equivalent of at least one full recital's worth) including recent and challenging works. The lecture-recital may also be devoted to music of the 20th and 21st centuries.

#### **E. Foreign Language**

Proficiency in one or more foreign language is required for the D.M.A. degree. There are two types of requirements, 1) knowledge equivalent to a year's college-level study or 2) reading knowledge. Depending on the program, the student may have to satisfy one or both types of requirements.

*Instrumental students* other than harpsichordists must demonstrate knowledge equivalent to a year's college-level study of any *one* of the following languages: French, German, Italian, or Spanish.

Equivalency is determined by taking the exam given by the language departments at Stony Brook University; this examination is offered at the beginning of every semester. Students with prior language experience should take the exam given by these departments during the advisory exam period before the first semester of study. Students who do not pass the examination must take the courses recommended by the relevant language department during the first year of residency and achieve a grade of B or higher. Students who have not had any previous foreign language study must take a year of college-level elementary foreign language courses and achieve a grade of B or higher to satisfy the requirement. The graduate review courses FRN 500, GER 500, and ITL 500 will not satisfy the Music Department's foreign language requirement for the DMA degree.

*Harpsichord students* must demonstrate knowledge equivalent to a year's college-level study of any *two* of the following languages: French, German or Italian

*Voice Students:* Since the study of foreign languages is central to a singer's craft, the foreign language requirement for singers is more demanding than it is for instrumentalists. Voice students must demonstrate knowledge equivalent to a year's college-level study of *all three* of the following



languages: French, German, and Italian. Students with prior language experience should take the exam given by the Stony Brook language departments during the advisory exam period before the first semester of study. Students who do not pass the examination must take the appropriate courses and achieve a grade of B or higher to satisfy the requirement. Voice students must also demonstrate a reading knowledge of any two of the following languages: French, German, Italian, or Russian. Reading knowledge is determined solely by the Music Department Translation Exam.

For all D.M.A. programs, the foreign language requirement must be satisfied in a timely manner, preferably by the end of the first year of study. In any case, all language requirements must be satisfied before advancement to candidacy, except in programs where more than one language is required. In these programs only, all but one language requirement must be satisfied before advancement; the remaining language may be satisfied after advancement to candidacy.

The contract toward candidacy may specify further or alternate language proficiency depending upon the proposed plan of study, subject to the approval of the Graduate Studies Committee.

#### **F. Teaching**

A minimum of two semester-long courses, either or both of which may comprise individual lessons, ensemble coaching, or classroom teaching, is required. In certain cases, this requirement may be met by private teaching or teaching at another institution (see the Graduate Program Director for details).

#### **G. Practicum in Professional Skills**

A professional performing musician, who is more likely than ever before to assemble a career and a livelihood from a wide variety of music-related activities, needs a wide variety of practical skills, not all of which can be acquired in formal courses or even necessarily within the confines of the academy. Thus, every full-time D.M.A student in residence must register for MUS 690, Practicum in Professional Skills, in every semester they are enrolled. This course covers practical training in activities related to the professional work of a performing musician, including solo and ensemble performance, teaching, internships, and related work, both on-campus and off-campus.

#### **H. Orchestra/Accompaniment**

Students who play orchestral instruments are required to enroll in MUS 565, Stony Brook Symphony Orchestra, every semester of full-time residence. Students who are registered part-time are required to participate in the Stony Brook Symphony Orchestra on a part-time basis. Under extraordinary circumstances, a student may petition to have this requirement waived on a per-concert basis; a memorandum outlining policies and procedures for requesting such a waiver is available on-line. Students in voice are required to enroll in MUS 579, Opera Workshop, for four semesters. This requirement may be waived at the request of either the conductor or the major teacher.

Pianists and Harpsichordists : In lieu of large ensemble requirements, keyboard players are required to enroll in Music 574, Collaborative Keyboard (one credit), for four semesters. After the fulfillment of four semesters of Music 574, keyboard players must also enroll in Music 574 in each semester in which they take lessons or in which they want to be paid for accompanying. Pianists enrolled in Music 574 are required to accompany the equivalent of two full recitals (or other approved events such as auditions, juries, etc.) for each academic year in which they are enrolled. (After fulfilling the two-recital equivalent requirement, pianists may play additional recitals/events and will be compensated by the department.) The Music 574 requirement for harpsichordists is considered to be fulfilled when they are concurrently signed up for Music 584, Baroque Ensemble. (Harpsichordists will be paid for additional accompaniment.)

#### **I. Chamber Music**

All instrumental students are required to participate in a formal chamber music course for four semesters. Students may satisfy the requirements by enrolling each semester in one of the following courses: MUS 573 Chamber Music, MUS 584 Baroque Chamber Ensemble, 596 Contemporary Chamber Players, or MUS 568 Jazz Ensemble. In the case of MUS 573, students will enroll in the section of a particular faculty member who will supervise the semester's work. Voice students must take two semesters of Music 584 Baroque Ensemble and or/Music 596 Contemporary Chamber Players.

Genre requirements have been added to the D.M.A. contract. These genre requirements can be fulfilled by a performance on a degree recital or on the end-of-semester chamber music recitals. The degree recital does not need to be the student's own recital. However, if the student's genre requirement is fulfilled by playing on a colleague's degree recital, documentation must be provided for his or her doctoral file in the form of a program.

The genre requirements are as follows:

Violin, viola, 'cello: Every DMA student must include a string quartet and a piece for mixed ensemble larger than two on a concert or concerts during the course of their DMA.

Bass: Two mixed groups larger than two.

Winds: A piece for mixed ensemble larger than two.

Brass: A piece for mixed ensemble larger than two

Piano: One piece, trio or larger

Harpsichord: Harpsichord literature is centered on music written either before 1780 or after 1920. Therefore harpsichord students should be enrolled during their entire residency in either Baroque Ensemble or CCP. More specifically, they should enroll in Baroque Ensemble all four semesters with the possible replacement of one semester with CCP. This enrollment will guarantee that every student will be performing in numerous chamber pieces having at least 4 people in a group either for their degree recitals or public baroque ensemble concerts.

Percussion: Percussionists are required to participate in chamber music activities within the percussion studio, as well as with other studios. They must be available for participation in percussion pieces performed as part of the annual season of the Contemporary Chamber Players, and they must participate on other chamber music activities, either as small ensembles (duos, trios, etc) with other musicians in the department. Each full-time percussion student should perform at least once in a piece with percussionists and once in a mixed ensemble piece every academic year.

**K. Secondary Area of Specialization**

Students who propose to do advanced work in composition, history and theory as an integral part of the program must do one or both of the following:

1. Present a number of musical compositions demonstrating fluency in working with a variety of contemporary performance media.
2. Present a number of essays demonstrating proficiency in various aspects of musicological research, theoretical studies, analysis, or criticism. The essays may have been prepared as part of coursework.

**L. Doctoral Jury Examinations**

A preliminary doctoral jury will be played during the first full year of residency. A second, 20-minute jury examination will be taken at the end of the period of residency covered under the contract toward candidacy. Both juries must be passed as a condition for advancement to candidacy.

**M. First-Year Academic Review**

In order to be in good standing, D.M.A. students must have taken the two academic courses required (History and Theory) by the end of the first year of the program, and must have taken the foreign language proficiency exam, or be in the appropriate language course, by the beginning of the second semester. The Graduate Program Director will monitor the academic progress of D.M.A. students by asking all academic advisors to submit contract checklists in February of each year.

**N. Advancement to Candidacy**

The student may advance to candidacy after completion of the following requirements:

1. Three of the four contract recitals (see Requirement A).
2. Completion of Requirements B through M. In programs which require more than one language, all but one language.

Advancement to candidacy is granted by the Graduate School upon recommendation from the departmental Graduate Program Director.

**O. Completion of the Doctoral Contract**

The Doctoral Contract will be completed after presentation of the fourth public recital (see Requirement A) and completion of any remaining language requirement (see Requirement E).

**P. Doctoral Degree Recital Examination**

After the doctoral contract is completed, the student must:

1. Submit a program of the proposed doctoral degree recital, bearing the signature of the major teacher, to the graduate program director and Graduate Studies Committee for approval. The program must not include works previously performed to satisfy other graduate degree requirements.
2. Submit a doctoral examination prospectus, approved by both members of the directing committee that focuses on significant analytical, historical, and interpretative aspects of the works to be performed. The prospectus will serve as the basis of the doctoral examination. Students may view sample prospectuses on Blackboard and should review the Oral Exam Guidelines prior to the exam (this document is also available on Blackboard).
3. Appear before an examining committee to demonstrate mastery of the doctoral degree recital program and of areas pertinent to the works to be performed. The doctoral degree recital examination normally takes place within one year after advancement to candidacy.

**Q. Doctoral Degree Recital**

The doctoral degree recital should be performed after the degree recital examination has been passed. It must demonstrate a distinguished, professional level of performance and be presented on campus, except under extraordinary circumstance for students in Choral Conducting. A recording of this recital, along with the program and the doctoral examination prospectus, is submitted to the Graduate School and is eventually deposited in the University library.

**Faculty of the Department of Music****Professors**

Anderson, Ray, Director of Jazz Studies, B.A., 2010, Empire State College: Jazz studies and jazz improvisation.

Carr, Colin, Certification of Performance, 1974, Yehudi Menuhin School: Cello.

Dutton, Lawtence, M.M., 1978, The Julliard School of Music; Mus.D., 1995, Middlebury College: Viola; chamber music.

Fuller, Sarah,<sup>1</sup> Ph.D., 1969, University of California, Berkeley: Medieval and Renaissance music; history of music theory

Goldstein, Perry,<sup>3</sup> Chair, Director of Musicianship, D.M.A., 1986, Columbia University: Analysis; theory, composition; musicianship.

Haas, Arthur, M.A., 1974, University of California, Los Angeles: Harpsichord; performance of early music.

Kalish, Gilbert, B.A., 1956, Columbia University: Piano; chamber music; 20th-century piano repertory.

Lawton, David., Ph.D., 1973, University of California, Berkeley: Opera workshop; 19th-century studies.

Lochhead, Judith, <sup>4</sup> Graduate Program Director, Ph.D., 1982, Stony Brook University: Theory and history of recent music; phenomenology and music; performance and analysis.

Silver, Sheila, Director of Undergraduate Studies, Ph.D., 1976, Brandeis University: Composition; analysis.

Setzer, Philip, M.M., 1974, The Juilliard School of Music; Mus.D., 1995, Middlebury College: Violin; chamber music.

Winkler, Peter, <sup>2</sup> M.F.A., 1967, Princeton University: Composition; theory and history of popular music.

### **Associate Professors**

Calcagno, Mauro, Ph.D., 2000, Yale University: 16th- and 17th-century music; madrigal; opera; Monteverdi; performance studies.

Dahl, Christina, M.M., 1989, Peabody Conservatory of Music: Piano, accompaniment, chamber music.

Semegen, Daria, Director of the Electronic Music Studio. M.Mus., 1971, Yale University: Composition; electronic music; composition, history and aesthetics of electronic music.

Leandro, Eduardo, M.M., 1999, Yale University: Percussion; chamber music.

Long, Timothy, M.M., 1992, Eastman School of Music: Vocal coach, conducting.

Minor, Ryan, Ph.D., 2005, University of Chicago: 19th-Century music; choral music; Brahms, Wagner, opera.

Weymouth, Daniel, Director of the Computer Music Studio and Co-Director, Laboratory for Technology in the Arts; Director cDACT (Consortium for Digital Arts, Culture and Technology). Ph.D., 1992, University of California, Berkeley: Composition; analysis; computer music; multimedia and performance technologies.

### **Assistant Professors**

Bradley, Catherine, Ph.D. 2011, University of Cambridge: 13th-century music; early motets; analysis and compositional process

Schedel, Margaret, DMA, 2007. University of Cincinnati, College Conservatory of Music. Composition, digital music and art.

Smith, Stephen Decatur, Ph.D., 2012, New York University : 20th-Century music; Critical theory; Second Viennese school.

### **Visiting Assistant Professor**

Adams, Margarethe, Ph.D., 2011, University of Illinois at Urbana-Champaign. Music, belief, and political ideology in Central Asia.

Johnston, Keith, Ph.D., 2011. University of Toronto

Kaczorowska, Joanna, D.M.A., 2008, Stony Brook University: Director of Undergraduate Performance; violin; chamber music.

Samuel, Jamuna, Ph.D., 2005, Graduate Center, City University of New York: 20th-century theory and analysis; music history.

### **Performing Artists in Residence**

Cobb, Kevin, M.M., 1995, Juilliard School: Trumpet.

Cords, Nicholas, B.M., 1997, The Curtis Institute of Music: viola, chamber music.

Diaz, Pedro, B.M., 1989, The Juilliard School of Music; Oboe; chamber music.

Ellsworth, Ann, M.M., 1991, University of Maryland: French horn.

Harris, Brenda; B.M and B.M.E., 1979; Illinois Wesleyan University; Graduate Study University of Illinois; Voice, opera studies.

Kay, Alan, M.M., 1983, The Juilliard School of Music: Clarinet; chamber music.

Kim, Soovin, 1999, Curtis Institute. Violin; chamber music.

Morelli, Frank, 1980, The Juilliard School of Music; Bassoon, chamber music.

Powell, Michael, B.Mus., 1973, Wichita State University: Trombone; chamber music.

Scarlata, Randall, M.M., 1998, The Julliard School of Music: voice and opera studies.

Shaham, Hagai, M.A., 1984, Brandeis University: Violin; chamber music.

Willard, Jerry, pupil of Sophocles Papas: Guitar; lute.

Wincenc, Carol, M.M., 1972, The Juilliard School of Music: Flute; chamber music.

#### **Quartet-in-Residence**

The Emerson String Quartet: In fall 2002, the celebrated Emerson String Quartet became the quartet-in-residence at Stony Brook. This prestigious ensemble presents a series of concerts, chamber music instruction, and workshops at the University every year.

Drucker, Eugene, Mus.D., 1995, Middlebury College: Violin; chamber music.

Dutton, Lawrence, M.M., 1978, The Juilliard School of Music; Mus.D., 1995, Middlebury College: Viola; chamber music.

Setzer, Philip, M.M., 1974, The Julliard School; Mus.D., 1995, Middlebury College: Violin; chamber music.

Watkins, Paul.

#### **Directors**

Cavanaugh, Alice. D.M.A., 2001, Stony Brook University: Director of the Camerata Singers.

Deaver, Susan, D.M.A., 1994, Manhattan School of Music: Director of the University Orchestra.

Engel, Bruce, M.M., 1974, The Juilliard School of Music: Director of the Stony Brook Wind Ensemble; conducting.

Hershkowitz, Shoshana. M.M., 2001, Crane School of Music, SUNY Potsdam. Director of the Stony Brook Chorale.

Number of teaching, graduate, and research assistants, fall 2012: 68 (full or partial support)

1) Recipient of the President's Award for Excellence in Teaching, 1984

2) Recipient of the State University Chancellor's Award for Excellence in Teaching, 1977

3) Recipient of the President's Award and the State University Chancellor's Award for Excellence in Teaching, 1997

4) Recipient of the Chancellor's Award for Excellence in Faculty Service, 2004

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

## Neuroscience

**Chairperson**

Lorna Role, Life Sciences Building 573, (631) 632-8616

**PhD Graduate Program Director**

Mary Kritzer, Life Sciences Building 510, (631) 632-8634

**MS Graduate Program Director**

Howard Sirotkin, Life Sciences Building 512, (631) 632-4818

**Graduate Program Administrator**

Odalís Hernández, Life Sciences Building 535, 631-632-8078, FAX (631) 632-6661

**Degree Awarded**

Ph.D. in Neuroscience, MA in Biological Sciences and MS in Biomedical Science (Neuroscience track)

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-gs](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-gs)

## Description of the Department of Neuroscience

The Graduate Program in Neuroscience, in the College of Arts and Sciences, offers doctoral training in the rapidly expanding field of neuroscience. Through coursework and independent research, students are trained to approach research problems in neuroscience with a broad perspective. Expertise in the areas of molecular and biochemical control of development, properties of receptors and ion channels in relation to cellular physiology, the cellular basis of integrative functions, and the structural basis for communication among neurons are available to all students in the program. Graduate students will receive in-depth research training in molecular, biochemical, physiological, behavioral, or anatomical sciences. In addition the Program offers unique opportunities to draw from one or more of these disciplines through multidisciplinary, cosponsored research projects. A program of highly interactive faculty and students provides an exciting focus for research training.

The MS in Biomedical Science (Neuroscience track) program prepares students to conduct, analyze and communicate Neuroscience research. Students will be exposed to advanced neuroscience research techniques, approaches and theory culminating with the MS degree. Core concepts and skills are taught through a series of required core courses, with the remaining coursework consisting of advanced electives and special topics courses. Expertise in the areas of molecular and biochemical control of development, properties of receptors and ion channels in relation to cellular physiology, the cellular basis of integrative functions, and the structural basis for communication among neurons are available to all students in the program. Students will receive in-depth research training in molecular, biochemical, physiological, behavioral, computational or anatomical sciences. A program of highly interactive faculty and students provides an exciting focus for research training.

## Admission details for the Department of Neuroscience

Students are expected to fulfill basic requirements of the Graduate School: a bachelor's degree from a recognized university, a grade point average corresponding to B or higher, evidence of the capacity to do satisfactory graduate work as evidenced by scores on the Graduate Record Examination (GRE - only required for PhD applicants), and the recommendations of three former instructors. In addition, all non-native speakers of English must score a minimum of 600 (paper), 250 (computer) or 100 (iBT) on the Test of English as a Foreign Language (TOEFL). The Program in Neuroscience has the following additional requirements: one year of calculus, physics, and chemistry, demonstrated proficiency in biological sciences, and laboratory research experience. Deficiencies in these requirements do not preclude admission, and special consideration will be made to promising applicants.

Application Deadline: March 15 for MS applications, January 15 for PhD applications

Applicants do not need to send their official transcripts until they are offered admission into the program.

In addition to the minimum requirements of the Graduate School, the following are suggested requirements:

A. BS or BA degree in a life science related field, with a minimum undergraduate grade point average of 3.00.

\* **Pre-requisites:** Successful MS and PhD candidates have often completed college level courses in physics, mathematics, organic and inorganic chemistry and advanced biology. It is recommended that students will have undergraduate neuroscience coursework. However, students are also accepted into the program without all necessary pre-requisites. These students may be asked to take the appropriate preparation course(s) prior to undertaking specific graduate level courses.

B. Three letters of recommendation.

C. Personal statement.

## Facilities of the Department of the Neuroscience

Program faculty are located in the Life Sciences Building, the Psychology Building, Centers for Molecular Medicine, and Health Sciences Center on the SUNY Stony Brook campus, and at Brookhaven National Laboratory and the Cold Spring Harbor Laboratory. Molecular facilities provide for analysis of protein and DNA biochemistry, including microsequencing, peptide mapping, synthesis of oligonucleotides and peptides, cellular

transfection, and production of transgenic animals. Wide-ranging facilities for cellular and integrative electrophysiology exist for studies on dissociated neurons, brain slice preparations, neurons in situ, and genetically engineered cells in culture. Imaging facilities permit anatomical reconstruction, fluorescence measurements, and the use of ion-sensitive indicators on both conventional, confocal, and multi-photon microscopes. An image analysis core is linked to a scanning and transmission electron microscopy facility. Separate behavioral testing core facilities for mice and rats are also available.

#### Requirements for Admission

The Graduate Program in Neuroscience does not accept a student whose goal is a M.A. degree. In exceptional instances, a student already in the Program may be awarded a M.A. degree upon completion of an approved course of study, including 30 graduate credit hours, a comprehensive examination, a research thesis, and the minimum requirements of the Graduate School.

#### Requirements for the PhD in Neuroscience

##### A. Course Requirements

1. Core courses in neuroscience (BNB 561, BNB 562, BNB 563, BNB 564). A four-semester series taught by members of the Program; the student is introduced to a broad variety of topics. These will be taken in the Fall and Spring semesters of the first and second years.
2. Neuroanatomy (BNB 560), Developmental Neuroscience (BNB 565), and Neurobiology of Disease (BNB 566). These are required short courses elaborating on fundamental topics in Neuroscience.
3. Laboratory Rotations in Neuroscience (BNB 555). A two-semester course in the Fall and Spring semesters of the first year. Students conduct research rotations in laboratories of three program members and present oral reports on their research.
4. Writing Neuroscience (BNB 551). This course is taught in the Fall semester of the first year. It provides training in the basics of scientific communication, with a strong emphasis on writing and revision. Practical exercises are designed to give experience and feedback in commonly needed aspects of scientific writing.
5. Advanced Neurobiology and Behavior Seminar (BNB 697). Seminar presentations delivered by faculty, students, associates, and visiting speakers.
6. Electives. At least two additional graduate-level courses in various biological, physical, or mathematical sciences must be selected by the student in consultation with the student's advisor. Students may take additional elective courses if they desire.

##### B. Thesis Proposal

At the end of the second year of study, each student must successfully propose and defend an outline of their thesis research. The proposal consists of a written document and an oral presentation.

##### C. Advancement to Candidacy

The faculty will recommend a student to the Graduate School for advancement to candidacy upon satisfactory completion of all course requirements and passing their thesis proposal.

##### D. Student Seminars

All students who have advanced to candidacy are required to give a departmental seminar on their dissertation work annually.

##### E. Ph.D. Dissertation

A dissertation that constitutes an original and significant contribution to the field of neuroscience is required for the Ph.D. The work must be of a quality acceptable for publication in a recognized scientific journal. At the end of the first year, students initiate a dissertation research program in a Program faculty's laboratory. After advancement to candidacy, the student and advisor will assemble an advisory committee to guide the dissertation research. Upon completion of the dissertation research, the student will present a seminar based on the dissertation. Following this the student will be given an oral examination on the dissertation research and related areas by the dissertation committee.

##### F. Teaching Requirements

To gain experience in teaching, the Program requires that all students serve as teaching assistants for two semesters during the first two years of study. Students who enter the program from the medical school's MSTP program are required to serve as TA's for one semester. Usually, TA assignments are to courses taught by Program faculty. Assignments are made to minimize impact on research productivity in the second year of study.

##### G. Residence Requirement

The University requires at least two consecutive semesters of full-time study. The demands of the course of study necessitate a longer period of residence.

##### H. Academic Standing

All students must maintain a 3.0 grade point average at all times. Due to the importance of BNB 561, BNB 562, BNB 563, and BNB 564 as the basis for advanced study in Neuroscience, students who have a grade of less than a B in these courses must remediate or repeat them satisfactorily prior to defending the thesis proposal and advancing to candidacy. Any student who fails to receive a grade of B or better in more than one required course will be reviewed for possible termination from the Program. Research (BNB 599 and BNB 699) is graded on a satisfactory/unsatisfactory basis. Any student who receives a grade of U in a research course will be reviewed for possible termination from the Program.

## Requirements for the MA in Biological Sciences

Completion of this track will require 30 credits from the approved PhD curriculum in Neuroscience and a thesis.

## Requirements for the MS in Biomedical Science

A total of at least 30 graduate credits with a cumulative GPA of 3.0 or greater are required for the MS degree. Of this, at least 8 credits must be earned in core courses in cellular, molecular and systems neuroscience. Students must also complete 4 credits in seminar courses designed to enhance reading, writing and presentation skills.

Research skills are at the center of the program and all students are required to complete a minimum of 14 credits of research related courses comprised of Introduction to Neuroscience Research, Neuroscience research practicum and Neuroscience Thesis work. A research thesis is required at the culmination of the program.

**Core Curriculum:**

- NEU 501: Introduction to Neuroscience Research (Summer II, 3 credits)
- NEU 502: Reading, writing and speaking Neurobiology (Fall, 2 credits)
- NEU 521: Introduction to cellular neuroscience (Fall, 3 credits)
- NEU 522: Introduction to molecular neuroscience (Fall, 3 credits)
- NEU 531: Sensory and motor systems (Spring, 2 credit)
- NEU 532: Neural Plasticity, Learning and Memory (Spring, 2 credit)
- NEU 533: Neural systems, emotion and cognition (Spring, 2 credit)
- BNB 560 Introduction to Mammalian Neuroanatomy (Spring, 1 credit)
- BNB 697: Neuroscience Seminar Series (Fall, Spring, 1 credit)
- NEU 548: MS Research Practicum in Neuroscience 3-5 credits (Fall, Spring, Summer)
- NEU 549: MS Thesis Research in Neuroscience
- 

*Students must complete at least 8 credits from NEU521, NEU522, NEU531, NEU532, NEU533 and BNB560.*

**Faculty of Neuroscience Graduate Program**

## Stony Brook Faculty

Acosta-Martinez, Maricedes, Ph.D., 2002, Albert Einstein College of Medicine: Neuroendocrine regulation of the hypothalamus-pituitary-gonad (HPG) axis.

Adams, Paul R., Ph.D., 1974, University of London, England: Synapse and network models of learning in relation to neocortical design.

Aguirre, Adan5, Ph.D., 2002, Centro de Investigacion y de Estudios Avanzados IPN (CINVESTAV-IPN), Mexico: Cellular and molecular biology of neural stem/progenitor cells during normal development and after brain injury or disease.

Anderson, Brenda J.8, Ph.D., 1993, University of Illinois: Behavioral and neuroanatomical effects of exercise and stress.

Bowen, Mark6, Ph.D., 1998, University of Illinois, Chicago Medical Center: Coordination of post-synaptic glutamate receptor signaling by the MAGUK family of scaffolds.

Brink, Peter, P.h.D., 1976, University of Illinois: Biophysical properties of transporting epithelia.

Collins, William F. III, Ph.D., 1980, University of Pennsylvania: Motoneuron physiology and plasticity.

Colognato, Holly5, Ph.D., 1999, Rutgers University: Molecular mechanisms that control oligodendrocyte function during nervous system development and during disease.

Czaplinski, Kevin1, Ph.D., 1999, UMDNJ-Robert Wood Johnson Medical School: Post transcriptional control of gene expression in the nervous system.

Dill, Kenneth, P.h.D., UCSD, La Jolla: Properties of Proteins.Dubnau, Josh10, Ph.D., 1995, Columbia University: Genetic dissection of memory in *Drosophila*

Evinger, Leslie Craig, Ph.D., 1978, University of Washington: Motor control and learning; Movement disorders.

Evinger, Marian J.4, Ph.D., 1978, University of Washington: Neural regulation of gene expression. Cholinergic intracellular signaling pathways.

Fontanini, Alfredo, M.D., 1998, Ph.D. 2002, University of Brescia, Italy: Behavioral electrophysiology of taste and olfaction.

Ge, Shaoyu, Ph.D., 2002, University of Science and Technology of China: Development of new neurons in the adult brain.

Halegoua, Simon, Ph.D., 1978, Stony Brook University: Neuronal Growth Factor Signaling and the Control of Phenotype and Survival.

- Kernan, Maurice, Ph.D., 1990, University of Wisconsin: Mechanosensory transduction in *Drosophila*; TRP channel function; ciliary mechanisms.
- Kritzer, Mary, Ph.D., 1989, Yale University: Effects of gonadal hormones on the cerebral cortex.
- LaCamera, Giancarlo, Ph.D., 2003, University of Bern: Learning and decision making; Theoretical Neuroscience.
- Levine, Joel M., Graduate Program Director, Ph.D., 1980, Washington University: Molecular biology of nerve regeneration; nerve-glia interactions.
- Maffei, Arianna, Ph.D., 2002, University of Pavia (Italy): Experience-dependent plasticity of neocortical circuits.
- Matthews, Gary G., Ph.D., 1975, University of Pennsylvania: Cellular and molecular neurobiology of the retina.
- McKinnon, David, Ph.D., 1987, Australian National University: Evolution and robustness of electrophysiological systems.
- McLaughlin, Stuart, Ph.D., 1968, University of British Columbia, Canada: Biophysics of signal transduction.
- Mendell, Lorne M., Ph.D., Distinguished Professor, 1965, Massachusetts Institute of Technology: Functional effects of neurotrophins in pain and segmental reflex pathways. Repair of the damaged spinal cord.
- Morin, Lawrence P.<sup>7</sup>, Ph.D., 1974, Rutgers University: Neural circuitry regulating mammalian sleep and circadian rhythms.
- Mujica-Parodi, Lilianne R.2, Ph.D., 1998, Columbia University: Neuroimaging (fMRI, nearinfrared spectroscopy) of limbic regulation; diagnostics for mental illness and resilience to acute/chronic stress.
- Parsey, Ramin, Ph.D., University of Maryland at Baltimore: Depression, Dementia and brain imaging technologies such as Positron Emission Tomography.
- Puopolo, Michelino, Ph.D., University of Ferrara, Italy: Cellular neurophysiology of nociceptor (pain-sensing) neurons.
- Role, Lorna, Ph.D., Chairperson, 1981, Harvard University: Neurobiology and pathology of cortico-limbic circuits.
- Shelly, Maya, Ph.D., 2004, The Weizmann Institute of Science, Israel: Molecular mechanisms of neuronal development, specification, and migration, during embryonic development and in neurological disorders. Establishment of axon/dendrite during neuronal development.
- Sirotkin, Howard, Ph.D., 1996, Albert Einstein College of Medicine: Molecular genetics of vertebrate neural development.
- Solomon, Irene C.<sup>6</sup>, Ph.D., 1994, University of California, Davis: Neural control of respiratory motor output and fast oscillatory rhythms.
- Talmage, David A.5 Ph.D. 1981 University of Minnesota: Neuregulin signaling and synaptic homeostasis
- Tsirka, Styliani-Anna (Stella) E.<sup>5</sup>, Ph.D., 1989, University of Thessaloniki: Neuronal-microglial interactions in the physiology and pathology of the central nervous system.
- Van Nostrand, William<sup>3</sup>, Ph.D., 1985, University of California, Irvine: Molecular pathogenesis of CNS amyloid accumulation.
- Wollmuth, Lonnie, Ph.D., 1992, University of Washington: Molecular mechanisms of synaptic transmission.
- 1) Primary appointment with Biochemistry
  - 2) Primary appointment with Biomedical Engineering
  - 3) Primary appointment with Neurosurgery
  - 4) Primary appointment with Pediatrics
  - 5) Primary appointment with Pharmacology
  - 6) Primary appointment with Physiology and Biophysics
  - 7) Primary appointment with Psychiatry

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*



## School of Nursing

### Chairperson

Marijean Buhse, School of Nursing, Health Sciences, Room 2-209 (631) 444-3284

### PhD Program Director

Patricia Bruckenthal, School of Nursing, Health Sciences, Room 2-238 (631) 444-3268

### Program Assistant

Linda Sacino, School of Nursing, Health Sciences, Dean's Suite, (631) 444-3262

### Degree Awarded

PhD in Nursing

### Web Site

<https://nursing.stonybrookmedicine.edu/>

### Application

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-gs](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-gs)

## School of Nursing

The Doctor of Philosophy (PhD) represents the highest level of formal education for a career in nursing research and the scholarship of discovery. It prepares scholars for expression and communication of the knowledge base in the profession of nursing. PhD graduates develop the scientific foundation, steward the profession, define its uniqueness, maintain its professional integrity and educate the next generation of nurses. The PhD in Nursing program at Stony Brook University (SBU) School of Nursing (SON) will have a strong scientific emphasis within the discipline of nursing and an understanding of the science of related disciplines and translation science. The program is designed in a broad, cross-functional perspective to prepare nurse scientists to collaborate across disciplines to solve complex problems and address multiple issues facing individuals, families, communities and populations. Translational and innovative research, promoting interdisciplinary collaboration at the highest level, will be foundational to the program. To foster success and promote transformational, far-reaching opportunities, students will engage in a diversified curriculum.

The 54-credit curriculum is designed for Master's-prepared nurses who aspire to research and academic roles within health care and educational settings. It will build on the foundation of research and scholarship gained at the master's level. The full-time, cohort-based program, to be offered on-site (one day/week) with web-enhanced technologies, contains three phases: Coursework, Proposal Development and Dissertation. Coursework and proposal development will take two and one-half years to complete with an additional one year for dissertation completion. The PhD candidate will select an area of research congruent with interdisciplinary faculty expertise. The SBU intensive research environment provides opportunities for mentorship by faculty within and outside the SON. Our Office of Nursing Research assists faculty and doctoral students in meeting research goals by providing administrative support, grant preparation support and management, statistical consultation, and dissemination of research findings through poster/podium presentation and manuscript preparation.

## Admission Requirements and Application Procedures

Application procedures and requirements as set forth in this Bulletin must be followed. Applications will be reviewed by PhD in Nursing program faculty and the Committee on Admissions and Academic Standards. All admissions for the PhD in Nursing will begin annually in June.

The number of openings for the PhD in Nursing program is small and acceptance is competitive. Additionally, congruency of the applicant's research interest with faculty expertise may impact admission decisions.

Requirements for admission include:

1. Applicants to the Ph.D. in Nursing Program must hold a Master's degree in nursing from a nationally accredited program or its international equivalent. Students with a master's degree in a related discipline (i.e, MPH) and a Bachelor's in Nursing may also be considered.
2. A current unencumbered license to practice as a registered professional nurse
3. One official copy of any transcript from any undergraduate college or university attended, **from which a degree was conferred**. Applicants must submit one official copy of any transcript relating to any graduate level work undertaken, **regardless of whether or not a degree was earned**. *Note: Educational systems that cannot be compared to the United States must be evaluated by a US credentials evaluation service before admission can be finalized.*
4. Minimum overall GPA of 3.0 on a 4.0 scale
5. Graduate Record Examination (GRE) General Test. Official score reports must be sent directly from ETS (photocopies are not acceptable).
6. Three letters of recommendation attesting to your academic ability and
7. Evidence of successful completion (grade C or better) of a graduate-level statistics course within the last five years
8. Curriculum Vitae including education and employment history; honors and awards; and publications and grantsmanship. Must demonstrate a progressive record of professional development in nursing
9. A personal interview with PhD program faculty
10. An exemplar of scholarly writing (e.g., publications)
11. A statement of professional goals and research interests including reference to Stony Brook University School of Nursing PhD faculty whose current research is aligned with your areas of interest and expertise.

12. Documented proficiency in English for international student (see the English Proficiency Requirements for Non-Native Speakers of English in the Graduate Bulletin (<http://www.stonybrook.edu/sb/graduatebulletin/current/degrees/phd/index.php>))
13. International Applicants: Each person planning to study in the United States is required to have the appropriate immigration status. The immigration documents for F-1 and J-1 student status are issued by **Visa and Immigration Services** at Stony Brook University based on receipt of required supporting documentation, including evidence of admission, English language proficiency, and proof of financial support for the program of study. (see the International Students section in the Graduate Bulletin (<http://www.stonybrook.edu/sb/graduatebulletin/current/degrees/phd/index.php>))

These admission requirements constitute the minimum expectations for applicants. Applicants should be aware that students selected for admission generally exceed these requirements.

## Requirements for the PhD in Nursing Program

### A. Curriculum Requirements

The full-time, cohort-based program, to be offered on-site (one day/week) with web-enhanced technologies, contains three phases: Coursework, Proposal Development and Dissertation. Coursework and proposal development will take two and one-half years to complete with an additional one year for dissertation completion. All students will follow an approved program of courses, called the Academic Program Plan, determined to meet his or her needs and to satisfy program requirements. The Academic Program Plan, developed by the student in consultation with the faculty advisor, should provide sufficient depth and breadth for the chosen area of research, including specific content areas, methodological and analytic approaches. Any changes to the plan must be approved by the faculty advisor and submitted to the Director of the PhD in Nursing Program for final review. The following includes **minimum** curriculum requirements:

| COURSE                                           | CREDIT | PRE-REQUISITE |
|--------------------------------------------------|--------|---------------|
| <b>Statistics/Research Design</b>                |        |               |
| HND 635 Biostatistics                            | 3      |               |
| HND 636 Advanced Statistical Methods             | 3      | HND 635       |
| HND 647 Doctoral Research Seminar                | 4      |               |
| HND 660 Quantitative Methods in Nursing Research | 3      |               |
| HND 661 Qualitative Methods in Nursing Research  | 3      |               |

|                                                                                   |   |                    |
|-----------------------------------------------------------------------------------|---|--------------------|
| <b>Philosophy/Theory/Foundations</b>                                              |   |                    |
| HND 630 Philosophical Foundations of Nursing Science                              | 3 |                    |
| HND 631 Concepts, Theories and Knowledge Development in Nursing Science           | 3 |                    |
| HPH 531 Introduction to Biobanking, Biomedical Informatics and Biomarker Research | 1 |                    |
| JRN 501 Distilling Your Message: Communicating Science                            | 1 |                    |
| MCR 562 Data Management and Informatics for Clinical Scientists                   | 3 | HND 635<br>HND 636 |

|                                 |   |                                                 |
|---------------------------------|---|-------------------------------------------------|
| <b>Research Practicum</b>       |   |                                                 |
| Cognates (3)                    | 9 |                                                 |
| HND 690 Dissertation Seminar I  | 6 | Successful completion of Qualifying Examination |
| HND 691 Dissertation Seminar II | 6 | Successful defense of Dissertation Proposal     |

|                                |   |  |
|--------------------------------|---|--|
| <b>Doctoral Role Formation</b> |   |  |
| HND 697 Research Practicum     | 3 |  |

|                            |           |  |
|----------------------------|-----------|--|
| HND 698 Teaching Practicum | 3         |  |
| <b>TOTAL CREDITS</b>       | <b>54</b> |  |

**By Advisement**

| Qualifying Examination                                                                                                                                                                                                                     | N/C | To be taken prior to dissertation phase                                                                                                              |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|------------------------------------------------------------------------------------------------------------------------------------------------------|
| HND 699 PhD Dissertation Research – On campus; or,<br><br>HND 700 PhD Dissertation Research – Off campus (Domestic); or,<br><br>HND 701 PhD Dissertation Research – Off campus (International)<br><br>(until <i>Dissertation Defense</i> ) | (1) | Following completion of Dissertation Seminar II, students will register for one (1) credit per semester until dissertation is completed and defended |

**B. Cognates**

Students will select a minimum of three cognate courses (9 credits) to support the dissertation. They individually and collectively enhance the depth of understanding of the student's chosen area of research. Cognate courses are taken after the first year of coursework when a student's chosen research area has become more clearly defined. Cognates are typically in specific content areas (i.e., self-management, biomarkers, biomedical informatics) or in specific methodological or analytical approaches (i.e., research design methodologies or data analytical methods).

These courses must be at the graduate level and taught by doctorally-prepared faculty either from with the School of Nursing or the University community at large. Students should consult with their faculty advisor regarding possible content and methodological areas that will support the chosen area of research.

**C. Teaching Practicum Requirement**

All doctoral students in the PhD in Nursing Program at Stony Brook University must complete at least one semester of practicum in teaching under supervision. Students in the PhD in Nursing Program will register for HND 698 Seminar Series: Academic Role and Teaching Practicum to enhance their expertise in the role of an academician. The practicum will be individualized according to the student's prior experiences in the academic role. The practicum will provide students with expertise in course development, teaching pedagogies and strategies for curriculum delivery, test construction and evaluation methodologies for didactic and clinical learning, approaches to teaching diverse learners and difficult student situations, and professional role development among others.

The practicum may include making seminar or class presentations, assisting in laboratories, or leading discussion sessions. Grading experience by itself will not be considered sufficient for satisfaction of this requirement. Faculty are responsible for providing informal feedback and formal evaluation. Following (or in some cases, concurrent with) proper training through a teaching practicum and after having fulfilled other requirements for teaching (e.g., demonstration of spoken English proficiency for non-native speakers of English), a graduate student may serve as a teaching assistant (TA) in courses at Stony Brook University, where the instructor of record is a faculty member. An advanced graduate student may act as the instructor of record for an undergraduate course offered at Stony Brook University only if he or she is appointed to an adjunct faculty position as a lecturer. No student shall be appointed to such a position until he or she has been advanced to candidacy (G5 only). It is not required that such students be enrolled in full time status, although this is recommended. Appointment procedures follow the same process as regular faculty appointments. Graduate students at G4 level or below cannot be designated as the Instructor of Record for any course offered at Stony Brook University. They may be appointed as Teaching Assistants. In addition, there must be a designated faculty supervisor who serves as the Instructor of Record for the course.

Each student, with the help of their faculty advisor, will identify the semester during which they will complete the teaching practicum, develop individualized student learning outcomes based on prior experiences in the academic role and identify a faculty preceptor. The faculty advisor, faculty preceptor and student will develop the structure of the practicum and plan activities to accomplish the student learning outcomes.

**D. Research Practicum Requirement**

All doctoral students in the PhD in Nursing Program at Stony Brook University must complete at least one semester of practicum in research under supervision. Students in the PhD in Nursing Program will register for HND 697 Seminar Series: Investigator Role and Research Practicum to enhance their expertise in the role of an investigator. The practicum will be individualized according to the student's prior experiences in the investigator role. The practicum will provide students with expertise in selected aspects of the research process, including development of the conceptual/theoretical foundation of the study, study implementation (e.g. start-up activities, consent, intervention, fidelity management), data collection, data management, data analysis, participate in preparation of grant proposal and dissemination of findings.

Each student, with the help of their faculty advisor, will identify the semester during which they will complete the research practicum, develop individualized student learning outcomes based on prior experiences in the investigator role and identify a faculty preceptor. The faculty advisor, faculty preceptor and student will develop the structure of the practicum and plan activities to accomplish the student learning outcomes.

**E. Qualifying Examination**

The purpose of the Qualifying Examination is to ascertain the breadth and depth of the student's preparation and to appraise readiness to undertake significant original investigation. Successful completion of the examination signifies the student's advancement to candidacy and potential to complete continuing coursework and the dissertation. It also represents the faculty's commitment to provide scholarly resources to assist the student in meeting these benchmarks. The advancement to candidacy is achieved by satisfactory completion of the Qualifying Examination, which is taken prior to the dissertation phase (HND 690 Dissertation Seminar I). At the discretion of the program, the Qualifying Examination may be oral, written, or both. The Examination Committee is appointed by the Program Director. The Committee must include at least two faculty members from the program and may include one or more members from outside the University or program. Results of the examination will be communicated to the student as soon as possible and to the Graduate School within one week of the completion of the

examination. A repetition of the preliminary examination, upon failure, may be scheduled at the discretion of the Program Director. The dean of the Graduate School must approve a request for repeat examination.

#### **F. Dissertation Proposal**

The dissertation proposal is prepared under the guidance of a faculty advisor. The proposal will be defended orally at a seminar, announced two (2) weeks in advance, and is open to PhD in Nursing faculty and students and to the larger academic community. The dissertation proposal defense committee must include at least two faculty members from the program and may include one or more members from outside the University or program. The dissertation proposal defense will be scheduled after successful completion of HND 691 Dissertation Seminar II. Upon successful defense of the proposal, the student may register for HND 699/700/701 PhD Dissertation Research.

#### **G. Dissertation**

The three requirements for the Ph.D. are assessed in the final defense of a dissertation.

1. The dissertation should demonstrate significant original work.
2. The final dissertation should be presented with clarity of thought and excellence of exposition that make it suitable for publication as a book or a series of papers in learned journals.
3. The dissertation should demonstrate a breadth and depth of the candidate's knowledge beyond the confines of his or her own research and is also critically assessed in the defense and at various examinations during the student's studies.

Successful oral defense of the dissertation to the candidate's dissertation committee and the University community at large is required. The dissertation committee will include the candidate's dissertation advisor, at least two faculty members from the program and may include one or more members from outside the University or program.

#### **H. Program Time Limit**

The time limit for a doctoral degree, including coursework, examinations, practicums, and dissertation is seven (7) years from date of matriculation in the PhD in Nursing Program. In exceptional cases where the program cannot be completed within these periods, students may petition for an extension of the time limit. The Request for Waiver of Graduate Time Limit form can be found by selecting the forms link from the Graduate School Web site. These petitions require the approval of the student's faculty advisor and Director of the PhD in Nursing Program. Requests for a time limit extension must be filed before the limit is exceeded and must contain a significant justification. The final decision rests with the Dean of the Graduate School, who may impose additional requirements.

### **PhD in Nursing Faculty**

#### **Professors**

Buhse, Marijean <sup>(1)</sup>, Ph.D., 1997, Adelphi University: multiple sclerosis; caregiver burden.

Shurpin, Kathleen <sup>(1)</sup>, Ph.D., 1989, Adelphi University: symptom distress; family support; cancer prevention and screening.

#### **Associate Professors**

Bruckenthal, Patricia <sup>(1)</sup>, Ph.D., 2004, University of Massachusetts, Amherst: health behavior change; pain management; health screening and health promotion; novel health promoting technologies.

Cannella, Dolores <sup>(2)</sup>, Ph.D., 2007, Stony Brook University: chronic illness adaptation; stress and coping; promotion of health behaviors.

Della Ratta, Carol <sup>(1)</sup>, Ph.D., 2015, Adelphi University: intra-professional educational strategies; active learning strategies; qualitative methods.

Dolce, Maria <sup>(1)</sup>, Ph.D., 2009, New York University: oral health; health promotion.

Friedberg, Fred <sup>(3)</sup>, Ph.D., 1979, City University of New York: chronic fatigue syndrome; fibromyalgia; behavioral self-management.

Jurgens, Corrine <sup>(1)</sup>, Ph.D., 2003, University of Massachusetts, Amherst: heart failure; symptom perception, recognition and response.

Marino, Marie <sup>(1)</sup>, Ph.D., 1992, Columbia University: determinants of health; community dwelling older adults; novel health promoting technologies.

Rohan, Annie <sup>(1)</sup>, Ph.D., 2013, Columbia University: biomedical innovations; maternal child health.

Shoenfeld, Elinor <sup>(4)</sup>, Ph.D., 1987, University at Buffalo: community engaged research; health disparities; sensor data for health; cancer epidemiology; data management and informatics.

1. School of Nursing
2. School of Dental Medicine
3. School of Medicine, Department of Psychiatry
4. School of Medicine, Department of Family, Population and Preventive Medicine

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

**Nutrition**

The Nutrition Program is part of the School of Medicine's Department of Family, Population and Preventive Medicine. Program and admissions information can be found in the Health Sciences Center Bulletin or the program website at <https://medicine.stonybrookmedicine.edu/gradnutrition>.

Program and admissions information can be found in the Health Sciences Center Bulletin and online at <https://medicine.stonybrookmedicine.edu/gradnutrition>.

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

Spring 2018

**Occupational Therapy**

The Occupational Therapy Department is part of the School of Health and Technology Management. Program and admissions information can be found in the Health Sciences Center Bulletin or on the OT website at <https://healthtechnology.stonybrookmedicine.edu/programs/otp/welcome>.

**Occupational Therapy**

Program and admissions information can be found online at <https://healthtechnology.stonybrookmedicine.edu/programs/otp/welcome>

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

Spring 2018

## Operations Research

**Program Director**

Dr. Wei Zhu, AMS Graduate Program Director for M.S. and AGC Programs, Wei.Zhu@stonybrook.edu, 631-632-8374, [www.ams.sunbysb.edu/~zhu](http://www.ams.sunbysb.edu/~zhu)

**Graduate Certificate Awarded**

Advanced Graduate Certificate in Operations Research

**Website**

<http://www.stonybrook.edu/spd/graduate/operations.html>

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-edl](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-edl)

## Operations Research

The Advanced Graduate Certificate in Operations Research provides students with the fundamental applied mathematics tools for developing protocols for the efficient management of private companies, government agencies and non-profit organizations. In today's global marketplace, organizations need to be efficient to survive. The Operations Research program will provide formal training in methods of optimization, modeling and statistics used in operations research. The objective of this program is to help individuals assist organizations to make efficient use of their resources so as to maximize efficiency and minimize net cost. Graduates of this program may be able to advance in management and organizational planning positions within their current employment or obtain new employment. It is recommended that applicants to the program hold a bachelor's degree in mathematics, engineering or computer science.

The program is offered in collaboration with the [Department of Applied Mathematics and Statistics](#) in the College of Engineering and Applied Sciences and articulates with the M.S. in Applied Mathematics and Statistics as well as the Master of Arts in Liberal Studies offered through SPD. If you intend to pursue the M.S. in Applied Mathematics and Statistics, please refer to the University's Graduate Bulletin for any additional admission requirements.

## Gainful Employment Regulation Disclosures

## Coaching Admissions

## A. Personal statement.

B. A bachelor's degree, with a cumulative 3.0 grade point average. It is recommended that applicants to the program hold a bachelor's degree in mathematics, engineering or computer science.

C. In those cases where the departmental admissions committee deems it desirable, personal interviews with departmental representatives may be necessary.

## Computer Support Services

Students in this program are welcome to use the University's Computing Center, the central facility for instructional, research, and administrative computing. All students are eligible for a campus-based computer account and may use dial-up numbers for access from off-site locations.

## Certificate Requirements

This advanced certificate program of 18 credits, consisting of six three-credit courses, trains students in the fundamental mathematical tools for working in the operations research profession. Operations research is the field of applied mathematics related to efficient management of the activities of private companies, government agencies and nonprofit organizations. The following courses are required for certificate: AMS 507 Introduction to Probability, AMS 540 Linear Programming, AMS 550 Stochastic Models, AMS 553 Simulation and Modeling, AMS 572 Data Analysis I, plus one (3 credit) elective chosen by student in consultation with an advisor.

## Faculty

The program's faculty is composed of faculty from the University's [Department of Applied Mathematics and Statistics](#).

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

**Oral Biology and Pathology Department****Acting Chairperson**

Lucille London, Westchester Hall (631) 632-8615

Email: [Lucille.London@stonybrook.edu](mailto:Lucille.London@stonybrook.edu)

**Graduate Program Directors**

Stephen Walker, Dutchess Hall 205 (631) 632-8916

E-mail: [Stephen.Walker@stonybrook.edu](mailto:Stephen.Walker@stonybrook.edu)

**Graduate Program Coordinator**

Marguerite Baldwin, 185 Westchester Hall (631) 632-9189

E-mail: [Marguerite.Baldwin@stonybrook.edu](mailto:Marguerite.Baldwin@stonybrook.edu)

**Degrees Awarded**

M.S. in Biomedical Science (Oral Biology and Pathology track)

Ph.D. in Oral Biology and Pathology

**Web Site**

<http://www.stonybrookmedicalcenter.org/dentalprograms/mastersphd>

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-gs](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-gs)

Department of Oral Biology and Pathology Department

The Graduate Program in Oral Biology and Pathology, within the Health Sciences Center, offers a program of study and research leading to the M.S. and Ph.D. degrees. The M.S. curriculum is of approximately two years' duration and is particularly suited for those dental graduates who wish to obtain further basic science training before entering or while obtaining a clinical specialty. The Graduate Program in Oral Biology and Pathology is also of particular interest to industrial-based scientists seeking additional training and advanced degrees. While the Department is interested in all aspects of oral biology, active programs of research presently being conducted include the following: development, metabolism, and control of the oral microflora on the teeth and various epithelial surfaces; oral putrefaction, malodor, and gingivitis; pathogenesis of periodontitis; interrelationship between systemic and oral diseases; mechanisms and therapy of dentinal hypersensitivity; ultrastructure and metabolism of healthy and diseased periodontal tissues with an emphasis on remodeling and matrix metalloproteinases; chemistry and crystallography of the biological calcium phosphates; biology of epithelial growth and differentiation; epithelial gene therapy; mechanisms of epidermal and oral carcinogenesis; wound repair; biology of skin and mucosal grafting; acquired and innate immunity; inflammation and fibrosis, and cancer. Further details may be obtained from the graduate program director.

Admission requirements of Oral Biology and Pathology Department

In addition to the minimum Graduate School requirements, the following are required:

- A. A bachelor's degree and grade point average of 3.3 in the sciences and 3.0 overall
- B. Original transcripts with three letters of recommendation
- C. Proof of satisfactory performance on the General Aptitude and Advanced parts of the Graduate Record Examination (GRE).

All applicants are carefully screened by the credentials committee of the department. Interviews and discussions are arranged with faculty members and graduate students where possible. Formal approval for acceptance into the program is given by the Graduate School.

Facilities of Oral Biology and Pathology Department

The Department of Oral Biology and Pathology currently occupies 18,000 square feet of research space. Facilities include isotope counters and preparative and analytical ultracentrifuges; infrared, atomic absorption, ultraviolet/visible spectrophotometers; an olfactometer; gas and high-pressure liquid chromatography systems; high-voltage, particle-free flow, and polyacrylamide gel electrophoresis systems; computer equipment of various types; fluorescence densitometer, spectrophotometers, microscopes, thermocyclers, ELISA readers, microdensitometers; automated colony counter; amino acid analyzer, autoclaves and ethylene oxide sterilizer, specialized anaerobic chambers, animal, and clinical laboratories; fully equipped tissue culture facilities,

The Living Skin Bank, which will provide a core facility for the production of clinical grade cell based therapies in a newly installed "clean room" (cGMP facility), is housed in the Department of Oral Biology and Pathology, under the direction of Dr. Marcia Simon. Research operatories are available in the Dental Care Center for clinical research projects. Graduate students have access to the University central computer facility as well as high-speed Ethernet links connecting the department to E-mail, Medline, and the Internet through servers located in the University Hospital.

Requirements for the Ph.D. Degree in Oral Biology and Pathology

In addition to the minimum degree requirements of the Graduate School:



A. All students must complete all or part of the Oral Biology and Pathology Oral Systems course.

B. M.S. students must complete two graduate courses selected from offerings within and outside the Department.

C. Ph.D. students are generally required to complete four to six course offerings at the graduate level and advance to candidacy by preparing a detailed written proposal in the format of a National Institutes of Health research grant application. A public seminar is presented by the student to members of his or her advisory committee, the department, and the University community at large, in which the student defends the proposal. This is followed by a further defense by the student before his or her advisory committee. A determination for advancement to candidacy is then made and forwarded to the Graduate School for official approval.

D. An original research thesis is required for completion of both the M.S. and Ph.D. degrees. For the Ph.D., a public defense followed by an examination of the student's dissertation by the Thesis Committee is required. For the M.S. degree, the student defends the thesis only to the student's dissertation committee. If the thesis is recommended for approval, the determination is submitted to the Graduate School for final decisions to award the degree.

#### Requirements for the MS Degree in Biomedical Science (Oral Biology and Pathology track)

Completion of this track will require 30 credits from the approved PhD curriculum in Oral Biology and Pathology and a thesis.

#### Faculty of Oral Biology and Pathology Department

##### Distinguished Professors

Kleinberg, Israel, Chairperson. D.D.S. 1952, University of Toronto, Canada; Ph.D., 1958, University of Durham, Newcastle upon Tyne, England: Identification of peptides and salivary factors involved in the growth and metabolism of oral mixed bacterial populations; pharmaceutical application of salivary components in the control of dental caries and oral malodor; mechanisms of dental plaque formation; control of microbial populations (oral, gastrointestinal, vaginal) with growth factors and growth inhibitors; new diagnostic techniques and therapeutics, technology transfer.

Golub, Lorne, M., D.M.D., 1963, M.Sc., 1965, University of Manitoba, Canada; Cert. Periodontics, 1968, Harvard School of Dental Medicine: Synthesis maturation and degradation of collagen in oral tissues; effect of inflammation on diabetes and collagen metabolism, on the flow and cellular and chemical constituents of gingival fluid, and relevance to diagnosis and management of the periodontal patient; therapeutic potential of tetracyclines as inhibitors of matrix metalloproteinases.

##### Professors

London, Steven D., D.D.S., 1981, Ph.D., 1987 University of Pennsylvania: Mucosal immunity, viral immunology, mucosal vaccine development, viral pathogenesis,

Ryan, Maria E., D.D.S., 1989, Ph.D. 1998, Stony Brook University; Cert. Periodontology, 1993, University of Connecticut: Connective tissue biology; the role of growth factors in connective tissue metabolism; diagnostic technology as it applies to preventative and therapeutic measures in dentistry; host modulatory therapies.

Simon, Marcia., Ph.D. 1981, Brandeis University: Biology of oral and cutaneous epithelial and mesenchymal cells, retinoid metabolism and the control of differentiations, wound healing, development and assessment of products for treatment of chemical and thermal burn injury.

##### Associate Professors

Brouxhon, Sabine M.D. 1998, University of Rochester: research focuses on the mechanism(s) by which *E-cadherin*, a cell-cell adhesion protein is downregulated to induce the progression of skin and breast cancers. Included are studies on its endocytosis, trafficking, and sorting to the lysosomal and proteasomal pathways for degradation and how ubiquitination and the cyclooxygenase-prostaglandin E2 system is involved in this process.

Ghazizadeh, Soosan, Ph.D. 1994, Stony Brook University: Epithelial stem cell biology; hair follicle development; immunological responses in gene therapy; cutaneous gene therapy.

London, Lucille. Ph.D. 1986, University of Pennsylvania: Mucosal immunity, pulmonary inflammation and fibrosis, acute respiratory distress syndrome, viral immunology, signal transduction.

Walker, Stephen G., M.Sc., 1987, University of Guelph, Canada; Ph.D. 1994, University of British Columbia, Canada. The analysis of the cell surface proteins and carbohydrates of *Treponema pectinovorum* and how these molecules interact with the environment. *T. pectinovorum* is an anaerobic spirochete that flourishes in the diseased periodontal pocket of humans and may contribute to periodontitis.

Trochesset, Denise, D.D.S., 1988, University of Minnesota; Certificate of General Practice Residency, 1989, VAMC, West Haven, CT; Certificate of Oral and Maxillofacial Pathology, 2002, New York Hospital Queens; Diplomate, The American Board of Oral and Maxillofacial Pathology, 2002: Clinical investigation of leukoplakic oral lesions; leukoplakic lesions and their relationship to alcohol and human papilloma virus.

## Assistant Professors

## Adjunct Professors

Cutler, Christopher D.D.S., 1986, Emory University School of Dentistry Ph.D. 1990, Emory University School of Medicine, Certificate of Periodontics, 1990, Emory University School of Post-graduate Dentistry: Innate immunity, inflammation, pathogenesis of chronic periodontitis, dendritic cells/Langerhans cells, anaerobic microbiology, Porphyromonas gingivalis.

Stephanos Kyrkanides, D.D.S., M.S., Ph.D., University of Athens 1991, University of Rochester, 1997, 1999: Research focuses on the cross-talk between peripheral inflammatory conditions, such as arthritis, and brain inflammation, including pain.

Rafailovich, Miriam, Ph.D., 1981, Stony Brook University: Properties of polymers in confinement at surfaces and interfaces, organic/inorganic nanocomposites, flame retardant polymers, electrospun scaffolds, cell/surface interactions, templated biomineralization, nanorheological measurements, neutron and x-ray scattering and reflectivity from organic thin films.

## Professors Emeritus

Kaufman, Hershall W., D.M.D., 1963, Ph.D., 1967, University of Manitoba, Canada: Calcium phosphate chemistry as it relates to dental hypersensitivity, dental caries, and calculus formation and prevention; rheological properties of saliva and their relation to oral health; design, management, and statistical analysis of clinical research trials.

McNamara, Thomas F., Ph.D., 1959, Catholic University of America: Microbial etiology of dental caries and periodontal disease; immune mechanisms involved in dental pathogenesis; viral infection in oral microorganisms; significance of secretory IgA in caries prevention.

Ramamurthy, Nungavarm S., Research Professor. MVSc., 1965, University of Agra, India; Ph.D., 1970, University of Manitoba, Canada: Collagen synthesis and remodeling in health and systemic disease; leukocyte metabolism and chemotaxis in diabetes; regulation of mammalian metallo-proteinases (MMPS) and development of synthetic inhibitors for MMPS.

Sreebny, Leo M., D.D.S., 1945, M.S., 1950, Ph.D., 1954, University of Illinois: Studies of saliva in health and disease; relationship of salivary constituents to systemic diseases, especially Sjögren's syndrome and systematic lupus erythematosus.

Taichman, Lorne B., M.D., 1965, M.Sc., 1967, University of Toronto, Canada; Ph.D., 1971, University of Wisconsin: Biology of epithelial keratinocyte growth and differentiation; cutaneous and mucosal gene therapy; viral and nonviral methods for gene transfer; keratinocyte secretion.

## Research Faculty

Gao, Jay G., Ph.D. 1989, Institute of Genetics, Fudan University, China Shanghai. Cutaneous and hepatic retinoid metabolism, regulation of lipolysis and lipogenesis.

Lee, His-Ming, Ph.D. 1996, SUNY at Stony Brook: #-Proteinase Inhibitors in Periodontal Disease: Serpinolytic Inhibition by Doxycycline.

Milroy Codipilly Ph.D. 1991, Stony Brook University: Basis of saliva viscosity and its relation to intra-oral adhesion phenomena.

## Clinical Adjunct Faculty

Barry Cooper, D.D.S.

Arthur Goren, D.D.S.

Irving Kittay, D.D.S.

Joan Phelan, D.D.S.

George Westbay, D.D.S.

Mark Wolff, D.D.S. Ph.D

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

**Philosophy****Chairperson**

Robert Crease, Harriman Hall 246 (631) 632-8040

**Doctoral Program Director**

Anne O'Byrne, Harriman Hall 213 (631) 632-7580

**MA Director**

Megan Craig, Harriman Hall 244 (631) 632-7570

**Assistant to the Chair**

Alissa Betz, Harriman Hall 211-A (631) 632-7590

**Graduate Program Coordinator**

Vacant

**Department Secretary**

Ann Marie Monaghan, Harriman Hall 213 (631) 632-7570

**Degrees Awarded**

M.A. in Philosophy; Ph.D. in Philosophy and Art; Advanced Graduate Certificate in Art and Philosophy

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-gs](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-gs)

\*The M.A. in Philosophy program is not currently accepting applications.

The Department of Philosophy, in the College of Arts and Sciences, offers programs leading to the Doctor of Philosophy and the Master of Arts in Philosophy.

**PhD Degree in Philosophy**

The doctoral program offers a rare opportunity to integrate the study of the history of philosophy with an exploration of contemporary philosophical methods and to apply an interdisciplinary approach to the framing and treatment of philosophical problems. The Philosophy Department is a sponsor of the Transatlantic Philosophical Collegium that offers advanced students opportunity for extended study at select German universities.

There are three general aims of the doctoral program:

1. To cultivate and make explicit the values and principles of the principal contemporary styles of philosophical reasoning.
2. To investigate the areas between philosophy and other disciplines that involve methodological, conceptual, and historical exchanges between philosophy and these other disciplines.
3. To provide an understanding of the history, major figures, and diverse problems of philosophy.

MA Degree in Philosophy with a focus on the Arts and Aesthetics

The Masters Degree in Philosophy with a focus on the Arts and Aesthetics at Stony Brook is an intensive, cross-disciplinary program. Founded in 2005, the program explores the intersections between philosophy and art, offering a terminal MA to theorists, practicing artists, critics, and those with an interest in the philosophical implications of art history and contemporary artistic practices. No other set of courses with a comparable emphasis exists in the New York area. Our seminars are characterized by close attention to specific texts in the history of philosophy and innovative approaches to traditional and contemporary art, drawing on arts venues and resources in New York City. The Philosophy Department at Stony Brook University is internationally recognized for its focus on contemporary European philosophy and its interdisciplinary orientation. Stony Brook Philosophy Department faculty who specialize in or have strong research interests in aesthetics, phenomenology, the history of philosophy, psychoanalysis, and technoscience teach M.A. seminars, with additional faculty support from the departments of Art, Music, and Cultural Analysis and Theory. The program also attracts renowned visiting scholars and artists to teach courses and give lectures. Our internationally recognized graduate student Philosophy and Art conference takes place yearly at the end of March ([www.philosophyartconference.org](http://www.philosophyartconference.org)).

**MA in Philosophy Curriculum and Degree Requirements**

Completion of the master's degree entails 30 course credits, the equivalent of 10 courses. You will find specific course descriptions for each semester on our website under the "current courses" tab. Of the 30 credits, 6 may be taken as Independent Study. Additionally, with the permission of the M.A. program director, 6 credits (2 courses) may be taken in the Philosophy Department's PhD program or in other departments at Stony Brook. One M.A. course per year is delivered at the Stony Brook Campus. An M.A. thesis option is available but not required for graduation.

**Advanced Graduate Certificate (AGC) in Art and Philosophy (ArtPHIL)**

For information on this advanced certificate program, go to <http://www.stonybrook.edu/commcms/philosophy/docs/artscert.html>

**Admission to the Ph.D. and M.A. Programs in Philosophy**

For admission to the doctoral and master's programs in philosophy, the following are normally required:

- A. A bachelor's degree with a major in philosophy.
- B. Some knowledge of the history of philosophy and of contemporary modes of thought is highly desirable. Deficiencies in these areas may require the student to undertake special work.
- C. An official transcript of undergraduate record and of any work completed at the graduate level.
- D. Letters of recommendation from three previous or current instructors.
- E. Submission of a philosophical essay (which may be a paper written for a previous course).
- F. Graduate Record Examination (GRE) General Test scores.
- G. Acceptance by both the Department of Philosophy and the Graduate School.

**Requirements for the Ph.D. Degree in Philosophy**

The doctoral program is designed to be completed in five years of full-time work. In addition to the minimum degree requirements of the Graduate School, the following are required:

**A. Seminars**

Seminar coursework will be required from the following three areas: history of philosophy, interface studies, and contemporary philosophy. Each of the three areas has a minimum number of required courses. The student will also take at least two additional seminars in one of the three areas to fulfill the concentration of studies requirement.

1. Three seminars in the history of philosophy from four groups of courses concentrating on ancient philosophy, medieval/Renaissance philosophy, modern philosophy, and 19th-century philosophy. These courses will feature an intensive writing component. For those students wishing to pursue a concentration of studies in the history of philosophy, a minimum of two additional courses may be taken from these areas or from seminar studies directed to special topics in the history of philosophy (which draw upon specific authors, texts, themes, or problems from the history of philosophy).
2. Two interface seminars in interdisciplinary areas between philosophy and another discipline pertaining to the natural sciences, to the social sciences, or to the humanities. This requirement may be met either by taking interdisciplinary seminars team-taught by philosophy faculty with faculty from another discipline or by taking regular graduate courses in another discipline. Two additional courses from this category may be taken to fulfill concentration requirements.
3. Five seminars in contemporary philosophy are required. Two seminars in the preeminent styles or modes of philosophy are required: one in continental philosophy (PHI 630) and one in analytic philosophy (PHI 631). These two seminars will explore the methods, presuppositions, and operational modes of the contemporary philosophy involved. Two additional seminars, chosen from a list of subjects, must be taken to fulfill the basic requirement. Two more seminars from the contemporary category may be taken to fulfill concentration requirements.
4. A practicum in the teaching of philosophy. This involves a supervised teaching seminar, along with additional teaching experience in the undergraduate program.
5. A series of prospectus workshops taken in the spring semester of the third year. The primary goal will be to produce a dissertation proposal.
6. An overall average grade of B or better is required, with no more than six credits of B- grades counting toward the degree.

**B. General Requirements**

1. The student must pass an examination in the History of Philosophy. Although the student may take the exam any number of times prior to the deadline, the examination must be passed by the end of the second year. The history of philosophy examination is constructed and read by the faculty on the History of Philosophy Committee.
2. The student must submit an essay, judged acceptable by a committee, in one of the areas of contemporary philosophy.
3. The student must submit an essay, judged acceptable by a committee composed of at least one Philosophy faculty member and a faculty member from the relevant second discipline, in one area of interface studies.

General reviews of student progress based upon a portfolio (courses taken, courses completed, grades, faculty evaluations of seminar work sample papers, teaching evaluations and performance in the above general requirements) will be undertaken at the end of the first and third years and in the second year after the deadline for passing the history of philosophy examination. The second-year review is the milestone requirement of the program. These reviews will assess the progress of students and determine qualifications for continuance or non-continuance in the program.

The Graduate Program Director will guide students in planning their program of studies to assure that general requirements are completed prior to their advancement to candidacy.

**C. Ph.D. Candidacy**

Official Ph.D. candidacy is attained when, in addition to the requirements listed above, a student fulfills the following competency requirements:

1. Competence in symbolic logic. Sufficient knowledge of concepts and notations of first-order logic for understanding and applying them to problems in philosophy.
2. Competence in a foreign language. This is shown by translating a previously untranslated philosophical article (or the equivalent).
3. Competence to undertake a dissertation project. This is shown by (a) a prospectus (10-15 pages) outlining projected study, expected findings, and relevant arguments and evidence (e.g., bibliography), and (b) an oral defense of the projected study before a faculty examining committee.

Upon the recommendation of the Examining Committee and the Graduate Program Director that the dissertation project be initiated, the student becomes a candidate for the Ph.D.

#### **D. Dissertation**

After advancement to candidacy, the student will concentrate on a dissertation (the written results of specialized study and research) under the supervision of a dissertation committee. After the dissertation is completed, it is read by a committee of four members, consisting of the director, two other members of the philosophy faculty, and one faculty member from outside the department who has specialized in related areas. Before final approval can be granted, the student must present the results of the dissertation research at an oral examination convened for that purpose by the department and open to interested faculty members and graduate students. If the dissertation defense is successful, the candidate is recommended to the University for the Doctor of Philosophy degree.

Doctoral students may be awarded the M.A. degree upon completion of the minimum coursework of 30 graduate credits of graded coursework.

#### **Courses**

Detailed course descriptions for the doctoral program are available from the Philosophy Department office each semester. Please refer to the current undergraduate and Graduate Class Schedules for specific semester offerings.

#### **Requirements for the MA Degree in Philosophy**

Given its commitment to philosophical pluralism and its triple focus on the history of philosophy, interdisciplinary studies, aesthetic and the philosophy of art, Stony Brook's Master of Arts in philosophy has been recognized throughout the profession as distinctive and innovative. The curriculum of the program embodies this commitment and focus.

#### **A. Administration**

The administration of the MA Program is carried out by the MA Director in consultation with the Chair of the Philosophy Department, the Graduate Program Committee, the Graduate Coordinator and the core faculty of the Philosophy and Arts program.

#### **B. Course of Study**

The primary purpose of the Master of Arts Program in Philosophy is to prepare students for original and independent research and scholarship in the field, and to prepare them for further postgraduate work in either philosophy or other humanistic disciplines. As an MA Program with special emphasis on the fine arts, it is also designed to provide artists with access to philosophical and intellectual resources not generally available in the art field.

In order to graduate, the student must have earned a total of 30 credits. Of these 30 credits:

1. 6 credits may be transfer credits (so long as they were not used toward earning another degree).
2. 6 credits may be earned either by taking 2 independent study courses, or by taking 1 independent study course and PHI 599 (Master's Thesis Research).
3. In order to be able to register for the MA Thesis course, students must fill out the MA Thesis Approval form, and have it signed by the MA Program Director as well as the Advisor of the MA thesis. The MA Thesis Advisor must be a permanent faculty member of the Philosophy Department.
4. All MA students must take at least one 500 or 600 level seminar on the Stony Brook University Campus
5. First year MA students may not take either Ph.D. seminars or independent studies. A second year MA student wishing to enroll in a PhD seminar must first obtain approval from the program director to request permission from the teaching faculty member. Only the teaching faculty member can give permission to enroll in the seminar.
6. If students enroll in PHI 520, it must be done with a permanent faculty member of the Philosophy Department.

**Note** the difference between **PHI 520: Advanced Studies in Philosophy** (3 credits, ABCF grading, variable and repetitive credit) and **PHI**

**521: Independent Study** (may be repeated for credit, S/U grading). If the Independent Study is intended to reach the required 30 credits for graduation, enrollment in PHI 520 is recommended (as only ABCF graded courses count towards cumulative credits).

#### **C. The MA Thesis Option**

Students are strongly encouraged to fulfill all of their MA degree requirements by taking the regularly scheduled graduate courses. Under certain conditions, however, a student may wish to pursue the MA thesis option by requesting the formation of a faculty committee for the thesis project. Such a Thesis Committee will consist of a thesis advisor, and at least one other member of the departmental faculty or a reader from the faculty

of another discipline. The MA Thesis Advisor is selected by the student, while the Second Reader (and possibly third reader) is selected by the advisor and student together. The Thesis Committee must be approved by the MA Program Director upon submission of the appropriate form and a brief thesis proposal summary. This form must be submitted to the MA Program director at least four weeks before the beginning of the semester in which the student is registering for PHI 599: Masters Thesis Research. The student will not be able to register for the MA thesis course without this form having been fully filled out and signed.

An MA student who takes the thesis option (see above) must notify the MA Program Director when submitting the thesis document to her/his thesis director. Once a student has submitted the thesis, the faculty thesis director has 3 weeks in which either to approve it for graduation purposes or require further revisions. In either case, the thesis director will notify the MA Director of the decision to approve or to require revisions. In the event that a thesis director fails to act within the time frame just specified, the MA Director will notify the student of her/his right to be assigned a different thesis director. The MA Director will also inform the Department Chair in case further administrative action is required.

### **Distinguished Professor**

Casey, Edward S., Ph.D., 1967, Northwestern University: Aesthetics; phenomenology; philosophy of psychology.

### **Professors**

Crease, Robert, Ph.D., 1987, Columbia University: Philosophy of science; aesthetics.

Dilworth, David, Ph.D., 1963, Fordham University; Ph.D., 1970, Columbia University: History of philosophy, East Asian languages and cultures.

Miller, Clyde Lee  
, Ph.D., 1974, Yale University: History of philosophy.

Rawlinson, Mary C., Ph.D., 1978, Northwestern University: 19th-century philosophy; Hegel; contemporary French philosophy; aesthetics and literary theory; bioethics.

Simpson, Lorenzo  
, Ph.D., 1978, Yale University: Contemporary continental philosophy (hermeneutics and critical theory); philosophy of the social sciences; philosophy of science and technology; neopragmatism and post-analytic philosophy; philosophy and race.

### **Associate Professors**

Cormier, Harvey J., Ph.D., 1992 Harvard University: American philosophy; William James and pragmatism; philosophy and culture; philosophy of biology; philosophy of race.

Craig, Megan, Ph.D., 2006, New School of Social Research: Ethics; aesthetics; pragmatism; phenomenology; Levinas.

De Laurentis, Allegra, Ph.D., 1982, University of Frankfurt: Greek philosophy; Hegel.

Edwards, Jeffrey B., Ph.D., 1987, Universität Marburg, Germany: History of philosophy; Kant; modern philosophy.

Mar, Gary  
, Ph.D., 1985, University of California, Los Angeles: Logic; philosophy of mathematics; contemporary analytic philosophy; philosophy of religion.

O'Byrne, Anne, Ph.D, 1999, Vanderbilt University: 20<sup>th</sup>-century and contemporary European philosophy; political philosophy.

### **Assistant Professors**

Jackson, Gabrielle, Ph.D., 2011, Harvard University: phenomenology; philosophy of mind; cognitive science; feminist philosophy.

Kim, Alan, Ph.D., Ph.D., 2001, McGill University: Ancient Greek philosophy; German philosophy.

Platt, Andrew, Ph.D., 2010, University of Massachusetts, Amherst: history of 17th and 18th century philosophy; social-political philosophy; philosophy of religion.

### **Emeritus Faculty**

Allison, David B., Ph.D., 1974, Pennsylvania State University: Contemporary European philosophy.

Grim, Patrick  
, B. Phil., 1975, University of St. Andrews, Scotland; Ph.D., 1976, Boston University: Logic; ethics; computer modeling; contemporary analytic philosophy.

Ihde, Don, Ph.D., 1964, Boston University: Phenomenology; philosophy of technology; hermeneutics.

Kittay, Eva, Ph.D., 1978, City University of New York: Philosophy of language; philosophy and literature; feminism.

Manchester, Peter, Ph.D., 1972, Graduate Theological Union: Greek philosophy; Heidegger.

Nolan, Rita, Ph.D., 1965, University of Pennsylvania: foundations of cognitive science; philosophy of art; philosophy of language.

Simon, Michael A., Ph.D., 1967, Harvard University: Social philosophy; philosophy of biological and social science; philosophy of mind; philosophy of law.

Spector, Marshall, Ph.D., 1963, Johns Hopkins University: Philosophy of science; philosophy of technology; environmental issues.

Welton, Donn

, Ph.D., 1973, Southern Illinois University: Phenomenology and epistemology; philosophical psychology; Contemporary German philosophy..

Williams, Peter

, Emeritus, Ph.D., 1973, Harvard University: Philosophy of law; ethics

Number of teaching, graduate, and research assistants, Fall 2016: 27

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Joint Appointment in Cultural Studies and Comparative Literature. Recipient of the Chancellor's Award for Excellence in Teaching.

Recipient of the Chancellor's Award for Excellence in Teaching, 1980

Joint Appointments in Cultural Studies and Comparative Literature, Women's and Gender Studies, and The College of Business. Recipient of the Chancellor's Award for Excellence in Teaching, 1984.

Recipient of the Commonwealth of Virginia's Outstanding Faculty Award, 1990; University of Richmond's Distinguished Educator Award, 1984

Joint appointment with Linguistics, Chancellor's and President's Award for Excellence in Teaching, 1993; Pew Scholar's Award, 1995; Outstanding Professor Award from the Alumni Association, 1995; Chancellor's Award for Excellence in University Service, 2015.

Recipient of the State University Chancellor's Award for Excellence in Teaching, 1988

Recipient of President's and Chancellor's Award for Excellence in Scholarship and Creative Activity, 2005

Recipient of the State University Chancellor's Award for Excellence in Teaching, 1978

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

**Physical Therapy**

Stony Brook's Physical Therapy Program is part of the School of Health and Technology Management. Program and admissions information can be found in the Health Sciences Center Bulletin or on the the PT program website at <https://healthtechnology.stonybrookmedicine.edu/programs/pt/eldpt>

**Physical Therapy**

Program and admissions information can be found in the Health Sciences Center Bulletin and online at <https://healthtechnology.stonybrookmedicine.edu/programs/pt/eldpt>

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

Spring 2018



**Physician Assistant**

The Stony Brook Physician Assistant (PA) Program is part of the School of Health and Technology Management. Program and admissions information can be found in the Health Sciences Center Bulletin or on the PA program website at <https://healthtechnology.stonybrookmedicine.edu/programs/pa/elpa>.

**Physician Assistant**

Program and admissions information can be found in the Health Sciences Center Bulletin and online at <https://healthtechnology.stonybrookmedicine.edu/programs/pa/elpa>.

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

Spring 2018

## Physics

### Chairperson

Axel Drees, Physics Building C-104 (631) 632-8114

### Graduate Program Director

Jacobus Verbaarschot, Physics Building P-107 (631) 632-8279

### Assistant Graduate Program Director

Donald Sheehan III, Physics Building P-110 (631) 632-8759

### Degrees Awarded

M.A. in Physics; M.S. in Physics in Scientific Instrumentation; Ph.D. in Physics; Ph.D. in Physics with Concentration in Astronomy; Ph.D. in Physics with Concentration in Physical Biology.

### Web Site

<http://graduate.physics.sunysb.edu>

<http://www.physics.sunysb.edu/Physics/>

### Application

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-gs](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-gs)

### General Description of the Graduate Program

The Department of Physics and Astronomy in the College of Arts and Sciences offers courses of study and research that normally lead to the Ph.D. degree. The M.A degree is awarded either as a terminal degree, or to students on the way to the Ph.D. degree. The Master of Science in Scientific Instrumentation program is provided for those interested in instrumentation for physical research. A Master of Arts in Teaching program, from the School of Professional Development, is available for students seeking to teach physics in high schools.

Students may find opportunities in various areas of physics not found in the department or in related disciplines at Stony Brook in such programs as Medical Physics, Chemical Physics, Atmospheric and Climate Modeling, Materials Science and at Cold Spring Harbor Laboratory.

The entire faculty participates in teaching a rich curriculum of undergraduate, graduate, and professional development courses, including many courses on special topics of current interest. Graduate students must fulfill one year of teaching. Course requirements are kept at a minimum to allow the student to set up a flexible program. Students are encouraged to participate in research as early as possible and to begin their thesis research no later than the beginning of their third year. The typical length of time to the Ph.D. is four to six years, whereas the Master's in Scientific Instrumentation is a two-year program that involves a thesis project in instrumentation design or development, and the work for an M.A. degree can be completed in two semesters and one Summer.

The Stony Brook Physics graduate program has been highly ranked in national surveys for the quality of its graduate program, its faculty, and the impact of its published research. It strives to make a graduate education in physics intellectually stimulating and educationally rewarding.

### Degrees

#### Doctoral Program in Physics

This is the generic Ph.D. degree which may specialize in any of the above research areas. This course of study is pursued by most students in the Ph.D. program. See below for a description of the degree requirements.

#### Doctoral Program with Concentration in Astronomy

The Department of Physics and Astronomy offers a Ph.D. degree with concentration in astronomy when the thesis work is carried out in the area of astronomy or astrophysics. Some of the requirement for the Ph.D. degree are substituted by astronomy courses.

#### Doctoral Program with Concentration in Physical Biology

This is an interdisciplinary concentration connected with the Laufer Center for Quantitative Biology. Students usually declare their interest in this concentration not later than the end of the first semester. Postponing this decision will result in a loss of time. There are several differences with the default physics concentration. The number of core courses is reduced by one course while several physical biology courses are required. Instead of the graduate lab students do rotations with faculty associated with the Laufer Center. Also the Graduate Seminar is substituted by the Laufer Center Journal Club.

#### Doctoral Programs with Concentration in Chemical Physics

The basic degree requirements for a student enrolled in this program are the same as those for other students in physics. Students will usually be advised to take one or more courses in chemical physics. The written part of the preliminary (comprehensive) examination is the same as for other physics students; the oral part will ordinarily be on topics in chemical physics. Subject to the approval of the chairpersons of the two programs involved, the student's research advisor may be chosen from participating members of the cooperating programs.

#### Master of Science Program with Concentration in Instrumentation

This is a two year Master of Science Program in which students focus on the study of modern research instrumentation.

### Master of Arts Degree in Physics

This program which can be completed in three or four semesters prepares you either of admission to a Ph.D. program or for a physics related job in a national lab or in the private sector.

#### Admission requirements of Physics and Astronomy Department

For admission to graduate study in Physics and Astronomy the following, in addition to the minimum Graduate School requirements, are required:

- A. A bachelor's degree in physics or a closely related field from an accredited institution.
- B. A minimum grade average of B in all undergraduate coursework, and B or better in the sciences and mathematics.
- C. Submission of the Graduate Record Examination (GRE) General Test and the Physics GRE subject test.
- D. For non-native speakers of English, submission of the Toefl or IELTS test.
- E. Admission by the Department of Physics and Astronomy and the Graduate School.

In special cases, a student not meeting requirement A (or, in unusual cases, requirement B) may be admitted on a provisional basis, without financial support. Upon admission, the student will be informed of the requirements that must be satisfied for termination of provisional status.

Retention of students in subsequent years will depend on satisfactory academic progress.

#### Research in the Physics and Astronomy Department

Research areas for the program include, Accelerator Physics and the Center for Accelerator Science and Education; Astronomy, Astrophysics and Cosmology; Atmospheric and Marine Sciences; Atomic, Molecular and Optical Physics; Experimental Condensed Matter and Devices; Experimental High Energy Physics; Experimental Nuclear Physics; Biological Physics at the Laufer Center; Theoretical Condensed Matter and Statistical Physics; Theoretical Nuclear Physics; Mathematical Physics; and Theoretical Particle Physics including String Theory. For information on this topic, please visit the program website at the link <http://graduate.physics.sunysb.edu/research/index.shtml>

A number of institutes dedicated to specific fields offer a diverse spectrum of research opportunities. The C. N. Yang Institute for Theoretical Physics focuses on research in fundamental theory such as particle theory, neutrino physics, string theory, supersymmetry, and statistical mechanics. The Nuclear Theory Institute works on non-perturbative quantum chromodynamics, and the properties of hadronic matter under extreme conditions such as those created in the Relativistic Heavy Ion Collider at BNL. The Simons Center for Geometry and Physics initiated by a significant private donation to the University offers research programs that are built on the historic close interaction between mathematicians and physicists at Stony Brook. The Laufer Center for Physical and Quantitative Biology aims to advance biology and medicine through discoveries in physics, mathematics and computational science. Data Science and computing in science and engineering including physics is performed at the Institute for Advanced Computational Science.

Stony Brook co-manages nearby Brookhaven National Laboratory which conducts research in the physical, biomedical, and environmental sciences, as well as in climate and energy technologies. Brookhaven Lab also builds and operates major scientific facilities that include the Relativistic Heavy Ion Collider (RHIC), the Center for Functional Nanomaterials, the National Synchrotron Light Source (NSLS) and its successor now under construction, NSLS II, the Brookhaven Computational Science Center with the IBM BlueGene supercomputer. Stony Brook is the largest academic user of Laboratory facilities with over 600 faculty, staff, and students involved in collaborative research (see <http://www.bnl.gov/sciencefor> for more information). Our nuclear physics faculty is one of the leading groups at RHIC. Experimental condensed matter and X-ray physicists in our department play a leading role in NSLS II and the Center for Functional Nanomaterials. Several of our colleagues are active in the interdisciplinary Stony Brook Center for Computational Science that uses the BlueGene supercomputer.

In addition to facilities at BNL, faculty and staff make use of many off-campus facilities including the Large Hadron Collider at CERN, Argonne National Laboratory and Lawrence Berkeley National Laboratory.

The Department had a Tandem Van de Graaff accelerator that after 40 years of nuclear research has been converted to educational, training, and accelerator R&D efforts. The Institute for Terrestrial and Planetary Atmospheres at the School of Marine and Atmospheric Sciences offers a program in atmospheric physics.

Astronomical research is conducted on both theoretical and observational topics. The group uses DOE supercomputing facilities as well as on-site Beowulf clusters for extensive simulations of astronomical objects and nuclear astrophysical processes. Recently we established a strong effort in cosmology as well.

Observational research focuses on topics in galactic and extragalactic star formation, substellar and stellar astrophysics, extrasolar planets, neutron stars, molecular clouds, and galaxy formation and evolution. Faculty and students are also frequent users of the National Optical Astronomy Observatories, the National Radio Astronomy Observatories, the observatories at Mauna Kea and the millimeter wave facilities at CARMA and Nobeyama observatories. They have also received extensive time on space-based observatories, including the Hubble Space Telescope, the Spitzer Space Telescope, the Herschel Space Observatory, and XMM-Newton.

#### Requirements for the M.A. Degree in Physics

1. Satisfactory performance in a program of studies (30 graduate credits) approved by the department. Normally such a program would include graduate seminars, classical mechanics, electrodynamics, and quantum mechanics.

2. Minimum grade point average of 3.0 in all graduate courses taken at Stony Brook.
3. Either passing the graduate comprehensive examination at the master's level or completion of a master's project.

#### Requirements for the M.S. Degree with Specialization in Scientific Instrumentation (MSI)

A candidate for the master's degree with concentration in instrumentation will be required to demonstrate a certain level of knowledge of physics (by written and/or oral examination), to take required and elective courses, and to complete both a major and minor project. The curriculum is designed to meet the needs of students learning about the design, construction, and testing of sophisticated instrument systems. The degree holder will not be a super-technician, but a professional scientist trained in both physics and measurement techniques.

A. A student shall demonstrate proficiency in undergraduate physics at the level of the courses PHY 335 (Junior Laboratory I), 405 (Advanced Quantum Physics). Students need to have demonstrated knowledge in two of the three areas Nuclear and Particle Physics (covered in PHY 431), Condensed Matter Physics (PHY 472) and Laser and Atomic Physics (PHY 452). This can be done (1) by acceptance by the Master's in Scientific Instrumentation Committee of courses taken as an undergraduate, (2) by written examination, or (3) by passing the courses appropriate to a student's background;

B. A course about research instrumentation (PHY 514);

C. Two semesters each of graduate lab (PHY 515) and graduate seminar (PHY 598, PHY 599);

D. Students shall work as teaching assistant in an undergraduate laboratory for at least one semester (being a TA in PHY 445 may satisfy the requirement of taking the second semester of graduate lab (PHY 515)); E. Thirty credits (minimum) of graduate courses (500 level or above), including a minor project and a master's thesis. This thesis must describe a major piece of work in scientific instrumentation and must be in a form acceptable to the Graduate School. It need not be original research in the same sense as a Ph.D. thesis, but it should be the result of an effort consistent with a year of full-time work. The thesis should present an improvement of the state of the art in some area, the development of a sophisticated apparatus, or some other significant laboratory project, and be defended before a committee;

F. Students shall acquire those technical skills deemed necessary by their thesis supervisors. These must include, but are not limited to, machining capability and computer literacy.

Each student will be assigned an advisory committee of three faculty members and will be required to meet frequently with them. It is expected that close communication among all the faculty and students involved will foster spirit, expose problems, and generally contribute to success.

#### Requirements for the Professional MSI Track

The only difference with the existing MSI program is that the minor project is replaced by a minimum of 9 credits of "Plus Courses" in Stony Brook's College of Business, the School of Journalism or similar courses from a different program (subject to approval). The advisory committee will advise the student on which "Plus Courses" to take.

For further information on this program, contact Professor Harold Metcalf.

#### Requirements for the Ph.D. Degree in Physics

A. Completion of the following core courses with a grade of B or better: 501, 505, 511, 512, 540. A student can skip one or more of these courses by sufficiently good performance in the corresponding parts of the placement exam (2<sup>nd</sup> year and older students need permission from the Graduate Program Director). Students who took similar courses elsewhere can satisfy this requirement by taking advanced graduate courses (subject to approval by an Advising Committee appointed by the Graduate Program Director);

B. Completion of required courses: Each of the courses listed below must be passed with a minimum grade of B:

1. PHY 598 and PHY 599 Graduate Seminars. These courses are normally taken during the first year of graduate study, one per semester, in either order.
2. PHY 515 Methods of Experimental Research. This course must be taken not later than the fourth semester of residence. This requirement can also be satisfied by PHY 517, Laboratory Course in Astronomical Techniques.
3. Three advanced courses, in three different areas of physics.

C. Passing of the written comprehensive examination. This is offered at the beginning of each semester. It is in five parts with exams on Classical Mechanics, Electrodynamics, Quantum Mechanics, and Statistical Mechanics. It must be passed in the student's fourth semester of study at Stony Brook or earlier. If taken as a placement exam for the core courses, it has to be passed at a higher level.

D. Passing an oral examination on a broad range of topics relevant to the student's intended area of thesis research. The oral examination should be passed before the beginning of the fifth semester of residency.

E. Acceptance of graduate student by an advisor for thesis work;

F. Teaching experience at least equivalent to that obtained in a one-year appointment as a teaching assistant, usually carried out in the first year;

G. Advancement to candidacy for the Ph.D. The department's recommendation to the Graduate School for advancement to candidacy is based on the satisfactory completion of all requirements listed above;

H. Research, dissertation, and passing the dissertation examination.

I. At least one year of residence.

#### Requirements for the Ph.D. Degree in Physics with Concentration in Astronomy

The requirements are the same except for B3. Instead the student shall take three astronomy core courses (PHY 521, PHY 522, PHY 523, PHY 524) and present a thesis proposal as an oral exam. In addition, the thesis work should be in the area of Astronomy or Astrophysics. The thesis proposal will be prepared in a Special Studies Course (PHY 585) with the advisor.

#### Requirements for the Ph.D. Degree in Physics with Concentration in Physical Biology

- A. Four Physics core course: Electrodynamics (PHY 505), Quantum Mechanics I (PHY 511), Statistical Mechanics (PHY 540) and either Classical Mechanics (PHY 501) or Quantum Mechanics II (PHY 512). Students can be exempted from these courses in the same way as in A above.
- B. Two Core Courses in Physical Biology: Physical Biology (PHY 558) and Biological Dynamics and Network (PHY 559)
- C. Biology For Physical Scientists (PHY 561)
- D. Two semesters of Teaching (PHY 600)
- E. Two semesters of Lab Rotations (PHY 584)
- F. Two semester of the Laufer Center Journal Club (PHY 665)
- G. Two Life Science courses form an approved list. Currently, the following courses have been approved: Biomolecular Structure and Analysis (CHE 541), Molecular Genetics (MCB 503), Structural Biology and Spectroscopy (MCB 512), Graduate Biochemistry I (MCB 520) and Cell Biology (MCB 656)
- H. Passing of the Comprehensive Exam.
- I. An oral exam on a topic in Physical Biology. The oral examination should be passed before the beginning of the fifth semester of residency
- J. Acceptance of the graduate student by an advisor working on the topic of Physical Biology.
- K. A Advancement to candidacy for the Ph.D. The department's recommendation to the Graduate School for advancement to candidacy is based on the satisfactory completion of all requirements listed above.
- L. Research, dissertation, and passing the dissertation examination.
- M. At least one year of residence.

Students who took similar courses elsewhere can satisfy this requirement by taking advanced graduate courses (subject to approval by an Advising Committee appointed by the Graduate Program Director);

Faculty of the Department of Physics and Astronomy

#### Distinguished Professors

**Dill**, Ken, Ph.D., 1978, UCSD, La Jolla: Physical Biology.

**Lattimer**, James M., Ph.D., 1976, University of Texas: Nuclear, neutrino and high- energy astrophysics; supernovae, neutron stars, dense matter; grain formation; isotopic anomalies in meteorites.

**Likharev**, Konstantin K. , Ph.D., 1969, Moscow State University, Russia: Mesoscopic physics.

**Jung**, Chang Kee, Ph.D., 1986, Indiana University: Experimental high-energy physics.

**McCoy**, Barry M. , Ph.D., 1967, Harvard University. C.N. Yang Institute for Theoretical Physics. Theoretical physics; statistical mechanics.

**Shuryak**, Edward, Ph.D., 1974, Institute of Nuclear Physics, Novosibirsk, Russia: Theoretical nuclear physics.

**Sterman**, George , Director of C.N. Yang Institute for Theoretical Physics. Ph.D., 1974, University of Maryland: Theoretical physics.

**Van Nieuwenhuizen**, Peter , Ph.D., 1971, University of Utrecht, Netherlands. C.N. Yang Institute for Theoretical Physics. Theoretical physics; quantum field theory.

#### Distinguished Teaching Professors

**Metcalf**, Harold J., Ph.D., 1967, Brown University: Atomic physics; laser cooling and trapping; atom optics; precision stark spectroscopy; lasers and optics.

**Hemmick**, Thomas, Ph.D., 1989, University of Rochester: Experimental nuclear physics; relativistic heavy ions.

#### Professors

**Abanov**, Alexander, Ph.D., 1997, University of Chicago: Theoretical Condensed Matter Physics.

**Allen**, Philip B., Ph.D., 1969, University of California, Berkeley: Theoretical condensed matter physics.

**Alvarez-Gaume**, Luis, Director, Simons Center, Ph.D., 1980, Stony Brook University: Theoretical Physics and Cosmology.

**Averin**, Dmitri V., Ph.D., 1987, Moscow State University, Russia: Theoretical condensed matter physics.

**Deshpande**, Abhay, Ph.D., 1995, Yale University: Nucleon spin and heavy ion physics

**Drees**, Klaus Axel, Chair of the Department, Ph.D., 1989, University of Heidelberg, Germany: Experimental nuclear physics; relativistic heavy ions.

**Goldhaber**, Alfred S. , Ph.D., 1964, Princeton University. C.N. Yang Institute for Theoretical Physics: Theoretical physics; nuclear theory; particle physics.

**Gonzalez-Garcia**, Concha , Ph.D., 1991, Universidad de Valencia, Spain. C.N. Yang Institute for Theoretical Physics. Theoretical Elementary Particle Physics

**Hobbs**, John, Ph.D., 1991, University of Chicago: Experimental high-energy physics.

**Kharzeev**, Ph.D., 1990, Moscow State University: Heavy ion physics and particle theory.

**Koch**, Peter M., Ph.D., 1974, Yale University: Experimental atomic physics; quantum chaos; nonlinear dynamics.

**Komargodski**, Zohar, Ph.D., Weizmann Institute of Science, 2008: Theoretical Physics.

**Korepin**, Vladimir , Ph.D., 1977, Leningrad University, Russia: C.N. Yang Institute for Theoretical Physics: Theoretical physics.

**Kumar**, Krishna S., Ph.D. 1990, Syracuse University. Experimental nuclear and heavy ion physics.

**Litvinenko**, Vladimir, Ph.D. 1989, Institute of Nuclear Physics, Novosibirsk, Russia: Accelerator physics and free electron lasers.

**McCarthy**, Robert L., Ph.D., 1971, University of California, Berkeley: Experimental high-energy physics.

**Mendez**, Emilio E., Director, Center for Functional Nanomaterials, BNL. Ph.D., 1979, Massachusetts Institute of Technology: Experimental condensed matter physics.

**Mihaly**, Laszlo, Ph.D., 1977, Eotvos Lorand University, Budapest, Hungary: Experimental condensed matter physics.

**Misewich**, James, Ph.D., 1984, Cornell University: Experimental Condensed Matter Physics.

**Nekrasov**, Nikita , Ph.D. 1996, Princeton University. Simons Center for Geometry and Physics: Mathematical physics.

**Perna**, Rosalba, Ph.D., Harvard University, 1999. High Energy Astrophysics.

**Rastelli**, Leonardo , Ph.D., 2000, Massachusetts Institute of Technology: String Theory.

**Rocek**, Martin , Ph.D., 1979, Harvard University. C.N. Yang Institute for Theoretical Physics: Theoretical physics: supersymmetry and supergravity.

**Rijssenbeek**, Michael, Ph.D., 1979, University of Amsterdam, Netherlands: Experimental high-energy physics.

**Shrock**, Robert , Ph.D., 1975, Princeton University. C.N. Yang Institute for Theoretical Physics: Theoretical physics; gauge theories; statistical mechanics.

**Siegel**, Warren , Ph.D., 1977, University of California, Berkeley. C.N. Yang Institute for Theoretical Physics: Theoretical physics; strings.

**Stephens**, Peter W., Ph.D., 1978, Massachusetts Institute of Technology: Experimental condensed matter physics. Verbaarschot, Jacobus J.M., Graduate Program Director, Ph.D., 1982, University of Utrecht, Netherlands: Theoretical physics.

**Verbaarschot**, Jacobus J., Ph.D., University of Utrecht, 1982. Graduate Program Director: Theoretical physics, strong interactions, random matrix theory.

**Walter**, Fredrick M., Ph.D., 1981, University of California, Berkeley: Stellar astrophysics, including X-ray optical and infrared photometry and spectroscopy; pre-main sequence objects.

**Weinacht**, Thomas, Ph.D., 2000, University of Michigan: Quantum Optics and Atomic Physics. Zahed, Ismail, Ph.D., 1983, Massachusetts Institute of Technology: Theoretical nuclear physics.

**Zahed**, Ismail, Ph.D., Massachusetts Institute of Technology, 1983: Theoretical nuclear

**Associate Professors**

- Calder**, Alan, Ph.D., 1997, Vanderbilt University: Observational Astronomy
- Dawber**, Matthew, Ph.D., 2003, Cambridge University: Experimental condensed matter physics
- Du**, Xu, Assistant Professor, Ph.D, University of Florida, 2004. Experimental condensed matter physics.
- Essig**, Rouven, Ph.D., 2008, Rutgers University.C.N. Yang Institute for Theoretical Physics: Theoretical particle physics.
- Fernandez-Serra**, Maria Victoria, Ph.D., University of Cambridge, 2005: Computational condensed matter.
- Herzog**, Christopher, Ph.D., 2002, Princeton University. C.N. Yang Institute for Theoretical Physics: Theoretical physics.
- Koda**, Jin, Ph.D., University of Tokyo, 2002. Astronomy.
- McGrew**, Clark, Ph.D., 1994, University of California Irvine: Experimental High Energy Physics.
- Meade**, Patrick, Ph.D. , 2006, Cornell University: phenomenological and theoretical explorations of the terascale. theoretical physics.
- Schneble**, Dominik A., Ph.D., 2002, University of Konstanz: Experimental atomic physics, ultracold quantum gases.
- Teaney**, Derek. Ph.D., 2001 Stony Brook University: Nuclear theory.
- Tsybychev**, Dmitri, Ph.D., 2004 University of Florida: Experimental high energy physics.
- Zingale**, Michael, Ph.D. 2000, University of Chicago: Computational astrophysics.

**Assistant Professors**

- Allison**, Thomas, Ph.D., 2010, University of California at Berkeley: Atomic, Molecular and Optical Experiment.
- Figueroa**, Eden, Ph.D. , 2008, University of Calgary/University of Konstanz, 2008: Atomic, Molecular and Optical Experiment.
- Kiryluk**, Joanna, Ph.D., 2000, University of Warsaw: Neutrino physics.
- Liu**, Mengkun, Ph.D., 2012, Boston University: Condensed Matter – experimental and device physics.
- Loverde**, Marilena, Ph.D., 2009, Columbia University. C.N. Yang Institute for Theoretical Physics: Cosmology.
- Piacquadio**, Giacinto, Ph.D., 2010, University of Freiburg: Experimental High Energy Physics.
- Sehgal**, Neelima, Ph.D., 2008, Rutgers University: Galaxies and cosmology.
- Syritsyn**, Sergey, Ph.D., 2010, MIT: Theoretical Nuclear Physics.
- Vafaei-Najafabadi**, Navid, Ph.D., UCLA, 2016: Experimental Accelerator Physics.
- von der Linden**, Anja, Ph.D., 2007, Ludwig Maximilian Universitaet Muenchen: Astrophysics.
- Wei**, Tzu-Chieh, Ph.D., 2005, University of Illinois, Urbana. C.N. Yang Institute for Theoretical Physics: Theoretical Particle physics.
- Wilking**, Michael, PhD., 2009, University of Colorado, Boulder: Experimental High Energy physics.

**Brookhaven Professor**

- Ben-Zvi**, Ilan, Ph.D., 1967, Weizmann Institute, Israel: Accelerator and beam physics.

**Research Faculty**

- Grannis**, Paul D., *Emeritus*, Ph.D., 1965, University of California, Berkeley: Experimental high-energy physics.
- Nomerotski**, Andrei, Ph.D., 1996, University of Padua: Cosmology and Instrumentation.
- Semenov**, Vasili, Ph.D., 1975, Moscow State University: Experimental condensed matter physics.
- Swesty**, Douglas, Ph.D., 1993, Stony Brook University: Computational astrophysics.
- da Via**, Cinazia, Ph.D., University of Glasgow, 1997: Experimental high Energy Physics.

**Adjunct Faculty**

**Bergeman**, Thomas, Ph.D., 1971, Harvard University: Theoretical atomic physics, interaction of light and matter, laser cooling, Bose condensation.

**Eisaman**, Matthew, Ph.D. , 2006, Harvard University: Experimental Condensed Matter Physics.

**Gu**, Genda, Ph.D., 1989, Harbin Inst. Of Technology: Experimental Condensed Matter Physics.

**Hao**, Yue, Ph.D., 2008, Indiana University: Accelerator physics.

**Karsch**, Frithjof, Ph.D. 1982, University of Bielefeld: Lattice QCD.

**Kayran**, Dmitry, Ph.D., Novosibirsk State University, 2001:. Accelerator Physics.

**Ku**, Wei, Ph.D., 2000, University of Tennessee: Theoretical condensed matter physics.

**Petrovic**, Cedimir, Ph.D., 2000, Florida State University: Condensed matter physics.

**Takai**, Helio, Ph.D., 1986, Rio de Janeiro: Experimental particle & heavy ion physics.

**Venugopalan**, Raju, Ph.D., 1992, Stony Brook University: Theoretical nuclear physics.

**Zhu**, Yimei, Ph.D., 1987, Nagoya University: Condensed matter physics.

**Emiritus**

**Yang**, Chen Ning , Emeritus. Ph.D., 1948, University of Chicago. C.N. Yang Institute for Theoretical Physics. Theoretical physics; field theory; statistical mechanics; particle physics.

**Affiliated Faculty**

**Jia**, Jangyong, Ph.D., Stony Brook University, 2003: Experimental Relativistic Nuclear Physics.

**Lacey**, Roy, Ph.D., 1987, Stony Brook University. Departement of Chemistry: High Energy Nuclear Physics.

**Johnson**, Christopher J., Ph.D., 2011, University of California San Diego. Department of Chemistry: Atomic and Molecular Physics.

**Oganov**, Artem, Ph.D., 2002, University College, London. Department of Geosciences: Geophysics.

**Wang**, Jin, Ph.D. 1991, University of Illinois: Department of Chemistry: Biology of physics.

Number of teaching, graduate, and research assistants, Fall 2017: 154

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*



Physiology and Biophysics Department

**Chairperson**

Todd Miller, Basic Science Tower T5, Room 180 (631) 444-3533

**Ph.D. Graduate Program Director**

Raafat El-Maghrabi, Basic Science Tower T6, Room 170 (631) 444-3049

**M.S. Graduate Program Director**

Inefta Reid, Inefta.Reid@stonybrook.edu

**M.S. Program Coordinator**

Diane Jewett, Basic Science Tower T6, Room 140 (631) 444-8818

**Graduate Program Administrator**

Odalis Hernandez, (631) 444-2299

**Degrees Awarded**

Ph.D. in Physiology and Biophysics; M.S. in Biomedical Sciences (Physiology and Biophysics Track)

**Web Site**

<http://pnb.informatics.stonybrook.edu/general/index.shtml>

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-gs](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-gs)

Physiology and Biophysics Department

The Department of Physiology and Biophysics offers a program of study leading to the degree of Doctor of Philosophy. The broad interests of our faculty provide diverse research opportunities ranging from systems physiology, to translational cancer research and single molecule biophysics. Our goal is to instruct students in the use of quantitative methods to study complex physiological problems of relevance to human health and disease.

The Department's principal areas of research specialization are 1) Ion channel and gap junction Biophysics, with emphasis on cardiology and vision; 2) Intracellular and intercellular signaling mechanisms in cancer and neurobiology; 3). Physiology at the cellular, organ, and intact animal levels with emphasis on transgenic models of disease; 4) Fluorescence microscopy with the largest concentrations of microscopy equipment at Stony Brook University.

Our curriculum is based on a foundation in Human Physiology with additional advanced courses in Statistical Methods, Biochemistry and the physical chemistry of Biomembranes. Through elective coursework in Applied Mathematics, Genetics, Neurobiology or Journalism students can tailor their training to their career goals. Students from our program have gone on to careers in academic and industrial research, government service and law.

Master of Science Degree in Biomedical Sciences, Physiology and Biophysics Track

**Goals of the Program**

The overall goals of the Master of Science degree program in Biomedical Sciences (Physiology and Biophysics track) are to provide students with a biomedical foundation towards their higher professional education or career goals in medicine and research. We seek to ready our students for entry and success into medical and dental programs, as well as positions of research staff scientist in laboratories and industry, a teaching career at the undergraduate college level, or further graduate study leading to the Ph.D. degree. To accomplish these goals, the program of study provides training in cellular and systems-level physiology, membrane biophysics, experimental design, data analysis, and commonly used laboratory techniques in integrative physiology. We provide a heavy emphasis on pathophysiology and clinical case-based learning. Elective coursework in Physiology and Biophysics, Biomedical Engineering, Neuroscience, Molecular and Cellular Biology, and Pharmacological Sciences are then selected to complement and expand on the above core training, and meet the individual needs of each student.

**Time**

All requirements must be completed within three years.

Admission requirements of Physiology and Biophysics Department

The minimum requirements for admission to The Ph.D program in Physiology & Biophysics are a Bachelor's Degree with a Major in the Physical or Biological sciences. Successful applicants have a grade point average of 3.25/4.0 or higher for their undergraduate curriculum, with special emphasis on coursework within the major. Admission requires submission of scores from the Graduate Record Exam (GRE). Successful applicants have GRE scores ranked in the upper half in all three areas of examination. No subject test is required. Students for whom English is not their native language, must establish English proficiency based on the results of your TOEFL or IELTS examinations. Applicants are required to provide three letters of recommendation that can speak to the student's academic and research performance. Preference is given to students with previous research experience. Students who do not meet these qualifications are encouraged to seek admission to our Master's program for additional preparation.

### Facilities of Physiology and Biophysics Department

In addition to the wide range of instrumentation and technical centers available on campus, the Department of Physiology and Biophysics is well equipped with major research instrumentation for physiological, metabolic, and biochemical studies. The department houses a Molecular Biology Core which has scintillation counters, ultracentrifuges, amino acid analyzers, protein sequencers, and a wide variety of chromatographic, electrophoretic, and spectrophotometric equipment. Also available are a peptide synthesizer, and a laboratory for chemical synthesis of low-molecular-weight compounds. NMR instrumentation is available through collaboration with other departments. Tissue culture services, including monoclonal antibody production, are also available. Specialized equipment used in studies of membrane physiology and biophysics (e.g., membrane electrophysiology and patch-clamp studies on ion channels) are in routine use in several faculty laboratories. The department also houses an imaging center containing two confocal microscopes with image acquisition and processing systems.

### Molecular Biology Core

The molecular biology core was established to provide students and faculty ready access to DNA/RNA recombinant technology. Departmental facilities include a 37-degree environmental room, a DNA synthesizer, and an automatic DNA sequencer, large orbital shakers, an array of incubators, DNA sequencing gel set ups (IBI), electrophoretic apparatus and power supplies, an IBI gel reader and a software package which permits the reading of DNA sequencing gels, a selection of restriction enzymes, and a number of cDNA expression libraries.

### Molecular Modeling

Computational molecular modeling and visualization are valuable tools for the study of signal transduction systems and protein structure/function. Some current applications of faculty affiliated with our Biophysics Program include examining the physical factors involved in protein/membrane, protein/protein, protein/DNA interactions, studying the specificity of ligand and substrate binding to enzymes, and building models of proteins using domain structures from homologous proteins. Several departmental members have access to the University's Supercomputing Center.

### Computing Facilities

Access to the campus-wide wireless network is available.. All computers are connected via Ethernet to a local area network.

### Requirements for the Ph.D. Degree in Physiology and Biophysics

In addition to the minimum Graduate School requirements, the following are required:

- A) Completion of HBY 531 or HBY 501, HBY 530, HBY 561 HBY 562, MCB 517, MCB 520, HBY 570, HBY 591, HBY 690, HBY 699, HBY 695, and 12 credits of elective courses.
- B) Satisfactory completion of the preliminary examination at the end of the second year of study.
- C) Submission of a thesis research proposal by the end of the third year.
- D) Participation in the teaching practicum.
- E) Submission of an approved dissertation and successful oral defense.
- F) Completion of all requirements within seven years.

### Requirements for the MS in Biomedical Science (Physiology and Biophysics track)

Two curriculum tracks exist for the M.S. Program in Biomedical Sciences (Physiology and Biophysics concentration). A total of at least 30 credits is required for the standard thesis M.S. degree, while 36 credits is required for the research track M.S. degree. Regardless of the track chosen, all students will be required to complete the same foundational core coursework that covers cellular and systems physiology, biophysics, experimental design, data analysis, and a laboratory techniques course. These items are integrated into the following coursework; therefore the program has adopted them as course requirements:

### Core Curriculum

- HBY 501 – Systems Physiology (4 credits)
- HBY 530 – Cellular Physiology and Biophysics (3 credits)
- HBY 561 – Statistical Analysis of Physiological Data (1 credit)
- HBY 562 – Model Based Analysis of Physiological Data (1 credit)
- HBY 564 – Experimental Techniques in Systems Physiology (2 credits)
- HBY 570 – Student Journal Club (1 credit, repeated at least 2x)
- HBY 690 – Seminar in Physiology and Biophysics (1 credit, repeated at least 2x)
- GRD 500 – Scientific Integrity (1 credit)

Additional Requirement for 36 Credit Research Thesis

HBY 599 – Master's Thesis Research (6 credits)

Faculty of Physiology and Biophysics Department

### Departmental Faculty

Brink, Peter R., Professor Emeritus. Ph.D., 1976, University of Illinois: Physiology and biophysics of functional and excitable membranes.

Cohen, Ira S., Leading Professor, M.D., Ph.D., 1974, New York University: Electrophysiology of the heart; synaptic physiology.

Lin, Richard, Professor, M.D., 1988, University of California: Mechanism of hormone action; Inter- and intracellular regulation of membrane-bound hormone-sensitive enzymes. , PI3 kinase signaling.

Mathias, Richard T. Professor, Ph.D., 1975, University of California, Los Angeles: Electrophysiology of cardiac muscle; volume regulation in the lens.

Miller, W. Todd, Professor, Interim Chairperson Ph.D., 1988, Rockefeller University: Protein structure and function; molecular mechanisms of signal transduction.

Moore, Leon C, Professor Emeritus, Ph.D., 1976, University of Southern California: Renal physiology.

Scarlata, Suzanne, Professor, Ph.D., 1984, University of Illinois: Biophysics of signaling proteins.

Solomon, Irene C., Professor,, Ph.D., 1994, University of California, Davis: Neural control of respiratory motor output and fast oscillatory rhythms.

White, Thomas W., Professor, Ph.D., 1984, Harvard University: Biology of cell-to-cell communication and gap junction.

Bowen, Mark, Associate Professor, Ph.D., 1998 , , University of Illinois, Chicago; Molecular aspects of signal transduction.

Clausen, Chris, Associate Professor, Ph.D., 1979, University of California, Los Angeles: Electrical properties of transporting epithelia.

Spector, Ilan, Associate Professor, Ph.D., 1967, University of Paris, France: Electrophysiology of nerve and muscle cell lines; ion channels; neurotoxins.

Acosta, Maricedes, Assistant Professor, Ph.D, 2002, Albert Einstein College of Medicine; Neuroendocrine regulation of the reproductive axis; signal transduction pathways and metabolic control.

### Jointly Appointed Faculty

Dilger, James P.<sup>5</sup>, Professor, Ph.D., 1980, Stony Brook University: Neuromuscular junction; ion channels in nerve membranes.

Konopka, James B.<sup>17</sup>, Professor, Ph.D., 1985, UCLA: G protein-coupled receptor signal transduction and yeast morphogenesis.

Mendell, Lorne<sup>1</sup>, Distinguished Professor, Ph.D., 1965, Massachusetts Institute of Technology: Physiology and modify ability of synapses in the spinal cord.

McKinnon, David<sup>1</sup>, Professor, Ph.D., 1987, Australian National University: Control of ion channel expression.

Qin, Yi-Xian<sup>18</sup>, Professor, Ph.D., 1997, Stony Brook University: Mechanisms in the control of tissue growth, bone adaptation by mechanical environment.

Reid-Martin, Inefta, Assistant Professor, PhD, 2014, Stony Brook University: characterizing the effects of postnatal maturation on basal respiratory activity and hypoxic ventilatory responses in neonatal rats in vivo

Smith, Steven O.<sup>14</sup>, Professor, Ph.D., 1985, University of California, Berkeley: Molecular mechanisms of signal transduction.

Collins, William<sup>1</sup>, Associate Professor, Ph.D., 1980, Univ. of Pennsylvania: Relationship between intrinsic properties of individual neurons and nervous system function.

Frame, Mary<sup>18</sup>, Associate Professor, Ph.D., 1990, University of Missouri: Microcirculation; tissue engineering; nanofabrication.

Cameron, Roger H., Assistant Professor. Ph.D., 1990, Stony Brook University: Electron microscopy; pharmacology of plasma cells secretion.

El-Maghrabi, Raafat, Associate Professor. Ph.D Graduate Program Director, Ph.D., 1978, Wake Forest University: Enzyme regulation; hormonal control of metabolism.

Luberto, Chiara, Assistant Professor, Ph.D., 1997, Catholic University of Rome: Cancer biology; Sphingolipid metabolism and signaling.

Rosati, Barbara, Assistant Professor. Ph.D., 2000, Milan, Italy: Transcriptional regulation of ion channel genes in the heart.

Valiunas, Virginijus, Assistant Professor. Ph.D., 1992, Kaunas Medical University, Lithuania: Gap junction; intercellular communication and cardiac electrophysiology.

Varadaraj, Kulandaiappan, Assistant Professor. Ph.D., 1991, Madri Kamaraj University: Lens membrane proteins and gap junctions.

Warren, Kelly, Assistant Professor. Ph.D., 2008, Stony Brook University

Yang, Vincent<sup>2</sup>, Professor MD, Ph.D., Rutgers University, Princeton University: Department of Medicine: cloning and characterization of Krüppel-like factors (KLFs)

Khan, Sardar Ali, Professor, M.D., 1964, Bangalore Medical College: Erectile Dysfunction, Pelvic surgery and general urology.

#### **Affiliated Faculty**

Colognato, Holly, Ph.D., 1999, Rutgers Univ., Department of Pharmacological Sciences; Extracellular matrix in brain: roles during development and during neurodegeneration.

Frohman, Michael, MD, Ph.D., Univ. of Pennsylvania, School of Medicine, Department of Pharmacological Sciences; Lipid Signalling

Grollman, Arthur P., Distinguished Professor, M.D., 1959, Johns Hopkins University: Department of Pharmacological Science. Chemical carcinogenesis and mutagenesis.

Kritzer, Mary, Ph.D, Yale Univ., Dept. of Neurobiology; Complex functions of the association cortices and the neurobiological basis for their dysfunction in disease.

London, Erwin, Professor, Ph.D., 1979, Cornell University: Department of Biochemistry. Membrane lipid-protein interactions; protein toxin structure and function.

Malbon, C., Leading Professor, Ph.D., 1976, Case Western Reserve University: Department of Pharmacology. Elucidating the genetic basis of developmental and metabolic diseases.

Matthews, Gary, Leading Professor, Ph.D., 1975, University of Pennsylvania: Department of Neurobiology and Behavior. Cellular biophysics of electrical signals in the retina.

Rashba, Eric, Professor, MD, 1992, Yale School of Medicine: Department of Medicine: new mechanisms of QT prolongation and prediction and prevention of sudden cardiac death

Rubin, Clinton, T., Professor, Ph.D., 1983, Bristol University: Department of Orthopaedics. Cellular mechanisms responsible for adaptation in bone.

Sampson, Nicole S., Professor, Ph.D., 1990, University of California Berkeley: Enzyme mechanisms and protein structure-function relationships.

Tonge, Peter J., Professor, Ph.D., 1986, University of Birmingham, England: Department of Chemistry. Enzyme mechanisms in antitubercular drugs and Alzheimer's disease.

Wong, Stanislaus, Assistant Professor, Ph.D., 1999, Harvard University: Department of Chemistry. Fundamental structure correlations in unique nanostructures.

- 1) Joint appointment, Department of Neurobiology
- 2) Joint appointment, Department of Medicine
- 3) Joint appointment, Department of Surgery
- 4) Joint appointment, Department of Pediatrics
- 5) Joint appointment, Department of Anesthesiology
- 6) Joint appointment, Cold Spring Harbor Laboratory
- 7) Joint appointment, Brookhaven National Laboratory
- 8) Joint appointment, Department of Applied Mathematics and Statistics
- 9) Joint appointment, Department of Orthopedics
- 10) Joint appointment, Veterans Administration Hospital
- 11) Joint appointment, North Shore University Hospital
- 12) Joint appointment, Department of Urology

- 13) Joint appointment, SUNY Old Westbury
- 14) Joint appointment, Department of Biochemistry and Cell Biology
- 15) Joint appointment, Department of Biology, University of Tulsa, Oklahoma
- 16) Joint appointment, Department of Pharmacology, College of Physicians and Surgeons, Columbia University
- 17) Joint appointment, Department of Molecular Genetics and Microbiology
- 18) Joint appointment, Department of Biomedical Engineering
- 19) Joint appointment, Department of Pharmacological Sciences

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

Spring 2018

Department of Political Science

**Chairperson**

Matthew Lebo, Ward Melville Social and Behavioral Sciences Building S-711 (631) 632-7667

**Graduate Program Director**

Jennifer Jerit, Ward Melville Social and Behavioral Sciences Building N-725 (631) 632-3267

**Graduate Coordinator**

Carri Horner, Ward Melville Social and Behavioral Sciences Building S-703 (631) 632-7667

**Degrees Awarded**

M.A. in Political Science; Ph.D. in Political Science

**Website**

<http://www.stonybrook.edu/polsci/>

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-gs](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-gs)

Ph.D. Program in Political Science

The Ph.D. program in Political Science, in the College of Arts and Sciences, is characterized by several distinct features:

A. Three areas of specialization

1. Political Psychology/Behavior
2. Political Economy and Public Policy
3. American Politics

B. Close student/faculty interaction

C. An emphasis on professional training of research-oriented students and the production of professional-quality articles and conference papers by Ph.D. students.

**Political Psychology/Behavior**

The doctoral concentration in political psychology/behavior applies contemporary psychological theories, concepts, and research methods to the study of political behavior. Students are trained in topics and methods associated with psychology as well as political science. Methodological concerns focus on experimentation and survey research. In addition to formal training in methods appropriate to the psychological study of political behavior, students are apprenticed to ongoing research projects throughout their course of training. Students become familiar with the department's extensive and well-equipped laboratories and the regular subject pool. Opportunities are also available to take part in ongoing survey research projects.

The substantive interests of the faculty in this area include voter decision-making processes, political socialization, political values and beliefs, the mass media, political cognition, group influence, and public opinion.

**Political Economy and Public Policy**

The concentration in political economy and public policy emphasizes the interaction between politics and the institutions (both public and private) that shape economic policies. Students choosing this concentration analyze important issues by focusing on decision-making and organizational behavior as shaped by individual incentives and institutional structures. In addition to the foundation course in public policy required of all students, elective seminars in this field include policy evaluation, organizational decision-making, bureaucracy, regulation, institutional analysis, and urban politics.

The faculty have published research on issues such as the economic development of metropolitan areas, the political economy of suburbs, political controls over regulatory bureaucracies, and citizen responses to tax policies. A sample of other ongoing research projects in which incoming students may become involved include the effect of market-like incentives in school choice, subsidy flows in the European Union, the role of social capital in environmental decision making, and regulation of business by state governments. The economic approach is also used to investigate other political processes such as voting, party competition, and agenda setting.

**American Politics**

The American politics concentration provides a broad perspective on national political institutions and processes, with particular emphases on elections and courts. Courses focusing on political parties and elections, the legislative process, the American judiciary, electoral behavior, American political ideology, and public choice theory are offered. Students become familiar with the kinds of quantitative and formal analysis techniques most often applied to the study of American politics. Seminar papers allow students to go into detail on topics of special interest.

Members of the faculty are currently doing research on congressional and Supreme Court decision-making, the role of economic forces in American national elections, voting in congressional elections, issues of gender and the law, and the dynamics of American public opinion.

**Methodology**

Since we believe that a strong background in research methods is essential for political scientists interested in empirical research, we provide a rigorous training in the application of statistical methods and formal models to political analysis. Coursework in methods includes introductory training in research design and elementary statistics, as well as more advanced work in statistical analysis, econometrics, time series analysis, and measurement. The department recognizes that many undergraduates in political science come to graduate school without much background in statistics and math. Therefore, our courses start at an introductory level and slowly develop the skills necessary to do publishable research in political science. In addition to the classroom work, these courses all involve analysis of actual data on personal computers. We believe, however, that it is the application of research methods, first as part of faculty and class research projects and then in a student's own dissertation research, that makes a qualified researcher with the skills required for success in research and academic careers.

**Admission requirements of the Department of Political Science**

The Department of Political Science Doctoral Program admits only students who intend to complete the Ph.D., although students are eligible to receive the M.A. Applicants for admission to the Ph.D. program in political science must meet the following requirements:

- A. Submission of Graduate Record Examination (GRE) Test scores (verbal, quantitative, and analytic).
- B. Prior training that includes basic work in at least two of the following:
  - 1. Political science
  - 2. Psychology
  - 3. Mathematics or statistics
  - 4. Economics or sociology
- C. A bachelor's degree with at least a B average in the major subject.
- D. Three letters of recommendation from instructors or academic advisors.
- E. In those cases where the departmental admissions committee deems it desirable, personal interviews with departmental representatives may be necessary.

Acceptance by both the Department of Political Science and the Graduate School is required.

**Facilities of the Department of Political Science**

The department has extensive research facilities equal to any in the country, most located on the same floor with faculty and student offices. Students routinely use the conveniently located computer facilities for writing and analysis as part of their professional training. The Social and Behavioral Sciences Data Laboratory on our floor provides access to state-of-the-art personal computers tied to a local computer network and providing connections to all computers on campus. The Stony Brook Instructional Networked Computer site one floor below the department provides additional personal computers for classroom and research work. In addition, our data lab maintains a library of reference materials, holds classes on specific software packages, provides access to the extensive data archives available through the Inter-University Consortium for Political and Social Resources, and employs computer consultants to help with student research projects. All of the resources of the data lab are available to graduate students.

The laboratories for political psychology research are designed for the experimental study of political behavior. One set of labs contains computerized equipment to monitor, control, record, and analyze multiple responses from subjects. Much of the recent work focuses on information processing and decision-making—how citizens interpret, use, and recall political information. The other set of labs contains a large survey and experiment room equipped with computerized data collection stations. Students may also take advantage of our modern, fully equipped Survey Center for public opinion studies using computer-assisted, telephone interviewing.

**Requirements for the M.A. Degree**

In addition to the minimum requirements of the Graduate School, the Department requires all candidates to complete 30 credits of approved graduate coursework in which a grade of B or higher has been received.

**Requirements for the Ph.D. Degree in Political Science**

Candidates must meet the general requirements for the Ph.D. degree set by the Graduate School. Departmental requirements are as follows:

**A. Core Courses**

Students take four core courses:

- 1. POL 600 Research Project
- 2. POL 601 Public Policy and Political Economy
- 3. POL 605 American Government
- 4. POL 608 Political Psychology

**B. Methods**

Students are expected to master the methods necessary to engage in scholarly work:

1. All students take a three-course sequence in mathematics, statistics, and research methods (POL 602, POL 603, POL 604).
2. All students are required to take at least one advanced methods course either in this department or in a cognate field (e.g., economics). The student's choice of advanced elective(s) is decided in conjunction with the student's advisor.
3. In addition to requirements 1 and 2 above, political psychology students take POL 610, a graduate-level course in experimental design. Political economy and American Politics students must take POL 613, Game Theory.
4. Students who have attended the ICPSR Summer Program in Quantitative Methods at the University of Michigan can have the advanced elective requirement waived.

**C. Electives**

Students take a minimum of four advanced seminars in their area of specialization and three in their minor area. The seminars are typically at the 600 level and can be within the department or can be in cognate fields such as psychology, economics, or applied math. The course of study is selected by the student in consultation with his or her advisor and must be approved by the graduate program director.

**D. Teaching and Research Apprenticeship**

To ensure that all students become proficient in teaching and research, students work with the faculty on an individual basis. Funded students participate in faculty research projects and assist in teaching courses. Advanced students then prepare and teach their own undergraduate classes.

**E. Evaluation**

Graduate students in the Ph.D. program are formally evaluated at the end of each semester, based on grades received in the program and on evaluations by faculty familiar with the student's work.

The evaluation committee's charge is to make one of the following three possible determinations with regard to the student's progress: (1) recommend continuation of graduate study toward the Ph.D., (2) recommend that the student be allowed to continue toward a terminal M.A. but not to continue in the Ph.D. program, or (3) recommend that the student not be permitted to enroll in additional graduate courses in the department.

The evaluation also serves as the basis for the decision as to whether the student is to receive financial support during subsequent semesters of graduate work.

**F. Qualifying Examinations**

1. Timing of Examinations: Students making normal progress toward the Ph.D. should anticipate taking qualifying examinations following the second year of coursework. Examinations in three fields compose the doctoral qualifying examinations.
2. Examination Fields: The department's policy is to allow students to take exams only in those areas in which its faculty strengths allow in-depth training, including:
  - a. Methods
  - b. American Politics
  - c. Political Economy and Public Policy
  - d. Political Psychology/Behavior

All students are required to take the methods exam. Students then prepare two of the three other substantive areas for written examination.

3. Preparation and Evaluation of Examinations: The graduate program director appoints a committee (with a designated committee chairperson) responsible for each examination field. The committee prepares the written examination, providing sufficient options for questions on which students may write. The committee members read the student's examination and prepare an evaluation of that performance, which is reviewed by the Ph.D. committee.

**G. Dissertation**

Following successful completion of the qualifying examinations, the student begins the process of preparing his or her dissertation.

The third year includes developing a directed reading course under the supervision of a dissertation director. Through the readings the student will explore specialized research literature in the area of a proposed dissertation, develop an initial bibliography, and formulate a specific question for research. The second half of the year includes working with the dissertation director and selecting a dissertation committee consisting of four faculty members—three from the Department of Political Science and one with whom the student has worked outside of the department. The third year culminates with a presentation of the dissertation proposal by the student and its acceptance by the dissertation committee.

Should the dissertation committee reject the proposal, a candidate is allowed to revise the proposal for a subsequent defense. If this second defense also results in failure, the student's program is terminated.

Upon successful conclusion of research, the student defends the completed dissertation to the committee and the University community at large.

**Courses**



**Ph.D. Program**

*The required courses for first-year students are given every year; electives are generally offered every other year. Courses are open to qualified students from other programs with permission of the graduate program director.*

**Required Courses**

Electives: Methodology

Electives: American Politics

Electives: Public Policy

Electives: Political Psychology

Electives: General

Faculty of the Department of Political Science

**Distinguished Professors**

Lodge, Milton G., Emeritus, Ph.D., 1967, University of Michigan: Political psychology; political cognition.

Segal, Jeffrey A., Chairperson, Ph.D., 1983, Michigan State University: Judicial process and behavior; research methods; American politics.

Myers, Frank, Emeritus, Ph.D., 1965, Columbia University: Comparative politics; political theory.

**Professors**

Barabas, Jason, Ph.D. 2000, Northwestern University: American politics, methodology, public policy.

Feldman, Stanley, Ph.D., 1978, University of Minnesota: American politics, emphasizing political psychology and socialization; public opinion; voting behavior and participation; methodology.

Huddy, Leonie, Ph.D., 1987, University of California, Los Angeles: Political attitudes; groups and politics; sociopolitical gerontology; women and politics.

Jerit, Jennifer, Ph.D. 2002, University of Illinois: Political psychology, citizen competence, media effects, persuasion, political rhetoric.

Koppelman, Lee E., Emeritus, D.P.A., 1970, New York University: Comprehensive regional and urban planning; environmental policy; American federalism and intergovernmental relations; regional policy analysis; coastal zone planning.

Lebo, Matthew, Ph.D., 1999, University of North Texas: Political parties; public opinion; elections; political methodology.

Norpoth, Helmut, Ph.D., 1974, University of Michigan: Electoral behavior; public opinion

Salins, Peter D., SUNY Provost and Vice Chancellor for Academic Affairs. Ph.D., 1969, Syracuse University: Public policy; regional planning.

Taber, Charles S., Dean of Graduate School, Ph.D., 1991, University of Illinois: International relations; political psychology; foreign policy; conflict modeling; computational modeling.

**Associate Professors**

Lahav, Gallya, Ph.D., 1995, City University of New York: Political psychology; comparative politics.

Krupnikov, Yanna, Ph.D., 2009, University of Michigan: Political psychology, political communication, political persuasion, political behavior, empirical methodology.

Smirnov, Oleg, Ph.D., 2005, University of Oregon: Evolutionary game theory; computational and agent-based modeling; experimental economics; evolutionary psychology.

Peress, Michael, Ph.D. 2006, Carnegie Mellon University: Voting behavior, legislative institutions, electoral systems, methodology, formal theory.

Ryan, John, Ph.D., 2009, University of California-Davis: Political communication, social networks, campaigns, voting behavior.

**Assistant Professors**

Delton, Andrew, Ph.D., 2010, University of California-Santa Barbara: Evolutionary psychology, behavioral economics, cooperation and altruism, social cognition.

DeScioli, Peter, Ph.D., 2008, University of Pennsylvania: Evolutionary psychology, behavioral economics, morality, alliances.

Kline, Reuben, Ph.D. 2010, University of California-Irvine: Behavioral political economy, fairness, social preferences, climate change mitigation, corruption,

Vittorio E. Merola Marotta, Ph.D. 2016, Ohio State University: Voting behavior, attitudes about inequality, redistribution, and immigration.

Nam, Hannah, Ph.D., 2016, New York University: Political psychology, neuro-cognitive correlates of political ideology, system justification, public opinion.

Sawyer, Katherine, Ph.D. 2017, University of Maryland: Civil conflict, rebellion movements, leaders and organizational dynamics, methodology.

Julian J. Wamble, Ph.D. 2017, University of Maryland: Race and ethnic politics, political psychology, survey methodology.

Number of teaching, graduate, and research assistants, fall 2009: 22

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

Spring 2018

Political Science, M.A. in Public Policy

**Chairperson**

Matthew Lebo, Ward Melville Social and Behavioral Sciences Building S-711 (631) 632-7667

**Graduate Program Director**

Yanna Krupnikov, Ward Melville Social and Behavioral Sciences Building S-701

**Graduate Coordinator**

Carri Horner, Ward Melville Social and Behavioral Sciences Building S-703 (631) 632-7667

**Degrees Awarded**

M.A. in Public Policy

**Website**

[http://www.stonybrook.edu/commcms/polisci/graduate/ma\\_public\\_policy.html](http://www.stonybrook.edu/commcms/polisci/graduate/ma_public_policy.html)

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-gs](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-gs)

Political Economy and Public Policy

Stony Brook University's Master of Arts in Public Policy prepares students to take a wide variety of rewarding careers in the growing field of public policy.

Graduates of the MAPP program will gain the skills and experience to achieve success working in government or in organizations affected by government – local, state, national and international. They may find employment as policy analysts and executives in government agencies, or in private, non-profit and advocacy organizations. They may enter the front lines of politics as elected officials or members of their staffs. They may influence public policy as journalists or leaders of civic organizations. Those with an international background or an interest in global affairs may enter careers abroad or in international affairs. For those looking to continue their professional or graduate studies, the MAPP provides a rigorous academic platform.

For students entering the public policy field for the first time, the program offers training and credentials to launch their careers; for those already working in the field, the program will enhance their skills and credentials. Graduates of the program will be joining a growing roster of alumni successfully working in public, private and non-profit organizations. With our flourishing alumni organization, MAPP alumni will be available to assist graduates with employment and career counseling.

**Course of Study**

The MPP program combines rigorous instruction in key components of public policy development with detailed analysis of specific public policy issues and fieldwork. After introducing students to the foundations of government action in philosophy, law and economics, the MAPP curriculum develops skills in political, economic, quantitative and organizational analysis, with a practical focus on solutions to complex public policy problems. With this foundation, students take one or more courses in a specialized concentration and a related internship or research assignment. The entire program of 30 credit hours can be completed in one calendar year by full-time students, and within two years by those attending part-time.

**Joint Degree Programs**

Combined MAPP/MPH

With additional coursework, students interested in pursuing a career in the increasingly important field of health policy may elect to earn a Master of Public Health degree along with their MAPP in a combined and accelerated 54-credit MAPP/MPH sequence.

Combined MAPP/MBA

With additional coursework, students interested in applying public policy concepts to the world of business may elect to earn a Master of Business Administration degree along with their MAPP in a combined and accelerated 69-credit-hour MAPP/MBA sequence.

Accelerated BA/MAPP Program

Stony Brook University undergraduates currently majoring in Political Science with a GPA of 3.0 or better are eligible to enroll in the five-year Accelerated BA/MAPP program, by taking up to six graduate credits while they fulfill the upper-level undergraduate elective requirements and completing the remaining graduate requirements in the fifth year of full-time study.

**The Students**

Students in the MPP program come from numerous academic backgrounds including undergraduate majors in the arts and sciences, health professions, engineering and architecture. Many students come to the program with extensive prior experience in government or the professions.

The curriculum structure and scheduling of courses is designed to accommodate candidates with a broad range of interests and experiences, and to permit those that are working to earn their degree while continuing to pursue their current career.

### **The Faculty**

The MPP program is housed in one of the country's leading departments of political science, ranked among the top five in research and publications, with a faculty comprised of nationally recognized scholars and highly experienced public policy professionals. In addition, the program draws on faculty resources from other prestigious Stony Brook programs in health policy, business administration, economics, engineering, education and journalism.

Admission requirements of the Department of Political Science

### **Admission Requirements**

Applicants must have an earned baccalaureate degree with a grade point average of 3.0 or better (on a 4.0 scale), have taken the Graduate Record Examination or equivalent, and submit three letters of recommendation from instructors, academic advisors or employers. Consideration will also be given to relevant work experience.

### **Tuition and Fees**

Tuition and fees, set by the State University of New York, are considerably below those of comparable programs in Long Island and the greater New York metropolitan region. For current tuition and fee schedules, please consult the Stony Brook University website.

Facilities of the Department of Political Science

The department has extensive research facilities equal to any in the country, most located on the same floor with faculty and student offices. Students routinely use the conveniently located computer facilities for writing and analysis as part of their professional training. The Social and Behavioral Sciences Data Laboratory on our floor provides access to state-of-the-art personal computers tied to a local computer network and providing connections to all computers on campus. The Stony Brook Instructional Networked Computer site one floor below the department provides additional personal computers for classroom and research work. In addition, our data lab maintains a library of reference materials, holds classes on specific software packages, provides access to the extensive data archives available through the Inter-University Consortium for Political and Social Resources, and employs computer consultants to help with student research projects. All of the resources of the data lab are available to graduate students.

The laboratories for political psychology research are designed for the experimental study of political behavior. One set of labs contains computerized equipment to monitor, control, record, and analyze multiple responses from subjects. Much of the recent work focuses on information processing and decision-making—how citizens interpret, use, and recall political information. The other set of labs contains a large survey and experiment room equipped with computerized data collection stations. Students may also take advantage of our modern, fully equipped Survey Center for public opinion studies using computer-assisted, telephone interviewing.

Degree Requirements M.A. in Public Policy

### **Program Tracks**

#### **M.A. Track**

This track requires the successful completion of 30 graduate course credits. In addition, the Graduate School policy regarding grade point averages (GPA) states that, "A student must achieve a 3.0 overall GPA in all graduate courses taken at Stony Brook to receive a degree."

Beyond those guidelines, there are no formal requirements. In particular, students should work with the MAPP program assistant and the Graduate Program Director to develop a course plan. There are two courses comprising 6 credits (3 credits each) that most students will take, subject to availability and scheduling:

POL 501 Introduction to Statistics for Public Policy (3 credits)

POL 535 Public Policy Analysis & Evaluation (3 credits)

Beyond the courses noted above, and contingent upon course availability, students will take additional courses (18 credits) offered by the Department of Political Science. Examples of courses offered toward the M.A. degree in Public Policy include the following:

POL 502 Intermediate Statistics for Public Policy (3 credits)

POL 509 Public Budgeting and Finance (3 credits)

POL 510 Personnel Systems for Public Policy (3 credits)

POL 530 Topics in Public Affairs (3 Credits)

POL 531 Topics in Public Affairs (3 Credits)

POL 534 Intergovernmental Relations and Policy Delivery (3 credits)

POL 536 Public Management and Organizational Behavior (3 credits)

POL 537 Administrative Law for Policy Analysts (3 credits)

POL 538 The Politics of Local Economic Development (3 credits)

POL 540 Data Applications in Public Policy (3 Credits)

POL 541 Survey Research for Public Policy (3 credits)

POL 542 Regional Planning (3 credits)

POL 543 Environmental Politics and Policy (3 credits)

Some of the courses listed above may be repeated for credit (e.g., the POL 530/531 Special Topics courses or the two different versions of POL 509 budgeting), but students attempting to re-take a course with the same number should confirm their choices with MAPP program staff and the course catalog prior to enrolling. In addition, students may take other level graduate courses in POL (typically 500-level) with the approval of the MAPP Graduate Program Director. Students may take one course outside of Department of Political Science in place of a POL course.

Finally, most students will take a capstone course to complete the M.A. in Public Policy. The capstone courses are:

POL 597 Master's Paper (1-6 credits)

or

POL 599 Internship in Public Policy (1-6 credits)

Prior to taking the capstone course (or while enrolled in a capstone course), students should enroll in POL 598 Capstone Seminar, a course designed to prepare students for their capstone project or internship. POL 598 is typically considered to be a prerequisite for taking POL 597 or POL 599.

Full-time students without past significant full-time public policy work experience are encouraged to take the Internship in Public Policy. Part-time students can fulfill their capstone requirement by the Internship (POL 599), the MA paper course (POL 597), or two additional courses approved by the Graduate Program Director.

### **B.A./M.A. Track**

Stony Brook University students currently enrolled with a major in Political Science are eligible for the five year B.A./M.A. program, in which up to six graduate credits are earned during the senior year, while also fulfilling the B.A. requirements. Consult the Undergraduate Bulletin for B.A. requirements. Upon admission to the program, the following two courses (or others approved by the Graduate Program Director) are taken in the senior year and also satisfy the upper level undergraduate elective requirement:

POL 535 Public Policy Analysis and Evaluation (3 credits)

POL 536 Public Management & Organizational Behavior (3 credits)

The student then completes the remaining graduate requirements during the fifth year of full-time study.

Faculty of the Department of Political Science, Public Policy Program

### **Professors**

Barabas, Jason: Professor & Program Director. Ph.D., Northwestern University, 2000. Research & Teaching Interests: Public Policy; Health Care & Retirement; Public Opinion; Survey Research & Experiments; Methodology.

Huddy, Leonie: Professor. Ph.D., University of California, Los Angeles, 1988. Research & Teaching Interests: Political Attitudes; Groups and Politics; Socio-political Gerontology; Women and Politics; Survey Methodology.

Stephanie Kelton: Professor. Ph.D. New School for Social Research, New York, 2001. Research & Teaching Interests: Macroeconomic Policy; International Economics; Government Finance, Student Debt, Social Security, and Employment Policy.

Salins, Peter: University Professor. Ph.D., Syracuse University, 1969. Research & Teaching Interests: Higher Education Policy; Housing, Economic Development; Immigration; Urban and Regional Planning.

### **Leading Professors**

Koppelman, Lee E., Emeritus, D.P.A., 1970, New York University: Comprehensive regional and urban planning; environmental policy; American federalism and intergovernmental relations; regional policy analysis; coastal zone planning.

### **Adjunct Professors**

Withers, Harold, Former Suffolk County Deputy Director of Planning and Commissioner of Consumer Affairs. Ph.D., Fordham University. Teaching Interests: Public policy; Federalism.

Kovesdy, Allen, MBA, Long Island University, 1972. Long Island Regional Planning Council; Former Director of Management and Research, Suffolk County Executive's Office. Teaching Interests: Budgeting; Public Finance.

Aginian, Anita, J.D., St. John's University School of Law, 1987. Supervising Attorney, Feldman, Kramer and Monaco. Teaching Interests: Administrative Law.

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

Spring 2018

Program in Public Health: PhD in Population Health and Clinical Outcomes Research

### Program in Public Health Director

Lisa Benz Scott, Health Sciences Center Level 3, Room 071

### Graduate Program Director

Dylan Smith, Health Sciences Center, Level 3, Room 071, dylan.smith@stonybrookmedicine.edu

### Graduate Program Coordinator

JoanMarie Maniaci, Health Sciences Center, Level 3, Room 071, Joanmarie.maniaci@stonybrookmedicine.edu

### Degree Awarded

PhD in Population Health and Clinical Outcomes Research For information about the Program in Public Health, please visit <https://publichealth.stonybrookmedicine.edu/>

### Application

[www.sophas.org](http://www.sophas.org)

### About the Program

As part of the SUNY Stony Brook Graduate School, the graduate program in Population Health and Clinical Outcomes Research [PHCOR] provides a multidisciplinary, integrated, applied problem-solving approach to support students in addressing the important issues within the field. The purpose of this small and highly specialized graduate degree program is to train population health and clinical outcomes researchers, academicians, and practitioners – who will advance the field on a local, regional and national level.

It has been recognized that there is a critical need for well trained people with the skills of population health and clinical outcome research. For example the new health care legislation places great emphasis on population based approaches to the obesity epidemic and clinical outcomes approaches to establishing comparative efficacy of treatments. We believe that these skills will be in great demand in the public, private and academic sectors. By uniquely placing a focus on human subject studies and trials, in combination with best practices in clinical care and community interventions, the PHCOR program will extend knowledge in the areas of safety, quality, efficiency, accessibility, accountability, and equity of care by supporting opportunities for development of new knowledge about health and disease prevention, diagnosis, treatment, and prognosis.

Students will gain knowledge, skills, and experience by means of a series of a rigorous quantitative and analytical courses designed to develop advanced problem-solving skills. Working under faculty mentor guidance, student projects will focus on substantive current health care problems affecting population health, health policy, clinical practice, and patient-based health care decisions. Graduates will be competent in the design, conduct, and evaluation of research studies that will improve the future public health and medical care provided.

Preparation for a research career will include publishing in peer reviewed journals and writing proposals to obtain research project funding. The Ph.D. program consists of two years of course work, followed by the Preliminary Examination and independent research leading to the dissertation. Students are expected to work with faculty to develop their own independent research projects, which will go beyond the boundaries of existing faculty research.

The goals of the program are to provide graduate students with a rigorous, innovative, mentored, learning experience with the following competency goals:

- Identification of the determinants of health and factors associated with disease prevention.
- Assessment of the health care needs of populations as related to their environment.
- Understanding of the a context for population health and clinical science research questions, as well as the organization, politics, and financing of the health care system
- Appraisal of the performance of the health system in terms of access to care, safety, quality of care, resource consumption, cost-effectiveness, and accountability.
- Conduct of independent studies of the health care system (evaluating determinants of access, quality, health outcomes, resource consumption, and cost-effectiveness) using state of the art research methods.
- Commitment to conduct population health and clinical research for human subjects both ethically and responsibly.
- Design and implementation for a mentored student research project experience including an in-depth focus on scientific writing and professional presentations (e.g., requiring manuscripts, presentations, and grant submissions).
- Career development by providing experiential opportunities to teach and present research findings.

### Degree Offered

#### Degree Option

Ph.D.

#### Specialization

- Population Health or
- Clinical Outcomes Research

Primary Application:

Primary applications are accepted through SOPHAS, the centralized application service for schools and programs of public health.

- For Admissions Deadlines, visit <https://publichealth.stonybrookmedicine.edu/admissions>.

- Bachelor's degree from an accredited college or university with a 3.0 GPA or better. Admitted students usually have GPAs that are higher than 3.0.
- Official transcripts from all post-secondary schools. Transcripts for all degrees earned in schools outside the U.S. or Canada must be evaluated by an agency accredited by the National Association of Credential Evaluation Services. See section on International applicants for more information about this process. The requirement for evaluation of transcripts is waived for graduates of foreign medical schools with a current license to practice in the U.S.
- Official GRE (verbal, quantitative, and analytical) scores are required. Please use the Stony Brook institution code (2548) to report your GRE scores. Do not use the Stony Brook - SOPHAS code. Waivers and substitutions are made on a case by case basis. Such requests should be submitted in writing to the Academic Coordinator at <mailto:Joanmarie.maniaci@stonybrook.edu>.
- Three references from persons who can address the applicant's capacity to complete a course of graduate study.
- A Cover Letter is required for the primary application. It should be no more than 500 words and should be submitted with your application in SOPHAS (under Statement of Purpose and Objectives).
- Applicants are strongly encouraged to review the available funding opportunities.
- Completion of the on-line application.

For admission to the doctoral and master's programs in philosophy, the following are normally required:

A. A bachelor's degree with a major in philosophy.

B. Some knowledge of the history of philosophy and of contemporary modes of thought is highly desirable. Deficiencies in these areas may require the student to undertake special work.

C. An official transcript of undergraduate record and of any work completed at the graduate level.

D. Letters of recommendation from three previous or current instructors.

E. Submission of a philosophical essay (which may be a paper written for a previous course).

F. Graduate Record Examination (GRE) General Test scores.

G. Acceptance by both the Department of Philosophy and the Graduate School.

#### **Interview:**

A personal interview, if requested by the Research Mentor Matching committee, will be scheduled.

#### **Additional information for international applicants:**

International applicants who trained in non-English speaking schools and do not reside in an English speaking country are required to take either the TOEFL or IELTS exam. Students who fail to meet this requirement must enroll in a course at the Intensive English Center and achieve satisfactory grades before admission to graduate study. Students whose scores on either of these exams are more than two years old must retake the test. The expected minimum score for the IELTS exam is 7, with no subsection below 6. The expected minimum score on the TOEFL Internet Based Test is 90.

International students are required to have a course-by-course educational credential evaluation completed by an agency accredited by the National Association of Credential Evaluation Services (<http://www.naces.org>). We require using World Education Services (<http://www.wes.org>). This evaluation provides a U.S. course equivalent including semester hours earned, course content, and corresponding letter grade for all courses listed on the international applicant's transcript. This evaluation must be completed before the application can be considered.

For more information about international students services, see: <http://www.stonybrook.edu/commcms/visa/>

#### **Financial Support:**

Research stipends are available on a competitive basis, contingent upon an available research mentor. Visit our website for current information regarding available funding.

#### **Transfer Information:**

##### **Transfer of Credit**

A candidate for the doctoral degree may transfer those graduate credits that are approved by the appropriate PHCOR course director(s), the concentration director, and the Graduate Program Director. All courses transferred must be documented to be directly substitutable with a B or better grade attained. Moreover, transferred courses should have been completed within the past 5 years. If transferred courses are older than 5 years, additional documentation of the current relevancy of the course content must be documented by the appropriate PHCOR course director(s). Thus, courses older than five years will be accepted only in rare circumstances.

##### **Transfer from Non-Matriculated Status**

There is not a limit to the doctoral student course credits for students transferring from non-matriculated status. However, a limit on credits transferred may be set by the academic advisor, concentration director, and/or Graduate Program Director to assure that the student meets all of



the core and concentration requirements but retains elective course flexibility to coordinate advance course work to support the student's research project experience optimally. Transfer of course credits will be proactively coordinated as part of the academic advising and course planning PHCOR Program processes.

Before the petition to transfer course credits will be submitted, students must be formally matriculated into a degree program at least one full semester and their PHCOR academic course plan approved. All graduate courses completed in non-matriculated status will be counted as part of the total graduate grade point average (GPA).

### **Transfer from Other Institutions**

A candidate for a degree may petition to transfer graduate credits from another institution toward their degree requirements. These credits must be from an institution authorized to grant graduate degrees by recognized accredited commissions and meet the following guidelines:

- Credits must not have been used to fulfill the requirements for either a baccalaureate or another advanced degree or certificate.
- Credits must not be more than five years old at the time the student is admitted to graduate study at Stony Brook. Courses older than five years will be accepted only in rare circumstances.
- A course listed as both graduate and/or undergraduate level will not be considered for transfer.
- Credits must carry the grades of A or B. "Pass" or "Satisfactory" grades are not transferable unless these grades can be substantiated by the former institution as B (3.0) or better.
- Grades earned in transferred courses are not counted as part of the overall GPA at Stony Brook.

### **Transfer Between Primary and Secondary Programs**

A maximum of 12 graduate credits from Stony Brook, which were earned in a primary program prior to a student being accepted into a secondary program, can be applied to the secondary program. Credits applied to the degree requirements of a primary program cannot be applied toward the degree requirements of a secondary program.

Note: Please see any additional distributed PHCOR Program policies regarding Transfer Credits. Questions should be directed to the PHCOR Program Director.

Special Circumstances

### **Readmission**

Graduate students who have interrupted their attendance at Stony Brook by withdrawing from the University or by taking a leave of absence must be readmitted to reactivate their graduate career. The student initiates the process by submitting a completed "Readmission" form to their program. The form is available at the Graduate School or may be downloaded at [www.gradsunysb.edu](http://www.gradsunysb.edu).

- Students returning from a currently approved Leave of Absence are generally guaranteed readmission.
- Students not on an official leave of absence must pay a \$500 readmission fee.
- International students must also submit a new financial affidavit and be cleared by an international student advisor before the readmission process can be concluded.

If the program approves the request, the readmission form is submitted to the Graduate School for final approval. The program or the Graduate School may set specific requirements to be fulfilled by the readmitted student during the first year of their readmission.

### **Conditional Admission**

In exceptional cases where certain admission requirements are not met or the prior education preparation is inadequate, an applicant may be admitted conditionally. Such applicants will be considered on probation during the first semester. PHCOR Program recommendation and Graduate School approval are required for conditional admission.

- Students admitted conditionally for a low cumulative GPA must earn an overall graduate average of at least a B (3.0) during the first semester of enrollment to be permitted to continue. In this case, the student is considered to have achieved regular status.
- A student admitted conditionally because of a low cumulative GPA who fails to earn a B (3.0) average in the first semester will not be permitted to reenroll. Both the student's program and the Graduate School may set conditions that the student must satisfy during the early period of graduate work.

### **Secondary Program**

Should a PHCOR student wish to add a secondary program to his or her primary program of study, a Permission to Enroll in a Secondary Degree or Certificate Program form must be submitted to the Graduate School with original signatures by both prior and new department or program chairs. Final approval rests with the Graduate School. International students are also required to obtain approval of an international student advisor.

Degree Requirements

The Population Health and Clinical Outcomes Research program offers one doctoral degree with two possible concentrations: Population Health or Clinical Outcomes Research. Core requirements are the same for both concentrations. Students specialize through the different concentration requirements. With advisor approval, students may tailor their degree to their specific interests via the selection of elective course offerings in

departments such as Molecular Genetics, Molecular and Cellular Biology, the Graduate Program in Public Health, Technology and Society, Pharmacologic Sciences, Sociology or Psychology.

#### Population Health

The population health specialization will focus on understanding the community and the quality, effectiveness, and efficiency of public health and community-based interventions. It will emphasize methodology in observational study design, determinants of population health, and development of evidence-based public health practice including efficiency, effectiveness, and access studies. Students will identify a cognate area that provides theoretical and/or methodological depth related to a population health problem and its determinants. A cognate area may be multi-disciplinary or discipline-specific. As an example of a multi-disciplinary approach, a student might develop a family violence cognate through the selection of courses in psychology, sociology, public policy, and social welfare. Another example of a potential cognate area might be health communications, with courses found primarily in journalism or psychology.

#### Clinical Outcomes Research

The clinical outcomes specialization will provide students with the tools to enhance preventive or chronic care strategies, and analyze the patient care outcomes for clinical disciplines. Moreover, the students within the clinical outcomes specialization will be able to formulate policies, advance clinical practice, or identify patient-based opportunities to improve medical care. As an example of a multi-disciplinary approach, biomarkers for cancer may become a cognate emphasis with advanced courses selected from the graduate programs in Experimental Molecular and Cellular Biology or Molecular Genetics. Another cognate area might relate to evaluating the impact of e-health initiatives upon ischemic heart disease medication management, with advanced courses selected from the departments of Technology and Society or Pharmacologic Sciences.

#### Additional Requirements

In addition to the core and concentration requirements, doctoral students will be required to pass a preliminary written examination, submit and have approved a dissertation proposal, complete a dissertation, and submit two publishable manuscripts. Preliminary Examination Doctoral students will be required to pass a preliminary examination. The Preliminary Examination will emphasize the integration of the student's knowledge in the core areas. The successful completion of this examination will allow the student to proceed towards the formal identification of their research supervisor and supervisory committee for the preparation and defense of the doctoral dissertation requirement. The purpose of the Preliminary Examination is to test the preparedness of the student for the doctoral research phase of the program. Students will be expected to exhibit a mastery of the material covered in the three areas – quantitative analysis, research methods, and the determinants of health and disease – as well as an ability to integrate and synthesize concepts and approaches relevant to population health and clinical science research.

#### Dissertation

The most important requirement for the Ph.D. degree is the dissertation, which must be an original scholarly investigation that meets the standards in the field for scholarly publications. Following the successful completion of the Preliminary Examination, students may be advanced to candidacy upon successful completion of all degree requirements of the Graduate School and program, other than the graduate seminars and the dissertation requirements. The Dean of the Graduate School confers this status upon recommendation from the Doctoral Program Director. Students must advance at least one year prior to the dissertation defense.

A proposal for the dissertation must be prepared, orally defended, and approved by the student's research supervisor or supervisory committee – appointed by the Doctoral Program Director in consultation with the student. The proposal will synthesize the literature on an important topic in population health or clinical outcomes research, and identify gaps in the literature that clearly demonstrate the importance for the student's planned dissertation research. The topic should be broad enough to allow for the preparation of at least two publishable papers in peer-reviewed journals.

The makeup of the dissertation committee includes the dissertation supervisor (faculty mentor), defense chairperson, a third member from the program, and at least one person outside of the program or University. To avoid any potential perception of a conflict of interest, the student's dissertation supervisor (faculty mentor) will not be able to chair their dissertation committee.

Preliminary research to develop a dissertation topic will normally begin in the second year of study and the third year will be mainly devoted to developing and refining the doctoral research.

Seminars organized by the program related to research in progress (i.e., a formal research in progress presentation) will provide an opportunity for students to present their thesis material to other students and interested faculty. Upon approval of the research supervisor or chair of the supervisory committee (and approval of the Graduate Program Director), a public presentation with a defense of the dissertation will be scheduled. Additional requirements for the dissertation may be found in the Graduate School Bulletin under "Degree Requirements".

#### Practicum in Teaching

Doctoral students will be provided with teaching opportunities and are expected to develop their teaching skills through the "Practicum in Teaching", an advanced two semester sequence completed after the Preliminary Examination has been passed. Teaching opportunities for doctoral students will include undergraduate and graduate teaching.

#### Course Requirements

##### Core Curriculum:

HPH 501

Introduction to the Research Process

|         |                                                  |
|---------|--------------------------------------------------|
| HPH 506 | Biostatistics I                                  |
| HPH 507 | Biostatistics II                                 |
| HPH 508 | Health Systems Performance                       |
| HPH 514 | Epidemiology for Public Health                   |
| HPH 523 | Social & Behavioral Determinants of Health       |
| HPH 527 | Health Economics and Policy                      |
| HPH 559 | Advanced Research Methods                        |
| HPH 560 | Applied Biostatistics                            |
| HPH 562 | Data Management & Informatics                    |
| HPD 605 | Intro Doctoral Studies                           |
| HPD 685 | Research in Population Health & Clinical Science |
| HPD 686 | Mentored Research                                |
| HPD 687 | Advanced Research Seminar                        |

**Students are required to complete one concentration:**

Concentration: Population Health

|         |                            |
|---------|----------------------------|
| HPD 673 | Longitudinal Data Analysis |
| HPD 674 | Causal Inference           |
| HPH 534 | Spatial Analysis           |
| HPD 661 | Psychometric Theory        |

Concentration: Clinical Outcomes Research

|         |                            |
|---------|----------------------------|
| HPD 664 | Clinical Trials            |
| HPD 665 | Clinical Outcomes Research |
| HPD 673 | Longitudinal Data Analysis |
| HPD 674 | Causal Inference           |

**Post-Preliminary Exam Courses:**

|         |                          |
|---------|--------------------------|
| HPD 692 | Practicum in Teaching I  |
| HPD 693 | Practicum in Teaching II |
| HPD 694 | Grant Writing            |
| HPD 699 | Dissertation Research    |

Faculty of the Program in Public Health

Please see the Program in Public Health website for more information:

<https://publichealth.stonybrookmedicine.edu/faculty>

**NOTE:** The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.

Department of Psychology

**Chair**

Dr. Sheri Levy, Psychology B 154 (631) 632-7808

**Graduate Program Director**

PhD Programs: Dr. Richard Gerrig, Psychology B 201 (631) 632-7847

MA Program: Dr. Bonita London, bonita.london@stonybrook.edu

**Graduate Program Coordinator**

Marilynn Wollmuth, Psychology B 150 (631) 632-7855

**Web Site**

<http://www.stonybrook.edu/commcms/psychology/masters/overview.html>

**Degrees Awarded**

MA in Psychology, Ph.D. in Clinical Psychology, Ph.D. in Cognitive Science, Ph.D. in Integrative Neuroscience, Ph.D. in Social/Health Psychology

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-gs](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-gs)

**Psychology Department**

The Department of Psychology, in the College of Arts and Sciences, is one of Stony Brook's largest graduate departments. More than 800 Ph.D. degrees have been awarded since the program began more than 40 years ago. In recent years the population of students has been about 60 percent female, 15 percent minority, and 10 percent international students.

The department is administratively organized into four program areas: Clinical Psychology, Cognitive Science, Integrative Neuroscience, and Social and Health Psychology. Students must be admitted to one of these four program areas, but they are encouraged to receive training in more than one program area if appropriate. In conjunction with the Department of Neurobiology and Behavior, Brookhaven National Labs, and the Department of Psychiatry, interdisciplinary training is offered in behavioral neuroscience. In conjunction with the Departments of Linguistics and Computer Science, interdisciplinary training is offered in cognitive science. Course offerings and research training are structured in such a way that students can meet the requirements for a Ph.D. degree in Clinical Psychology, Cognitive Science, Integrative Neuroscience, or Social and Health Psychology. Stony Brook's doctoral program in Clinical Psychology is accredited by the American Psychological Association. A detailed description of the graduate programs, including requirements for students in each area of graduate studies, is available from the departmental graduate office or from our Web site: [www.psychology.sunysb.edu](http://www.psychology.sunysb.edu).

In all four program areas, the primary emphasis is on research training through apprenticeship, advisement and independent research. New students are encouraged to become involved immediately in ongoing research and to engage in independent research when sufficient skills and knowledge permit, with the goal of becoming active and original contributors.

**Description of the Masters Program in Psychology**

The full-time program begins with the first summer school session and includes the second summer session and the next two academic semesters. The program is generalist in its orientation and provides advanced education that will transfer well either to a career right after graduation or to further graduate education in a variety of fields such as law, business, medical school, social work, and psychology. Specific applied training leading directly to professional licensure is not provided. Instead, the students in the MA program receive traditional and general grounding in psychology via courses chosen from our regularly offered graduate courses.

A faculty director specifically for the MA program is available for consultation on course selection, career opportunities, and professional development. In addition to courses in developmental, clinical, social/health, cognitive/experimental, and biological psychology, professional development workshops that address concerns about graduate school, career and personal choices, professional presentation, are a regular part of the curriculum. Depending on the interests and qualifications of the students, there is the opportunity to engage in research under the direction of Psychology Department faculty. "Brown bag" seminars in Social, Cognitive/Experimental, or Biopsychology provide awareness of ongoing research at Stony Brook and that of guest speakers at other research institutions.

**Admissions Requirements for the Psychology department**

The requirements for admission to masters study, in addition to the minimum Graduate School requirements, ordinarily include:

- A. A bachelor's degree with a major in psychology, or in a program providing adequate preparation for the intended area of study (ordinarily including statistics, research methodology, and/or psychology laboratory).
- B. An average of 3.25 or better in all graded academic undergraduate coursework.
- C. One official copy of all previous college transcripts, with certified English translations of any transcripts in a foreign language.
- D. Letters of recommendation from three instructors or academic advisors.
- E. The GRE is not required.

F. For international students, TOEFL or IELTS scores (unless their native language is English) and the International Student Financial Affidavit.

G. Students who do not meet these requirements may also apply if they feel that special circumstances should be considered.

H. Acceptance by the department and Graduate School.

The Master's Program begins Summer Session I. Applications are accepted January 15 through February 28th. All applications must be submitted online through the Graduate School. Admission questions and application instructions are available at the Graduate School website at: [http://www.grad.sunysb.edu/admissions/app\\_info.shtml](http://www.grad.sunysb.edu/admissions/app_info.shtml)

### Facilities of the Department of Psychology

Faculty in each area maintain active laboratories with state-of-the-art equipment for research and graduate training. Faculty, students, and postdoctoral associates have access to the Psychology Department's large volunteer pool of human subjects. In addition, the program supports the development of teaching and professional skills.

The **Clinical** Program's research interests of the core faculty center on depressive disorders (child, adolescent, adult), anxiety disorders (child, adolescent, adult), autism spectrum disorders, personality, child maltreatment, close relationship functioning (e.g., discord and aggression among couples, romantic competence among adolescents and adults, relationship education), lesbian, gay, and bisexual issues (among youth and adults), emotion regulation processes (e.g., cognitive, interpersonal, neurobiological), and emotion and attention processes in normal and pathological conditions. Faculty labs are equipped with state-of-the-art facilities including equipment for observational research (e.g., digital cameras and DVDs), psychophysiological equipment (e.g., heart rate, blood pressure, respiratory rate,) as well as electrophysiology (EEG, ERP). The clinical area also utilizes a number of other on- and off-campus facilities for clinical research and training, including the Social, Cognitive, and Affective Neuroscience Center for neuroimaging, and the Krasner Psychological Center, a training, research, and service unit that provides psychological services and consultation to the community and as well as a site for graduate practica. Within the Krasner Psychological Center, an Anxiety Disorders Clinic provides assessment and treatment of various anxiety disorders such as obsessive-compulsive disorder and social anxiety disorder. The University Marital Therapy Clinic provides therapy for couples and individuals in the community who are experiencing relationship difficulties. Personnel at the Marital Clinic also provide forensic assessments for child custody and therapeutic visitation for the Supreme and Family Courts of Suffolk County, NY. Affiliations have been established with the University's Health Sciences Center, numerous other local hospitals, and local public schools.

The **Cognitive Science** Program offers broad training in cognitive science through its affiliations with the Departments of Linguistics and Computer Science, and in cognitive neuroscience, in cooperation with the Integrative Neuroscience Program, the Department of Neurobiology and Behavior, and Brookhaven National Laboratory's Medical Department. Laboratory facilities include a state-of-the-art research dedicated 3T fMRI scanner housed in our new NSF-funded SCAN (Social, Cognitive, and Affective Neuroscience) center, electrophysiology (EEG, ERP) labs, multiple eyetrackers for psycholinguistics and visual cognition studies, rooms equipped to study electronic communication and human-computer interaction, sound-isolated chambers for perception and psycholinguistics experiments, multimedia workstations for presenting stimuli and collecting data, and computer-controlled choice stations for testing human and non-human subjects. Faculty research is particularly strong in language, memory, attention, visual cognition, perception, and decision making. Most research programs are funded by agencies such as the National Science Foundation, the National Institutes of Health, and the Department of Defense.

The **Integrative Neuroscience** Program provides opportunities to learn the neurobiology, genetics, anatomy, physiology and neurochemistry underlying a comprehensive array of behaviors and human disorders, including Alzheimer's Disease, Parkinson's Disease, autism and depression.

The broad range of faculty expertise within the program introduces students to social, affective, cognitive and clinical neuroscience at all levels of analysis, from molecular/genetic to human brain imaging and behavioral and cognitive testing and at all ages across the lifespan. In addition to gaining core knowledge, students also develop the cutting edge research expertise which is essential to successful careers in neuroscience. Students have access to facilities for histological and neuroanatomical analysis, behavioral analysis, and animal models of human diseases, molecular and genetic analysis, human electrophysiology and fMRI imaging. Students have the opportunity for research training with core faculty or with affiliated faculty in the Departments of Neurobiology, Psychiatry and Neurology as well as at Cold Spring Harbor Labs. The curriculum supports the development of broad content knowledge, while research training provides development of skill expertise. In addition, the program supports the development of teaching and professional skills.

The **Social and Health** Program offers predoctoral training for students who are interested in a research career in social psychology, health psychology, or the interface between these two disciplines (e.g., application of social psychological theory to health problems). Areas of particular strength in the faculty's research in social psychology include the study of attachment, close relationships, and social rejection in adults and children; social cognition; social-cognitive development; social identity, prejudice, and stereotyping; academic achievement; and the representation and processing of social experience, motivation, and self-regulation. Health psychology focuses on identifying, evaluating, and enhancing the psychosocial and behavioral factors that promote health, prevent disease, or affect adjustment to illness. Faculty research topics in health psychology include the impact of stress on health; the role of social support in dealing with health problems; coping with breast cancer; reproductive health; and behaviors that promote or impair health; and aging and health. Social and Health Area faculty have affiliations with the College of Business, Department of Psychiatry and other departments in the University, and they collaborate with researchers and clinicians in the Stony Brook School of Medicine, Dental School, and University Hospital. Students in our graduate program work collaboratively with faculty members on research projects of mutual interest. A variety of courses are offered so that students can fulfill requirements by selecting the courses that best fit their interests and needs. Students may also take courses in other departments of the university, such as Political Science, Public Health, or Women's, Gender, and Sexual Studies. In addition, students have the opportunity to receive training in methodological and quantitative techniques such as structural equation modeling and meta-analysis and they may elect to complete a quantitative minor. Seminars are offered on topics such as career issues, teaching methods, and grant writing. Another important feature of our program is its cultural and ethnic diversity. We strive to integrate cultural and ethnic concerns into all aspects of graduate training.

Requirements of the Masters Program in Psychology

The 1-Year MA Program in General Psychology provides an advanced education preparing students for a career in psychology or related fields directly after graduation or to further graduate education in psychology or related fields such as business, law, medicine, and social work.

The full-time program begins with the first Summer Session and continues through the second Summer Session as well as the Fall and Spring academic semesters.

- MA students are required to enroll in a statistics course during the Summer (PSY501). Students are also required to enroll in a weekly seminar in the Fall semester with all first year graduate students (PSY504), which include discussions of current research and research practices by faculty and visiting speakers.
- MA students can select among a wide range of courses in the Psychology Department from clinical psychology, cognitive science, developmental psychology, integrative neuroscience, and social and health psychology. For information on the courses offered, see the link below. (Note: not all courses are offered every year.)

<http://www.stonybrook.edu/sb/graduatebulletin/current/courses/psy/>

- In the Fall and Spring semesters, MA students have the opportunity to enroll in weekly seminars in either Cognitive Science, Integrative Neuroscience, or Social and Health Psychology (PSY581, 582, 583, 584, 585, or 586). These seminars include presentations on current research problems.
- MA students have a faculty advisor specifically for the MA program who is available for consultation on course selection, career opportunities, and other matters.
- The MA program includes professional development opportunities that address students' concerns about graduate school, career and personal goals, professional presentation, etc.
- Depending on students' interests and qualifications, MA students have the opportunity to engage in research under the direction of faculty in the Psychology and Psychiatry Departments.
- A wide variety of internships are available to MA students, which provide them with experiential learning relevant to their future careers.
- Applicants to the MA program will be evaluated on the basis of their GPAs (minimum 3.25), three letters of recommendation, and their personal statement. GREs are optional.

#### **TIMELINE:**

- End of February: Application period ends.
- March and April: Offers of admission are made.
- End of May (Summer Session 1): Program begins.
- Mid-May of the following year: Graduation.

In light of the extraordinarily short period between admissions offers and the start of the MA program, applicants should carefully consider whether they will be able to satisfy all bureaucratic and practical tasks to join the MA program on time.

- Completion of the MA program will be contingent on completion of 30 credits with at least a 3.0 GPA, as per the regulations of the Graduate School. Additionally, students are expected to earn grades of C or better in all courses.

#### **Sample Curriculum:**

| Semester         | Title                                | Credits |
|------------------|--------------------------------------|---------|
| Summer session 1 | Professional Skills Seminar (PSY610) | 3       |
| Summer session 2 | Graduate Statistics (PSY501)         | 3       |
| Fall             | Weekly seminar (PSY581, 583, or 585) | 0       |
|                  | First year seminar (PSY504)          | 0       |
|                  | Course in Abnormal Psychology        | 3       |
|                  | Course in Social Psychology          | 3       |
|                  | Research                             | 3       |
|                  | Internship                           | 3       |
| Spring           | Weekly seminar (PSY582, 584, or 586) | 0       |
|                  | Course in Cognitive Science          | 3       |
|                  | Course in Integrative Neuroscience   | 3       |
|                  | Research or other elective           | 3       |
|                  | Internship                           | 3       |
| Total            |                                      | 30      |

## Requirements for the Ph.D. Degree in Psychology

The receipt of the Ph.D. signifies both a scholarly mastery of the field of psychology and the ability to conduct independent research. In addition to the Graduate School's degree requirements, students must satisfy the following requirements (as well as requirements of their area of studies):

### A. Course Requirements

A student must maintain a graduate G.P.A. of at least 3.0 and successfully complete an approved program of study with a grade of at least B in each required course. Two semesters of quantitative methods and three breadth courses selected from outside the student's area of graduate studies are required. In addition, one semester of First-Year Lectures (no credit) and two semesters of a practicum in statistical computer applications are required. The four training areas of the department have additional course requirements. Following admission, students with graduate training elsewhere can petition to satisfy course requirements on the basis of their previous graduate work. No more than three departmental course requirements will be waived. Petition to waive requirements or to satisfy them on the basis of previous graduate work should be directed to the Psychology Graduate Office. Petitions concerning area requirements should be addressed to the student's area head.

### B. Yearly Evaluation

The progress of each graduate student is reviewed at the end of each academic year by the student's area's faculty. This provides opportunities for both positive feedback about the student's achievements and constructive feedback for improving or accelerating the student's progress. We expect that all students admitted to the Ph.D. program have the potential to succeed; however, any student whose performance is below the standards established by the department and the area may be dismissed or asked to withdraw. Under certain circumstances a student may be permitted to obtain a terminal Master of Arts degree satisfactorily completing the required courses and 30 graduate credit hours of study, and writing a second-year research paper.

### C. Second-Year Paper

At the end of the second year of study, each student must submit an original research paper to the advisor and the area head. Although the form of this paper and the date it is due varies by area, all second-year papers must include data collection and analysis. The second-year paper must be approved prior to the specialties paper (see item E). A copy of the approved paper must be provided to the Psychology Graduate Office.

### D. M.A. Degree in the Course of Doctoral Studies

The department will recommend granting an M.A. degree to students who have successfully completed the second-year requirements, including the second-year research paper, upon the recommendation of the faculty in the student's area of graduate studies. This process is not automatic; students wishing to obtain an M.A. degree must file for one.

### E. Specialties Paper and Examination

This requirement should be completed by the end of the sixth semester of study. The specialties paper is a review/research paper suitable for submission to a refereed journal. The paper must be presented to and defended before a committee. The form of the specialties paper depends upon the student's area of graduate studies, but all areas require its completion by the end of the third year in order for a student to be considered to be on track.

### F. Advancement to Candidacy

After successful completion of the specialties paper and examination, all required coursework, two SDI courses (see G), and the requirements of the student's area of studies, a majority vote of the faculty of the student's area is required to recommend advancement to candidacy for the Ph.D. The Graduate School requires that students must advance to candidacy at least one year before defending their dissertations.

### G. Research and Teaching

All four graduate training areas focus heavily on research; research activity from the time of admission through the fourth year is required. Students who are funded on state lines serve as teaching assistants (TAs) for classes taught by departmental faculty and instructors. For all students, regardless of source of funding, two semesters of substantial direct instruction (SDI) in the classroom or laboratory is required (one of which must be PSY 310). Students may satisfy this requirement by providing significant hours of lecturing and student contact in a class for which they are serving as a TA, or by serving as the instructor of record for a class of their own. During these semesters, graduate students must receive teaching evaluations from their students.

### H. Residence

Minimum residence of two years and the equivalent of three years of full-time graduate study are ordinarily required. Unless admitted as part-time students (which happens very rarely), residents must register for full-time study until they are advanced to candidacy. Full-time study is 12 credits during the first year and nine thereafter.

### I. Dissertation

The approval of the dissertation proposal and successful oral defense of the completed dissertation are required.

**Within Area Course Requirements:** In addition to satisfying Graduate School and departmental degree requirements, students must satisfy all of the course requirements of their training programs.

### Clinical Psychology

Complete the following courses in the first year (required of all Clinical Area students):

PSY 534 Assessment: General Principles, Clinical Interviews, and Adult Psychopathology

PSY 602 Assessment: Personality Testing, Intellectual/Cognitive Testing, and Child/Parent Assessment

PSY 537 Methods of Intervention: Treatment of Internalizing Disorders

PSY 538 Methods of Intervention: Treatment of Externalizing Disorders and Relationship Problems

PSY 545 Psychopathology: Conceptual Models and Internalizing Disorders

PSY 596 Psychopathology: Externalizing and Psychotic Disorders

PSY 603 Ethics and Professional Issues

Complete the following courses in the second year (required of all Clinical Area students):

PSY 505 Structural Equation Modeling and Advanced Multivariate Methods, or an alternative advanced statistics course approved by the Area Head

PSY 604 Intervention Practicum

PSY 605 Advanced Clinical Practicum

PSY 606 Supervised Practice

PSY Breadth Course 1

Complete the following courses in the third year:

PSY 606 Supervised Practice (Fall and Spring)

PSY Breadth Course 2

PSY Breadth Course 3

PSY 698 Research (Fall and Spring)

Complete dissertation (PSY 699) during the fifth year and complete internship (PSY 608) in the sixth year.

### **Cognitive Science**

Complete three of the following:

PSY 513 Theories of Attention

PSY 516 Judgment and Decision Making

PSY 518 Memory

PSY 520 Psycholinguistics

PSY 610/620 Seminars in Selected Topics: Cognition (must be approved *in advance* by the Area Head)

Sign up for the following sequence each year (required of all students):

PSY 583 Experimental Colloquium I

PSY 584 Experimental Colloquium II

The Cognitive Science Area also requires submission of a First-Year Research Paper requiring data collection and analysis. This paper must be submitted to the advisor and second reader at the end of the second semester of graduate study.

### **Integrative Neuroscience**

Complete the **three** following courses (required of all Integrative Neuroscience Area students):

PSY 561 Cognitive and Behavioral Neuroscience I

PSY 562 Cognitive and Behavioral Neuroscience II

PSY 565 Functional Neuroanatomy

Complete at least two of the following courses:

PSY 560 Cognitive Neuroscience

PSY 564 Neuropsychopharmacology



PSY 610/620 Seminars in Selected Topics: Affective Neuroscience

PSY 610/620 Seminars in Selected Topics: Hormones and Behavior

Sign up for the following sequence each year (required of all Integrative Neuroscience Area students):

PSY 581 Cognitive and Behavioral Neuroscience Colloquium I

PSY 582 Cognitive and Behavioral Neuroscience Colloquium II

### **Social and Health Psychology**

Complete two of the following courses:

PSY 541 Social Psychology of Close Relationships

PSY 543 Attachment

PSY 549 Prejudice & Discrimination

PSY 555 Social Psychology

PSY 556 Stress and Coping

PSY 558 Theories of Social Psychology: Health Applications

PSY 559 Psychology of Women's Health

PSY 594 Psychology of Gender

Complete an additional special topics course in the Social and Health Area (PSY 610 or PSY 620). Alternatively, students can complete an additional course from the preceding category.

Students must complete one of the quantitative courses listed below or an additional methods or statistics course as approved by the student's advisor and Area Head.

PSY 505 Structural Equation Modeling and Advance Multivariate Methods

PSY 506 Psychometrics

PSY 507 Meta-Analysis

Cognitive Neuroscience Certificate:

Integrative Neuroscience students must take 3 of the following courses from the Cognitive Science Area:

PSY 513 Theories of Attention

PSY 516 Judgment and Decision Making

PSY 518 Memory

PSY 520 Psycholinguistics

### **Cognitive Science students must take 3 of the following courses from the Integrative Neuroscience Area:**

PSY 610/620 Current Issues in Brain Imaging

PSY 561 Cognitive & Behavioral Neuroscience I

PSY 562 Cognitive & Behavioral Neuroscience II

PSY 565 Functional Neuroanatomy

PSY 560 Cognitive Neuroscience

PSY 610/620 Seminars in Selected Topics: Hormones & Behavior

PSY 610/620 Seminars in Selected Topics: Molecular Psychology

## PSY 610/620 Neuroscience: Applications in Psychology

**Quantitative Methods Certificate**

Students must complete both of the following courses:

PSY 501 Analysis & Design

PSY 502 Correlation/Regression

Students must complete three (3) additional quantitative courses from the following list (instructors may change; courses outside Psychology require the permission of those instructors). Any substitutions must be approved by the Graduate Director in advance by providing a syllabus of the course to be substituted.

PSY 505 Multivariate Methods/Structural Equation Modeling

PSY 506 Psychometric Methods

PSY 507 Meta-Analysis

PSY 508 Introduction to Computer Applications in Statistics

PSY 535 Advanced Research Methods

PSY 610/620 Computational Modeling

POL 602 Applied Data Analysis I: Probability Theory

POL 603 Applied Data Analysis II: Regression

POL 604 Applied Data Analysis III: Maximum Likelihood Estimation

POL 606 Duration & Panel Models

POL 610 Experimental Design

POL 676 Advanced Topics: Methods

CSE 507 Introduction to Computational Linguistics

CSE 529 Modeling and Simulation

AMS 571 Mathematical Statistics II

**Teaching Requirement:**

Students must serve as the instructor of one of the following courses:

PSY 201 or PSY 301

OR Serve as a Teaching Assistant in one of the following courses:

PSY 501 or PSY 502.

**Faculty of Psychology Department****Distinguished Professors**

Goldfried, Marvin, Ph.D., 1961, University at Buffalo: Psychotherapy integration; Gay/lesbian/bisexual issues. Clinical Program

Klein, Daniel N., Associate Chair, Ph.D., 1983, University at Buffalo: Mood disorders in youth and adults; temperament and personality development. Clinical Program

O'Leary, K. Daniel, Ph.D., 1967, University of Illinois: Etiology, prevention, and treatment of psychological and physical aggression in intimate relationships; multivariate models (biological, psychological, and social) of intimate partner aggression; the bidirectional role of marital problems and depression; marital and dyad based treatments for clinical depression; prevalence and correlates of intense love. Clinical Program

Rachlin, Howard, Emeritus, Ph.D., 1965, Harvard University: Choice, decision making, behavioral economics, self-control, addiction, gambling, and time allocation in humans and other animals. Cognitive Science Program

### Professors

Aron, Arthur, Research Professor, Ph.D., 1970, University of Toronto, Canada: Motivation and cognition in close relationships; intergroup relations; social neuroscience. Social and Health Program

Brennan, Susan E., Ph.D., 1990, Stanford University: Language production and comprehension in spoken dialogue; multimodal communication; speech disfluencies; human/computer interaction; computational linguistics; eye gaze as a measure of language processing and as a cue in conversation. Cognitive Science Program

Canli, Turhan, Ph.D., 1993, Yale University: The genetic and neural basis of personality and emotion. Integrative Neuroscience Program, Director of the SCAN Center

Davila, Joanne, Director of Clinical Training Program, Ph.D., 1993, University of California, Los Angeles: Development and course of interpersonal functioning and psychopathology (especially depression) among adolescents and adults; Romantic competence among adolescents and adults; Romantic relationship education for adolescents and young adults; Well-being among LGBT individuals. Clinical Program

Gerrig, Richard, Director of Graduate Studies, Ph.D., 1984, Stanford University: Psycholinguistics; text understanding and representation; nonconventional language; cognitive experiences of narrative worlds. Cognitive Science Program

Hajcak (Proudfit), Greg, Ph.D., 2006, University of Delaware: Psychophysiological approaches to studying emotion and cognition in the context of psychopathology and risk; developmental psychopathology; adolescence; anxiety disorders; depression; psychosis and schizophrenia. Clinical Program

Levy, Sheri, Chair, Ph.D., 1998, Columbia University, Prejudice and stigma based on age, ethnicity, gender, race, sexual orientation, socioeconomic status; beliefs systems and intergroup relations; role models; social identity and transitions; student engagement in STEM fields, Social and Health Program

Lobel, Marci, Director of Social and Health Program, Ph.D., 1989, University of California, Los Angeles: Stress, coping, and physical health; psychosocial factors in pregnancy, birth, and reproduction; social comparison processes. Social and Health Program

O'Leary, Susan G., Emerita, Ph.D., 1972, Stony Brook University: Theoretical and applied research on discipline practices in the home; prevention and early intervention vis-a-vis oppositional and conduct-disordered children. Clinical Program

Rajaram, Suparna, Ph.D., 1991, Rice University: Social Memory and Cognition; social transmission of memory; collaborative remembering and collective memory; social memory and aging; learning and education; social and nonsocial scaffolding of knowledge representation; emotion and memory; human memory and amnesia; implicit and explicit memory distinctions. Cognitive Science Program

Robinson, John, Ph.D., 1991, University of New Hampshire: Behavioral Neuroscience. Integrative Neuroscience Program

Samuel, Arthur G., Ph.D., 1979, University of California, San Diego: Perception, psycholinguistics, and attention; perception of speech as a domain of study in cognitive psychology; spatial and temporal properties of visual attention. Cognitive Science Program

Squires, Nancy K., Emerita, Ph.D., 1972, University of California, San Diego: Neuropsychology; neurophysiological measures of sensory and cognitive functions of the human brain, both in normal and clinical populations. Integrative Neuroscience Program

Vivian, Dina, Clinical Professor and Director, Psychology Center, Ph.D., 1986, Stony Brook University: Marital therapy; communication skills in maritally discordant couples; communication and problem solving in physically abusive couples; cognitive and affective processes in physically abusive and maritally discordant couples. Clinical Program

Waters, Everett, Emeritus, Ph.D., 1977, University of Minnesota: Social and personality development; parent-child and adult-adult attachment relationships. Social and Health Program

Waters, Harriet Salatas, Emerita, Ph.D., 1976, University of Minnesota: Cognitive development (comprehension and production of prose; memory and problem solving) and social cognition (mental representations of early social experiences, construction and socialization processes). Social and Health Program

Whitaker-Azmitia, Patricia, Director of Integrative Neuroscience/Biopsychology Program. Ph.D., 1979, University of Toronto: Animal models of autism and Down syndrome; serotonin and its role in brain development. Integrative Neuroscience Program

Wortman, Camille, Emerita, Ph.D., 1972, Duke University: Reactions to stressful life experiences; the role of social support and coping strategies in ameliorating the impact of life stress; predictors of good psychological adjustment among those who experience major losses, including bereavement and serious injury; others' reactions to those who experience life crisis. Social and Health Program

Zelinsky, Gregory, Director of Cognitive Science Program. Ph.D., 1994, Brown University: Visual attention, eye movements, and visual working memory; Object category representation and detection; Object and proto-object image segmentation; Neurocomputational and deep neural network models of attention and fixation prediction. Cognitive Science Program

### Associate Professors

Anderson, Brenda J., Ph.D., 1993, University of Illinois: Rodent models of the effects of exercise and stress on brain structure, metabolism, and function. Integrative Neuroscience Program

Franklin, Nancy, Ph.D., 1989, Stanford University: Memory, particularly false memory, eyewitness memory, and the relationship between emotion and cognition. In addition to collaborating on research projects in the lab, interested students have the opportunity to train as expert witnesses within the criminal justice system. Cognitive Science Program

Freitas, Antonio L., Ph.D., 2002, Yale University: Social cognition, motivation, self-regulation. Social and Health Program

Leung, Hoi-Chung, Director of Undergraduate Studies, Ph.D., 1997, Northwestern University: Prefrontal and parietal function in human cognition; neural mechanisms underlying information processing and response control; fMRI applications in cognitive neuroscience. Integrative Neuroscience Program

London, Bonita, Director of MA Program, Ph.D., 2006, Columbia University: Social identity and intergroup processes; stereotyping and prejudice; academic achievement. Social and Health Program

Luhmann, Christian, Ph.D., 2006, Vanderbilt University: High-level cognition; causal and associative learning, probabilistic reasoning, economic and perceptual decision making, neuroimaging and computational modeling. Cognitive Science Program

Mohanty, Aprajita, Ph.D., 2011, University of Illinois-Urbana Champaign: Neural mechanisms of emotion-cognition interactions; effect of emotion on perception and working-memory in anxiety and schizophrenia; using pattern information in fMRI and computational modeling to study perception and emotion. Clinical Program

Moyer, Anne, Ph.D. 1995, Yale University: Psychosocial issues surrounding cancer risk: research synthesis and research methodology. Social and Health Program

### Assistant Professors

Bernard, Kristin, Ph.D., 2013, University of Delaware: Child maltreatment; neurobiological consequences of early life adversity; parent-child relationships; early parenting interventions; psychobiology of parenting and attachment. Clinical Program

Eaton, Nicholas, Ph.D., 2012, University of Minnesota: Classification and structure of psychopathology, personality, and other constructs; sexual orientation, gender diversity, and LGBT issues; quantitative methods and psychometrics; human sexuality; individual/group differences and mental health. Clinical Program

Hymowitz, Genna, Research Assistant Professor, Ph.D., 2011, Stony Brook University: Cognitive biases and chronic medical conditions; biopsychosocial processes in obesity and obesity treatment; stress and gastrointestinal illness; interdisciplinary interventions for chronic illness. Clinical Program

Jarcho, Johanna, Ph.D., 2010, University of California, Los Angeles: The relationship between brain function and social cognition across development; brain function and behavioral profiles associated with risk for psychopathology; peer victimization (i.e., bullying); behaviorally inhibited (i.e., extremely shy) temperament; social anxiety and its treatment. Clinical Program | Social and Health Program

Lerner, Matthew, Ph.D., 2013, University of Virginia: Models of social competence & deficits in youth; social competency interventions for developmental disorders (e.g. Autism Spectrum Disorders & Attention-Deficit/Hyperactivity Disorder); therapeutic process variables (mediators and moderators of outcomes); peer relations and their impact on developmental psychopathology. Clinical Program

Nelson, Brady, Research Assistant Professor, Ph.D., 2013, University of Illinois-Chicago, Emotional and motivational mechanisms of anxiety disorders and depression; developmental psychopathology; EEG; fMRI; reward sensitivity; startle reflex; uncertainty and unpredictability. Clinical Program

Parsons, Ryan, Ph.D., 2008, University of Wisconsin-Milwaukee: Neurobiology of learning and memory; memory consolidation; fear extinction; anxiety; neural plasticity. Integrative Neuroscience Program

Scott, Stacey B., Ph.D., 2009, University of Notre Dame: Stress, emotions, health, lifespan development, longitudinal and intensive measurement designs and analysis. Social and Health Program

### Joint and Associated Faculty

Biegon, Anat, Senior Scientist, Medical Department, Brookhaven National Labs, Ph.D., 1980, Weizmann Institute of Science, Israel: Brain response to traumatic, ischemic or inflammatory insults. Integrative Neuroscience Program

Brown, Stephanie L., Associate Professor, Medicine and Society, Ph.D., 1999, Arizona State University. Altruism, prosocial behavior, and health; compassion neuroscience; hormones and behavior; evolutionary constraints on social relationships and the "caregiving system". Social and Health Program

Caprariello, Peter, Assistant Professor of Marketing, College of Business, Ph.D., 2012, University of Rochester. Consumer relationship processes; how consumers spend money pursuing happiness. Social and Health Program

Crowell, Judith A., Professor, Professor, Psychiatry: Child and Adolescent Psychiatry, M.D., 1978, University of Vermont: The attachment system across the life span; parent-child and adult-adult interactions. Social and Health Program

Evinger, Leslie Craig, Ph.D., 1978, University of Washington: Motor control and learning; movement disorders. Integrative Neuroscience Program

Fischel, Janet, Professor, Pediatrics, Ph.D., 1978, Stony Brook University: Behavioral and developmental pediatrics; developmental language disorders and emergent literacy skills; psychological management of disorders of elimination. Clinical Program

Fontanini, Alfredo, Assistant Professor, Neurobiology, M.D., Ph.D., Brescia University: Neural basis for rich perceptual experiences; how populations of cortical neurons process the multiple physical and psychological dimensions of taste. Integrative Neuroscience Program

Hsu, David, Assistant Professor, Psychiatry, Ph.D., 2002, University of Wisconsin, neural pathways linking stress with psychiatric disorders; social rejection, acceptance, and support; the endogenous opioid system; PET and fMRI; genetic variations

Huffman, Marie K., Associate Professor, Linguistics, Ph.D., 1989, University of California, Los Angeles: Phonetics; phonology. Cognitive Science Program

Hwang, Jiwon, Assistant Research Professor, Ph.D., 2011, Stony Brook University: Linguistics, phonetics, phonology, Lecturer, Asian Studies. Cognitive Science Program.

Kritzer, Mary, Professor, Neurobiology and Behavior, Ph.D., Yale University, 1989: Gonadal hormone influence over function and dysfunction in the cerebral cortex. Integrative Neuroscience Program

Krupp, Lauren, Professor, Clinical Neurology, M.D., 1981, Albert Einstein College of Medicine: Neuropsychological and neurobehavioral characteristics of chronic mental illness; interrelationship between memory performance and mood disturbance in chronic fatigue syndrome, Lyme disease, and Multiple Sclerosis. Integrative Neuroscience Program

Kotov, Roman, Research Assistant Professor, Department of Psychiatry: Psychiatric Epidemiology. Ph.D., 2006, University of Iowa: Classification of mental illness; relationships between personality and psychopathology; clinical assessment. Clinical Program

London, Manuel, Dean and Professor, College of Business and Center for Human Resource Management. Ph.D. 1974, Ohio State University: Organizational psychology; person perception applied to performance ratings, feedback, and performance management systems; group learning and team development; dispositional factors affecting involvement in social advocacy. Social and Health Program

Powers, Alice, Ph.D., 1969, Bryn Mawr College: Comparative and physiological psychology; brain and behavior of turtles, with the aim of understanding the evolutionary history of the mammalian brain; habituation and affective modification of the blink reflex in humans. Integrative Neuroscience Program.

Van Snellenberg, Jared, Assistant Professor, Psychiatry, Ph.D., 2012, Columbia University, neural underpinnings of psychotic and cognitive symptoms of schizophrenia and related disorders, using multimodal neuroimaging methods to measure brain activity and neurochemistry

#### **Adjunct Faculty**

Sternglanz, Sarah, Assistant Professor Emerita, Social Sciences Interdisciplinary Program, Ph.D., 1973, Stanford University: Human ethology; sex roles; social learning theory; female academic and career success

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

**Public Health**

The Program in Public Health (PPH) is part of Stony Brook Medicine. Program information is available in the Health Sciences Bulletin or on the PPH website at <https://publichealth.stonybrookmedicine.edu/>.

**Public Health**

Program information is available in the Health Sciences Bulletin or at <https://publichealth.stonybrookmedicine.edu/>.

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

Spring 2018

Science Education

**Graduate Program Director:**

Keith Sheppard, Life Sciences Building 092 (631) 632-2989 (keith.sheppard@stonybrook.edu)

**Graduate Program Coordinator:**

Judy Nimmo, Life Sciences Building 092 (631) 632-9750 (judith.nimmo@stonybrook.edu)

**Associate Program Directors:**

Angela Kelly, Life Sciences Building 092, (631) 632-1683 (angela.kelly@stonybrook.edu)

Ross Nehm, Life Sciences Building 092, (631) 632-7247 (ross.nehm@stonybrook.edu)

Gregory.Rushton, Life Sciences Building 092, (631) 632-7496 (gregory.rushton@stonybrook.edu)

**Degree awarded:**

Ph.D. in Science Education

**Program web site:**

<http://sciedphd.stonybrook.edu/>

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-gs](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-gs)

Science Education

The Institute for STEM Education (I-STEM) provides graduate education leading to a PhD in Science Education for those who wish to work as

1. university or college science educators, directing science teacher education programs, working closely with schools and school systems on local, state and national science projects;
2. university research or policy specialists, with the bulk of their time spent on guiding research on various aspects of science instruction;
3. directors and supervisors in K-12 school systems, covering the design and implementation of science programs at local, county and state levels; and,
4. classroom teachers with improved knowledge of science education theory and practice.

A carefully sequenced series of science education core courses and research experiences, coupled with exposure to science education events at state and national levels, provide the backbone of the program. Students are introduced to current science education research areas. As part of the coursework students are required to complete research projects, write and submit articles for publication, make presentations at science education conferences and learn to use computer and library research resources.

Beyond the science education core coursework, students take courses in statistics and research methodologies, complete breadth and depth requirements in science content areas and undertake independent research under the guidance of advisors in science education and in their science cognate discipline. The program targets part-time students from the region, but will expand after the first cohort groups by attracting full-time students. Part-time students should complete the program in approximately five to six years.

**Science Education Admission Requirements:**

The following will be required

- A. A bachelor's degree in a science subject
- B. A master's degree in either a scientific field or in education
- C. Official transcripts of all colleges and universities attended
- D. GRE general test scores (required for PhD programs - taken within last 5 years)
- E. Graduate GPA of at least 3.0
- F. 3 letters of recommendation
- G. Interview and writing sample
- H. Statement of intent
- I. Completed application form
- J.

Acceptance by the graduate school

For more information visit the CESAME Web site at

<http://sciedphd.stonybrook.edu/>

Degree Requirements for the Ph.D. in Science Education

**A. Course Requirements (5 courses from the following)**

CSM 599 Graduate Research in Science Education CSM 600 History and Philosophy of Science Education

CSM 610 Nature and Practice of Science

CSM 620 Science Teacher Education

CSM 630 Science Education Research Seminar

CSM 640 Directed Study in Science Education

CSM 650 Introduction to Measurement and Assessment in Science Education

**B. Statistics and Research Methodology courses (3 courses)**

**C. Science Content Breadth and Depth Courses (up to 6 courses)**

**D. Independent Research**

CSM 699 Dissertation Research on Campus or CSM 700 Dissertation Research Off Campus

CSM 701 Dissertation Research Off Campus-International

The courses to be taken depend upon the type of master's degree that the entering student holds. Students holding a master's degree in a specific scientific discipline will be required to complete graduate courses in other science disciplines. Students holding masters degrees in education will be required to complete graduate coursework in their scientific field. The required breadth and depth courses are determined by transcript review by the Graduate Program Director upon acceptance into the program.

**E. Qualifying examination**

Students will complete a qualifying examination after their fifth semester and upon the completion of all the science education core courses. The qualifying examination will have three components:

Paper 1 – a common examination question for all students based on a topic from the science education core courses.

Paper 2 - an individualized examination question, written by the student's advisor, based upon a student's dissertation research area.

An oral presentation and defense of the two papers

**F. Research Proposal**

Students are required to prepare and defend a dissertation proposal based on their proposed research. The students will present a formal written dissertation proposal that includes details of the research questions, a complete literature review, the methods chosen to answer the research questions and details of how the collected data will be analyzed. The proposal will be presented and defended in an oral hearing before the dissertation committee. If appropriate, Institutional Review Board (IRB) approval to conduct the research will be secured. On satisfactory completion of the dissertation proposal, a recommendation for advancement towards candidacy will be forwarded to the graduate school.

**G. Advancement to Candidacy**

When the above requirements have been satisfactorily completed, a recommendation for advancement to candidacy for the Ph.D. will be forwarded to the Graduate School.

**H. Dissertation**

The dissertation research outlined in the thesis proposal will be supervised by the committee, which will normally include both science education and science faculty.

**I. Dissertation Defense**

The dissertation defense, which completes the requirement for the PhD consists of a public seminar presentation of the dissertation work followed by an oral examination before the dissertation examining committee.

**J. Teaching Experience**



A semester of a practicum in teaching will be required in addition to the completion of the Science Teacher Education core course. This may include making seminar presentations, assisting in laboratories and leading discussion sessions. Formal and informal feedback on a candidate's teaching will be provided by program faculty.

### K. Residence Requirement

The University requires at least two consecutive semesters of full-time graduate study.

Science Education Faculty

#### Full Professors

Bugallo, Mónica, Professor of Electrical and Computer Engineering and Faculty Director of the Women in Science and Engineering Program (WISE). Ph.D., 2001, University of A Coruña, Spain: Statistical signal processing; engineering education; women in science and engineering.

Bynum, R. David, Distinguished Service Professor of Biochemistry and Cell Biology and Emeritus Director of Institute for STEM Education. Ph.D., 1981, Dartmouth College: Science education.

Ferguson, David L., Distinguished Service Professor and Chairperson of Technology and Society. Ph.D., 1980, University of California, Berkeley: Quantitative methods; computer applications (especially intelligent tutoring systems and decision support systems); mathematics, science, and engineering education.

Hanson, Gilbert N., Distinguished Service Professor of Geosciences. Ph.D., 1964, University of Minnesota: Application of radiometric and geochemical methods to petrologic and tectonic problems.

Hanson, David M., Distinguished Service Professor of Chemistry. Ph.D., 1968, California Institute of Technology: Design and development of classroom learning structures; text-based and web-based learning systems; and course assessment systems.

Lopez, Glenn R., Professor of Marine Sciences. Ph.D., 1976, Stony Brook University: Marine biology; benthic ecology; animal-sediment interactions.

McCarthy, Robert, Professor of Physics and Astronomy and Director of Masters of Arts in Teaching Physics Program. Ph.D., 1971, University of California, Berkeley: Experimental elementary particle physics; physics education of teachers.

#### Associate Professors

Aubrecht, Katherine, Associate Professor of Chemistry. Ph.D., 1999, Cornell University: Development of learning materials about sustainability for the chemistry curriculum; context-based approaches in chemical education; biodegradable and bio-renewable polymers; environmentally benign synthetic methodology.

Berger, Lisa, Associate Professor of Mathematics. Ph.D., 2007, University of Arizona: Number theory; mathematics education of teachers.

Kelly, Angela, Associate Professor of Physics. Ph.D., 2006, Teachers College, Columbia University: Science education; physics education; engineering education; physical science access for traditionally underserved groups; sociocognitive perspectives of STEM participation and persistence.

Nehm, Ross, Associate Professor of Ecology and Evolution. Ph.D., 1998, University of California, Berkeley: Biology education; science assessment; assessment technologies; problem solving processes; science learning; novice-expert studies; evolution education; textbooks and knowledge representation.

Rushton, Gregory T., Associate Professor of Chemistry. Ph.D., 2004, University of South Carolina: Conceptual change in tertiary chemistry learning environments; classroom discourse practices; policy reform in K-16 chemistry education; large-scale demographic analyses of K-12 STEM teaching populations; science teacher leadership; curricular reform through research-driven decisions; pedagogical content knowledge (PCK) in chemistry.

Scarlato, Lori L., Associate Professor of Computer Science. Ph.D., 1993, Stony Brook University: Educational technology; tangible, physical, multi-modal, and collaborative human-computer interfaces; serious games; computer graphics; multimedia.

Sheppard, Keith, Associate Professor of Biology and Cell Biology and Director of Institute for STEM Education. Ed.D., 1997, Teachers College, Columbia University: Science education, chemistry education, physics education, history of science education, science learning, science teacher education.

#### Research Associate Professor

Moloney, Daniel, Research Associate Professor of Biochemistry and Cell Biology, Director of NIH Bridges to Baccalaureate Program, and Director of Biotechnology Teaching Laboratories. Ph.D., Stony Brook University: cell signaling regulation; cancer chemoprevention; DNA barcoding; biotechnology; STEM education.

**Research Assistant Professor**

Zachar, Zuzana, Research Assistant Professor of Biochemistry and Cell Biology and Director of Masters of Arts in Teaching Biology Program. Ph.D., Stony Brook University: Cancer chemotherapy; transposon biology; regulation of alternative splicing of mRNA and nuclear architecture; biology education of teachers.

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

Spring 2018

Social Welfare Department

**Dean**

Jacqueline B. Mondros, Health Sciences Center, Level 2, Room 093 (631) 444-2139

**Graduate Program Director**

Richard Morgan, Health Sciences Center, Level 2, Room 093 (631) 444-6926

**Assistant Dean, Academic Services for Master's Program**

Sunday Coward, Health Sciences Center, Level 2, Room 093 (631) 444-3154

**Doctoral Program Director and Interim Chair**

Iris C. Fineberg, Health Sciences Center, Level 2, Room 093 (631) 444-3146

**Doctoral Program Coordinator**

Jamie Weissbach, Health Sciences Center, Level 2, Room 089 (631) 444-3146

**Degree Awarded**

Ph.D. in Social Welfare

Health Sciences Center Bulletin

**Application**

Admission of new students is currently suspended.

The Ph.D. Program in Social Welfare

The primary purpose of the Ph.D. program is to produce scholars who can use systematic methods to develop through research, and disseminate through teaching and writing, knowledge concerning social welfare problems and policies.

Drawing upon the social, behavioral and health sciences as well as social work knowledge and experience, the graduates of this program will have the skills to expand the base of tested knowledge that can guide the profession of social work in its efforts to address major social problems.

A second purpose is to develop leaders and educators who can effectively contribute to contemporary social work practice as defined in this school's mission statement, which can be found at: [socialwelfare.stonybrookmedicine.edu/mission](http://socialwelfare.stonybrookmedicine.edu/mission).

The core of this program is education for scholarly research leading to careers as teachers, researchers, and policy analysts with a focus on the content areas of health, mental health, and substance abuse. The strength of such a program lies in its location within the Health Sciences Center. This is a natural setting in which to bring together the basic sciences and theoretical disciplines in applied policy/program analysis and thereby contribute to research in the social dimensions of health and mental health.

**Program Structure and Content**

The structure of this program consists of 12 required classroom courses (36 credits) as follows:

Statistics I and II

Research Methods I and II

Qualitative Research

Social Welfare Policy Analysis I and II

Social Welfare Administration

Knowledge Building in Social Work: The Philosophy of Applied Social Research

Social Science Theory for Social Welfare

Seminar and Teaching Practicum in Social Work Education

Dissertation Seminar I and II

Also required are three electives (9 credits), a research practicum of 10 hours per week for two semesters under mentorship (6 credits), a comprehensive exam and the production and defense of a scholarly dissertation. Fifty four credits are required for graduation. In the first three years, students take three courses each semester. The full-time program is designed to be completed in a minimum of four years.

Once all coursework and the comprehensive exam have been completed successfully, students select a preliminary dissertation chair and committee and develop an approved dissertation proposal. The student is then advanced to candidacy and begins dissertation research. The fourth year is spent on completion of the dissertation and defense.

**The Part-Time Option**

Students who are approved for the part-time option take a minimum of six credits each semester until the 54 credit sequence has been completed. However, in order to meet residence requirements, they must take nine credits in each of two consecutive semesters during the program. Part-time students take their comprehensive exam at the end of the semester when 36 credits of required course work are completed (usually the second semester of the third year). Once all coursework and the comprehensive exam are completed successfully, part-time students select a dissertation chair and committee. In the fourth year, they develop an approved dissertation proposal. They are then advanced to candidacy. Dissertation research begins in the fifth year.

Admission requirements of the Social Welfare Department

Admissions of new students is currently suspended.

#### **Requirements for the Ph.D. Degree in Social Welfare**

A) One year in residence

B) Satisfactory completion of all required and elective courses (54 credits)

C) Satisfactory completion of research and teaching practicum

D) Satisfactory performance on the comprehensive qualifying exams

E) Advancement to candidacy by vote of the doctoral committee upon successful completion of all course work and the comprehensive exam

F) Completion of a dissertation

G) Successful defense of the dissertation

A program summary booklet is available describing the Ph.D. program in detail, its curriculum and requirements for admission. To receive a copy of this booklet, contact the School of Social Welfare's Ph.D. program office in writing or by telephone at (631) 444-2138.

Faculty of the Social Welfare Department

#### **Professors**

Ballan, Michelle, Ph.D., University of Texas at Austin: Prevention and treatment interventions for individuals with intellectual and developmental disabilities and their families; research focused on sexuality, intimate partner violence and direct practice for individuals with disabilities; bioethics; disability studies; human rights and social justice for underserved populations.

Blau, Joel, Director of the Ph.D. Program, D.S.W., Columbia University: History of social welfare, poverty, homelessness, the political economy of social welfare, and comparative social welfare, as well as the major U.S. social programs for food, income supports, health care, housing, and employment policy.

Brisbane, Frances, Vice President for Health Sciences Workforce Diversity, Ph.D. Union Graduate School and University: Substance abuse and addictive behaviors, culture competence, childhood trauma, aging, veterans and their families.

Leibowitz, George, Ph.D., University of Denver: Research on trauma and victimization among child welfare and juvenile justice involved youth; Addictions and public health issues in the criminal justice system; Assessment and Treatment with Sexually Abusive Youth; Global mental health.

Mondros, Jacqueline B., Dean and Assistant Vice President of Social Determinants of Health, D.S.W., University of Pennsylvania: Social work education leadership; application of social capital and social network theory to social work practice; social work determinants of health; study of urban neighborhoods; community social services; community development and community organization.

#### **Associate Professors**

Fineberg, Iris Cohen, Associate Dean for Academic Affairs, Ph.D. Boston University: Palliative and end of life care, oncology, family-oriented health care, interdisciplinary education and teamwork, advance care planning, clinical and research ethics, qualitative research methods, mixed methods, evaluation.

Hayward-Everson, R. Anna, Ph.D., University of Maryland, Baltimore: Child welfare, undocumented immigrant children, family-centered practice, research, program evaluation, environmental social work.

Monahan, Kathleen, Associate Professor, Director of the Family Violence Education and Research Center and Director of the Trauma Specialization, D.S.W., Adelphi University: Sexual abuse; sexual abuse and adult health issues; Intimate Partner Violence (IPV), battered women and Traumatic Brain Injury; domestic violence shelters; disability; aging and trauma; children exposed to domestic violence and siblings.

Robbins, Charles L., Vice Provost for Undergraduate Education, Dean of the Undergraduate Colleges, Stony Brook University; D.S.W. Yeshiva University: Violence in intimate relationships and as a public health problem, health-care policy, health care disparities, social work and health care, the use of complementary medicine, men's health, cultural competency.

#### **Assistant Professors**

Bessaha, Melissa L., Ph.D., University of Maryland: Adolescent and emerging adult development; educational and health equity; multicultural and immigrant issues; mental health services research; higher education policy; program development and evaluation.

Hammock, Amy, Ph.D., University of Michigan: Intimate partner violence intervention and prevention; Community-based participatory research; Community practice with immigrant populations; Qualitative methods; Feminist theory and practice.

**Clinical Associate Professors**

Farrington, Jack, Ph.D., Nova Southeastern University: Community health orientation; advocacy; human rights for Long Island teenagers and domestic violence.

Morgan, Richard, Ph.D., Fordham University: Child welfare policy and programs; child sexual abuse and juvenile sex offenders; research, ethics.

Peabody, Carolyn, Ph.D., Stony Brook University: Advocacy/empowerment theory and practice, feminist theory and practice, mental health, lesbian and gay issues, development of political identity among oppressed populations, impact of sexual abuse histories among mental health populations.

Velázquez, Suzanne, Director of the Undergraduate Program, Ph.D., Stony Brook University: Community Development, service-learning, cultural competency, leadership, transformative learning, higher education policy, organizational culture management, women's life work issues.

**Clinical Assistant Professors**

Rabeno, Stephen, Ph.D., Adelphia University: Poverty, homelessness, and the political economy of social welfare; substance abuse; intimate relationships; gender studies.

Cohen, Shelly, D.Phil., Oxford University: Criminal justice research, problem solving courts, substance abuse, program evaluation and statistical analysis.

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

Sociology Department

**Chairperson**

Daniel Levy, Ward Melville Social and Behavioral Sciences Building S-409 (631) 632-7755

**Graduate Program Director**

Kathleen Fallon, Ward Melville Social and Behavioral Sciences Building N-435 (631) 632-7581

**Graduate Program Coordinator**

Wanda Vega, Ward Melville Social and Behavioral Sciences Building S-401 (631) 632-7730

**Degrees Awarded**

M.A. in Sociology; Ph.D. in Sociology

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-gs](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-gs)

**Description of Sociology Department**

The Department of Sociology, in the College of Arts and Sciences, has a nationally ranked graduate program offering both the M.A. and Ph.D. degree.

The Department provides graduate training in sociology that is informed by a global perspective. Whether a sociological question addresses individual-level processes, ideas, or organizations, there are often global influences and implications connected to that phenomenon. Students pursuing an advanced degree in sociology will have opportunities to focus on global sociology and to learn how sociological methods and theories can be applied to the study of global social, cultural, political, and economic processes.

The sociology program grants the doctorate to three to six students per year. Most of these go on to university or college teaching positions or postdoctoral programs at other universities. A few enter government service, business, or applied research.

**Admission to the Ph.D. and M.A. Program in Sociology**

Applicants should specify on the application which degree program they wish to enter. Applicants seeking a Ph.D. degree should apply directly for acceptance to the Ph.D. program. (Applicants need not have an M.A. degree to apply to the Ph.D. program.) For admission to graduate study in sociology, the following, in addition to the minimum Graduate School requirements, are normally required:

A. A bachelor's degree or its equivalent, as attested to by transcripts of previous academic work. Official transcripts from international colleges or universities are preferred to be evaluated by [World Education Services](#).

B. Undergraduate statistics course.

C. Undergraduate grade point average of 3.0 or above.

D. Satisfactory results on the Graduate Record Examination (GRE) General Test. (Non-native speakers of English, in addition to taking the GRE, must take the TOEFL exam and receive a score of 550 (paper), 213 (computer) or 90 (iBT) or better to be considered for admission.)

E. Satisfactory recommendations from former instructors.

F. Acceptance by both the Department and the Graduate School.

**Facilities of Sociology Department**

The Ward Melville Social and Behavioral Sciences Building is networked by computers to a divisional network, University mainframes, and the Internet, as well as to the Social Sciences Data Lab's computing facilities and data library. The Sociology Department has the only laboratory for the study of social systems in humans and animals existent in a sociology department; it is devoted to basic research in social organization. The department also has a Sociology Reading Room.

**Requirements for the M.A. Degree in Sociology**

In addition to the minimum Graduate School requirements, the following are required:

**A. Courses**

Course requirements for an M.A. in sociology include four designated courses, two in sociological theory and two in statistics, and an additional six elective courses totaling thirty credits. Students must achieve a minimum 3.0 grade point average for 30 credits of graduate level courses.

**B. Writing Requirement**

Students are required to write a theoretical/empirical research paper as described in the writing option (Section D, Option 2.1, Mandatory Theoretical/Empirical Paper) for the Ph.D. program. This paper will constitute an original piece of social science research evaluated formally by two faculty members.

**Requirements for the Ph.D. Degree in Sociology**

In addition to the minimum Graduate School requirements, the following are required:

### A. Residence

Minimum residence is one year of full-time study. Students may be admitted to the Ph.D. program on a part-time basis, but these arrangements usually require that the students appear on campus during certain periods of the normal working day. Full-time study entails 12 or more graduate credit hours per semester for those students entering without prior graduate study or fewer than 24 graduate credit hours, and nine or more graduate credit hours per semester for those students entering with more than 24 graduate credit hours or with advanced standing provided by prior graduate work. Since a graduate traineeship is considered part of the academic program, credit hours will be given for teaching or research assistantships as well as supervised teaching. Under specific conditions credit may be given for individual research work outside formal courses but under the supervision of faculty members.

### B. Courses

Course requirements for a Ph.D. in sociology include five designated courses, two in sociological theory and three in statistics and methods. Of an additional 10 required courses, one must be taken in introduction to global sociology and another, which must provide additional methodological training, can be chosen by the student from a variety of suitable offerings specified by the department. Three of the remaining eight required courses may be taken outside the department, upon written approval from the department's graduate committee. These three courses must be completed with at least a B average.

During the first year of study full-time students who have fewer than 24 graduate credit hours take eight courses; full-time students who have 24 or more graduate credit hours from prior graduate study take six courses. These must include two two-course sequences, one in sociological theory (SOC 505 and SOC 506) and one in statistics (SOC 501 and SOC 502), plus a methods course (SOC 504) and one elective course. For those holding graduate traineeships, a teaching assistantship under the supervision of a faculty member would consist of two of the eight courses (one each semester).

### C. M.A. Degree

A student is awarded the M.A. degree as a sign of progress toward the Ph.D. To receive the M.A. a student must complete:

1. Two consecutive semesters of full-time study, achieving a 3.0 grade point average for 30 hours of graduate work.
2. One of the two papers required by the writing option (Section D, Option 2) for the Ph.D. program.

### D. Professional Competence Options

Continuing doctoral students have two options for completing the first half of the doctoral program before moving on to work in a special field and on their dissertation.

*Option 1—Comprehensive Examination and M.A. Research Report:* In this rather traditional option, the adequacy of a student's general preparation is evaluated by means of a written comprehensive examination. This examination, to be taken between the beginning of the fifth semester and the beginning of the sixth semester of graduate study, must be passed at the standard set by the department for doctoral-level work. A student who fails to pass this examination at the required level, but whose performance is satisfactory in all other aspects, may be permitted to take a terminal M.A. by completing 30 credits of graduate coursework and submitting an acceptable research report. Upon passing the comprehensive examination, the student must submit a research report that demonstrates ability to analyze empirical data and to present findings clearly and systematically. Upon successful completion of all of the above requirements, along with completion of a minimum of 30 hours of graduate credit, the department will recommend to the dean of the Graduate School that the student be awarded the M.A. degree as a sign of progress toward the Ph.D. Recipients of the terminal M.A. will not be granted permission to continue.

*Option 2—The Two Papers:* In this option, a student can meet M.A. requirements and proceed to the second half of doctoral work through the submission of two papers written under faculty supervision. These should normally be completed by the end of the third academic year, and each of the two papers is designed to allow students to demonstrate a different competence. Each paper should be more substantial than a seminar paper and less substantial than an M.A. thesis; two different substantive areas must be represented in the papers. The two papers are designed to demonstrate competence in the kinds of skills that students will need in the profession of sociology. One of these papers must be a theoretical/empirical paper and the second can be either a second theoretical/empirical paper, an analytical review of the literature, or an analytical review of the literature embedded in a grant proposal. In other words, one paper must be theoretical/empirical and the second may be chosen from among the three possible kinds of papers described below.

**1. Mandatory Theoretical/Empirical Paper:** The majority of sociological articles use empirical data to answer theoretical questions. Such questions often arise from previous research. They can also be the result of juxtaposing two or more theories, or finding that a theory could use further development or clarification on a point, and then showing how the proposed development or clarification better explains some specific aspect or aspects of social reality.

The empirical data explained or clarified by the theory or theories can take a number of forms. It can be the product of ethnographies, comparative and/or historical research, social surveys, small group or experimental laboratory research, content analyses, etc. The important point is to combine theory and empirical research.

**2. Analytical review of the literature:** This paper is to be an assessment of the state of the art in some substantive area of sociology. This paper can take various forms. One possibility is a review essay and examples of this form can be found in the *Journal of Economic Literature*, the *Psychological Review*, or the *Annual Review of Sociology*. A second approach could be a review of a field that could serve as the substantive underpinning for a graduate seminar.

**3. Analytical review of the literature embedded in a grant proposal:** This is to be a major grant proposal. It should normally include a review of the relevant literature, statements of the theoretical framework being used, the hypotheses to be tested, and methodology to be employed in

the project. The proposal does not have to be submitted to a funding agency, but all the materials required by a particular agency or foundation must be completed and, in addition, the project must receive CORIHS (Committee on Research Involving Human Subjects) approval, if human subjects are involved. This proposal must also be of substantial size. A very short proposal of just a few pages is not adequate even if that is acceptable to some particular agency.

Upon successful completion of all of the above requirements, along with completion of 30 hours of graduate credit, the student may proceed to the advanced stage of his or her doctoral work.

#### **E. Teaching Requirement**

Graduate training includes supervised teaching experience. In the fall semester of their third year, students enroll in a teaching practicum to prepare them to teach their own course, under supervision, the following semester or in the Fall semester of their fourth year.

#### **F. Preliminary Examination**

This takes the form of an oral examination in the student's specialty to be given only after all the above requirements have been met. It is designed to appraise the depth of knowledge in the broad area from which the student has selected a dissertation topic. The content of this area is to be defined individually for each student. It consists of a generally recognized, broad subfield and must deal with related materials from other subfields.

#### **G. Advancement to Candidacy**

The department's recommendation that a student be advanced to candidacy for the Ph.D. is based on passing the preliminary examination and approval of a dissertation proposal.

#### **H. Doctoral Dissertation**

This must be an independent piece of research and scholarship representing an original contribution, the results of which are worthy of publication. Upon oral defense and acceptance of the dissertation, the department will recommend to the dean of the Graduate School that the student be awarded the Ph.D. degree.

The progress of every student will be evaluated by the department at the end of the first full year of graduate study. Those whose performance and ability are clearly below the standard established by the department for the Ph.D. will be asked to withdraw before they have made a costly investment of time. If more than seven years have elapsed since the student completed 24 hours of graduate courses in the department, the student's Ph.D. candidacy will lapse. After the first year, a progressively larger proportion of a student's time will be spent as a participant in research activities, under the supervision of faculty members. Ordinarily, a student with adequate preparation and involved in full-time study should be able to earn a Ph.D. within five to six years from the start of graduate work.

Students who arrive with an M.A. degree in sociology or with three semesters of work in the discipline will be expected to complete some of the requirements above more quickly than indicated.

### **Faculty of Sociology Department**

#### **Distinguished Professors**

Cole, Stephen, Emeritus, 1 Ph.D., 1967, Columbia University: Science and technology; education; medical sociology; theory.

Kimmel, Michael, Ph.D., 1981, University of California, Berkeley: Gender and Sex; Masculinity Studies; Comparative and historical development; social movements; .

#### **Distinguished Service Professors**

Arjomand, Said, Ph.D., 1980, University of Chicago: Comparative; historical; political; religion.

Goodman, Norman, also a Distinguished Teaching Professor, 2 Ph.D., 1963, New York University: Social psychology; family; socialization; emotions.

#### **Distinguished Teaching Professor**

Schwartz, Michael, Emeritus, 3 Ph.D., 1971, Harvard University: Methodology; historical; political economy; business structure; social movements.

Tanur, Judith, Emerita, 4 Ph.D., 1972, University at Stony Brook: Statistics; methodology; survey research; social psychology

#### **Professors**

Barthel-Bouchier, Diane, Emerita, 5 Ph.D., 1977, Harvard University: Culture; community; historical; gender.

Chase, Ivan, Emeritus, Ph.D., 1972, Harvard University: Social organization; behavioral processes in small groups; resource allocation; collective action; cross-species comparisons.

Fallon, Kathleen, Graduate Program Director, Ph.D., 2002, Indiana University: Global sociology; gender and development; political sociology; social movements; health.

Feldman, Kenneth, 6 Ph.D., 1965, University of Michigan: Social psychology; higher education; socialization.



Levy, Daniel, Chairperson, Ph.D., 1999, Columbia University: Political sociology; comparative/historical sociology; global sociology; memory studies.

Oyewumi, Oyeronke, Ph.D., 1993, University of California, Berkeley: Gender; race; family; culture; knowledge; social inequalities; globalization.

Roxborough, Ian, Ph.D., 1977, University of Wisconsin-Madison: War and military; historical; revolutions; economic.

Rule, James B., Emeritus, Ph.D., 1969, Harvard University: Theory; political; technology.

Tyree, Andrea, Emerita, Ph.D., 1968, University of Chicago: Demography; social stratification; ethnicity; marital violence.

#### **Associate Professors**

Collver, O. Andrew, Emeritus, Ph.D., 1964, University of California, Berkeley: Human ecology; urban community; demography.

Fleming, Crystal, Ph.D., 2011, Harvard University: Cultural sociology; race; racial and ethnic relations.

Moran, Timothy, Ph.D., 2000, University of Maryland: Social inequality; global political economy; contentious collective action; quantitative methods.

Shandra, John, Ph.D., 2005, Boston College: Quantitative methods; environmental sociology; political economy.

#### **Assistant Professors**

Burroway, Rebekah, Ph.D., 2011, Duke University: Medical sociology; sex and gender; stratification/mobility.

Heerwig, Jennifer, Ph.D., 2013, New York University: Political sociology; elites; public opinion; quantitative methods; computational sociology.

Jones, Jason, Ph.D., 2011, University of California, San Diego: Computational social science; social networks; political behavior.

Joseph, Tiffany, Ph.D., 2011, University of Michigan-Ann Arbor: Medical sociology; migration/immigration; racial and ethnic relations.

Shandra, Carrie Ph.D., 2009, Brown University: Disabilities; gender; work and occupations; families and households; quantitative methodology

Shorette, Kristen, Ph.D., 2013, University of California - Irvine: Global and transnational sociology; environmental sociology; economic sociology; health; human rights; culture; political economy.

Wilson, Nicholas Hoover, Ph.D., 2012, University of California – Berkeley: Theory; comparative and historical methods; culture; empire and imperialism; sociology of morality; sociology of knowledge.

#### **Senior Lecturers**

Marrone, Catherine, Ph.D., 1995, Stony Brook University: Medical sociology; gender; work and professions; sociology of human reproduction; sociology of aging.

#### **Affiliated Appointment**

Forbis, Melissa M.,<sup>7</sup> Assistant Professor, Ph.D., 2008, University of Texas-Austin: Ethnography (Anthropology); sex and gender; social change.

Gootenberg, Paul, E,<sup>8</sup> Professor, Ph.D., 1985, University of Chicago: Religion; colonial and modern, Andes, comparative economic.

#### **Research Faculty**

Schwartz, Joseph,<sup>9</sup> Professor, Ph.D., 1978, Harvard University: Quantitative methods; social stratification; sociology of work and occupations; social networks.

Number of teaching, graduate, and research assistants, fall 2017 30

- 1) Recipient of the President's Award for Excellence in Teaching, 1992
- 2) Recipient of State University Chancellor's Award for Excellence in Teaching, 1976
- 3) Recipient of the State University Chancellor's Award for Excellence in Teaching, 1975
- 4) Recipient of the State University Chancellor's Award for Excellence in Teaching, 1990. Recipient of the President's Award for Excellence in Teaching, 1990
- 5) Recipient of the State University Chancellor's Award for Excellence in Teaching, 1989. Recipient of the President's Award for Excellence in Teaching, 1989
- 6) Recipient of the State University Chancellor's Award for Excellence in Teaching, 1995. Recipient of the President's Award for Excellence in Teaching, 1995

- 7) Joint title, Women's, Gender, and Sexuality Studies
- 8) Affiliated appointment, History Department
- 9) Affiliated appointment, Department of Psychiatry

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

Spring 2018

**Please refer to the Linguistics Department Bulletin for more information.**

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**Please refer to the Linguistics Department Bulletin for more information.**

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

Master of Arts in Teaching Biology

**Director, Center for Science and Mathematics Education**

Keith Sheppard, 39 Life Sciences Building (631) 632-2989 Keith.Sheppard@stonybrook.edu

**Program Director**

Zuzana Zachar, 50 Life Sciences Building (631) 632-8970 Zuzana.Zachar@stonybrook.edu

**Degree Awarded**

Master of Arts in Teaching Biology

**Website**

<http://www.stonybrook.edu/spd/graduate/matscience.html>

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-edl](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-edl)

Master of Arts in Teaching Biology

This program is designed as a course of study leading to New York State certification for teaching Biology in the secondary schools (grades 7-12), with an extension option for grades 5-6. Candidates admitted may also qualify for a General Science Extension for grades 7-12. This program, offered in collaboration with the School of Professional Development, the University's Department of Biochemistry and Cell Biology and the [Professional Education Program](#), is designed for those who have little or no previous coursework in education or formal classroom teaching experience.

Master of Arts in Teaching Admissions

A. Application essay.

B. Graduate Record Examination (GRE) General Test scores.

C. A bachelor's degree with an academic major (or a minimum of 36 credits) in the content field. Transcript must reflect a 2.75 minimum cumulative GPA as well as a 3.0 minimum GPA in science courses.

D. One year of college-level study of a foreign language with a grade of "C" or better (this may include American Sign Language)

E. Three letters of recommendation. Two of the three recommendations must be from faculty with whom you have completed a course of study at the college level. It would be preferable that these faculty be in the area of your major.

F. In those cases where the departmental admissions committee deems it desirable, personal interviews with departmental representatives may be necessary.

Requirements for the MAT in Biology

The degree program consists of 44 credits, distributed among the areas listed below. Unless otherwise noted, each course is three credits. All degree requirements must be completed within five (5) years from the semester date of admission as a matriculated student.

**1. GRADUATE SCIENCE COURSES**

15 credits; courses not listed are selected with the approval of a departmental advisor

*Core courses (select 3 of the following):*

CEB 546 Current Topics in Biotechnology  
CEB 547 Current Topics in Molecular Genetics  
CEB 553 Biology of Human Behavior  
CEB 554 Current Topics in Immunology  
CEB 556 Ecology

*Plus two of the following\*:*

CEB 505 History of the Long Island Environment  
CEB 557 Forensic Science  
CEB 548 Current Topics in Microbiology  
CEB 549 Laboratory Science Curriculum Development  
CEN 508/CHE 593 Demonstrations in Chemistry

\*With prior approval of the MAT Biology program director, you may choose a content course from one of the masters or PhD programs in Marine Science, Genetics, Molecular & Cellular Biology and Ecology & Evolution to satisfy requirements in this area.

**2. PROFESSIONAL STUDIES IN EDUCATION - 23 credits**

CEE 505 Education: Theory and Practice  
 CEF 547 Principles and Practices of Special Education  
 PSY 595 Human Development  
 SCI 510 Introduction to Science Teaching (co-requisite SCI 549)  
 SCI 520 Science Teaching Methods (prerequisite SCI 510; co-requisite SCI 550)  
 SCI 549 Clinical Experience I (one-credit; co-requisite SCI 510)  
 SCI 550 Clinical Experience II (one-credit; prerequisite SCI 549; co-requisite SCI 520)  
 SCI 554 Student Teaching Seminar (prerequisites SCI 510, 520, 549, 550, CEE 505, PSY 595, and LIN 544, and all content courses required for completion of the degree; interview with and permission of Science Education Committee 631.632.7059; matriculation in degree [MAT/BIO, CHE, ESS, or PHY] program, successful completion of the LAST Examination. Co-requisites SCI 551 and SCI 552.)  
 LIN 544 Language Acquisition and Literacy Development

At the program director's discretion, an undergraduate course from a registered and approved program may be approved as a substitution for any of the courses listed below. In all cases the undergraduate course must have been completed with a B or higher and the student must then take a different graduate pedagogy course to fulfill the graduate credits required for the graduate degree.

- CEE 505: Education – Theory and Practice
- CEF 547: Principles and Practices of Special Education
- LIN 544: Language Acquisition and Literacy Development
- PSY 595: Human Development

Speak to your graduate program director for more information and approval.

**3. SUPERVISED STUDENT TEACHING - 6 credits**

SCI 551 Supervised Student Teaching High School Grades 10-12: Science (prerequisites SCI 510, 520, 549 and 550; co-requisite SCI 552 & SCI 554)  
 SCI 552 Supervised Student Teaching Middle School Grades 7-9: Science (prerequisites SCI 510, 520, 549 and 550; co-requisites SCI 551 & SCI 554)

**4. WRITTEN PROJECT**

Students will be required to complete a teaching project approved by the sponsoring department.

**TEACHER CERTIFICATION**

The Master of Arts in Teaching is a New York State registered and approved program that qualifies students for license upon successful degree completion. Students must complete all courses required for the MAT and must receive a grade of B or better in all pedagogy and foundation courses as well as an overall GPA of 3.0 or better in all course work attempted while matriculated in a graduate teacher preparation program.

In addition, all teacher preparation candidates must be fingerprinted and must also complete certification workshops in:

- Child Abuse
- Dignity for All Students Act (DASA)
- School Violence (Project Save)

See Certification and Licensing Workshops for details and schedules.

All students will have to complete the ALST (Academic Literacy Skills Test), Educating All Students Test, and the revised CST (Content Specialty Test) in the area of the Certificate. The activation date of some of the new Content Specialty Tests will vary as they become live during the 2013-2014 academic year. It is the student's responsibility to monitor the TEACH website at <http://www.highered.nysed.gov/tcert/> to ensure that they are taking the appropriate examinations. All students are required to complete and submit the edTPA (Education-Teacher Performance Assessment - Portfolio) in their content field. Students should check with the program director for specific requirements.

**Faculty**

Program faculty are drawn from the Department of Biochemistry and Cell Biology, as well as from the Professional Education Program.

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

## Master of Arts in Teaching Chemistry

**Director, Center for Science and Mathematics Education**

Keith Sheppard, 39 Life Sciences Building, (631) 632-2989 Keith.Sheppard@stonybrook.edu

**Program Director**

Susan Oatis, 104 Chemistry (631) 632-1571 Susan.Oatis@stonybrook.edu

**Degree Awarded**

Master of Arts in Teaching Chemistry

**Website**<http://www.stonybrook.edu/spd/graduate/matscience.html>**Application**[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-edl](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-edl)

## Master of Arts in Teaching Chemistry

This program is designed as a course of study leading to New York State certification for teaching Chemistry in the secondary schools (grades 7-12), with an extension option for grades 5-6. Candidates admitted may also qualify for a General Science Extension for grades 7-12. This program, offered in collaboration with the University's Department of [Chemistry](#), the School of Professional Development, and the [Professional Education Program](#), is designed for those who have little or no previous coursework in education or formal classroom teaching experience.

## Master of Arts in Teaching Admissions

A. Application essay.

B. Graduate Record Examination (GRE) General Test scores.

C. A bachelor's degree with an academic major (or a minimum of 36 credits) in the content field. Transcript must reflect a 2.75 minimum cumulative GPA as well as a 3.0 minimum GPA in science courses.

D. One year of college-level study of a foreign language with a grade of "C" or better (this may include American Sign Language)

E. Three letters of recommendation. Two of the three recommendations must be from faculty with whom you have completed a course of study at the college level. It would be preferable that these faculty be in the area of your major.

F. In those cases where the departmental admissions committee deems it desirable, personal interviews with departmental representatives may be necessary.

## Requirements for the MAT in Chemistry

The degree program consists of 44 credits, distributed among the areas listed below. Unless otherwise noted, each course is three credits. All degree requirements must be completed within five (5) years from the semester date of admission as a matriculated student.

**1. GRADUATE SCIENCE COURSES**

15 credits; courses not listed are selected with the approval of a departmental advisor

CHE 501 Instrumental Methods in Chemistry  
CHE 504 Structure and Reactivity in Organic Chemistry  
CHE 507 Biomolecular Structure and Reactivity  
CHE 511 Structural Inorganic Chemistry  
CHE 590 Master's Term Paper

**2. PROFESSIONAL STUDIES IN EDUCATION - 23 credits**

CEE 505 Education: Theory and Practice  
CEF 547 Principles and Practices of Special Education  
PSY 595 Human Development  
SCI 510 Introduction to Science Teaching (co-requisite SCI 549)  
SCI 520 Science Teaching Methods (prerequisite SCI 510; co-requisite SCI 550)  
SCI 549 Clinical Experience I (one-credit; co-requisite SCI 510)  
SCI 550 Clinical Experience II (one-credit; prerequisite SCI 549; co-requisite SCI 520)  
SCI 554 Student Teaching Seminar (prerequisites SCI 510, 520, 549, 550, CEE 505, PSY 595, and LIN 544, and all content courses required for completion of the degree; interview with and permission of Science Education Committee 631.632.7059; matriculation in degree [MAT/BIO, CHE, ESS, or PHY] program, successful completion of the LAST Examination. Co-requisites SCI 551 and SCI 552.)

**LIN 544 Language Acquisition and Literacy Development**

At the program director's discretion, an undergraduate course from a registered and approved program may be approved as a substitution for any of the courses listed below. In all cases the undergraduate course must have been completed with a B or higher and the student must then take a different graduate pedagogy course to fulfill the graduate credits required for the graduate degree.

- CEE 505: Education – Theory and Practice
- CEF 547: Principles and Practices of Special Education
- LIN 544: Language Acquisition and Literacy Development
- PSY 595: Human Development

Speak to your graduate program director for more information and approval.

**3. SUPERVISED STUDENT TEACHING - 6 credits**

SCI 551 Supervised Student Teaching High School Grades 10-12: Science (prerequisites SCI 510, 520, 549 and 550; co-requisite sSCI 552 & SCI 554)

SCI 552 Supervised Student Teaching Middle School Grades 7-9: Science (prerequisites SCI 510, 520, 549 and 550; co-requisites SCI 551 & SCI 554)

**4. WRITTEN PROJECT**

Students will be required to complete a teaching project approved by the sponsoring department.

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**TEACHER CERTIFICATION**

The Master of Arts in Teaching is a New York State registered and approved program that qualifies students for license upon successful degree completion. Students must complete all courses required for the MAT and must receive a grade of B or better in all pedagogy and foundation courses as well as an overall GPA of 3.0 or better in all course work attempted while matriculated in a graduate teacher preparation program.

In addition, all teacher preparation candidates must be fingerprinted and must also complete certification workshops in:

- Child Abuse
- Dignity for All Students Act (DASA)
- School Violence (Project Save)

See Certification and Licensing Workshops for details and schedules.

All students will have to complete the ALST (Academic Literacy Skills Test), Educating All Students Test, and the revised CST (Content Specialty Test) in the area of the Certificate. The activation date of some of the new Content Specialty Tests will vary as they become live during the 2013-2014 academic year. It is the student's responsibility to monitor the TEACH website at <http://www.highered.nysed.gov/tcert/> to ensure that they are taking the appropriate examinations. All students are required to complete and submit the edTPA (Education-Teacher Performance Assessment - Portfolio) in their content field. Students should check with the program director for specific requirements.

**Faculty**

Program faculty are drawn from the [Department of Chemistry](#), as well as from the Professional Education Program.

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at [COURSE SEARCH](#).*

Master of Arts in Teaching Earth Science

**Director, Center for Science and Mathematics Education**

Keith Sheppard, 39 Life Sciences Building (631) 632-2989 Keith.Sheppard@stonybrook.edu

**Faculty Advisor**

Gilbert Hanson, 310 Earth and Space Sciences (631) 632-8210 Gilbert.Hanson@stonybrook.edu

**Degree Awarded**

Master of Arts in Teaching Earth Science

**Website**

<http://www.stonybrook.edu/spd/graduate/matscience.html>

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-edl](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-edl)

Master of Arts in Teaching Earth Science

This program is designed as a course of study leading to New York State certification for teaching Earth Science in the secondary schools (grades 7-12), with an extension option for grades 5-6. Candidates admitted may also qualify for a General Science Extension for grades 7-12. This program, offered in collaboration with the School of Professional Development, the University's Department of Geosciences and the [Professional Education Program](#), is designed for those who have little or no previous coursework in education or formal classroom teaching experience.

Master of Arts in Teaching Earth Science Admissions

A. Application essay.

B. Graduate Record Examination (GRE) General Test scores.

C. A bachelor's degree with an academic major (or a minimum of 36 credits) in the content field. Transcript must reflect a 2.75 minimum cumulative GPA as well as a 3.0 minimum GPA in science courses.

D. One year of college-level study of a foreign language with a grade of "C" or better (this may include American Sign Language)

E. Three letters of recommendation. Two of the three recommendations must be from faculty with whom you have completed a course of study at the college level. It would be preferable that these faculty be in the area of your major.

F. In those cases where the departmental admissions committee deems it desirable, personal interviews with departmental representatives may be necessary.

**Requirements for the MAT in Earth Science**

The degree program consists of 44 credits, distributed among the areas listed below. Unless otherwise noted, each course is three credits. All degree requirements must be completed within five (5) years from the semester date of admission as a matriculated student.

**1. GRADUATE SCIENCE COURSES - 15 credits**

Each student's 15-credit content curriculum within the Earth Science MAT will be predicated on background preparation.

For further information on possible course offerings please go to: [http://www.geo.sunysb.edu/Earth\\_Science\\_Education](http://www.geo.sunysb.edu/Earth_Science_Education).

**2. PROFESSIONAL STUDIES IN EDUCATION - 23 credits**

CEE 505 Education: Theory and Practice

CEF 547 Principles and Practices of Special Education

PSY 595 Human Development

SCI 510 Introduction to Science Teaching (co-requisite SCI 549)

SCI 520 Science Teaching Methods (prerequisite SCI 510; co-requisite SCI 550)

SCI 549 Clinical Experience I (one-credit; co-requisite SCI 510)

SCI 550 Clinical Experience II (one-credit; prerequisite SCI 549; co-requisite SCI 520)

SCI 554 Student Teaching Seminar (prerequisites SCI 510, 520, 549, 550, CEE 505, PSY 595, and LIN 544, and all content courses required for completion of the degree; interview with and permission of Science Education Committee 631.632.7059; matriculation in degree [MAT/BIO, CHE, ESS, or PHY] program, successful completion of the LAST Examination. Co-requisites SCI 551 and SCI 552.)

LIN 544 Language Acquisition and Literacy Development

At the program director's discretion, an undergraduate course from a registered and approved program may be approved as a substitution for any of the courses listed below. In all cases the undergraduate course must have been completed with



a B or higher and the student must then take a different graduate pedagogy course to fulfill the graduate credits required for the graduate degree.

- CEE 505: Education – Theory and Practice
- CEF 547: Principles and Practices of Special Education
- LIN 544: Language Acquisition and Literacy Development
- PSY 595: Human Development

Speak to your graduate program director for more information and approval.

### 3. SUPERVISED STUDENT TEACHING - 6 credits

SCI 551 Supervised Student Teaching High School Grades 10-12: Science (prerequisites SCI 510, 520, 549 and 550; co-requisite SCI 552 & SCI 554)

SCI 552 Supervised Student Teaching Middle School Grades 7-9: Science (prerequisites SCI 510, 520, 549 and 550; co-requisites SCI 551 & SCI 554)

### 4. WRITTEN PROJECT

Students will be required to complete a teaching project approved by the sponsoring department.

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## TEACHER CERTIFICATION

The Master of Arts in Teaching is a New York State registered and approved program that qualifies students for license upon successful degree completion. Students must complete all courses required for the MAT and must receive a grade of B or better in all pedagogy and foundation courses as well as an overall GPA of 3.0 or better in all course work attempted while matriculated in a graduate teacher preparation program.

In addition, all teacher preparation candidates must be fingerprinted and must also complete certification workshops in:

- Child Abuse
- Dignity for All Students Act (DASA)
- School Violence (Project Save)

See Certification and Licensing Workshops for details and schedules.

All students will have to complete the ALST (Academic Literacy Skills Test), Educating All Students Test, and the revised CST (Content Specialty Test) in the area of the Certificate. It is the student's responsibility to monitor the TEACH website at <http://www.highered.nysed.gov/tcert/> to ensure that they are taking the appropriate examinations. All students are required to complete and submit the edTPA (Education-Teacher Performance Assessment - Portfolio) in their content field. Students should check with the program director for specific requirements.

#### Faculty

Program faculty are drawn from the Department of Geosciences, as well as from the Professional Education Program.

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

Master of Arts in Teaching English

**Acting Director of English Teacher Education**

Nicole Galante, Humanities 2084 (631) 632-7303 [Nicole.Galante@stonybrook.edu](mailto:Nicole.Galante@stonybrook.edu)

**Degree Awarded**

Master of Arts in Teaching English

**Website**

<http://www.stonybrook.edu/spd/graduate/matenglish.html>

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-edl](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-edl)

Master of Arts in Teaching English

The Master of Arts in Teaching English is a course of study leading to New York State certification for teaching English in the secondary schools (grades 7-12) with an extension option for grades 5-6. This program, offered in collaboration with the School of Professional Development, the University's Department of English and the [Professional Education Program](#), is designed for those who have little or no previous coursework in education or formal classroom teaching experience.

Master of Arts in Teaching English Admissions

A. Application essay.

B. Graduate Record Examination (GRE) General Test scores. The verbal score should be near 600 (former GRE scoring system) or 160 (new GRE scoring system); test scores can be no more than 5 years old.

C. A bachelor's degree with an academic major in English (Those without an undergraduate major in English should pursue a "second bachelor's" degree in English.) The transcript must reflect a 3.0 minimum cumulative GPA as well as a 3.0 minimum GPA in the English studies.

D. One year of college-level study of a foreign language with a grade of "C" or better (this may include American Sign Language)

E. Three letters of recommendation, preferably from English professors (one from a secondary teacher is optional)

F. In those cases where the departmental admissions committee deems it desirable, personal interviews with departmental representatives may be necessary.

Requirements for the MAT in English

The degree program consists of 44 credits, distributed among the areas listed below. Unless otherwise noted, each course is three credits. All degree requirements must be completed within five (5) years from the semester date of admission as a matriculated student.

**1. ENGLISH LANGUAGE AND LITERATURE**

15 credits.

Course selection will be determined by the student and advisor. Students who have academic deficiencies in English linguistics and/or did not complete an advanced analytical composition course will be required to include courses that specifically address these deficiencies. These courses will be part of the 15 credits selected to satisfy this requirement. Students may substitute one to six credits from Theatre Arts or Writing and Rhetoric programs to fulfill this requirement.

**2. PROFESSIONAL STUDIES IN EDUCATION - 23 credits**

CEE 505 Education: Theory and Practice

PSY 595 Human Development

CEE 588 Methods of Instruction in Literature and Composition in Secondary School (corequisite CEF 551)

CEE 590 Student Teaching Seminar (corequisites CEQ 591 & CEQ 592; prerequisites CEE 588, CEE 593, CEF 551 & CEF 552)

CEE 593 Performance and Technology in Teaching Literature and Compositions (prerequisite CEE 588; corequisite CEF 552)

CEF 547 Principles and Practices of Special Education

CEF 551 Field Experience I — Grades 7-9 (one-credit; corequisite CEE 588)

CEF 552 Field Experience II — Grades 10-12 (one-credit; prerequisite CEF 551; corequisite CEE 593)

LIN 544 Language Acquisition and Literacy Development

At the program director's discretion, an undergraduate course from a registered and approved program may be approved as a substitution for any of the courses listed below. In all cases the undergraduate course must have been completed with

a B or higher and the student must then take a different graduate pedagogy course to fulfill the graduate credits required for the graduate degree.

- CEE 505: Education – Theory and Practice
- CEF 547: Principles and Practices of Special Education
- LIN 544: Language Acquisition and Literacy Development
- PSY 595: Human Development

Speak to your graduate program director for more information and approval.

### 3. SUPERVISED STUDENT TEACHING - 6 credits

CEQ 591 Supervised Student Teaching High School Grades 10-12: English (prerequisites CEE 588, CEE 593, CEF 551 & CEF 552; corequisites CEE 590 & CEQ 592)  
CEQ 592 Supervised Student Teaching Middle School Grades 7-9: English (prerequisites CEE 588, CEE 593, CEF 551 & CEF 552; corequisites CEE 590 & CEQ 591)

### 4. WRITTEN PROJECT

Students will be required to complete a four-week English teaching module specifically designed for the Supervised Student Teaching project.

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## TEACHER CERTIFICATION

The Master of Arts in Teaching is a New York State registered and approved program that qualifies students for license upon successful degree completion. Students must complete all courses required for the MAT and must receive a grade of B or better in all pedagogy and foundation courses as well as an overall GPA of 3.0 or better in all course work attempted while matriculated in a graduate teacher preparation program.

In addition, all teacher preparation candidates must be fingerprinted and must also complete certification workshops in:

- Child Abuse
- Dignity for All Students Act (DASA)
- School Violence (Project Save)

See Certification and Licensing Workshops for details and schedules.

All students will have to complete the ALST (Academic Literacy Skills Test), Educating All Students Test, and the revised CST (Content Specialty Test) in the area of the Certificate. It is the student's responsibility to monitor the TEACH website at <http://www.highered.nysed.gov/tcert/> to ensure that they are taking the appropriate examinations. All students are required to complete and submit the edTPA (Education-Teacher Performance Assessment - Portfolio) in their content field. Students should check with the program director for specific requirements.

#### Faculty

Program faculty are drawn from the Department of English, as well as from the Professional Education Program.

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

Master of Arts in Teaching French

**Director of the Foreign Language Teacher Preparation Program**

Sarah Jourdain, 1055 Humanities (631) 632-7440 Sarah.Jourdain@stonybrook.edu

**Faculty Advisor for the MAT in French**

Prosper Sanou, 1069 Humanities (631) 632-7439 Prosper.Sanou@stonybrook.edu

**Degree Awarded**

Master of Arts in Teaching French

**Website**

<http://www.stonybrook.edu/spd/graduate/matfl.html>

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-edl](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-edl)

Master of Arts in Teaching French

The Master of Arts in Teaching is designed as a course of study leading to New York State certification for teaching French in the secondary schools (grades 7-12), with an extension option for grades 5-6. This program, which is offered in collaboration with the University's [Department of European Languages, Literatures and Cultures](#), the School of Professional Development, and the [Professional Education Program](#), is designed for those who have little or no previous coursework in education or formal classroom teaching experience.

Master of Arts in Teaching French Admissions

A. Application essay.

B. Graduate Record Examination (GRE) General Test scores.

C. A bachelor's degree with an academic major (or a minimum of 36 credits) in the program language. Transcript must reflect a 3.0 minimum cumulative GPA as well as a 3.0 minimum GPA in language studies.

D. Three letters of recommendation. Two of the three recommendations must be from faculty with whom you have completed a course of study at the college level. It would be preferable that these faculty be in the area of your major.

E. In those cases where the departmental admissions committee deems it desirable, personal interviews with departmental representatives may be necessary.

Requirements for the MAT in French

The degree program consists of 47 credits, distributed among the areas listed below. Unless otherwise noted, each course is three credits. All degree requirements must be completed within five (5) years from the semester date of admission as a matriculated student.

**1. LANGUAGE, LITERATURE AND CULTURE**

15 credits; courses not listed are selected with the approval of a departmental advisor

**French**

FRN 501 Contemporary French Culture and Institutions

FRN 507 Advanced Stylistics

FRN 510 French Phonetics and Diction

Plus two additional graduate-level FRN literature courses

**2. PROFESSIONAL STUDIES IN EDUCATION - 26 credits**

CEE 505 Education: Theory and Practice

CEF 547 Principles and Practices of Special Education

PSY 595 Human Development

FLA 505 Methods of Teaching Foreign Languages

FLA 506 Portfolio Development (prerequisite FLA 505)

FLA 507 Critical Pedagogy or FLA 540 Foreign Language Acquisition Research

FLA 549 Field Experience I—Grades 7-9 (one credit; corequisite FLA 505)

FLA 550 Field Experience II—Grades 10-12 (one credit; corequisite FLA 506)

FLA 554 Student Teaching Seminar (prerequisites FLA 505, 506, & 540; corequisites FLA 551 & FLA 552)

FLA 571 Technology and Education or FLA 507 Critical Pedagogy

At the program director's discretion, an undergraduate course from a registered and approved program may be approved as a substitution for any of the courses listed below. In all cases the undergraduate course must have been completed with a B or higher and the student must then take a different graduate pedagogy course to fulfill the graduate credits required for the graduate degree.

- CEE 505: Education – Theory and Practice
- CEF 547: Principles and Practices of Special Education
- LIN 544: Language Acquisition and Literacy Development
- PSY 595: Human Development

Speak to your graduate program director for more information and approval.

### 3. FIELD EXPERIENCE AND CLINICAL PRACTICE

Students will be required to complete 100 clock hours of field experience related to coursework prior to student teaching or practica. These experiences include practicing skills for interacting with parents, experiences in high-need schools, and experiences with each of the following student populations: socio-economically disadvantaged students, students who are English Language Learners, and students with disabilities.

### 4. SUPERVISED STUDENT TEACHING - 6 credits

Prior to student teaching, students must participate in an official ACTFL OPI (Oral Proficiency Interview) and receive a minimum spoken proficiency rating of Advanced-Low as defined in the ACTFL Proficiency Guidelines-Speaking (1999). Students must contact Language Testing International (LTI) and arrange for either a face-to-face OPI or a phone interview.

#### *Courses:*

FLA 551 Supervised Student Teaching High School Grades 10-12: Foreign Languages (prerequisites FLA 505, 506, and 540; corequisites FLA 552 and 554)

FLA 552 Supervised Student Teaching Middle School Grades 7-9: Foreign Languages (prerequisites FLA 505, 506, and 540; corequisites FLA 551 and FLA 554)

### 5. WRITTEN PROJECT

Students in all degree programs will be required to complete a four-week foreign language teaching module specifically designed for the Supervised Student Teaching project.

### TEACHER CERTIFICATION

The Master of Arts in Teaching is a New York State registered and approved program that qualifies students for license upon successful degree completion. Students must complete all courses required for the MAT and must receive a grade of B or better in all pedagogy and foundation courses as well as an overall GPA of 3.0 or better in all course work attempted while matriculated in a graduate teacher preparation program.

In addition, all teacher preparation candidates must be fingerprinted and must also complete certification workshops in:

- Child Abuse
- Dignity for All Students Act (DASA)
- School Violence (Project Save)

See Certification and Licensing Workshops for details and schedules.

Also, all students will have to complete the ALST (Academic Literacy Skills Test), Educating All Students Test, and the revised CST (Content Specialty Test) in the area of the Certificate. Please check with the MAT program director for specific requirements.

#### Faculty

Program faculty are drawn from the departments of Department of European Languages, Literatures and Cultures Linguistics, as well as from the Professional Education Program.

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

Master of Arts in Teaching German

**Director of the Foreign Language Teacher Preparation Program**

Sarah Jourdain, 1055 Humanities (631) 632-7440 Sarah.Jourdain@stonybrook.edu

**Faculty Advisor for the MAT in German**

Robert Bloomer, 1143 Humanities (631) 632-7369 Robert.Bloomer@stonybrook.edu

**Degree Awarded**

Master of Arts in Teaching German

**Website**

<http://www.stonybrook.edu/spd/graduate/matfl.html>

**Application**

This program is not currently accepting applications. Interested applicants should contact the Director, Dr. Sarah Jourdain (contact information above).

Master of Arts in Teaching German

The Master of Arts in Teaching is designed as a course of study leading to New York State certification for teaching German in the secondary schools (grades 7-12), with an extension option for grades 5-6. This program, which is offered in collaboration with the University's [Department of European Languages, Literatures and Cultures](#), the School of Professional Development, and the [Professional Education Program](#), is designed for those who have little or no previous coursework in education or formal classroom teaching experience.

Master of Arts in Teaching Admissions

**This program is not currently accepting applications. Interested applicants should contact the Director, Dr. Sarah Jourdain.**

A. Application essay.

B. Graduate Record Examination (GRE) General Test scores.

C. A bachelor's degree with an academic major (or a minimum of 36 credits) in the program language. Transcript must reflect a 3.0 minimum cumulative GPA as well as a 3.0 minimum GPA in language studies.

D. Three letters of recommendation. Two of the three recommendations must be from faculty with whom you have completed a course of study at the college level. It would be preferable that these faculty be in the area of your major.

E. In those cases where the departmental admissions committee deems it desirable, personal interviews with departmental representatives may be necessary.

Requirements for the MAT in German

The degree program consists of 47 credits, distributed among the areas listed below. Unless otherwise noted, each course is three credits. All degree requirements must be completed within five (5) years from the semester date of admission as a matriculated student.

**1. LANGUAGE, LITERATURE AND CULTURE**

15 credits; courses not listed are selected with the approval of a departmental advisor

GER 504 German Cultural History

GER 506 Advanced Stylistics

Plus, one of the following courses:

GER 557 History of the German Language

GER 539 Contrastive Structures: German-English

GER 558 Middle High German

Plus, two additional graduate-level GER literature courses.

**2. PROFESSIONAL STUDIES IN EDUCATION - 26 credits**

CEE 505 Education: Theory and Practice

CEF 547 Principles and Practices of Special Education

PSY 595 Human Development

FLA 505 Methods of Teaching Foreign Languages

FLA 506 Portfolio Development (prerequisite FLA 505)

FLA 507 Critical Pedagogy or FLA 540 Foreign Language Acquisition Research

FLA 549 Field Experience I—Grades 7-9 (one credit; corequisite FLA 505)  
 FLA 550 Field Experience II—Grades 10-12 (one credit; corequisite FLA 506)  
 FLA 554 Student Teaching Seminar (prerequisites FLA 505, 506, & 540; corequisites FLA 551 & FLA 552)  
 FLA 571 Technology and Education or FLA 507 Critical Pedagogy

At the program director's discretion, an undergraduate course from a registered and approved program may be approved as a substitution for any of the courses listed below. In all cases the undergraduate course must have been completed with a B or higher and the student must then take a different graduate pedagogy course to fulfill the graduate credits required for the graduate degree.

- CEE 505: Education – Theory and Practice
- CEF 547: Principles and Practices of Special Education
- LIN 544: Language Acquisition and Literacy Development
- PSY 595: Human Development

Speak to your graduate program director for more information and approval.

### 3. FIELD EXPERIENCE AND CLINICAL PRACTICE

Students will be required to complete 100 clock hours of field experience related to coursework prior to student teaching or practica. These experiences include practicing skills for interacting with parents, experiences in high-need schools, and experiences with each of the following student populations: socio-economically disadvantaged students, students who are English Language Learners, and students with disabilities.

### 4. SUPERVISED STUDENT TEACHING - 6 credits

Prior to student teaching, students must participate in an official ACTFL OPI (Oral Proficiency Interview) and receive a minimum spoken proficiency rating of Advanced-Low as defined in the ACTFL Proficiency Guidelines-Speaking (1999). Students must contact Language Testing International (LTI) and arrange for either a face-to-face OPI or a phone interview.

#### *Courses:*

FLA 551 Supervised Student Teaching High School Grades 10-12: Foreign Languages (prerequisites FLA 505, 506, and 540; corequisites FLA 552 and 554)  
 FLA 552 Supervised Student Teaching Middle School Grades 7-9: Foreign Languages (prerequisites FLA 505, 506, and 540; corequisites FLA 551 and FLA 554)

### 5. WRITTEN PROJECT

Students in all degree programs will be required to complete a four-week foreign language teaching module specifically designed for the Supervised Student Teaching project.

## TEACHER CERTIFICATION

The Master of Arts in Teaching is a New York State registered and approved program that qualifies students for license upon successful degree completion. Students must complete all courses required for the MAT and must receive a grade of B or better in all pedagogy and foundation courses as well as an overall GPA of 3.0 or better in all course work attempted while matriculated in a graduate teacher preparation program.

In addition, all teacher preparation candidates must be fingerprinted and must also complete certification workshops in:

- Child Abuse
- Dignity for All Students Act (DASA)
- School Violence (Project Save)

See Certification and Licensing Workshops for details and schedules.

Also, all students will have to complete the ALST (Academic Literacy Skills Test), Educating All Students Test, and the revised CST (Content Specialty Test) in the area of the Certificate. Please check with the MAT program director for specific requirements.

#### Faculty

Program faculty are drawn from the departments of Department of European Languages, Literatures and Cultures and Linguistics, as well as from the Professional Education Program.

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

Master of Arts in Teaching Italian

**Director of the Foreign Language Teacher Preparation Program**

Sarah Jourdain, 1055 Humanities (631) 632-7440 Sarah.Jourdain@stonybrook.edu

**Faculty Advisor for the MAT in Italian**

Irene Marchegiani, Humanities (631) 632-7440 Irene.Marchegiani@stonybrook.edu

**Degree Awarded**

Master of Arts in Teaching Italian

**Website**

<http://www.stonybrook.edu/spd/graduate/matfl.html>

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-edl](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-edl)

Master of Arts in Teaching Italian

The Master of Arts in Teaching program is designed as a course of study leading to New York State certification for teaching Italian in the secondary schools (grades 7-12), with an extension option for grades 5-6. This program, which is offered in collaboration with the University's [Department of European Languages, Literatures and Cultures](#), the School of Professional Development, and the [Professional Education Program](#), is designed for those who have little or no previous coursework in education or formal classroom teaching experience.

Master of Arts in Teaching Italian Admissions

A. Application essay.

B. Graduate Record Examination (GRE) General Test scores.

C. A bachelor's degree with an academic major (or a minimum of 36 credits) in the program language. Transcript must reflect a 3.0 minimum cumulative GPA as well as a 3.0 minimum GPA in language studies.

D. Three letters of recommendation. Two of the three recommendations must be from faculty with whom you have completed a course of study at the college level. It would be preferable that these faculty be in the area of your major.

E. In those cases where the departmental admissions committee deems it desirable, personal interviews with departmental representatives may be necessary.

Requirements for the MAT in Italian

The degree program consists of 47 credits, distributed among the areas listed below. Unless otherwise noted, each course is three credits. All degree requirements must be completed within five (5) years from the semester date of admission as a matriculated student.

**1. LANGUAGE, LITERATURE AND CULTURE**

15 credits; courses not listed are selected with the approval of a departmental advisor

**Italian**

ITL 501 Contemporary Italy

ITL 508 Advanced Grammar and Stylistics

One of the following courses in Italian Linguistics: ITL 509, ITL 511, ITL 512, ITL 513

One course in literature

One elective course

**2. PROFESSIONAL STUDIES IN EDUCATION - 26 credits**

CEE 505 Education: Theory and Practice

CEF 547 Principles and Practices of Special Education

PSY 595 Human Development

FLA 505 Methods of Teaching Foreign Languages

FLA 506 Portfolio Development (prerequisite FLA 505)

FLA 507 Critical Pedagogy or FLA 540 Foreign Language Acquisition Research

FLA 549 Field Experience I—Grades 7-9 (one credit; corequisite FLA 505)

FLA 550 Field Experience II—Grades 10-12 (one credit; corequisite FLA 506)

FLA 554 Student Teaching Seminar (prerequisites FLA 505, 506, & 540; corequisites FLA 551 & FLA 552)

FLA 571 Technology and Education or FLA 507 Critical Pedagogy



At the program director's discretion, an undergraduate course from a registered and approved program may be approved as a substitution for any of the courses listed below. In all cases the undergraduate course must have been completed with a B or higher and the student must then take a different graduate pedagogy course to fulfill the graduate credits required for the graduate degree.

- CEE 505: Education – Theory and Practice
- CEF 547: Principles and Practices of Special Education
- LIN 544: Language Acquisition and Literacy Development
- PSY 595: Human Development

Speak to your graduate program director for more information and approval.

### 3. FIELD EXPERIENCE AND CLINICAL PRACTICE

Students will be required to complete 100 clock hours of field experience related to coursework prior to student teaching or practica. These experiences include practicing skills for interacting with parents, experiences in high-need schools, and experiences with each of the following student populations: socio-economically disadvantaged students, students who are English Language Learners, and students with disabilities.

### 4. SUPERVISED STUDENT TEACHING - 6 credits

Prior to student teaching, students must participate in an official ACTFL OPI (Oral Proficiency Interview) and receive a minimum spoken proficiency rating of Advanced-Low as defined in the ACTFL Proficiency Guidelines-Speaking (1999). Students must contact Language Testing International (LTI) and arrange for either a face-to-face OPI or a phone interview.

#### *Courses:*

FLA 551 Supervised Student Teaching High School Grades 10-12: Foreign Languages (prerequisites FLA 505, 506, and 540; corequisites FLA 552 and 554)

FLA 552 Supervised Student Teaching Middle School Grades 7-9: Foreign Languages (prerequisites FLA 505, 506, and 540; corequisites FLA 551 and FLA 554)

### 5. WRITTEN PROJECT

Students in all degree programs will be required to complete a four-week foreign language teaching module specifically designed for the Supervised Student Teaching project.

### TEACHER CERTIFICATION

The Master of Arts in Teaching is a New York State registered and approved program that qualifies students for license upon successful degree completion. Students must complete all courses required for the MAT and must receive a grade of B or better in all pedagogy and foundation courses as well as an overall GPA of 3.0 or better in all course work attempted while matriculated in a graduate teacher preparation program.

In addition, all teacher preparation candidates must be fingerprinted and must also complete certification workshops in:

- Child Abuse
- Dignity for All Students Act (DASA)
- School Violence (Project Save)

See Certification and Licensing Workshops for details and schedules.

Also, all students will have to complete the ALST (Academic Literacy Skills Test), Educating All Students Test, and the revised CST (Content Specialty Test) in the area of the Certificate. Please check with the MAT program director for specific requirements.

#### Faculty

Program faculty are drawn from the departments of European Languages, Literatures and Cultures and Linguistics, as well as from the Professional Education Program.

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

Master of Arts in Teaching Mathematics

**Director of Mathematics Education**

Lisa Berger, 4-105 Mathematics Building (631) 632-8278 [Lisa.Berger@stonybrook.edu](mailto:Lisa.Berger@stonybrook.edu)

**Degree Awarded**

Master of Arts in Teaching Mathematics

**Website**

<http://www.stonybrook.edu/spd/graduate/matmath.html>

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-edl](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-edl)

Master of Arts in Teaching Mathematics

This program is designed as a course of study leading to New York State certification for teaching Mathematics in the secondary schools (grades 7-12), with an extension option for grades 5-6. This program, offered in collaboration with the School of Professional Development, the University's [Department of Mathematics](#) and the [Professional Education Program](#), is designed for those who have little or no previous coursework in education or formal classroom teaching experience.

Master of Arts in Teaching Mathematics Admissions

A. Application essay.

B. Graduate Record Examination (GRE) General Test scores.

C. A bachelor's degree in Mathematics, Applied Mathematics or the equivalent (see below) with a minimum of 36 credits in Mathematics\* with a minimum cumulative GPA of 2.75 and a minimum GPA of 3.0 in all Mathematics studies.

D. One year of college-level study of a foreign language with a grade of "C" or better (this may include American Sign Language).

E. Three letters of recommendation. Two of the three recommendations must be from faculty with whom you have completed a course of study at the college level. It would be preferable that these faculty be in the area of your major.

F. In those cases where the departmental admissions committee deems it desirable, personal interviews with departmental representatives may be necessary.

\*These 36 credits must include courses in single and multivariable calculus, linear algebra, and at least two of the following four more advanced subjects: abstract and/or applied algebra; analysis or advanced calculus; geometry, including non-Euclidean geometry; probability and/or statistics. You must also have taken at least one mathematics course that significantly uses computers and/or graphing calculators.

**Requirements for the MAT in Mathematics**

The degree program consists of 45 credits, distributed among the areas listed below. Unless otherwise noted, each course is three credits. All degree requirements must be completed within five (5) years from the semester date of admission as a matriculated student.

**1. MATHEMATICS CONTENT COURSES**

12 credits.

Course selection will be determined by the student and advisor. Students who have academic deficiencies in Mathematics will be required to include courses that specifically address these deficiencies. These courses will be part of the 12 credits selected to satisfy this requirement. If additional deficiencies exist, those credits required to meet these mandates will be over and above those requirements for the degree.

MAT 511 Fundamental Concepts of Mathematics (Required of all students in this program)

*Plus nine additional credits selected from the following:*

AMS 504 Foundations of Applied Mathematics

AMS 507 Introduction to Probability

AMS 572 Data Analysis I

MAT 512 Algebra for Teachers

MAT 513 Analysis for Teachers I

MAT 514 Analysis for Teachers II

MAT 515 Geometry for Teachers

MAT 516 Probability & Statistics for Teachers  
 MAT 530 Topology/Geometry I  
 MAT 534 Algebra I  
 MAT 542 Complex Analysis I  
 MAT 544 Analysis  
 MAT 550 Real Analysis I  
 MAT 599 Masters Level Independent Study

## 2. PROFESSIONAL STUDIES IN EDUCATION - 27 credits

CEE 505 Education: Theory and Practice  
 CEF 547 Principles and Practices of Special Education  
 PSY 595 Human Development  
 LIN 544 Language Acquisition and Literacy Development  
 MAE 501 Foundations of the Secondary School Mathematics Curriculum  
 MAE 510 Introduction to Methods of Teaching & Learning Standards (co- or prerequisite: MAE 501)  
 MAE 520 Advanced Methods of Teaching Secondary School Mathematics (prerequisites: MAE 501 and MAE 510)  
 MAE 530 Directed Readings in Mathematics Education (1 credit course; prerequisites: MAE 510 & MAE 520; co-requisite: MAE 540)  
 MAE 540 Clinical Experience (2 credits; prerequisites: MAE 510 & MAE 520; co-requisite: MAE 530)  
 MAE 554 Student Teaching Seminar (co-requisites MAE 551 & MAE 552; prerequisites CEE 505, CEE 565, LIN 544, MAE 501, MAE 510, MAE 520, MAE 530, MAE 540; satisfaction of all content requirements and permission of the Director of Mathematics Education)

At the program director's discretion, an undergraduate course from a registered and approved program may be approved as a substitution for any of the courses listed below. In all cases the undergraduate course must have been completed with a B or higher and the student must then take a different graduate pedagogy course to fulfill the graduate credits required for the graduate degree.

- CEE 505: Education – Theory and Practice
- CEF 547: Principles and Practices of Special Education
- LIN 544: Language Acquisition and Literacy Development
- PSY 595: Human Development

Speak to your graduate program director for more information and approval.

## 3. SUPERVISED STUDENT TEACHING - 6 credits

MAE 551 Supervised Student Teaching Middle School Grades 7 - 9: Mathematics (co-requisites MAE 552 & MAE 554; prerequisites CEE 505, CEE 565, LIN 544, MAE 501, MAE 510, MAE 520, MAE 530, MAE 540; satisfaction of all content requirements and permission of the Director of Mathematics Education)  
 MAE 552 Supervised Student Teaching High School Grades 10 - 12: Mathematics (co-requisites MAE 551 & MAE 554; prerequisites CEE 505, CEE 565, LIN 544, MAE 501, MAE 510, MAE 520, MAE 530, MAE 540; satisfaction of all content requirements and permission of the Director of Mathematics Education)

## 4. WRITTEN PROJECT

Students in all degree programs will be required to complete a four-week foreign language teaching module specifically designed for the Supervised Student Teaching project.

## TEACHER CERTIFICATION

The Master of Arts in Teaching is a New York State registered and approved program that qualifies students for license upon successful degree completion. Students must complete all courses required for the MAT and must receive a grade of B or better in all pedagogy and foundation courses as well as an overall GPA of 3.0 or better in all course work attempted while matriculated in a graduate teacher preparation program.

In addition, all teacher preparation candidates must be fingerprinted and must also complete certification workshops in:

- Child Abuse
- Dignity for All Students Act (DASA)
- School Violence (Project Save)

See Certification and Licensing Workshops for details and schedules.

All students will have to complete the ALST (Academic Literacy Skills Test), Educating All Students Test, and the revised CST (Content Specialty Test) in the area of the Certificate. It is the student's responsibility to monitor the TEACH website at <http://www.highered.nysed.gov/tcert/> to ensure that they are taking the appropriate examinations. All students are required to complete and submit the edTPA (Education-Teacher Performance Assessment - Portfolio) in their content field. Students should check with the program director for specific requirements.

## Faculty

Program faculty are drawn from the [Department of Mathematics](#), as well as from the Professional Education Program.

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at [COURSE SEARCH](#).*

Spring 2018

Master of Arts in Teaching Physics

**Director, Institute for STEM Education**

Keith Sheppard, 39 Life Sciences Building (631) 632-2989 Keith.Sheppard@stonybrook.edu

**Faculty Advisor**

Robert McCarthy, D104 or P110 Physics Building (631) 632-8086 or (631) 632-8758 Robert.McCarthy@stonybrook.edu

**Degree Awarded**

Master of Arts in Teaching Physics

**Website**

<http://www.stonybrook.edu/spd/graduate/matscience.html>

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-edl](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-edl)

Master of Arts in Teaching Physics

This program is designed as a course of study leading to New York State certification for teaching Physics in the secondary schools (grades 7-12), with an extension option for grades 5-6. Candidates admitted may also qualify for a General Science Extension for grades 7-12. This program, offered in collaboration with the School of Professional Development and the University's Department of Physics and Astronomy, is designed for those who have little or no previous coursework in education or formal classroom teaching experience.

Master of Arts in Teaching Physics Admissions

- A. Application essay.
- B. Graduate Record Examination (GRE) General Test scores.
- C. A Bachelor of Science in Physics degree from Stony Brook or equivalent requiring a minimum of 37 credits of physics. Transcript must reflect a 3.0 minimum cumulative GPA as well as a 3.0 minimum GPA in science courses.
- D. Additional science competency requirements: BIO201/204, CHE131/133 and either GEO102/112 or AST101/112.
- E. One year of college-level study of a foreign language with a grade of "C" or better (this may include American Sign Language)
- F. Three letters of recommendation. Two of the three recommendations must be from faculty with whom you have completed a course of study at the college level. It would be preferable that these faculty be in the area of your major.
- G. In those cases where the departmental admissions committee deems it desirable, personal interviews with departmental representatives may be necessary.

Requirements for the MAT in Physics

The degree program consists of 44 credits, distributed among the areas listed below. Unless otherwise noted, each course is three credits. All degree requirements must be completed within five (5) years from the semester date of admission as a matriculated student.

**1. GRADUATE SCIENCE COURSES**

15 credits; courses are selected with the approval of a departmental advisor.

PHY 525 Current Research Instrumentation  
PHY 585 Special Study: Optics and Waves  
PHY 585 Special Study: Introductory Quantum Mechanics  
PHY 585 Special Study: Electromagnetic Theory  
Plus, one graduate course selected in concert with an academic advisor.

**2. PROFESSIONAL STUDIES IN EDUCATION - 23 credits**

CEE 505 Education: Theory and Practice  
CEF 547 Principles and Practices of Special Education  
PSY 595 Human Development  
SCI 510 Introduction to Science Teaching (co-requisite SCI 549)  
SCI 520 Science Teaching Methods (prerequisite SCI 510; co-requisite SCI 550)  
SCI 549 Clinical Experience I (one-credit; co-requisite SCI 510)  
SCI 550 Clinical Experience II (one-credit; prerequisite SCI 549; co-requisite SCI 520)  
SCI 554 Student Teaching Seminar (prerequisites SCI 510, 520, 549, 550, CEE 505, PSY 595, and LIN 544, and all content courses required for completion of the degree; interview with and permission of Science Education Committee 631.632.7059; matriculation in degree [MAT/BIO, CHE, ESS, or PHY] program, successful completion of the LAST Examination. Co-requisites SCI 551 and SCI 552.)  
LIN 544 Language Acquisition and Literacy Development

At the program director's discretion, an undergraduate course from a registered and approved program may be approved as a substitution for any of the courses listed below. In all cases the undergraduate course must have been completed with a B or higher and the student must then take a different graduate pedagogy course to fulfill the graduate credits required for the graduate degree.

- CEE 505: Education – Theory and Practice
- CEF 547: Principles and Practices of Special Education
- LIN 544: Language Acquisition and Literacy Development
- PSY 595: Human Development

Speak to your graduate program director for more information and approval.

### 3. SUPERVISED STUDENT TEACHING - 6 credits

SCI 551 Supervised Student Teaching High School Grades 10-12: Science (prerequisites SCI 510, 520, 549 and 550; co-requisites SCI 552 & SCI 554)

SCI 552 Supervised Student Teaching Middle School Grades 7-9: Science (prerequisites SCI 510, 520, 549 and 550; co-requisites SCI 551 & SCI 554)

### 4. WRITTEN PROJECT

Students will be required to complete a teaching project approved by the sponsoring department.

## TEACHER CERTIFICATION

The Master of Arts in Teaching is a New York State registered and approved program that qualifies students for license upon successful degree completion. Students must complete all courses required for the MAT and must receive a grade of B or better in all pedagogy and foundation courses as well as an overall GPA of 3.0 or better in all course work attempted while matriculated in a graduate teacher preparation program.

In addition, all teacher preparation candidates must be fingerprinted and must also complete certification workshops in:

- Child Abuse
- Dignity for All Students Act (DASA)
- School Violence (Project Save)

See Certification and Licensing Workshops for details and schedules.

All students will have to complete the ALST (Academic Literacy Skills Test), Educating All Students Test, and the revised CST (Content Specialty Test) in the area of the Certificate. The activation date of some of the new Content Specialty Tests will vary as they become live during the 2013-2014 academic year. It is the student's responsibility to monitor the TEACH website at <http://www.highered.nysed.gov/tcert/> to ensure that they are taking the appropriate examinations. All students are required to complete and submit the edTPA (Education-Teacher Performance Assessment - Portfolio) in their content field. Students should check with the program director for specific requirements.

### Faculty

Program faculty are drawn from the [Department of Physics](#), as well as from the Professional Education Program.

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

## Master of Arts in Teaching Social Studies

**Program Director**

Larry Frohman, S-651 Social and Behavioral Sciences Building (631) 632-7686 [Lawrence.Frohman@stonybrook.edu](mailto:Lawrence.Frohman@stonybrook.edu)

**Degree Awarded**

Master of Arts in Teaching Social Studies

**Website**

<http://www.stonybrook.edu/spd/graduate/matss.html>

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-edl](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-edl)

## Master of Arts in Teaching Social Studies

The Master of Arts in Teaching Social Studies, with a concentration in history, is a course of study leading to New York State certification for teaching social studies in the secondary schools (grades 7-12), with an extension option for grades 5-6. This program, offered in collaboration with the School of Professional Development, the University's [Department of History](#) and the [Professional Education Program](#), is designed for those who have little or no previous coursework in education or formal classroom teaching experience.

## Master of Arts in Teaching Admissions

A. Application essay.

B. Graduate Record Examination (GRE) General Test scores.

C. A bachelor's degree in history or one of the social sciences (excluding psychology, linguistics, criminal justice and communications) with an 18-credit history minor. Transcript must reflect a 3.0 minimum cumulative GPA as well as a 3.0 minimum GPA in the content field.

D. One year of college-level study of a foreign language with a grade of "C" or better (this may include American Sign Language)

E. Three letters of recommendation. Two of the three recommendations must be from faculty with whom you have completed a course of study at the college level. It would be preferable that these faculty be in the area of your major.

F. In those cases where the departmental admissions committee deems it desirable, personal interviews with departmental representatives may be necessary.

## Requirements for the MAT in Social Studies

The degree program consists of 44 credits, distributed among the areas listed below. Unless otherwise noted, each course is three credits. All degree requirements must be completed within five (5) years from the semester date of admission as a matriculated student.

**1. HISTORY CONTENT COURSES**

15 credits.

CEG 523/HIS 500 Historiography

*Plus 12 credits selected from the following courses:*

CEG 516 Early Modern Europe Seminar

CEG 517 Modern Latin America

CEG 522 US History since the Civil War

CEG 524 Late Modern Europe Seminar

CEG 532 US History and Civil War Seminar (formerly US History to Civil War)

CEG 534 Modern African/Asian History Seminar (formerly Topics Seminar: Africa or Topics Seminar: Asia)

CEJ 501 Traditional China: Culture & Society

CEJ 502 Modern China: Culture & Society

CEG 538 - United States History since 1945

CEG 555 - Gender in Modern Global History

**2. PROFESSIONAL STUDIES IN EDUCATION - 23 credits**

CEE 505 Education: Theory and Practice

PSY 595 Human Development

CEE 577 Teaching Social Studies (corequisite CEF 548)

CEE 578 Social Studies Strategies (prerequisite CEE 577; corequisite CEF 549)

CEE 580 Student Teaching Seminar (prerequisites CEE 577, CEE 578, CEF 548 & CEF 549; corequisites CEQ 581 & 582)

CEF 547 Principles and Practices of Special Education\*  
 CEF 548 Field Experience I — Grades 7-9 (one-credit; corequisite CEE 577)  
 CEF 549 Field Experience II — Grades 10-12 (one-credit; corequisite CEE 578)  
 LIN 544 Language Acquisition and Literacy Development

At the program director's discretion, an undergraduate course from a registered and approved program may be approved as a substitution for any of the courses listed below. In all cases the undergraduate course must have been completed with a B or higher and the student must then take a different graduate pedagogy course to fulfill the graduate credits required for the graduate degree.

- CEE 505: Education – Theory and Practice
- CEF 547: Principles and Practices of Special Education
- LIN 544: Language Acquisition and Literacy Development
- PSY 595: Human Development

Speak to your graduate program director for more information and approval.

### 3. SUPERVISED STUDENT TEACHING - 6 credits

CEQ 581 Supervised Student Teaching High School Grades 10-12: Social Studies (prerequisites CEE 577, CEE 578, CEF 548 & CEF 549; corequisites CEE 580 & CEQ 582)  
 CEQ 582 Supervised Student Teaching Middle School Grades 7-9: Social Studies (prerequisites CEE 577, CEE 578, CEF 548 & CEF 549; corequisites CEE 580 & CEQ 581 )

### 4. WRITTEN PROJECT

Students will be required to complete a four-week social studies teaching module specifically designed for the Supervised Student Teaching project.

## TEACHER CERTIFICATION

The Master of Arts in Teaching is a New York State registered and approved program that qualifies students for license upon successful degree completion. Students must complete all courses required for the MAT and must receive a grade of B or better in all pedagogy and foundation courses as well as an overall GPA of 3.0 or better in all course work attempted while matriculated in a graduate teacher preparation program.

In addition, all teacher preparation candidates must be fingerprinted and must also complete certification workshops in:

- Child Abuse
- Dignity for All Students Act (DASA)
- School Violence (Project Save)

See Certification and Licensing Workshops for details and schedules.

All students will have to complete the ALST (Academic Literacy Skills Test), Educating All Students Test, and the revised CST (Content Specialty Test) in the area of the Certificate. It is the student's responsibility to monitor the TEACH website at <http://www.highered.nysed.gov/tcert/> to ensure that they are taking the appropriate examinations. All students are required to complete and submit the edTPA (Education-Teacher Performance Assessment - Portfolio) in their content field. Students should check with the program director for specific requirements.

### Faculty

Program faculty are drawn from the [Department of History](#), as well as from the Professional Education Program.

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at [COURSE SEARCH](#).*



Master of Arts in Teaching Spanish

**Director of the Foreign Language Teacher Preparation Program**

Sarah Jourdain, 1055 Humanities (631) 632-7440 Sarah.Jourdain@stonybrook.edu

**Faculty Advisor for the MAT in Spanish**

Adrian Perez Melgosa, N3014 Melville Library (631) 632-6877 Adrian.Perezmelgosa@stonybrook.edu

**Degree Awarded**

Master of Arts in Teaching Spanish

**Website**

<http://www.stonybrook.edu/spd/graduate/matfl.html>

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-edl](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-edl)

Master of Arts in Teaching Spanish

The Master of Arts in Teaching program is designed as a course of study leading to New York State certification for teaching Spanish in the secondary schools (grades 7-12), with an extension option for grades 5-6. This program, which is offered in collaboration with the University's [Department of Hispanic Languages and Literature](#), the School of Professional Development, and the [Professional Education Program](#), is designed for those who have little or no previous coursework in education or formal classroom teaching experience.

Master of Arts in Teaching Spanish Admissions

A. Application essay.

B. Graduate Record Examination (GRE) General Test scores.

C. A bachelor's degree with an academic major (or a minimum of 36 credits) in the program language. Transcript must reflect a 3.0 minimum cumulative GPA as well as a 3.0 minimum GPA in language studies.

D. Three letters of recommendation. Two of the three recommendations must be from faculty with whom you have completed a course of study at the college level. It would be preferable that these faculty be in the area of your major.

E. In those cases where the departmental admissions committee deems it desirable, personal interviews with departmental representatives may be necessary.

Requirements for the MAT in Spanish

The degree program consists of 47 credits, distributed among the areas listed below. Unless otherwise noted, each course is three credits. All degree requirements must be completed within five (5) years from the semester date of admission as a matriculated student.

**1. LANGUAGE, LITERATURE AND CULTURE**

15 credits; courses not listed are selected with the approval of a departmental advisor

**Spanish (HEGIS 0802)**

Choose five of the following with the approval of the graduate program director:

SPN 501 Spanish Historical Linguistics

SPN 502 Methods in Linguistics Research

SPN 503 Spanish Linguistics

SPN 504 Contrastive Analysis

SPN 505 Spanish Dialectology and Sociolinguistics

SPN 510 Hispanic Culture

SPN 515 Spanish Composition and Stylistics

SPN 500-level Courses in Literature (to be selected by student and advisor)

SPN 691 Practicum in Teaching Spanish

**2. PROFESSIONAL STUDIES IN EDUCATION - 26 credits**

CEE 505 Education: Theory and Practice

CEF 547 Principles and Practices of Special Education

PSY 595 Human Development

FLA 505 Methods of Teaching Foreign Languages

FLA 506 Portfolio Development (prerequisite FLA 505)

FLA 507 Critical Pedagogy or FLA 540 Foreign Language Acquisition Research  
 FLA 549 Field Experience I—Grades 7-9 (one credit; corequisite FLA 505)  
 FLA 550 Field Experience II—Grades 10-12 (one credit; corequisite FLA 506)  
 FLA 554 Student Teaching Seminar (prerequisites FLA 505, 506, & 540; corequisites FLA 551 & FLA 552)  
 FLA 571 Technology and Education or FLA 507 Critical Pedagogy

At the program director's discretion, an undergraduate course from a registered and approved program may be approved as a substitution for any of the courses listed below. In all cases the undergraduate course must have been completed with a B or higher and the student must then take a different graduate pedagogy course to fulfill the graduate credits required for the graduate degree.

- CEE 505: Education – Theory and Practice
- CEF 547: Principles and Practices of Special Education
- LIN 544: Language Acquisition and Literacy Development
- PSY 595: Human Development

Speak to your graduate program director for more information and approval.

### 3. FIELD EXPERIENCE AND CLINICAL PRACTICE

Students will be required to complete 100 clock hours of field experience related to coursework prior to student teaching or practica. These experiences include practicing skills for interacting with parents, experiences in high-need schools, and experiences with each of the following student populations: socio-economically disadvantaged students, students who are English Language Learners, and students with disabilities.

### 4. SUPERVISED STUDENT TEACHING - 6 credits

Prior to student teaching, students must participate in an official ACTFL OPI (Oral Proficiency Interview) and receive a minimum spoken proficiency rating of Advanced-Low as defined in the ACTFL Proficiency Guidelines-Speaking (1999). Students must contact Language Testing International (LTI) and arrange for either a face-to-face OPI or a phone interview.

*Courses:*

FLA 551 Supervised Student Teaching High School Grades 10-12: Foreign Languages (prerequisites FLA 505, 506, and 540; corequisites FLA 552 and 554)

FLA 552 Supervised Student Teaching Middle School Grades 7-9: Foreign Languages (prerequisites FLA 505, 506, and 540; corequisites FLA 551 and FLA 554)

### 5. WRITTEN PROJECT

Students in all degree programs will be required to complete a four-week foreign language teaching module specifically designed for the Supervised Student Teaching project.

## TEACHER CERTIFICATION

The Master of Arts in Teaching is a New York State registered and approved program that qualifies students for license upon successful degree completion. Students must complete all courses required for the MAT and must receive a grade of B or better in all pedagogy and foundation courses as well as an overall GPA of 3.0 or better in all course work attempted while matriculated in a graduate teacher preparation program.

In addition, all teacher preparation candidates must be fingerprinted and must also complete certification workshops in:

- Child Abuse
- Dignity for All Students Act (DASA)
- School Violence (Project Save)

See Certification and Licensing Workshops for details and schedules.

Also, all students will have to complete the ALST (Academic Literacy Skills Test), Educating All Students Test, and the revised CST (Content Specialty Test) in the area of the Certificate. Please check with the MAT program director for specific requirements.

Faculty

Program faculty are drawn from the departments of Hispanic Languages and Literature and Linguistics, as well as from the Professional Education Program.

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

## Technology and Society

**Chairperson**

Wolf D. Schafer, 1209 Computer Science Building, (631) 632-7924

**Graduate Program Director**

Gerald Stokes, Computer Science 1413 (631) 632-3402

**Graduate Program Coordinator**

Marypat Taveras, Computer Science 1426 (631) 632-8762

**Advanced Graduate Certificate Awarded**

Advanced Graduate Certificate in Educational Computing; Advanced Graduate Certificate in Industrial Management

**Degrees Awarded**

M.S. in Technological Systems Management; Ph.D. in Technology, Policy, and Innovation

## Technology and Society

Technology shapes every facet of modern life. Familiarity with the characteristics, capabilities, and limitations of current and emerging technologies is indispensable to wise and effective decisions and practices in government, business and personal life. At all levels and in all disciplines, careers in industry, government and education ever more turn on the ability to see and seize the opportunities, and address the problems, that technology often presents. Technological developments are indeed re-defining these very careers, and changing the workplace itself.

Managing modern technologies calls upon a synthesis of tools drawn from many areas: science and engineering, computers and information, economics and regulation, psychology and community values, design and assessment. The Master's Degree in Technological Systems Management provides professionals in all fields, and persons planning such careers, with state-of-the-art concepts, analytical tools and practical skills for managing specific technological systems and improving their performance. Students may opt to pursue one of these four areas of focus areas: Educational Technology, Energy and Environmental Systems, Global Technology Management, or Energy, Technology, and Policy.

Students must take a common core of six credits, and an additional 24 elective credits. It is strongly recommended that elective credits be specific to the selected focus area.

**The Technology, Policy, and Innovation (TPI) Ph.D. program** has a four-part mission:

- To develop a cadre of scholars who will be engines of national leadership in charting and gauging the future course of technologies;
- To carry out policy and design/planning research in intersecting socio-technological areas: energy and environmental systems; and engineering & technology workforce policy;
- To establish a new model for doctoral education that promotes highly intensive collaborations and uses advanced educational technologies in a fertile, diverse, globally networked laboratory environment that transcends disciplinary boundaries; and,
- To serve as an exemplary resource for regional and national industry and government, as well as for schools, colleges/universities, and other educational institutions in both implementing technological innovation and carrying out policy studies.

Students in the **Technology, Policy, and Innovation (TPI) Ph.D. program** will work in one or more areas of faculty research strength, including: 1) energy and environmental systems; 2) Engineering Education, Management, and Policy. In addition to drawing on the expertise of faculty in the Department of Technology and Society, the Ph.D. program is supported by more than 20 affiliated faculty members from throughout the Stony Brook campus.

The **Advanced Graduate Certificate in Educational Computing** prepares current and prospective teachers to use advanced technologies in learning and teaching, and helps business and industrial trainers and educators to develop and teach computer applications, multimedia technologies, and computer-based documentation. Students elect either the school track or the business/industry track. The **Advanced Graduate Certificate in Industrial Management** helps managers develop their abilities to use advanced technologies in their companies, understand their business processes, reduce waste and inefficiencies, and improve the bottom line of their companies.

## Admission requirements for the Department of Technology and Society

Admission to the M.S. and Ph.D. programs is handled separately by the Departmental admissions committee. The requirements for admission to graduate study in this department include:

- A. A bachelors degree in engineering, natural sciences, social sciences, mathematics, or a closely related area from an accredited college or university. For admission to the M.S., students who elect to take a block of elective courses within the Energy and Environmental Systems and the Energy, Technology, and Policy focus areas will need to have completed prerequisite courses of one year of calculus (MAT 131, 132 or equivalent).
- B. A minimum undergraduate grade point average of 3.00.
- C. Three letters of recommendation.
- D. Graduate Record Examination (GRE) General Test scores.

E. Acceptance by the Department of Technology and Society and the Graduate School.

F. If your native or primary language is not English, a test to measure your English proficiency is required. The department and Graduate School accept TOEFL and IELTS examination scores. English proficiency requirements for the master's and the Ph.D. programs are different. For the master's program, the minimum score for TOEFL is 85 and an overall score of 6.5 with no subsection below 6 for IELTS. For the Ph.D. program, the minimum score for TOEFL is 90 and the overall score of 7.5 with no subsection below 6.5 for IELTS.

G. A Statement of Purpose describing the applicant's relevant past experience and immediate and long-term goals. For the **master's** program, your statement of purpose must include your focus area: Educational Technology, Energy and Environmental Systems, Global Technology Management, or Energy, Technology, and Policy. **(Please state your focus area at the top of the personal statement page.)** For the **D.** program, the statement of purpose should describe how the type of research that students expect to conduct while in the program relates to one of the department's research areas, energy and environmental systems and/or Engineering Education, Management, and Policy. .

H. All official transcripts, recommendation letters (those not uploaded in the Graduate School's online application system), etc. must be sent to the Department of Technology and Society, College of Engineering and Applied Sciences, Stony Brook University, Stony Brook, N.Y. 11794-4404. . In special cases, applicants who do not satisfy requirement a or b may be admitted on a conditional basis and may be subject to additional course requirements. Appropriate courses taken in non-matriculated status may be applied towards the M.S. degree in Technological Systems Management and the Ph.D. degree in Technology, Policy, and Innovation; however, no more than 12 credits taken in non-matriculated status can be applied to the credit requirements for the M.S. and Ph.D. degrees.

For admission to the Advanced Graduate Certificate program, students must have a bachelor's degree and an undergraduate GPA of at least

3.0. Students with lower averages may be admitted in non-matriculated status that may be changed upon earning six or more graduate credits applicable to the Certificate with a GPA of 3.0 or higher.

Credits for Certificate program courses may be applied to requirements for the M.S. degree in Technological Systems Management, subject to Graduate School rules and limitations; however, no more than 12 credits may be transferred.

#### Facilities of the Department of Technology and Society

Graduate students enrolled in the Department of Technology and Society have access to several computing facilities. The University maintains a wide range of mainframe facilities and personal computing laboratories. However, the department uses its two in-house, state-of-the-art computer laboratories as hands-on enhancements of the graduate student's experience. The first lab has 20 Pentium Desktop computers that operate as stand-alones or within a basic network environment. The lab is integrated into the campus WAN, with full Internet access and a wide array of educational, academic, and professional software. Video cameras, scanners, printers, laptops, and a projection system are available for student use within the lab. The second computer laboratory is used for research and teaching related to computer-supported collaboration, E-learning technologies, and emerging educational technologies. The lab, available for faculty and students, consists of 20 laptop computers on a cart. Both labs are designed for student work and as open laboratories to give students the broadest, in-depth exposure to information technologies. The Department of Technology and Society is also a major contributor to three research centers at Stony Brook (the Advanced Energy Research and Technology Center (AERTC), the Center for Excellence in Wireless and Information Technology (CEWIT), and the Center for Interdisciplinary Environment Research) and collaborates with scientists at Brookhaven National Laboratory (BNL). Students working on research projects will have access to the facilities as appropriate for their project.

#### Requirements for the M.S. Degree in Technological Systems Management

Typically, students in the master's program choose one of four focus areas and take all 24 elective courses within the selected focus area. Students are required to complete two courses (EST 581 and EST 582) for six credits and 24 additional elective credits. Suggested additional credits for each of the 4 areas of focus are indicated below. Consult with the Graduate Program Director for more guidance.

#### **Required Courses** (6 credits): EST 581, EST 582

Note: Entering students are presumed to have essential communications, computer, and mathematical skills. Otherwise, prerequisite study in these areas will be required.

#### **Elective Courses**

##### **Educational Technology Focus Area**

Additional Courses: EST 521, EST 522, EST 523,, EST 567, EST 570, Est 571, EST 573, EST 574, EST 5 EST 578, EST 579, , EST 580, EST 590, EST 591, EST 599 Masters Project.

##### **Global Technology Management Focus Area**

Additional Courses: EMP 502, EMP 504, EMP 506, EMP 507, EMP 517, EMP 518, , EMP 521, EMP 524, , EMP 530, EMP 531, EMP 532, EST 508,, EST 530, EST 580, EST 590 EST 599.

##### **Energy, Technology, and Policy Focus Area**

Additional Courses: EMP 518, EST 535, EST 580, EST 590, EST 591, EST 592, EST 593, EST 594, EST 599, EST 603, EST 607, EST 694, Masters Project

#### **Requirements for the Advanced Graduate Certificate in Educational Computing (See course titles and descriptions below.)**

A total of 18 credits (four core courses and two electives) are required. Core Courses: EST 565, EST 567, EST 570, EST 571

### **School Track**

Choose one of three: EST 563, EST 573, EST 585 Choose one of three: EST 591, CEI 511, CEN 580

### **Business Track**

Choose one of three: EST 509, EST 520, EST 530 Choose one of three: EST 573, EST 591, EST 596

Requirements for the Advanced Graduate Certificate in Industrial Management The AGC in Industrial Management consists of 18 graduate credits:

**Core Courses** (9 credits). All three courses must be taken.

EMP 502 Engineering Economics (formerly Management Accounting and Financial Decision Analysis) EMP 506 Strategic Technology Analysis (formerly Engineering Enterprise Management)

EMP 509 Management Information Systems

**Required Courses** (6 credits). Two of the five courses must be taken.

EMP 501 Behavioral and Organizational Aspects of Management EMP 503 Legal and Regulatory Aspects of Management

EMP 504 Quantitative Methods of Management EMP 511 Starting the High Technology Venture EMP 517 Quality Management

**Elective Course** (3 credits). Select one of the required courses or one course from the following list. EST 520 Computer Applications and Problem Solving

EST 530 Internet Electronic Commerce

EST 581 Heuristics and Quantitative Decision Making (formally Methods of Socio-Technological Decision Making) EST 582 Introduction to Systems Concepts (formally Systems Approach to Human-Machine Systems)

### **Requirements for the Ph.D. Degree in Technology, Policy, and Innovation**

Please refer to our web site for the application deadline: [www.stonybrook.edu/est](http://www.stonybrook.edu/est). Applications are only accepted for the Fall semester.

#### **A. Residence**

The student must complete two consecutive semesters of full-time graduate study. Full-time study is 12 credits per semester until 24 graduate credits have been earned. Students who have earned 24 graduate credits at another school may be assigned advanced status and are required to take only nine credits per semester for full-time status.

#### **B. Qualifying Examination**

The qualifying examination must be taken by all students, regardless of whether they enter the program holding a master's degree or a bachelor's degree only. Students are expected to take the qualifying examination in the fourth semester, preferably after having completed 34 credits in the program. The qualifying exam has three parts to it.

**Part A:** The student conducts an original research project, starting in the first semester in the program, and presents the results to the department during the fourth semester. The purpose of this is to ascertain the student's preparation to conduct independent original research in a TPI area.

The student is expected to conduct an independent research project under the guidance of a faculty advisor, and present the results. We expect that the quality of the methodology and results should be sufficient for a poster presentation at a leading academic conference.

The Part A exam may be presented at any time that is convenient for the student and the student's Part A committee. For full-time students, this should occur sometime during the 4th semester; part-time students may take the exam up to one year later. The student's advisor and the student consult to make a recommendation to the Chair of the Department regarding the composition of the Part A Committee. Typically, the student's Part A Committee will be comprised of four faculty members, and include at least one faculty member from outside of the Department of Technology and Society. The student's advisor does not serve on the student's Part A committee.

The Part A committee will evaluate the exam in terms of its 3 components:

1. Written report – typically, 15-30 pages, and, typically, 50-100 citations. The report must a) identify a research question of interest to some research community; b) provide an overview of related background research; c) describe a reasonable approach to addressing the research question; and d) present the results of the research project.
2. Presentation - approximately 45 minutes. The presentation must a) provide a motivation for conducting this line of research; b) summarize the background material, emphasizing only the most important related work; c) give an overview of the methodology, emphasizing why this approach was taken; and d) give results.
3. Questions - posed by members of the committee following the presentation. Questions may be related to any aspect of the presentation or the written report.

**Part B:** The student achieves an average GPA of 3.7 or higher on three social sciences-related courses:

Research Methods I – from a social sciences department  
 Research Methods II – from a social sciences department  
 EST 610 (Advanced Statistics)—within Department of Technology and Society

### C. Course Requirements

1. For students who entered the Ph.D. Program prior to Fall, 2014, course requirements are as follows:
  - o EST 600 (Technology and Policy)
  - o EST 610 (Data Analysis, or equivalent approved course)
  - o EST 620 (Decision Making)
  - o 3 courses from Social Sciences Departments (Research Method I, Research Methods II, and Advanced Statistics)
  - o 15 credits of technical electives (foundation for technical/technology dimension of planned research)
2. For students who entered the Ph.D. program in Fall, 2014 or later, course requirements are as follows:
  - o EST 600 (Technology and Policy)
  - o EST 610 Revised (Advanced Statistics)
  - o EST 625 (Advanced Technology and Policy)
  - o 2 courses from social sciences departments (Research Methods I, and Research Methods II)
  - o 15 credits of technical electives (foundation for technical/technology dimension of planned research)

The following courses have been designated as “highly recommended”, and advisors ensure that nearly all students take the courses:

EST 605 and EST 606 (Economics)

EST 692 (Research Seminar)

EST 601 (Grand Challenges in Energy—for students in energy area only)

In addition to regular course requirements, University policy requires that all doctoral students participate in an appropriately structured teaching practicum. This can be accomplished with a Practicum in Teaching course, in conjunction with T.A. responsibilities.

### D. Thesis Proposal and Preliminary Examination

Students who pass all three parts of the qualifying examination are expected to develop a thesis proposal within one semester for full-time students, and two semesters for part-time students. This thesis proposal must then be presented and defended in an oral preliminary examination. Failure to fulfill this requirement within 18 months of passing the qualifying examination, and without a formal extension, may be considered evidence of unsatisfactory progress toward the Ph.D. degree.

The major requirements of the thesis proposal are as follows: (1) the student must be thoroughly familiar with the background and current status of the intended research area; (2) the student must have clear and well-defined plans for pursuing the research objectives; and (3) the student must offer evidence of progress in achieving these objectives.

The student will present the thesis proposal to the thesis committee in a seminar presentation. It is limited to members of the committee. The committee for the student’s preliminary examination, dissertation and defense will include at least one faculty member who does not have a primary or joint appointment in Department of Technology and Society. Students will be strongly encouraged to have at least one faculty member from another university on their committee. As part of the preliminary examination, faculty members are free to question the student on any topics they feel are in any way relevant to the student’s objectives and career preparation. Most questions, however, will be directed toward verifying the student’s grasp of the intended specialty in depth. The student will be expected to show complete familiarity with the current and past literature of this area.

The findings of the committee will be communicated to the student as soon as possible and to the Graduate School within one week of the presentation of the proposal. A student who does not pass the preliminary examination on the first attempt will be given a second chance. If the preliminary is failed on the second attempt, the student will be dismissed from the program.

Having passed the preliminary examination, the student is advanced to candidacy. This status, called G5, is conferred by the Dean of the Graduate School upon recommendation of the Department. Note that unlike the change from G3 to G4, the change from G4 to G5 is not automatic—the student must request to be advanced to candidacy by notifying the Technology and Society Graduate Program Coordinator. Students must advance to candidacy at least one year before defending their dissertations. The Graduate School requires G5 students to register for nine credits, which can be research or other graduate courses relevant to their dissertation. Courses outside of the major require the approval of the dissertation advisor and Graduate Program Director. Failure to complete the preliminary examination within the specified timeframe and obtain the G5 status is considered evidence of unsatisfactory progress.

### E. Dissertation

An important requirement of the Ph.D. program is the completion of a dissertation which must be an original scholarly investigation. The dissertation shall represent a significant contribution to the scientific literature, and its quality shall be compatible with the publication standards of appropriate reputable scholarly journals.

**F. Approval and Defense of Dissertation**

The dissertation must be orally defended before a dissertation examination committee, and the candidate must obtain approval of the dissertation from this committee. The oral defense of the dissertation is open to all interested faculty members and graduate students. The final draft of the dissertation must be submitted to the committee no later than three weeks prior to the date of the defense.

**G. Satisfactory Progress and Time Limit**

Students are expected to finish all the requirements, including thesis research and defense, in four to five full-time-equivalent years. A student who does not meet the target dates for the Qualifying Examination, Thesis Proposal, and Preliminary Examination, or who does not make satisfactory progress toward completing thesis research, may lose financial support. The candidate must satisfy all requirements for the Ph.D. degree within seven years after completing 24 credit hours of graduate courses in the Department of Technology and Society at Stony Brook. In rare instances, the Dean of the Graduate School will entertain a petition to extend this time limit, provided it bears the endorsement of the Department's Graduate Program Director. A petition for extension must be submitted before the time limit has been exceeded. The Dean or the Department may require evidence that the student is still properly prepared for the completion of work.

**H. Part-Time Students**

Students admitted into the Ph.D. program for part-time study are bound by all the rules set out henceforth. In particular, part-time students should adhere to the schedule for the Qualifying Examination, Thesis Proposal, and Preliminary Examination unless a different schedule has been approved in writing by the Graduate Program Director.

**Faculty of the Department of Technology and Society Distinguished Service Professors*****Distinguished Service Professors***

Ferguson, David L., Ph.D., 1980, University of California, Berkeley: Quantitative methods; computer applications (especially intelligent tutoring systems and decision support systems); mathematics, science, and engineering education.

Paldy, Lester G., M.S., 1966, Hofstra University: Nuclear arms control; science policy.

***Distinguished Teaching Professor***

Liao, Thomas T., Emeritus, Ed.D., 1971, Columbia University: Computers in education; science and technology education.

***Professors***

Pittinsky, Todd L; Professor, Ph.D., 2001, Harvard University. Models intergroup relations in their ecosystems of society, technology, and policy.

Stokes, Gerry, Visiting Professor, Ph.D., 1977, University of Chicago, Energy Technology and policy, emphasizing climate, carbon emissions mitigation and smart grid

Teng, Tian-Lih, Research Professor, Ph.D., 1969, University Of Pittsburgh, Pittsburgh: Electrical engineering, computer science, management of information systems, and electronic commerce.

Wolf Schafer, Interim Department Chair, Professor, Ph.D., University of Bremen, Germany, History of Science and Technology and Social History

***Associate Professors***

Reaven, Sheldon J., Associate Professor, Ph.D., 1975, University of California, Berkeley: Science and technology policy; energy and environmental problems and issues; environmental and waste management, recycling and pollution prevention; risk analysis and life-cycle analysis; nuclear, chemical, and biological threats; technology assessment; homeland security and the war on terrorism.

Scarlato, Lori L., Associate Professor, Ph.D. 1993, Stony Brook University: Educational technology; tangible, physical, multi-modal, and collaborative human- computer interfaces; serious games; computer graphics; multimedia.

Tonjes, David J., Research Associate Professor, Ph.D., 1998, Stony Brook University: Environmental management (salt marshes, mosquito control, alternative energy sources), contamination (groundwater, pesticides), and monitoring (groundwater, surface water, estuaries) public policy and communication (risk assessment, environmental impact analyses, environmental justice).

***Assistant Professors***

Araujo, Kathleen, Ph.D., 2013 MIT, National planning and policy; energy-environmental systems; energy transitions, history of science & technology; international development, globalization of R&D, safety, security and disaster preparedness; institutional design and management\*

He, Gang, Ph.D. 2015, University of California, Berkeley, Energy modeling, energy economics, energy and climate policy, energy and environment, domestic coal and power sectors and their key role in both the global energy supply and in international climate policy framework.

Hewitt, Elizabeth, L, Ph.D., 2015, Rutgers University, Building occupant behavior; social science and behavioral energy research; organizational energy issues; green building design and technology; environmental economics

Woodson, Thomas, Ph.D., 2014, Georgia Institute of Technology, Innovation Systems, bibliometrics, science and technology policy, international development

Number of teaching, graduate, and research assistants, Fall 2016: 18

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

Spring 2018



## Technology and Society

**Chairperson**

Wolf D. Schafer, 1209 Computer Science Building, (631) 632-7924

**Graduate Program Director**

Gerald Stokes, Computer Science 1413 (631) 632-3402

**Graduate Program Coordinator**

Marypat Taveras, Computer Science 1426 (631) 632-8762

**Advanced Graduate Certificate Awarded**

Advanced Graduate Certificate in Educational Computing; Advanced Graduate Certificate in Industrial Management

**Degrees Awarded**

M.S. in Technological Systems Management; Ph.D. in Technology, Policy, and Innovation

## Technology and Society

Technology shapes every facet of modern life. Familiarity with the characteristics, capabilities, and limitations of current and emerging technologies is indispensable to wise and effective decisions and practices in government, business and personal life. At all levels and in all disciplines, careers in industry, government and education ever more turn on the ability to see and seize the opportunities, and address the problems, that technology often presents. Technological developments are indeed re-defining these very careers, and changing the workplace itself.

Managing modern technologies calls upon a synthesis of tools drawn from many areas: science and engineering, computers and information, economics and regulation, psychology and community values, design and assessment. The Master's Degree in Technological Systems Management provides professionals in all fields, and persons planning such careers, with state-of-the-art concepts, analytical tools and practical skills for managing specific technological systems and improving their performance. Students may opt to pursue one of these four areas of focus areas: Educational Technology, Energy and Environmental Systems, Global Technology Management, or Energy, Technology, and Policy.

Students must take a common core of six credits, and an additional 24 elective credits. It is strongly recommended that elective credits be specific to the selected focus area.

**The Technology, Policy, and Innovation (TPI) Ph.D. program** has a four-part mission:

- To develop a cadre of scholars who will be engines of national leadership in charting and gauging the future course of technologies;
- To carry out policy and design/planning research in intersecting socio-technological areas: energy and environmental systems; and engineering & technology workforce policy;
- To establish a new model for doctoral education that promotes highly intensive collaborations and uses advanced educational technologies in a fertile, diverse, globally networked laboratory environment that transcends disciplinary boundaries; and,
- To serve as an exemplary resource for regional and national industry and government, as well as for schools, colleges/universities, and other educational institutions in both implementing technological innovation and carrying out policy studies.

Students in the **Technology, Policy, and Innovation (TPI) Ph.D. program** will work in one or more areas of faculty research strength, including: 1) energy and environmental systems; 2) Engineering Education, Management, and Policy. In addition to drawing on the expertise of faculty in the Department of Technology and Society, the Ph.D. program is supported by more than 20 affiliated faculty members from throughout the Stony Brook campus.

The **Advanced Graduate Certificate in Educational Computing** prepares current and prospective teachers to use advanced technologies in learning and teaching, and helps business and industrial trainers and educators to develop and teach computer applications, multimedia technologies, and computer-based documentation. Students elect either the school track or the business/industry track. The **Advanced Graduate Certificate in Industrial Management** helps managers develop their abilities to use advanced technologies in their companies, understand their business processes, reduce waste and inefficiencies, and improve the bottom line of their companies.

## Admission requirements for the Department of Technology and Society

Admission to the M.S. and Ph.D. programs is handled separately by the Departmental admissions committee. The requirements for admission to graduate study in this department include:

- A. A bachelors degree in engineering, natural sciences, social sciences, mathematics, or a closely related area from an accredited college or university. For admission to the M.S., students who elect to take a block of elective courses within the Energy and Environmental Systems and the Energy, Technology, and Policy focus areas will need to have completed prerequisite courses of one year of calculus (MAT 131, 132 or equivalent).
- B. A minimum undergraduate grade point average of 3.00.
- C. Three letters of recommendation.
- D. Graduate Record Examination (GRE) General Test scores.

E. Acceptance by the Department of Technology and Society and the Graduate School.

F. If your native or primary language is not English, a test to measure your English proficiency is required. The department and Graduate School accept TOEFL and IELTS examination scores. English proficiency requirements for the master's and the Ph.D. programs are different. For the master's program, the minimum score for TOEFL is 85 and an overall score of 6.5 with no subsection below 6 for IELTS. For the Ph.D. program, the minimum score for TOEFL is 90 and the overall score of 7.5 with no subsection below 6.5 for IELTS.

G. A Statement of Purpose describing the applicant's relevant past experience and immediate and long-term goals. For the **master's** program, your statement of purpose must include your focus area: Educational Technology, Energy and Environmental Systems, Global Technology Management, or Energy, Technology, and Policy. **(Please state your focus area at the top of the personal statement page.)** For the **D.** program, the statement of purpose should describe how the type of research that students expect to conduct while in the program relates to one of the department's research areas, energy and environmental systems and/or Engineering Education, Management, and Policy. .

H. All official transcripts, recommendation letters (those not uploaded in the Graduate School's online application system), etc. must be sent to the Department of Technology and Society, College of Engineering and Applied Sciences, Stony Brook University, Stony Brook, N.Y. 11794-4404. . In special cases, applicants who do not satisfy requirement a or b may be admitted on a conditional basis and may be subject to additional course requirements. Appropriate courses taken in non-matriculated status may be applied towards the M.S. degree in Technological Systems Management and the Ph.D. degree in Technology, Policy, and Innovation; however, no more than 12 credits taken in non-matriculated status can be applied to the credit requirements for the M.S. and Ph.D. degrees.

For admission to the Advanced Graduate Certificate program, students must have a bachelor's degree and an undergraduate GPA of at least

3.0. Students with lower averages may be admitted in non-matriculated status that may be changed upon earning six or more graduate credits applicable to the Certificate with a GPA of 3.0 or higher.

Credits for Certificate program courses may be applied to requirements for the M.S. degree in Technological Systems Management, subject to Graduate School rules and limitations; however, no more than 12 credits may be transferred.

#### Facilities of the Department of Technology and Society

Graduate students enrolled in the Department of Technology and Society have access to several computing facilities. The University maintains a wide range of mainframe facilities and personal computing laboratories. However, the department uses its two in-house, state-of-the-art computer laboratories as hands-on enhancements of the graduate student's experience. The first lab has 20 Pentium Desktop computers that operate as stand-alones or within a basic network environment. The lab is integrated into the campus WAN, with full Internet access and a wide array of educational, academic, and professional software. Video cameras, scanners, printers, laptops, and a projection system are available for student use within the lab. The second computer laboratory is used for research and teaching related to computer-supported collaboration, E-learning technologies, and emerging educational technologies. The lab, available for faculty and students, consists of 20 laptop computers on a cart. Both labs are designed for student work and as open laboratories to give students the broadest, in-depth exposure to information technologies. The Department of Technology and Society is also a major contributor to three research centers at Stony Brook (the Advanced Energy Research and Technology Center (AERTC), the Center for Excellence in Wireless and Information Technology (CEWIT), and the Center for Interdisciplinary Environment Research) and collaborates with scientists at Brookhaven National Laboratory (BNL). Students working on research projects will have access to the facilities as appropriate for their project.

#### Requirements for the M.S. Degree in Technological Systems Management

Typically, students in the master's program choose one of four focus areas and take all 24 elective courses within the selected focus area. Students are required to complete two courses (EST 581 and EST 582) for six credits and 24 additional elective credits. Suggested additional credits for each of the 4 areas of focus are indicated below. Consult with the Graduate Program Director for more guidance.

#### **Required Courses** (6 credits): EST 581, EST 582

Note: Entering students are presumed to have essential communications, computer, and mathematical skills. Otherwise, prerequisite study in these areas will be required.

#### **Elective Courses**

##### **Educational Technology Focus Area**

Additional Courses: EST 521, EST 522, EST 523,, EST 567, EST 570, Est 571, EST 573, EST 574, EST 5 EST 578, EST 579, , EST 580, EST 590, EST 591, EST 599 Masters Project.

##### **Global Technology Management Focus Area**

Additional Courses: EMP 502, EMP 504, EMP 506, EMP 507, EMP 517, EMP 518, , EMP 521, EMP 524, , EMP 530, EMP 531, EMP 532, EST 508,, EST 530, EST 580, EST 590 EST 599.

##### **Energy, Technology, and Policy Focus Area**

Additional Courses: EMP 518, EST 535, EST 580, EST 590, EST 591, EST 592, EST 593, EST 594, EST 599, EST 603, EST 607, EST 694, Masters Project

#### **Requirements for the Advanced Graduate Certificate in Educational Computing (See course titles and descriptions below.)**

A total of 18 credits (four core courses and two electives) are required. Core Courses: EST 565, EST 567, EST 570, EST 571

**School Track**

Choose one of three: EST 563, EST 573, EST 585 Choose one of three: EST 591, CEI 511, CEN 580

**Business Track**

Choose one of three: EST 509, EST 520, EST 530 Choose one of three: EST 573, EST 591, EST 596

Requirements for the Advanced Graduate Certificate in Industrial Management The AGC in Industrial Management consists of 18 graduate credits:

**Core Courses** (9 credits). All three courses must be taken.

EMP 502 Engineering Economics (formerly Management Accounting and Financial Decision Analysis) EMP 506 Strategic Technology Analysis (formerly Engineering Enterprise Management)

EMP 509 Management Information Systems

**Required Courses** (6 credits). Two of the five courses must be taken.

EMP 501 Behavioral and Organizational Aspects of Management EMP 503 Legal and Regulatory Aspects of Management

EMP 504 Quantitative Methods of Management EMP 511 Starting the High Technology Venture EMP 517 Quality Management

**Elective Course** (3 credits). Select one of the required courses or one course from the following list. EST 520 Computer Applications and Problem Solving

EST 530 Internet Electronic Commerce

EST 581 Heuristics and Quantitative Decision Making (formally Methods of Socio-Technological Decision Making) EST 582 Introduction to Systems Concepts (formally Systems Approach to Human-Machine Systems)

**Requirements for the Ph.D. Degree in Technology, Policy, and Innovation**

Please refer to our web site for the application deadline: [www.stonybrook.edu/est](http://www.stonybrook.edu/est). Applications are only accepted for the Fall semester.

**A. Residence**

The student must complete two consecutive semesters of full-time graduate study. Full-time study is 12 credits per semester until 24 graduate credits have been earned. Students who have earned 24 graduate credits at another school may be assigned advanced status and are required to take only nine credits per semester for full-time status.

**B. Qualifying Examination**

The qualifying examination must be taken by all students, regardless of whether they enter the program holding a master's degree or a bachelor's degree only. Students are expected to take the qualifying examination in the fourth semester, preferably after having completed 34 credits in the program. The qualifying exam has three parts to it.

**Part A:** The student conducts an original research project, starting in the first semester in the program, and presents the results to the department during the fourth semester. The purpose of this is to ascertain the student's preparation to conduct independent original research in a TPI area.

The student is expected to conduct an independent research project under the guidance of a faculty advisor, and present the results. We expect that the quality of the methodology and results should be sufficient for a poster presentation at a leading academic conference.

The Part A exam may be presented at any time that is convenient for the student and the student's Part A committee. For full-time students, this should occur sometime during the 4th semester; part-time students may take the exam up to one year later. The student's advisor and the student consult to make a recommendation to the Chair of the Department regarding the composition of the Part A Committee. Typically, the student's Part A Committee will be comprised of four faculty members, and include at least one faculty member from outside of the Department of Technology and Society. The student's advisor does not serve on the student's Part A committee.

The Part A committee will evaluate the exam in terms of its 3 components:

1. Written report – typically, 15-30 pages, and, typically, 50-100 citations. The report must a) identify a research question of interest to some research community; b) provide an overview of related background research; c) describe a reasonable approach to addressing the research question; and d) present the results of the research project.
2. Presentation - approximately 45 minutes. The presentation must a) provide a motivation for conducting this line of research; b) summarize the background material, emphasizing only the most important related work; c) give an overview of the methodology, emphasizing why this approach was taken; and d) give results.
3. Questions - posed by members of the committee following the presentation. Questions may be related to any aspect of the presentation or the written report.

**Part B:** The student achieves an average GPA of 3.7 or higher on three social sciences-related courses:

Research Methods I – from a social sciences department  
 Research Methods II – from a social sciences department  
 EST 610 (Advanced Statistics)—within Department of Technology and Society

### C. Course Requirements

1. For students who entered the Ph.D. Program prior to Fall, 2014, course requirements are as follows:
  - o EST 600 (Technology and Policy)
  - o EST 610 (Data Analysis, or equivalent approved course)
  - o EST 620 (Decision Making)
  - o 3 courses from Social Sciences Departments (Research Method I, Research Methods II, and Advanced Statistics)
  - o 15 credits of technical electives (foundation for technical/technology dimension of planned research)
2. For students who entered the Ph.D. program in Fall, 2014 or later, course requirements are as follows:
  - o EST 600 (Technology and Policy)
  - o EST 610 Revised (Advanced Statistics)
  - o EST 625 (Advanced Technology and Policy)
  - o 2 courses from social sciences departments (Research Methods I, and Research Methods II)
  - o 15 credits of technical electives (foundation for technical/technology dimension of planned research)

The following courses have been designated as “highly recommended”, and advisors ensure that nearly all students take the courses:

EST 605 and EST 606 (Economics)

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Students who pass all three parts of the qualifying examination are expected to develop a thesis proposal within one semester for full-time students, and two semesters for part-time students. This thesis proposal must then be presented and defended in an oral preliminary examination. Failure to fulfill this requirement within 18 months of passing the qualifying examination, and without a formal extension, may be considered evidence of unsatisfactory progress toward the Ph.D. degree.

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Students are expected to finish all the requirements, including thesis research and defense, in four to five full-time-equivalent years. A student who does not meet the target dates for the Qualifying Examination, Thesis Proposal, and Preliminary Examination, or who does not make satisfactory progress toward completing thesis research, may lose financial support. The candidate must satisfy all requirements for the Ph.D. degree within seven years after completing 24 credit hours of graduate courses in the Department of Technology and Society at Stony Brook. In rare instances, the Dean of the Graduate School will entertain a petition to extend this time limit, provided it bears the endorsement of the Department's Graduate Program Director. A petition for extension must be submitted before the time limit has been exceeded. The Dean or the Department may require evidence that the student is still properly prepared for the completion of work.

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***Professors***

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Stokes, Gerry, Visiting Professor, Ph.D., 1977, University of Chicago, Energy Technology and policy, emphasizing climate, carbon emissions mitigation and smart grid

Teng, Tian-Lih, Research Professor, Ph.D., 1969, University Of Pittsburgh, Pittsburgh: Electrical engineering, computer science, management of information systems, and electronic commerce.

Wolf Schafer, Interim Department Chair, Professor, Ph.D., University of Bremen, Germany, History of Science and Technology and Social History

***Associate Professors***

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Scarlato, Lori L., Associate Professor, Ph.D. 1993, Stony Brook University: Educational technology; tangible, physical, multi-modal, and collaborative human- computer interfaces; serious games; computer graphics; multimedia.

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***Assistant Professors***

Araujo, Kathleen, Ph.D., 2013 MIT, National planning and policy; energy-environmental systems; energy transitions, history of science & technology; international development, globalization of R&D, safety, security and disaster preparedness; institutional design and management\*

He, Gang, Ph.D. 2015, University of California, Berkeley, Energy modeling, energy economics, energy and climate policy, energy and environment, domestic coal and power sectors and their key role in both the global energy supply and in international climate policy framework.

Hewitt, Elizabeth, L, Ph.D., 2015, Rutgers University, Building occupant behavior; social science and behavioral energy research; organizational energy issues; green building design and technology; environmental economics

Woodson, Thomas, Ph.D., 2014, Georgia Institute of Technology, Innovation Systems, bibliometrics, science and technology policy, international development

Number of teaching, graduate, and research assistants, Fall 2016: 18

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

Spring 2018

MFA in Theatre

### Tracks in Acting, Playwriting, Directing, Dramaturgy, and Film

#### Southampton Graduate Arts

##### Director

Carla Caglioti, Chancellors Hall (631) 632-2576

##### Administrative Coordinator

Margaret Grigonis, (631) 632-5028

##### Degree Awarded

M.F.A. in Theatre

##### Web Site

<http://www.stonybrook.edu/sb/mfa/taf/index.shtml>

#### MFA in Theatre

Southampton Arts offers an MFA in Theatre with tracks in Acting, Playwriting, Directing, Dramaturgy and Film. Students study with internationally acclaimed artists in an interdisciplinary, collaborative environment. We offer crossover opportunities between theatre and film, which include ensemble creation and digital filmmaking, as well as all genres of creative writing and the visual arts. The program is for entrepreneurial students who wish to explore multiple approaches—from traditional to experimental—to create and produce new work.

The MFA in Theatre is a three year program that includes a core curriculum, a specialization (track), lab projects, a culminating MFA performance project, MFA written thesis, and a professional internship.

The curriculum requires 44-48 credits, including 30-31 required core and 14-17 track credits. All students take the required core courses and specialize in one of the four tracks.

Interested students should request information from the department and find application information at [http://www.grad.sunysb.edu/admissions/app\\_info.shtml](http://www.grad.sunysb.edu/admissions/app_info.shtml). Students are encouraged to apply as early as possible, especially if they plan to apply for financial aid.

Admission to the M.F.A. Program in Theatre

This M.F.A. program is intensive, and admission to it is highly selective. Upon review, finalists are invited for an on-campus interview. Interview requirements vary depending on track. For admission, the following, in addition to the minimum Graduate School requirements, are normally required:

- A. A bachelor's degree from an accredited college or university.
- B. Undergraduate grade point average of at least 3.0.
- C. A minimum of three years of professional experience / training (preferred).
- D. Three letters of recommendation.
- E. A current resume
- F. A written statement of artistic, educational and professional goals
- G. The following are required for a chosen Track. Choose one:

**Playwriting:** 1) a completed play of any length that best represents your work; 2) a brief description of a play you are currently writing or wish to write while in our program

**Directing:** 1) a brief description of your approach (concept) to a chosen play, either one you have directed or one you wish to direct. You may provide select supporting materials, such as research (written or visual), and any other inspiration for your approach; 2) a list of plays and/or ideas for original devised pieces that you would like to direct / create while in our program

**Dramaturgy:** 1) three writing samples, including, critiques, production program notes, and/or literary criticism of a chosen play; 2) a play, screenplay or alternative performance piece if you have written one; 3) a brief statement describing your view of the role of the Dramaturg in today's theatre, and particularly in relation to creating new work

**Film:** 1) a film you have written, directed and/or produced if you have one; 2) a screenplay if you have written one; 3) a list of proficiencies in various production skills: camera, lighting, editing, directing, production and/or production design.

Crossover between tracks is possible, depending on each student's interests and professional goals. For the application, choose one track and indicate in your statement of goals (F) your interest, if any, in crossover

**F.** Acceptance by both the MFA in Theatre program and the Graduate School.

**I.** If a student accepted into the M.F.A. program wishes to offer, either for credit toward the degree or for exemption from enrollment in courses required by Stony Brook, analogous courses taken at another university, transcripts and other supporting material must be presented for consideration by the graduate program director before the end of the student's first semester in the program (see Transfer of Credit from Other Universities).

#### Facilities

The MFA in Theatre is located on the Stony Brook Southampton campus which includes the Avram Theater and Gallery, a 429-seat theater that was substantially renovated in 2007. Students also work in a flexible black box studio, and a digital film studio. The program recently purchased Panasonic AG 150s, Kino flo and Arri light kits, Sennheiser lavaliers and booms, iMacs and Final Cut Studio.

The University Library holds in excess of 27,000 volumes related to the study of theatre arts which is easily accessible through interlibrary document delivery. Special collections of play texts, including translations, and theatre archives are being developed continually.

#### Requirements for the M.F.A. Degree in Theatre

In addition to the minimum Graduate School requirements, the following are required:

##### **A. Courses**

Courses required for the degree are:

TAF 500: Introduction to Graduate Theatre, 3-4 credits

TAF 510: Theatre History and Literature I, 3 credits

One of the following : TAF 520: Theatre History and Literature II, 3 credits or TAF 530 Directed Readings in Theatre, 3 credits

TAF 523: Theatre in New York, 3 credits

TAF 525: Topics in Theatre, 3 credits

TAF 591: Independent Project, 3 credits

One of the following : TAF 690: Professional Internship, or TAF 550 Teaching Practicum, 3 credits

TAF 691: MFA Project, 3 credits

TAF 692: Thesis, 3 credits

One of the following:

Any additional SB Southampton TAF or CWL course with the permission of the MFA Director, or any other SBU graduate course with the permission of the MFA Director. Interdisciplinary studies are encouraged, 3-4 credits

##### **B. TRACKS**

Choose one of the following Tracks (14 – 17 credits)

**ACTING** (15 cr.)

TAF 560: Acting Theory & Practice, 3 credits

TAF 576: Theatre Workshop, 2-3 credits

TAF 576: Theatre Workshop, 2-3 credits

TAF 660: Acting Workshop, 3 credits

One of the following: TAF 638 Directing I, or TAF 639 Directing II, or TAF 670 Directing Workshop, or TAF 650 Playwriting I, or TAF 651 Playwriting Workshop II, 3 credits

Acting Track students will also participate in public readings, live performance and/or film projects associated with various workshops

**DRAMATURGY** (14-15 cr.)

TAF 505: Dramaturgy I, 3 credits



TAF 506: Dramaturgy II, 3 credits

TAF 575: Adaptation Workshop, 3 credits

TAF 576: Theatre Workshop, 2-3 credits

TAF 680: Dramaturgy Workshop, 3 credits

Dramaturgy Track students also participate in public readings, live performance and/or film projects associated with various workshops.

#### DIRECTING (14-15 cr.)

TAF 576: Theatre Workshop, 2-3

TAF 638: Directing I, 3 credits

TAF 639: Directing II, 3 credits

TAF 660: Acting Workshop, 3 credits

TAF 670: Directing Workshop, 3 credits

Directing Track students also participate in public readings, live performance and/or film projects associated with various workshops.

#### PLAYWRITING (14-16 cr.)

TAF 576: Theatre Workshop, 2-3 credits

TAF 650: Playwriting Workshop I, 3 credits

TAF 651: Playwriting Workshop II, 3 credits

Choose one of the following: CWL 510 Forms of Fiction, CWL 520 Forms of Poetry, or CWL 530 Forms of Scriptwriting, or TAF 575 Adaptation Workshop, 3-4 credits

TAF 660: Acting Workshop, 3 credits

Playwriting Track students also participate in public readings, live performance and/or film projects associated with various workshops.

#### FILM TRACK (14-17 cr.)

CWL 530: Forms of Scriptwriting: Screenwriting, 4 credits

Choose one of the following: CWL 510 Forms of Fiction, or CWL 520 Forms of Poetry, or CWL 530 Forms of Scriptwriting, TAF 640 Scenography & New Media, or TAF 575 Adaptation Workshop, 3-4 credits.

TAF 576: Theatre Workshop, 2-3 credits

TAF 660: Acting Workshop, 3 credits

Film Track students also participate in public readings, live performance and/or film projects associated with various workshops.

### F. Residence Requirement

This program is normally completed in three years of full-time residency. One semester of the last year is typically spent in a professional internship program.

### H. Master's Thesis

A master's thesis must be successfully completed under the direction of a faculty advisor.

#### University Requirements

The granting of master's degree is based upon the completion of any special departmental requirements in addition to the items listed below:

#### A. Courses and Grade Point Average

A student must maintain a 3.0 overall grade point average

**C. Registration**

Degree candidates must be registered in the program granting their degree. Students must be registered for the semester in which they intend to graduate. Spring (May) and Fall (December) candidates must register for at least one graduate credit; Summer (August) candidates may register for zero credits in either summer session, but it still must be graduate level.

Faculty of MFA in Theatre Program

**Professor**

Mangano, Nick, Director. MFA, Columbia University, School of the Arts. Directing, Acting.

**Visiting Assistant Professors**

Alda, Alan, BS, Fordham: Writing.

Baitz, Jon Robin. Scriptwriting, Playwriting

Brandeis, Magdalene, MFA, Stony Brook University. Digital Film Production.

Feiffer, Jules, The Pratt Institute. Screenwriting.

Hamilton, Stephen. Playwriting.

Handley Chandler, Annette. Screenwriting.

Kriegman, Mitchell, Scriptwriting, Digital Film Production.

Norman, Marsha, M.A.T., University of Louisville. Playwriting, Musical Book

**Lecturers**

Burford, William. MFA, University of Texas-Austin. Playwriting, Production

**Guest Teaching Artists**

Baker, Annie, MFA, Playwriting

Baldwin, Alec, Acting.

Bock, Adam, Playwriting.

Brancato, Paula, Screenwriting.

Carden, William, Acting

Hedges, Peter, Screenwriting.

Lazaridi, Christina, Screenwriting.

Mann, Emily, Playwriting, Directing.

Mantello, Joe, Directing

Marshall, Kathleen, Directing.

Pendleton, Austin, Directing.

Walton, Tony, Directing.

Wing-Davey, Mark, Directing.

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

## Theatre Arts

**Chairperson**

John Lutterbie, Staller Center for the Arts 3013 (631) 632-7300

**Graduate Studies Director**

Amy Cook, Staller Center for the Arts 3014 (631) 632-7586

**Graduate Program Coordinator**

Lisa Perez, Staller Center for the Arts 3046 (631) 632-7270

**Degree Awarded**

M.A. in Theatre, Accelerated B.A./M.A. in Theatre Arts (Note: Currently not accepting new students)

**Web Site**

<http://www.stonybrook.edu/commcms/theatre-arts/>

## Description of Theatre Arts

The Department of Theatre Arts offers a 30-credit Master of Arts in Theatre. The M.A. offers an interdisciplinary, collaborative curriculum encourages our graduate students to produce, write and adapt their own work, serve as dramaturgs for department productions, and to apply the historical and theoretical knowledge they attain in course work to the practice of innovative theatre making and new play development.

Among the world-class faculty are directors, actors, playwrights, theorists, dramaturgs and designers all of whom work closely with graduate students. The Staller Center for the Arts is Long Island's hub of creative activity, and provides a wonderful inter-arts working atmosphere for students of Theatre, Art and Music. Students are also introduced to the art of devising new work in collaboration with faculty and students from Art and Music.

The goals of the M.A. program are (1) to study the dramatic tradition and the history of the performing arts, (2) to develop an understanding of the vital relationship between theatre theory and onstage practice, and (3) to prepare students qualified to matriculate in programs of study at the M.F.A. or Ph.D. level.

The Department of Theatre Arts recognizes the contribution of the dramaturg in institutional American theatre. In the United States and throughout the world, the dramaturg plays a vital part in the direction of professional theatre. He or she must be well informed in historical, critical, and comparative studies, and sensitive to every aspect of theatre practice. Training in dramaturgy is useful even to students who later decide to pursue other careers in the theatre or other media, or in teaching. Professional dramaturgs often become directors, producers, administrators, drama critics, teachers, or playwrights, and many combine two or three different careers.

The Stony Brook program offers opportunities for students with a wide range of interests in theatre practice and dramatic criticism to pursue individual development with an applied orientation. This can mean, for example, that graduates could find themselves working with a psychology professor on autism research, as one of our graduates are, or working with an artist on a video installation piece.

The 2-year program culminates in the creation of a Thesis.

Interested students should request information from the department and find application information at [http://www.grad.sunysb.edu/admissions/app\\_info.shtml](http://www.grad.sunysb.edu/admissions/app_info.shtml). Students are encouraged to apply as early as possible, especially if they plan to apply for financial aid.

## Admission to the M.A. Program in Theatre Arts

For admission to the M.A. program in Theatre Arts, the following, in addition to the minimum Graduate School requirements, are normally required:

- A. A bachelor's degree from an accredited college or university.
- B. Advanced undergraduate courses in theatre history, dramatic literature, and/or theatre practice.
- C. Undergraduate grade point average of at least 3.0.
- D. Three letters of recommendation.
- E. Graduate Record Examination (GRE) General Test scores.
- F. Supporting materials must include a sample of the applicant's writing as well as other materials such as scripts, essays, publications, portfolio, etc. (For the returned work, the applicant must include a stamped, self-addressed envelope with the completed application.)
- G. Acceptance by both the Department of Theatre Arts and the Graduate School.
- H. If a student accepted into the M.A. program wishes to offer, either for credit toward the degree or for exemption from enrollment in courses required by Stony Brook, analogous courses taken at another university, he or she must present transcripts and other supporting materials for consideration by the graduate program director before the end of his or her first semester in the program (see Transfer of Credit from Other Universities).

## Theatre Arts Facilities

The Theatre Arts department is located in the Staller Center for the Arts, which houses a 1,106-seat proscenium stage and three black box theatres. Additional theatre spaces are also available on campus. A newly acquired studio/theatre space in the basement of the Staller Center is the home of the Graduate Student Cabaret. This flexible, intimate, 50-seat performance space can also be used as a studio/classroom. The Cabaret serves M.F.A. Dramaturgy students as a production space and theatrical laboratory.

The University Library is adjacent to the Staller Center and holds in excess of 27,000 volumes related to the study of theatre arts. Special collections of play texts, including translations, and theatre archives are being developed continually. Manhattan is an easy commute by train, bus, or car, and its many theatres, exhibitions, archives, and libraries (most notably the New York Public Library of the Performing Arts at Lincoln Center) are easily accessible.

## Requirements for the M.A. Degree in Theatre

In addition to the minimum Graduate School Requirements, the following are required:

**A. Courses**

Courses required for the degree are:

THR 500 Introduction to Graduate Studies

THR 510 and THR 521 Western Theatre History and South and Southeast Asian Theatre and Drama or

THR 511 and THR 520 Far Eastern Theatre and Drama and Western Dramatic Literature

THR 535 Theories of Theatre or

THR 635 Theories of Performance

THR 550 Teaching Practicum

THR 590 M.A. Thesis (6 Credits)

In addition, students select from among a range of courses in consultation with the graduate program director and a faculty advisor. A minimum of 30 credits is required for graduation.

**B. Examination**

Successful completion of the M.A. exam is required, normally at the end of the second semester of full-time residence.

**C. Foreign Language**

Proficiency in a foreign language must be demonstrated.

**D. Teaching Experience**

Teaching for at least one semester at the University level is required of all graduate students.

**E. Master's Thesis**

A master's thesis must be successfully completed under the direction of a faculty advisor.

**F. Residency Requirement**

This program is normally completed in one to two years of full-time residency. Students may be enrolled in the M.A. program on a full-time or part-time basis.

**G. Time Limitations**

Depending on the student's first-time, matriculated enrollment in the Graduate School, full-time students must complete all degree requirements within three years, part-time students in five years.

## Theatre Art Faculty

Phillip Baldwin, Associate Professor, M.F.A., 1987, Yale University. Scene design; interactive media; cultural studies.

Izumi Ashizawa, Assistant Professor, M.F.A., Yale University. Directing and Devising

Mallory Catlett, Assistant Professor, M.F.A., 2000, Simon Fraser University. Interdisciplinary arts, directing and critical studies

Amy Cook, Associate Professor, Ph.D., 2006 University of San Diego, California. Shakespeare, Performance, and Cognitive Science

John Lutterbie, Professor, Chair, Ph.D., 1983, University of Washington. Theatre history: performance theory and criticism; dramaturgy; directing.

Nick Mangano, Professor, M.F.A., Columbia University. Directing.

Deborah Mayo, Director of Undergraduate Studies, M.F.A., 1973, Yale School of Drama. Acting.

Ken Weitzman, Assistant Professor, M.F.A., 2003, University of California, San Diego. Dramatic writing.

Steve Marsh, M.F.A., 2000, Stony Brook University: Dramaturgy.

Elizabeth Bojza, M.F.A., 2004, Stony Brook University: Dramaturgy.

**Adjunct Faculty**

Cate Cammarata, M.F.A., Stony Brook University. Acting and Producing.

Jian Jung, M.F.A., New York University. Theatre Design

Nancee Moes, M.F.A. Stony Brook University. Acting and Analysis

Norman L Prusslin, Director of Media Director, B.A., 1973, University at Stony Brook: Broadcast management.

*For current course listings, please go to: <http://www.stonybrook.edu/registrar/class-schedules.shtml>*

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*

Spring 2018

**Writing and Rhetoric****Graduate Program Director**

Shyam Sharma, Humanities Building 2109, (631) 632-9186

**Program Assistant and Graduate Certificate Coordinator**

Adam Schultheiss, Humanities Building 2005 (631) 632-7390

Graduate Certificate Awarded

Advanced Certificate in Teaching Writing

**Website**

<http://www.stonybrook.edu/commcms/writrhet/graduate/certificate.html>

**Application**

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantLogin.asp?id=sunysb-gs](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantLogin.asp?id=sunysb-gs)

The Program in Writing and Rhetoric, in conjunction with the English Department and the Linguistics Department, offers a course of study that leads to the Advanced Certificate in Teaching Writing. The certificate program, a 15-unit graduate program approved by the State University of New York, is designed to complement graduate work in rhetoric and composition, English, literacy studies, linguistics, or cultural analysis and theory, to name a few examples. The certificate also provides further professional development and mentoring for those already teaching writing at the secondary or college levels.

Learning to teach writing effectively requires study of a variety of fields. Our program draws on theories, research and practices from psycholinguistics, sociolinguistics, cognitive psychology, language acquisition research, genre theory, rhetorical theory, media studies and linguistic anthropology.

Teachers who are grounded in this body of theory and research will be better equipped to implement effective teaching strategies or undertake doctoral studies.

Individuals who would benefit from this certificate program include MA and MAT candidates in English who are preparing for a teaching career in high school or community college teaching; PhD candidates in a range of disciplines who would like a broad-based degree program and want to do research in methods of teaching writing; and high school and college teachers seeking advanced training, accreditation, mentoring, or promotion.

Admission to the Graduate Certificate Program in Teaching Writing is open to any student enrolled a graduate degree-granting program at Stony Brook University or to free-standing certificate students who have completed their BAs who meet the admissions criteria.

For applicants already admitted to the university, admission involves filling out a brief form. For admission to the free-standing Certificate Program in Teaching Writing, students are required to have earned a bachelor's degree with a cumulative grade point average of 3.0 on a 4 point scale. The following must be submitted to the Program in Writing and Rhetoric for admission to the Certificate program:

- A. A letter of application stating the purpose of study
- B. A Graduate School application form
- C. An official transcript of undergraduate record culminating in a bachelor's degree and graduate degree transcript if applicable
- D. Two letters of recommendation from teaching supervisors and/or professors. The forms and additional information are available through the Program in Writing and Rhetoric office:

Program in Writing and Rhetoric

Stony Brook University

Stony Brook, NY 11794-5340

**Certificate Requirements**

The Certificate, which can be completed in two years, consists of five courses, chosen from among the following:

WRT 506 / EGL 506 Studies in Literary Theory

WRT 509 / EGL 509 Studies in Language and Linguistics

WRT 592 / EGL 592 Problems in the Teaching of Writing

WRT 612 / EGL 612 Composition Theory

WRT 613 / EGL 613 Research in Composition

WRT 614 / EGL 614 Topics in Composition and Writing

(may be repeated with different topics)

WRT 698 / EGL 698 Practicum in Teaching of Writing (for PhD candidates or teachers with an MA degree) or

Up to two courses may be taken from the following list, with enrollment permission from the Linguistics Department:

LIN 522 Phonetics

LIN 527 Structure of English

LIN 530 Introduction to General Linguistics

Note: One course from another university may be applied towards this Certificate with approval from the Director

Note 2: Students may petition to the Director of the Writing Program that a course at Stony Brook other than those above be counted towards the Certificate if the course is determined to contribute to the student's mastery of writing and language study.

#### Affiliated Faculty

Broselow, Ellen. Linguistics. PhD, 1976, University of Massachusetts-Amherst: Phonology, phonetics, second language acquisition.

Davidson, Cynthia. Writing and Rhetoric. PhD, 2000, University of Illinois at Chicago: Rhetoric and digital media.

Dunn, Patricia. English. PhD, 1991, The University at Albany: Composition and rhetoric, English education, disability studies.

Hammond, Eugene. Writing and Rhetoric. PhD, 1977, Yale University: Composition and rhetoric; history of rhetorical theory, Jonathan Swift.

Khost, Peter. Writing and Rhetoric. PhD, 2011, CUNY Graduate Center: Teaching writing and teaching literature, political implications of teaching writing, humanitarianism.

Lindblom, Kenneth. English. Director of the English Teacher Education Program. PhD, 1996, Syracuse University: English education; theory, history, and practice of composition-rhetoric; discourse pragmatics.

Lucenko, Kristina. Writing and Rhetoric. PhD, 2009, University at Buffalo: Women's writing, feminism, life narrative, service learning.

Martinez-Pizarro, Joaquin. English. PhD, 1976, Harvard University: Literary history of the Middle Ages, classical and medieval backgrounds, comparative studies.

Pfeiffer, Douglas. English. PhD, 2005, Columbia University: Renaissance humanism, history of literary and rhetorical theory.

Sharma, Shyam. Writing and Rhetoric. PhD, 2012, University of Louisville: Writing in the disciplines, English as a second language.

Thompson, Roger. Writing and Rhetoric. PhD, 2000, Texas Christian: Rhetorical theory, history of rhetorical theory, writing about war experience, veterans issues, trauma.

*NOTE: The course descriptions for this program can be found in the corresponding program PDF or at COURSE SEARCH.*