Graduate Bulletin

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Requirements for Admissions

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- GPA for Admission
- Graduate Record Examination GRE
- English Proficiency Requirements
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Requirements for Admission

Admission to the Graduate School requires that the applicant have the preparation and ability that — in the judgment of the program and the Graduate School — are sufficient to enable satisfactory progress in the degree program. 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 is made to a specific program for a designated degree. 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.)*

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 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.

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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 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*.

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.

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: 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, or the Speaking Proficiency English Assessment Kit (SPEAK). 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*. Information on the IELTS test can be found at *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 English as a Second Language (ESL) course.

TOEFL iBT	IELTS	SBU Campus SPEAK	Course Requirement	Result

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Speak	Speak			
25-30	7.5 or Higher	55+	none	Eligible to TA
22-24	6.5-7	50-54	ESL 598	Eligible to TA
19-21	6	45-49	ESL 596	Eligible to run recitation and lab sessions and/or grade
15-18	5-5.5	40-44	ESL 591	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.

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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

Financial Verification

Applicants who are not citizens or permanent residents of the United States must provide the University with verification that the necessary funds are available to finance their education at Stony Brook and for living expenses. The University form SUSB103R2 must be submitted for this purpose before immigration documents will be sent to the admitted students. (The form SUSB103R2 may also be downloaded at *www.grad.sunysb.edu* under the heading “International Students.”)

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. I-20 Certificates of Eligibility for F-1 or 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 proposed length of the program of study at the Stony Brook University. Non-immigrant students are responsible for obtaining and maintaining the appropriate immigration status for their stays in the United States.

I-20 Documentation

Government regulations require that every international student attend the institution that issued the I-20 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.

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 form to SPD. Contact SPD for additional information at (631) 632-7050 or at *http://stonybrook.edu/spd/*. Non-degree students who later wish to pursue a graduate degree will need to make a formal application for admission to the Graduate School and a degree program and may transfer a maximum of 12 credits taken in non-matriculated status to the graduate degree program.

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. 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.

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• 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.

• 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.

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 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 include:

- 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.
- Students who have a fellowship/scholarship through McNair, Project 1000, SEEK, and AGEP. To qualify, applicants must have a letter or email from the appropriate agency sent to the Graduate School Admissions Office.

Appropriate supporting documentation for the application fee waiver can be emailed to graduate_school_admissions@notes.cc.sunysb.edu. Once the Graduate School Admissions Office receives the appropriate documents, the fee will 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.

- 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

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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 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 with original signatures by both prior and new department or program chairs and advisors. The form can be downloaded at 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.

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 with original signatures by both the primary and new Graduate Program Directors. Final approval rests with the Graduate School. International students are required to obtain approval of an international student advisor.

Students who complete the published requirements for a second degree 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. 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.

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.

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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.

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. 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.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;	Masters Business Administration	15

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Psychology; Religious Studies; Russian Language & Literature; Sociology; Spanish Language & Literature; Studio Art; Sustainability Studies; Theatre Arts; Women's & Gender Studies.		
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 full-time 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.

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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.

Masters

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

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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.
- 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 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 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. 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.

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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.

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- 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.

• 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 10 of classes for the advancement to take effect that same semester.

• Advancements received by the Graduate School after day ten of any semester or term 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 will appoint 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.
- 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 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.

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- 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. However, 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, program brochure, or website) 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 MUST 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.

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.
- To be eligible to participate in the Doctoral Hooding Ceremony, the student must either successfully complete an oral defense of the dissertation OR provide a written statement from their Graduate Program Director indicating that the defense will take place prior to the start of the next term.
- A student may register for no more than one additional semester following the successful defense of the dissertation.

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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 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

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- 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.

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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 and December commencements. 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,

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and have maintained matriculation according to the regulations outlined under the section “Maintaining Matriculated Status,” elsewhere in this Bulletin.

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.

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Overview

- Organization of Graduate Education at Stony Brook
- The Graduate Council
- The Department/Program
- Graduate Program Directors

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 regulations and procedures as set forth in this Bulletin and in 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.

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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.

Course Changes

Students may change their course registrations, subject to the following requirements:

• Graduate students may add or register for classes through day 15 of classes.

• Through day 5 of classes, Graduate students may drop classes without incurring a tuition liability and without a W (withdrawal) being recorded.

• From days 6 to 10, students may be able to drop classes with an approved petition from the Graduate School between days 6 to 10 of classes without incurring a tuition liability and without a W (withdrawal) being recorded.

Course cancellations (removing a course from the transcript/academic record) are not possible after day ten.

• From days 11 to 15, graduate students may only drop from courses if an even number of credits are added in a single transaction (i.e., a swap of 12 credits for 12 credits), or they may withdraw from a class. When a student withdraws from a class, a W is posted and tuition is charged based on the Tuition Liability schedule. This information is available on the Registrar's Web site. For swaps between these dates, Graduate students must petition to the Graduate School. Students can swap only if they petition to the Graduate School using the appropriate forms; swaps cannot be done on SOLAR.

• Retroactive add/drop petitions must have the approval of the graduate program director and the Graduate School and will not be processed by the Registrar's Office until the processing fee is paid.

Graduate Students Registering for Undergraduate Classes

Graduate students may take undergraduate courses with the approval of their advisor and Graduate Program Director and the approval of the appropriate undergraduate faculty and Director of Undergraduate Studies. Since tuition scholarships do not cover the tuition for undergraduate courses, all graduate students are responsible for undergraduate tuition costs.

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.

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

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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/bursar/residency/applying.shtml
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 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. If the graduate program director approves the request, the form is then forwarded to the Graduate School, who will make the final decision. 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. 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.

Withdrawal from the University

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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.

• 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.

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

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Grading System

The following grading system will be used for graduate students in graduate courses: 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). Pass/No Credit (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 final grade has not been reported by the scheduled deadline, or if the deadline has not been appropriately extended, an F will be recorded.

• Graduate students may repeat courses without limit. With the exception of certain courses that may be taken more than once for credit, credits will be counted toward the degree only once, and only the most recent grade will be used to calculate the GPA for probation or graduation purposes.

• 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 reports of an Incomplete must be submitted by the first day of classes of the semester following the Incomplete. 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 how far in advance of the deadline work must be completed.

• An instructor may request an extension of the original Incomplete by sending written notification to the Office of Records/Registrar before the first day of classes. 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

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- 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.

• 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 10 of classes for the advancement to take effect that same semester.

• Advancements received by the Graduate School after day ten of any semester or term 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

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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

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.

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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.

Ethical Writing Awareness

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. Detailed 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. While scholarly and academic misconduct can be hard to distinguish, a useful distinction is that misconduct for an article or a grant would be considered scholarly misconduct, while misconduct for a grade would be considered academic misconduct. Scholarly misconduct is defined as follows.

- Fabrication, falsification, plagiarism, or other serious deviation from accepted practices in proposing, carrying out, or reporting results of scholarly activities.
- Retaliation of any kind against a person who reported or provided information about suspected or alleged misconduct and who has not acted in bad faith.
- Scholarly misconduct does not include actions involving honest error or honest difference in interpretation or judgments of data.
- If applicability of this definition to a given case is in question, then the Vice President for Research must be consulted to determine proper jurisdiction for review of the charges.

Allegations of scholarly and scientific misconduct in the context of research will be reviewed and considered in accordance with the University's Scholarly Misconduct Policy (available at the Office of the Vice President for Research).

Penalties for misconduct may vary according to the circumstances of each particular case. Penalties may range in severity from verbal warning to expulsion from the University with the reason recorded on the student's permanent transcript.

Grievance and Appeals Procedure

A variety of appeals and grievance procedures are available, 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 Dean of the Graduate School. When warranted, the Dean will pass the matter on to the Graduate Council Appeals Committee (GCAC). The Dean is responsible for making and implementing a final decision. Any appeal of decisions made by the Dean of the Graduate School must be presented in writing to the President of the University within two weeks.

Grievances against a person that involve allegations of scholarly misconduct must be adjudicated by the Office of the Vice President for Research (OVPR). See Scholarly Misconduct OVPR. Any appeal of decisions made by the Vice President for Research must be presented in writing to the President of the University within two weeks. For a distinction between scholarly and academic misconduct, see Academic Dishonesty and Scholarly Misconduct.

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

For graduate students, 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 or Graduate School policy or procedure, or with faculty or staff, should discuss the problem with their advisors and their graduate program directors whenever possible.

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Grievances

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 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.

Appeals

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 Dean of the Graduate School within two weeks. The Dean may choose to forward the case to the Graduate Council Appeals Committee (GCAC), who will then advise the Dean on the disposition of the case and possible penalties. The Dean of the Graduate School will determine and implement penalties for academic or professional misconduct. The Dean'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.
- All GCAC members must sign this report, which will be forwarded to the party who filed the appeal, the program director or department chair, and the Dean of the Graduate School.
- The GCAC will present to the Graduate Council and the Graduate Student Organization an annual report documenting its activities but not disclosing the substance of the appeals.

Appealing the Dean's Decision

A person may appeal the final disposition of the Dean of the Graduate School to the President of the University. This appeal must be in writing and must be received within two weeks of the decision.

Scholarly Misconduct OVPR

The Vice President for Research must be notified in writing of allegations of scholarly misconduct. Such cases will be reviewed according to the published policy of the Office of the Vice President for Research and should not be discussed with or reviewed by any other persons prior to notification of the Vice President for Research.

When review of the charges of scholarly misconduct against a person is completed, the Vice President for Research or a designee will provide the graduate director of the relevant program and the Graduate School with written notification of the final disposition of the case.

If an individual is accused of professional or academic wrongdoing in addition to scholarly misconduct, the allegations pertaining to scholarly misconduct must first be reviewed by the Office of the Vice President for Research. In cases brought against graduate students, the notification to the student's graduate director after review of the case is completed will also include a description of the outstanding charges of academic or professional misconduct. These charges will then be referred to the student's departmental/program grievance committee for adjudication according to the procedures specified above.

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Appealing the OVPR Decision

A person may appeal the final disposition of the Vice President for Research to the President of the University. This appeal must be in writing and must be received within two weeks of the decision.

Keywords - Academic dishonesty, Stony brook University, Grievance and Appeal, Graduate Bulletin, Academic dishonesty

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.

Fall 2013

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.

Fall 2013

Africana Studies

Chairperson: E. Anthony Hurley, Ward Melville Social & Behavioral Sciences Bldg, S-245 (631) 632-7472

Graduate Program Director: Leslie Owens, Melville Social & Behavioral Sciences Bldg., S-234 (631) 632-7471

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

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

Website: www.stonybrook.edu/afs.

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

Fall 2013

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 Aficana 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.

Owens, L.H., Ph.D., University of California, Riverside: African-American history; U.S. southern history.Slavery ,Civil Rights, Ancient Egypt(KMT)

Walters, Tracey, Ph.D., Howard University: African American literature, Caribbean literature, African literature; Pan-African literature; Black British literature and culture; 20th 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.

Fall 2013

Anatomical Sciences

Chairperson
William Jungers, Health Sciences Center T-8, Room 040 (631) 444-3122

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
http://www.anat.stonybrook.edu/

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, paleocology 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, finite element analysis, 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.

Fall 2013

Important Note:

Anatomical Sciences has an application deadline in early December each year (please check website for exact date, it is December 6 for 2012). 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 a primate colony and the apparatus necessary for 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 recently constructed 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, Asia, and Madagascar.

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).

Fall 2013

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 3 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 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. 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.

Fall 2013

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.

Distinguished Service Professor
Krause, David W.[4], Ph.D., 1982, University of Michigan: Vertebrate paleontology; mammalian evolution; functional morphology of masticatory and locomotor systems.

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

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.

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

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

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

Associate Professors
O'Leary, Maureen A.[4], Ph.D., 1997, Johns Hopkins University: Vertebrate paleontology; phylogenetic systematics; mammalian evolution.

Seiffert, Erik. Ph.D. 2003, Duke University: Primate systematics, evolutionary history of placental mammals, biogeography.

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.

Assistant Professors

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

Adjunct and Joint Faculty

Brink, Peter R.[2], Ph.D., 1976, University of Illinois: Physiology and biophysics of junctional and excitable membranes.

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

Grine, Federick E.[1], Ph.D., 1984, University of Witwatersrand, South Africa: Hominid evolution; functional morphology of the masticatory system; vertebrate paleontology; dental structure and comparative odontology.

Jouffroy, Francoise K., Ph.D., 1962, Université de Paris: Comparative vertebrate anatomy; functional morphology of locomotion; histochemistry and immunohistochemistry of muscle.

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.1 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.[3], 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.

Fall 2013

Doctoral Program in Anthropological Sciences

Director
Katheryn Twiss, Anthropology, Ward Melville Social and Behavioral Sciences Building, S-533, (631) 632-1539

Graduate Program Coordinator
Jean Moreau, Ward Melville Social and Behavioral Sciences Building, S-501 (631) 632-7606

Degree Awarded
Ph.D. in Anthropology

Web Site
http://www.stonybrook.edu/commcms/idpas/

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, Geosciences, and History. 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. 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 and application forms 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 and faunal remains, application of remote sensing and Geographic Information Systems (GIS), analysis of primate or human remains, and advanced electron microscopy (EM). Housed in the department are archaeological collections from Africa, the Near East, Long Island, and South America. A fully equipped preparation lab provides opportunities for state-of-the-art mineralized tissue research.

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.

Also in the Department of Anatomical Sciences is a biomechanics lab that includes equipment and facilities for force-plate analysis, high-speed cinematography and cineradiography, three dimensional morphometrics, as well as bone strain and telemetered electromyography. Scanning and transmission electron microscope facilities are available elsewhere on campus. 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 Argentina, Central Africa, Indonesia, Madagascar, Tanzania, and Thailand. Paleontological field research is current in Argentina, Egypt, Ethiopia, India, Indonesia, Kenya, Madagascar, Mali, North America, and South Africa. The new Turkana Basin Institute provides IDPAS students with access to field opportunities for paleontology and archaeology in northern Kenya. Additionally, the archaeology faculty have active field sites in Kenya, Sudan, Eritrea, Long Island, and Turkey. Students may be invited to participate in these projects.

The Institute for Long Island Archaeology conducts cultural resource management studies throughout the New York Metropolitan area and provides support for graduate students interested in local archaeology. The Institute has a research library with extensive holdings on local archaeology and history, and its large collections of prehistoric and historic materials are available for student research projects.

Requirements of the Ph.D. Degree in Anthropological Sciences

Fall 2013

For a full description of IDPAS requirements and deadlines, please request "IDPAS Rules, Regulations, Requirements, and Procedures" from the graduate secretary or download the description at www.anat.stonybrook.edu/IDPAS.

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 DPAS course requirements.

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) ANT 515 or DPA 515 Theory and Method in Archaeology and (b) a Graduate-level Statistics course, (c & d) two survey courses chosen from ANT 511 or DPA 511 Paleolithic Archaeology, ANT 513 or DPA 513 Origins of Agriculture, or ANT 512 or DPA 512 Comparative Civilizations. Additional requirements include (a) ANT 516 or DPA 516 Research Design in Archaeology, (b) one laboratory methods course chosen from ANT 517 or DPA 517 Primitive Technology, ANT 518 or DPA 518 Lithic Technology, ANT 519 or DPA 519 Zooarchaeology, ANT 526 or DPA 526 Remote Sensing and GIS, or additional laboratory course approved by committee, (c) one area course chosen from ANT 560 or DPA 560 Ancient Mesopotamia, ANT 562 or DPA 562 Long Island Archaeology, ANT 564 or DPA 564 African Stone Age, ANT 585 or DPA 585 Prehistoric Peoples of the Americas, or ANT 650 or DPA 650, ANT 651 or DPA 651, ANT 652 or DPA 652, ANT 653 or DPA 653 (with committee approval). Students must also take one elective course outside the archaeology subdiscipline (e.g. ANT 565 or DPA 565 Human Evolution, ANT 566 or DPA 566 Hunters and Gatherers, ANT 582 or DPA 582 Human Demography, ARH 541 Topics in Ancient Art, 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 taken 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 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. Language tests are administered by members of the IDPAS faculty, by special arrangements, or through standardized tests. 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

Fall 2013

Distinguished Professors

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

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

Krause, David W.,[1] Distinguished Service Professor, Ph.D., 1982, University of Michigan: Vertebrate paleontology, biogeography, early primate evolution, Madagascar.

Stern, Jack T., Jr.,[1] Distinguished Teaching Professor, Ph.D., 1969, University of Chicago: Functional morphology of primates; biomechanics of muscle.

Professors

Arens, William E., Dean[2], Ph.D., 1970, University of Virginia: Social anthropology; conservation; Africa and the Mediterranean.

Demes, Brigitte,[1] Ph.D., 1982, Ruhr University, Bochum, Germany: Biomechanics; functional morphology; allometry; primates.

Doran-Sheehy, Diane M.,[3] Ph.D., 1989, University at Stony Brook: Social evolution; behavioral ecology; African apes.

Gilmore, David D.,[3] Ph.D., 1975, University of Pennsylvania: Complex societies, stratification, and peasant culture; Europe; Mediterranean.

Grine, Frederick E.,[3] Ph.D., 1984, University of the Witwatersrand, South Africa: Hominid evolution; functional morphology of the masticatory apparatus; diet reconstruction; dental anthropology; mineralized tissues.

Hicks, David B.,[3] D.Phil., 1973, Oxford University, Great Britain: Politics; ritual; literature; Insular Southeast Asia.

Koenig, Andreas,[3] Ph.D., 1992, Georg-August University, Göttingen, Germany: Primate behavioral ecology; social evolution; reproductive strategies; Asia.

Larson, Susan G.,[1] Ph.D., 1982, University of Wisconsin, Madison: Functional morphology; primates; biomechanics.

Martin, Lawrence B., Dean[4] & Associate Provost, Ph.D., 1983, University of London, Great Britain: Hominoid evolution; enamel thickness; enamel microstructure and development.

Shea, John J., Ph.D.,[3] 1991, Harvard University: Old World paleolithic archaeology; lithic analysis; Near East; Europe; Africa.

Stone, Elizabeth C.,[3] Ph.D., 1979, University of Chicago: Old World archaeology; state formation; ancient economy and society; remote sensing and GIS; Near East.

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

Wright, Patricia C.,[3] Ph.D., 1985, City University of New York: Primate behavior and ecology; rainforest conservation; Madagascar.

Zimansky, Paul E.,[5] 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.,[3] PhD., 1968, University of North Wales: Primate evolution; palaeoecology and evolution of African mammals.

Associate Professors

Bernstein, David J.,[3] Ph.D., 1988, State University of New York at Binghamton: New World archaeology; paleoecology; coastal societies; subsistence studies.

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

Fall 2013

Rasbury, Troy, E., Ph.D.,[6] 1998, University at Stony Brook: Sedimentary geochemistry; chronostratigraphy; geochronology.

Rossie, James B.,[3] Ph.D., 2003, Yale University: Primate evolution; miocene hominoids; cranial anatomy; East Africa.

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

Seiffert, Erik R.,[1] Ph.D., 2003, Duke University: Evolution of primates and other placental mammals.

Twiss, Katheryn C.,[3] Ph.D., 2003, University of California, Berkeley: Zooarchaeology; origins of agriculture and social complexity; anthropology of food; Southwest Asia.

Research Associate Professor

Borries, Carola, Ph.D.,[3] 1989, Georg-August University, Göttingen, Germany: Socio-ecology; reproduction; life history; Asian primates.

Assistant Professors

Baab, Karen L.,[3] Ph.D. 2007, City University of New York: Human evolution; lemur evolution; skull morphology; geometric morphometrics.

Boyer, Doug M.,[8] Ph.D. 2009, Stony Brook University: Phylogenetic, functional, and environmental contexts of anatomical form; mammalian evolution.

Hildebrand, Elisabeth,[3] Ph.D., 2003, Washington University: Origins of agriculture; paleoethnobotany; ethnoarchaeology; Africa.

Scientists and Lecturers

O'Neill, Matthew C.,[1] Ph.D. 2009, John Hopkins University: Hominin evolution; primates; energetics; computer modeling.

Patel, Biren,[1] Ph.D. 2008, Stony Brook University: Primate evolution; human evolution; functional morphology; biomechanics.

Number of teaching assistants/graduate assistants/esearch assistants, fall 2010: 22

Number of graduate fellows, fall 20010: 12

1) Department of Anatomical Sciences

2) International Academic Programs (IAP)

3) Department of Anthropology

4) Graduate School

5) Department of History

6) Department of Geosciences

7) Department of Asian and Asian-American Studies

8) Brooklyn College, CUNY

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.

Fall 2013

Anthropology Department

Chairperson
Fred Grine, Ward Melville Social and Behavioral Sciences Building N-533 (631) 632-7622,

Director of M.A. Program
David Hicks, Ward Melville Social and Behavioral Sciences Building S-545 (631) 632-7617

Graduate Program Coordinator
Jean Moreau, Ward Melville Social and Behavioral Sciences Building S-501 (631) 632-7606

Degree Awarded
M.A. in Anthropology

Web Site
http://www.stonybrook.edu/anthro/graduate.shtml

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 person with whom they wish to study prior to application. However, admissions decisions are made by the admissions committee, not by individual faculty members. 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 evolution, lithic technology, zooarchaeology, paleoethnobotany, Remote Sensing and Geographic Information Systems (GIS), and dental structure and microwear. The archaeology and physical anthropology laboratories contain state-of-the-art scanning and digitizing equipment and a variety of microscopes. The GIS Laboratory contains eight networked Pentium computers configured to run ArcGIS 9 software.

Teaching collections include extensive 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. In addition, the Institute for Long Island Archaeology (ILIA) maintains a large collection of library and archival materials relating to the history and archaeology of coastal New York.

For students interested in anthropological research in the New York/Long Island area, there is a research room containing an expanding collection of documentary material. The Institute for Long Island Archaeology performs cultural resource surveys and environmental impact statements for the area and provides equipment for survey, excavation, and data analysis.

Students may be invited to participate in ongoing archaeological, ethnographic, paleontological, or primatological 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;

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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: 10 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

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Faculty of Anthropology Department

Professors
Arens, William, Dean of International Academic Programs, Ph.D., 1970, University of Virginia: Social anthropology; conservation; Africa and the Mediterranean.

Doran-Sheehy, Diane M., Chair. Ph.D., 1989, Stony Brook University: Primate behavior and ecology; socioecology of African apes.

Gilmore, David, Ph.D., 1975, University of Pennsylvania: Complex societies; stratification; peasant culture; Europe; Mediterranean.

Grine, Frederick E., 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.

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

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., Ph.D., 1985, City University of New York: Primate behavior and ecology; rain forest conservation; Madagascar.

Associate Professors
Bernstein, David J., Ph.D., 1988, Binghamton University: New World archaeology; paleoecology; coastal societies; subsistence studies; cultural resource management.

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

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

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

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

Rossie, James, Ph.D., 2003, Yale University: Primate evolution; fossil catarrhines; East Africa.

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

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

Fall 2013

Applied Mathematics and Statistics

Chairperson
Brent Lindquist, Mathematics Building P-139A (631) 632-8361

Graduate Program Director
David Green, Mathematics Building P-137 (631) 632-8354

Graduate Secretary
Christine Rota, Mathematics Building P-134A (631) 632-8360

Advanced Graduate Certificate Awarded
Advanced Graduate Certificate in Operations Research

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

Web Site
http://www.ams.stonybrook.edu/

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, 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. A University-based, 100Tf, BlueGene super computer and a 300 node linux cluster are available for student access. 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, reliability theory, robust estimation, nonparametric statistics, stochastic modeling and sequential decision making, computational geometry and control theory. 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 credit (limited to six 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 Statistical Methods for Social Scientists, Elective chosen by student in consultation with advisor.

Combined B.S./M.S. Degree
Undergraduate applied mathematics majors, with strong academic credentials (minimum of 3.0 in the applied mathematics major) 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 9 graduate credits toward the B.S. and M.S. requirements. In essence, those 9 credits count toward two goals simultaneously. Normally, it would take 6 years to complete two separate degrees. 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.

In the first semester of the senior year, students in the B.S./M.S. program may take up to 6 graduate credits. In the second semester of the senior year, they become enrolled as graduate students, and continue on as graduate students during the fifth year. Because students in this program only need to earn 111 undergraduate credits, they are usually finished with undergraduate coursework by the first semester of their senior year. If needed, they may continue to take some undergraduate courses after they become graduate students.

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When the student is accepted, permission will be granted to take 6 graduate credits that will be applied toward the master's degree. The requirements for the B.S. degree must be completed before admission to the graduate program. At least 24 additional credits including the requirements stated in the Graduate Bulletin must be earned to qualify the student for the master's degree. 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 with specializations in computational applied mathematics, operations research, and statistics, 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 may be obtained from the graduate program director at the Department of Applied Mathematics and Statistics, Stony Brook University, Stony Brook, NY 11794-3600.

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, physics, chemistry, or the social sciences with a strong mathematics background.

B. A minimum grade point average of at least 3.00 in all courses in pertinent or related fields.

C. Results of the Graduate Record Examination (GRE) General Test.

D. Three letters of reference and all transcripts of undergraduate study completed.

E. Acceptance by both the Department of Applied Mathematics and Statistics and the Graduate School.

F. Students admitted provisionally must satisfy designated course and grade point average requirements 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.

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 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 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. Applied Mathematics

AMS 501 Differential Equations and Boundary Value Problems

AMS 503 Applications of Complex Analysis

AMS 504 Foundations of Applied Mathematics

AMS 505 Applied Linear Algebra

AMS 526 Numerical Analysis I

AMS 527 Numerical Analysis II

AMS 595 Fundamentals of Computing

2. Computational Biology

AMS 507 Probability

AMS 510 Analytical Methods for Applied Mathematics and Statistics

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MCB 520 Graduate Biochemistry OR

AMS 530 Principles in Parallel Computing

AMS 532 Laboratory Rotations & Journal Club in Computational Biology

AMS 533 Numerical Methods and Algorithms in Computational Biology

AMS 535 Intro to Computational Structural Biology & Drug Design

CHE 541 Biomolecular Structure and Analysis

CSE 549 Computational Biology

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 556, Dynamic Programming or AMS 553/CSE 529 Simulation and Modeling or

AMS 542/CSE 548 Analysis of Algorithms

One course in statistics

AMS 595 Fundamentals of Computing

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 575 Internship in Statistical Consulting

AMS 578 Regression Theory

AMS 582 Design of Experiments

AMS 595 Fundamentals of Computing

Elective Requirements for the M.S. Degree

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

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A student must pass a qualifying examination to be allowed to continue toward the Ph.D. degree. 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 algebra and analysis and in-depth knowledge in one of the following areas:

Computational Applied Mathematics

Computational Biology

Operations Research

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 to25 double-spaced pages long, containing the literature search synopsis for the proposed dissertation as well as research work accomplished to date. It must be given to the members of the Preliminary Examination committee at lease one week before the oral presentation.

The document must have the written approval for good English and writing style as well as correct content by the student's thesis adviser and a faculty member, not of 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
Glimm, James, Chairperson. Ph.D., 1959, Columbia University: Nonlinear equations, conservation laws; computational fluid dynamics; mathematical physics.

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

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Arkin, Esther[5], Ph.D., 1986, Stanford University: Combinatorial optimization; network flows; computational geometry.

Beltrami, Edward J., Emeritus. Ph.D., 1962, Adelphi University: Optimization techniques; models for public systems analysis.

Chen, Yung Ming, Emeritus. Ph.D., 1963, New York University: Numerical analysis and methods; numerical methods for solving inverse problems; large-scale numerical simulations.

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

Dicker, Daniel, Emeritus. D.Eng.Sc., 1961, Columbia University: Boundary value problems of solids and fluids; aeroelastic analysis of suspension bridges.

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.

Finch, Stephen, Ph.D., 1974, Princeton University: Robust estimation and nonparametric statistics.

Li, Xiaolin, Ph.D., 1987, Columbia University: Computational fluid dynamics; numerical analysis.

Lindquist, Brent[6], Ph.D., 1981, Cornell University: Flow in porous media; Computational fluid dynamics.

Mendell, Nancy, Ph.D., 1972, University of North Carolina at Chapel Hill: Biostatistics.

Mitchell, Joseph[7], Ph.D., 1986, Stanford University: Operations research; computational geometry; combinatorial optimization.

Srivastav, Ram P., Emeritus Ph.D., 1958, Lucknow University, India; Ph.D., 1963, D.Sc., 1972, Glasgow University, Scotland: Fracture mechanics; integral equations; mixed boundary value problems.

Tewarson, Reginald P., Emeritus. Ph.D., 1961, Boston University: Numerical analysis and computational methods; sparse matrices; generalized inverses and large nonlinear systems; mathematical models of diffusion problems in biology and medicine.

Zhu, Wei, Ph.D., 1996, University of California, Los Angeles: Biostatistics;optimal experimental design; linear models; structural equation modeling

Associate Professors
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

Assistant Professors
Green, David, Ph.D., 2002, MIT: Computational biology, protein structure.

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.

Research Professors
Frey, Robert, Ph.D., 1986, Stony Brook University: Quantitative finance

Andrew Mullhaupt, Ph.D. 1984, New York University: Quantitative finance.

Research Associate Professor
Tucker, Ann, Ph.D. 2000, Stony Brook University: Quantitative finance.

Research Assistant Professor
Yu, Yan, Ph.D., 2005, Stony Brook University: Numerical analysis and computational fluid dynamics.

Adjunct Faculty
Bender, Michael[3], Associate Professor, Ph.D., 1996, Harvard University, combinatorial algorithms.

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Chen, John[11], Ph.D. 1999, University of California, Berkeley: Biostatistics,

Dubey, Pradeep[1], Professor, Ph.D., 1975, Cornell University: Game theory; mathematical economics.

Ferguson, David[8], Professor. Ph.D., 1980, University of California, Berkeley: Mathematics education; educational technology.

Grove, John[4], Professor. Ph.D., 1984, Ohio State University: Conservation laws; front tracking.

Pinezich, John[12], Adjunct Professor, Ph.D.. 1998, SUNY at Stony Brook: Radar, ballistics, sonar, acoustics.

Powers, Scott[13], Adjunct Professor, Ph.D., 1982, Columbia University: Genetic basis of cancer.

Reinitz, John[14], Ph.D., 1988, Yale University: Theory of fundamental biological processes; bioinformatics; optimization, developmental biology and gene regulation .

Sharp, David[4], Professor. Ph.D., 1963, California Institute of Technology: Mathematical physics; computational fluid dynamics.

Simmerling, Carlos[9], Associate Professor, Ph.D., 1995, University of Illinois at Chicago: Protein structcure.

Skiena, Steven[3], Professor, Ph.D., 1988, University of Illinois: Combinatorial algorithms; computational geometry; data structures.

Skorin-Kapov, Jadranka[2], Professor, Ph.D., 1988, University of British Columbia, Canada: Mathematical programming; production management.

Sheldon Weinig, Professor, Ph.D., 1955, Columbia University: Manufacturing management, material sciences.

Wang, Jin[9], Assistant Professor, Ph.D., 1991, University of Illinois: bio-molecular folding and recognition: protein - protein interactions.

Zemanian, Armen H.[10], Distinguished Professor, Eng.Sc.D., 1953, New York University: Network theory; food system modeling.

Zhang, Michael[13], Ph.D., 1987, Rutgers University: computational biology, systems biology.

Number of teaching assistant and research assistants, fall 2007:75

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.

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Art History and Criticism

Chairperson
John Lutterbie, Staller Center 2221 (631) 632-4596

M.A./Ph.D. Graduate Program Director
Andrew Uroskie, Staller Center 4217 (631) 632-7260

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

Website
http://art.stonybrook.edu

Art History and Criticism Department

The Department of Art's master's and doctoral program in art history and criticism occupy 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. Students have the opportunity to explore other fields in addition to art history and criticism, and may elect to complete one or more advanced graduate certificate programs in Cultural Studies, Women's Studies, and Art and Philosophy among others.

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 newly-opened Stony Brook Manhattan facility, 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.

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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 that offers an integrated curriculum of art history, criticism, and theory with a particular focus on modern and contemporary art and visual culture. It presents the graduate student a unique opportunity for innovative study in art criticism and theory, as well as traditional study in art history. The goals of the program include the development of the critic or historian who can combine the various fields of art historical study with a critical consciousness and awareness of larger intellectual issues involved in such work. For example, seminars are offered on the history of art criticism; the development of alternative perspectives on art; the development of practicing art critics; and the interdisciplinary study of modern and contemporary art, among others. 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. It is organized to allow students to further their areas of study by concentrating on major and minor fields that are a function of the individual interests of the student and the strengths of our faculty. The emphasis of the program is on integrating research and analysis into a single curriculum with a particular focus on art criticism and theory and an interdisciplinary approach to modern and contemporary art and visual 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.

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.

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, including the annual M.F.A. show. 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)

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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 l9th Century Art Criticism and Theory (3 credits)

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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.

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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, chosen from the following fields:

Contemporary Art and Criticism

Photography and the Moving Image

Modern European Art and Criticism

American Art and Material Culture

Early Modern Art and Visual Culture

Global, Colonial and Diasporic Art

Medieval and Renaissance Art

Ancient Civilizations

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.

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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.

Faculty of Art History and Criticism Department

The faculty of the Art Department consists of artists and scholars of national and international reputation who are actively involved in the practice of art, art criticism, or art historical research. Artists on the faculty are represented in major galleries, museums, and exhibitions; critics and historians on the faculty have published numerous books and articles in major scholarly journals or presses.

Professors

Bogart, Michele H., Ph.D., 1979, University of Chicago: American art and visual culture.

Buonagurio, Toby, M.A., 1971, City College of New York: Ceramics; ceramic sculpture; drawing.

Guilmain, Jacques, Emeritus. Ph.D., 1958, Columbia University: Medieval art; archaeology.

Kuspit, Donald B., Emeritus. Ph.D., 1971, University of Michigan; D.Phil., 1960, University of Frankfurt, Germany: Art criticism; aesthetics; 20th-century and Northern Renaissance art.

Levine, Martin, M.F.A., 1972, California College of Arts and Crafts: Printmaking.

Lutterbie, John, Ph.D., 1983, University of Washington: Performance and Theatre Studies.

Moskowitz, Anita, Emeritus. Ph.D., 1978, New York University: Medieval and Renaissance art and connoisseurship.

Nagasawa, Nobuho, M.F.A., 1985, Hochschule der Kunste Berlin, Germany: Sculpture.

Pekarsky, Melvin H., Emeritus, M.A., 1956, Northwestern University: Drawing; painting; public art.

Pindell, Howardena, M.F.A., 1967, Yale University: Painting and drawing.

Rubin, James H., Ph.D., 1972, Harvard University: 18th- and 19th-century art; art and politics.

Uroskie, Andrew, Ph.D., 2005, University of California, Berkeley: History and criticism of late modernism, film and photography in the art of 1960s and 1970s.

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.

Frank, Barbara E., Ph.D., 1988, Indiana University: African, Mesoamerican and African Diaspora art history.

Uroskie, Andrew, Ph.D., 2005, University of California, Berkeley: History and criticism of late modernism, film and photography in the art of 1960s and 1970s.

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.

Goodarzi, Shoki, Lecturer. Ph.D., 1999, University of California at Berkeley: Ancient Near Eastern Art.

Patterson, Zabet, Ph.D., 2007, University of California, Berkeley: Core Faculty for the Consortium for Digital Arts, Culture, and Technology; history and theory of digital media.

Technicians, and Professional Staff

Harrison, Helen, Lecturer and Director of the Pollock-Krasner House and Study Center. M.A., 1975, Case Western Reserve University: American art.

Ide, Takafumi, Instructional Support Specialist, Photography and Digital Arts. M.F.A, 2007, Stony Brook University

Richholt, Dan, Sculpture Technician and Studios Manager. M.F.A., 1994, Stony Brook University: Sculpture.

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Part-Time Faculty

Brooks, Perry, Adjunct Lecturer, Ph.D., Columbia University, 1990.

Calvanico, Jessica, Adjunct Lecturer, M.A., Uiversity of Chicago, 2009.

Esser, Joseph, Adjunct Lecturer, M.F.A. Stony Brook University: Digital Arts.

Fasanella, Marc, Visiting Professor, Ph.D., New York University.

Goodrich, Alan, Adjunct Lecturer, M.F.A., Stony Brook University 2009: Video Art, Mixed Media.

Paradis, Jason, Adjunct Lecturer. M.F.A, 1998, Stony Brook University: Painting and drawing.

Salcedo-Watson, Lorena, Adjunct Lecturer, M.F.A., 2008, Stony Brook University: Printmaking and Lithography.

Semergieff, Christopher, Visiting Artist. M.F.A., 1979, CUNY, New York. Painting and Drawing.

Wiener, Ellen, Visiting Artist, M.F.A. Queens College, 1985, Painting and Drawing.

Affiliated Faculty

Craig, Megan, Assistant Professor of Philosophy. Ph.D., 2006, New School: Levinas and aesthetics; phenomenology; painting.

Guins, Raiford, Associate Professor, Comparative Literary and Cultural Studies; Core faculty for the Consortium for Digital Arts, Culture, and Technology; Editor of the *Journal of Visual Culture*. Ph.D., 2000, Leeds, UK: Visual and digital culture; games; politics; play.

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.

Schedel, Margaret, Assistant 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

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.

Fall 2013

Studio Art

Chairperson
John Lutterbie, Staller Center 2221 (631) 632-4596

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

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. Students have the opportunity to explore other fields in addition to art history and criticism or studio art, and may elect to complete one or more advanced graduate certificate programs in Cultural Studies, Women's Studies, and Art and Philosophy among others.

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 newly-opened Stony Brook Manhattan facility, 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.

Fall 2013

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.

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 on **DVD or CD**. 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.

Facilities of Studio Art 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, 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. The Visual Resources Library offers an extensive slide and digital image collection to support the teaching and research needs of the department, videos and print journals, as well as computer equipment for the ongoing development of a database and digital imaging capacity. 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.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

Fall 2013

The faculty of the Art Department consists of artists and scholars of national and international reputation who are actively involved in the practice of art, art criticism, or art historical research. Artists on the faculty are represented in major galleries, museums, and exhibitions; critics and historians on the faculty have published numerous books and articles in major scholarly journals or presses.

Professors
Bogart, Michele H., Ph.D., 1979, University of Chicago: American art and visual culture.
Buonagurio, Toby, M.A., 1971, City College of New York: Ceramics; ceramic sculpture; drawing.

Guilmain, Jacques, Emeritus. Ph.D., 1958, Columbia University: Medieval art; archaeology.

Kuspit, Donald B., Distinguished Professor, Ph.D., 1971, University of Michigan; D.Phil., 1960, University of Frankfurt, Germany: Art criticism; aesthetics; 20th-century and Northern Renaissance art.

Levine, Martin, M.F.A., 1972, California College of Arts and Crafts: Printmaking.

Moskowitz, Anita, Ph.D., 1978, New York University: Medieval and Renaissance art and connoisseurship.

Pekarsky, Melvin H., Emeritus, M.A., 1956, Northwestern University: Drawing; painting; public art.

Pindell, Howardena, M.F.A., 1967, Yale University: Painting and drawing.

Rubin, James H., Ph.D., 1972, Harvard University: 18th- and 19th-century art; art and politics.

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.

Frank, Barbara E., Ph.D., 1988, Indiana University: African, Mesoamerican and African Diaspora art history.

Lutterbie, John, Ph.D., 1983, University of Washington: Performance and Theatre Studies.

Monteyne, Joseph, Ph.D., 2000, University of British Columbia, Canada: Early Modern art history and print culture

Nagasawa, Nobuho, M.F.A., 1985, Hochschule der Kunste Berlin, Germany: Sculpture.

Assistant Professors
Goodarzi, Shoki, Lecturer. Ph.D., 1999, University of California at Berkeley: Ancient Near Eastern art.

Patterson, Zabet, Ph.D., 2007, University of California, Berkeley: Core Faculty for the Consortium for Digital Arts, Culture, and Technology; history and theory of digital media.

Uroskie, Andrew, Ph.D., 2005, University of California, Berkeley: History and criticism of late modernism, film and photography in the art of 1960s and 1970s.

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Adjunct Faculty, Technicians, and Professional Staff
Cassidy, James, Technical Specialist and Lecturer, M.A., 1986, Adelphi University: Photo/printmaking technician and studios manager.

Cooper, Rhonda, Director of the University Gallery and Lecturer. M.A., 1972, University of Hawaii: Far Eastern Art.

Harrison, Helen, Lecturer and Director of the Pollock-Krasner House and Study Center. M.A., 1975, Case Western Reserve University: American art.

Larese, Steven, Technical Specialist and Lecturer. M.F.A., 1975, University of Cincinnati: Visual Resources Curator; painting and drawing.

Mafucci, John, Technical Specialist and Lecturer. B.A., 1998, Stony Brook University, Sculpture Technician and Studios Manager.

Part-Time Faculty
Leslie, Richard, Adjuncy Lecturer. Ph.D., 2003, Graduate Center of the City University of New York: 20th-century; northern Baroque; history of photography.

Nelinson, David, Adjunct Lecturer. M.F.A., 2004, Stony Brook University: Painting and drawing.

Paradis, Jason, Adjunct Lecturer. M.F.A, 1998, Stony Brook University: Painting and drawing.

Richholt, Dan, Adjunct Lecturer. M.F.A., 1994, Stony Brook University: Sculpture.

Schneider, Gary, Artist-In-Residence. M.F.A., 1979, Pratt Institute: Photography.

Semergieff, Christopher, Visiting Artist. M.F.A., 1979, CUNY, New York.

Affiliated Faculty
Craig, Megan, Assistant Professor of Philosophy. Ph.D., 2006, New School: Levinas and aesthetics; phenomenology; painting.

Guins, Raiford, Assistant Professor, Comparative Literary and Cultural Studies; Core faculty for the Consortium for Digital Arts, Culture, and Technology; Editor of the *Journal of Visual Culture*. Ph.D., 2000, Leeds, UK: Visual and digital culture; games; politics; play.

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.

Silverman, Hugh J., Professor of Philosophy and Comparative Literary and Cultural Studies; Program Director, Advanced Graduate Certificate in Art and Philosophy. Ph.D., 1973, Stanford University: Aesthetic, cultural, and art theory; continental philosophy; contemporary European thought and cultures.

Number of teaching, graduate, and research assistants, Fall 2009: 25

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

Fall 2013

Biochemistry and Cell Biology (BCB) MS Program

Chairperson
Robert Haltiwanger, Life Sciences Building 450 (631) 632-8550

BCB MS Graduate Program Director
Neta Dean, Life Sciences Building 310, (631) 632-9309

Administrative Assistant
Dianna (Dee) Berger, 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 www.stonybrook.edu/biochem.

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/biochem/graduate/bcb.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:

A. 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.

B. Three letters of recommendation.

C. Acceptance by the Graduate Program in Biochemistry and Cell Biology and by the Graduate School.

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 and its oral defense.

Literature-based thesis option (30 credits)

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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 and its oral defense.

Core Course Requirements

- 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 (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 or Spring, 4 credits)
- BCB 599 MS Thesis in Biochemistry and Cell Biology (Fall, Spring & Summer, 1 – 6 credits)
- Integrity in Science (TBA, 1 credit)
- MCB 601 or 602 Colloquium in Molecular and Cellular Biology (Fall & Spring, 1 credit)

FACULTY

Department of Biochemistry

Paul M. Bingham Genetic control of development and gene expression in animals

Deborah Brown Cholesterol/sphingolipid-rich domains in membrane signaling

Kevin Czaplinski Post-transcriptional control of gene expression in the nervous system

Vitaly Citovsky Nuclear targeting and intercellular communication in plants

Neta Dean Glycosylation; fungal pathogenesis

Dale G. Deutsch Marijuana; molecular neurobiology of anandamide

J. Peter Gergen Gene expression and development in *Drosophila*

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

William J. Lennarz Biosynthesis and function of glycoproteins in cell-cell interactions

Erwin London Membrane protein structure/translocation/folding

Harvard Lyman Photocontrol of chloroplast development

Kenneth B. Marcu Antibody class switch mechanism; NFkB kinases; Myc gene control

Aaron Neiman Vesicle trafficking and membrane/cytoskeletal interactions

Nisson Schechter Homeobox and filament proteins in neuronal differentiation

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 signaling in bacteria.

Isaac Carrico Site-specific protein labeling; glycoproteins.

Fall 2013

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

Jian Cao, M.D. Biology and prevention of cancer metastasis

Wen-Tien Chen Proteases / integrins in cancer invasion, metastasis, angiogenesis

Jolyon Jesty Regulatory controls of blood coagulation

Erich R. Mackow Rotavirus and Hantavirus Pathogenesis

Richard Lin Kinase signaling and cell proliferation

Mario Rebecchi Phospholipases and signal transduction

Roy Steigbigel Immune dysfunction induced by HIV infection

William Van Nostrand Vascular functions of Alzheimer's disease amyloid beta-protein

Department of Oral Biology and Pathology

Soosan Ghazizadeh Epithelial stem cell biology; Skin bioengineering and gene therapy.

Department of Pathology

Fleit, Howard B. Leukocyte Fc receptors; macrophage differentiation

Martha Furie Interactions between leukocytes and endothelium

Richard R. Kew Leukocyte chemotaxis/inflammation

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

Gary Zieve Assembly/transport of snRNP particles

Department of Pharmacological Sciences

Miguel Berrios Cell structure and function; the cell biology of DNA damage and repair.

Bogenhagen, Daniel Mitochondrial DNA; DNA repair

Emily Chen Breast Cancer Metastasis & Shotgun Proteomics

Holly Colognato Extracellular matrix in the brain; roles during development and during neurodegeneration.

Michael A. Frohman Early mammalian development; gene regulation

Miguel Garcia-Diaz Mechanisms of chemical mutagenesis/carcinogenesis

Masaaki Moriya Cellular responses to DNA damage.

Joav Prives Cytoskeletal membrane interactions in muscle cells

Markus Seeliger

Orlando Schärer Chemical Biology of DNA damage and repair.

Ken-Ichi Takemaru Wnt Signaling in Development and Disease

Styliani-Anna Tsirka Neuronal-microglial interactions in the central nervous system

Department of Physiology and Biophysics

Mark Bowen Single molecule spectroscopy; Coordination of post-synaptic glutamate receptor signaling by the MAGUK family of scaffolds

Roger A. Johnson Intercellular and intracellular signal transduction

Stuart McLaughlin Calcium/phospholipid second messenger system

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W. Todd Miller Tyrosine phosphorylation and signal transduction

Suzanne Scarlata Structure/oligomerization of membrane proteins

Ilan Spector Neuronal differentiation and microfilaments

Hsien-yu Wang Signal transduction and development.

Thomas White 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.

Fall 2013

Biochemistry and Structural Biology

Chairperson, Department of Biochemistry and Cell Biology
Robert Haltiwanger, Life Sciences Building 450 (631) 632-8550

Graduate Program Coordinator
Joann DeLucia-Conlon, Life Sciences Building 338 (631) 632-8613

Graduate Program Director
Erwin London, Life Sciences Building 420 (631) 632-8533

Senior Staff Assistant
Beverly Piazza, Life Sciences Building 336 (631) 632-8533

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/

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/.

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)

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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.

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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
Grollman, Arthur, P.[4], M.D., 1959, Johns Hopkins Medical School: Mechanisms of chemical mutagenesis/carcinogenesis.

Sternglanz, Rolf[1], Ph.D., 1967, Harvard University: Chromatin structure and function in yeast; histone modifying enzymes.

Professors

Brown, Deborah[1], Ph.D., 1987, Stanford University: Structure and function of caveolae and cholesterol/sphingolipid-rich membrane domains.

Citovsky, Vitaly[1], Ph.D., 1987, Hebrew University, Jerusalem: Nuclear targeting and intercellular communication in plants.

Dean, Neta[1], Ph.D., 1988, UCLA: Protein glycosylation, fungal cell wall biosynthesis; fungal pathogenesis

de los Santos, Carlos[2], Ph.D., 1987, Buenos Aires, Argentina: Solution structures of damaged DNA; structural basis of chemical mutagenesis, lesion recognition, and DNA repair.

Deutsch, Dale[1], Ph.D., 1972, Purdue University: Metabolism and uptake of the endocannabinoids (anandamide and 2-AG).

Gergen, J. Peter[1], Ph.D., 1982, Brandeis University: Transcriptional regulation in development; structure and function of Runt domain proteins.

Green, David, F.[6], Ph.D. 2002, MIT: Protein design; computational glycobiology; specificity of protein interaction networks.

Haltiwanger, Robert[1], Ph.D., 1986, Duke University: Glycobiology: Role of protein glycosylation in signal transduction and development.

Hollingsworth, Nancy [1] ,Ph.D., Meiotic synapsis, recombination, and segregation in yeast

Hannun, Yusuf, [1,7], MD , [1], Bioactive lipids in cancer pathogenesis and therapeutics

Li, Huilin[1,5], Ph.D., 1994, University of Sciences and Technology, Beijing China: Structural biology of macromolecular assemblies and membrane proteins by cryo-electron microscopy.

London, Erwin[1], Ph.D., 1979, Cornell University: Membrane protein structure/translocation/folding. Structure and function of sphingolipid/ cholesterol rafts in membranes.

Miller, W. Todd[3], Ph.D., 1989, Rockefeller University: Tyrosine phosphorylation and signal transduction.

Neiman, Aaron[1], 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

Raleigh, Daniel P.[4], Ph.D., 1988, Massachusetts Institute of Technology: Experimental studies of protein folding and amyloid formation.

Rizzo, Robert[6], Ph.D 2001, Yale University: Computational biology; drug design.

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Sampson, Nicole[4], 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[2], Ph.D., 1984, University of Illinois: Structure/oligomerization of membrane proteins.

Simmerling, Carlos L.[4], 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.[1], 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.

Thomsen, Gerald H.[1], 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.[4], Ph.D., 1986, University of Birmingham, England: Tuberculosis pathogenesis and drug discovery; Enzyme mechanisms and rational inhibitor design; Fluorescent proteins.

Wang Jin[4], Ph.D., 1991 University of Illinois: Fundemental mechanism of biomolecular folding and recognition. Especially protein folding and protein-protein/protein-DNA interactions.

Associate Professors

Holdener, Bernadette[1], Ph.D., 1990, University of Illinois: The role of protein folding in WNT signal transduction and development.

Karzai, Wali[1], Ph.D., Johns Hopkins University, 1995. Structure-Function studies of RNA-protein interactions.

Schärer, Orlando D.[4,9], Ph.D., 1996, Harvard University: Chemistry and Biology of DNA damage and repair.

Assistant Professors

Boon, Elizabeth M.[4], Ph.D., 2003, California Institute of Technology: Nitric oxide signaling in bacteria.

Bowen, Mark E.[3], Ph.D., 1998, University of Ilinois, Chaicago;

Carrico, Isaac[4], Ph.D 2003, California Institute of Technology: Site-specific protein labeling; glycoproteins.

Czaplinski, Kevin[1], Ph.D., 1999, UMDNJ-Robert Wood Johnson Medical School: Post transcriptional control of gene expression in the nervous system.

Garcia-Diaz, Miguel[2], Ph.D., 2003, UAM University (Madrid, Spain): Structural Enzymology of eukaryotic DNA/RNA transactions.

Glynn, Steven [1] Ph.D Structure and mechanism of protein-unfolding machines in mitochondria

Hitchcock, Ian [2] Ph.D The role of the hormone thrombopoietin (TPO)

Luk, Edward [1] Ph.D Chromosome biology and genome regulation

Martin, Benjamin [1] Ph.D Stem cell maintenance and differentiation, Developmental mechanisms of cancer pathogenesis

Seeliger, Jessica[2] Ph.D Stanford University:infectious disease, tuberculosis, lipid biosynthesis, membrane biology, enzymology

Seeliger, Markus[2] Ph.D Cambridge University Mechanism of Protein kinases and Ubiquitin Ligases in Cancer and Aging

Scientists

Allaire, Marc[5], 1992, University of Sherbrooke: Synchrotron-based techniques and structural biology.

Fu, Dax[5], 1996, Mayo Graduate School of Medicine: X-ray crystallography of membrane protein transporters and channels.

Liu, Chang-Jun[5], Ph. D. 1999, Shanghai Institute of Plant Physiology, the Chinese Academy of Sciences.

Schwender, Jörg [5], Ph. D., 1999, University of Karlsruhe, Germany: Experimental and theoretical analysis of plant metabolic networks.

Shanklin, John[5], Ph.D., 1988, University of Wisconsin-Madison: Structure-function relationships of lipid modification enzymes.

Subramanyan Swaminathan[5], 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

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7) Department of Medicine

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

Fall 2013

Biomedical Engineering Department

Chair
Clinton T. Rubin, Dept. of Biomedical Engineering and Director, Center for Biotechnology, Bioengineering Bldg., 2nd Floor (631) 632-8375

Graduate Program Director
Helmut Strey, Dept. of Biomedical Engineering, Bioengineering Bldg., G13 (631) 632-1957

Assistant to the Chair; Graduate Program Coordinator
Anne Marie Dusatko, Dept. of Biomedical Engineering, Bioengineering Bldg., 217 (631) 632-8375

Degrees Awarded
M.S. in Biomedical Engineering; Ph.D. in Biomedical Engineering

Web Site
http://bme.stonybrook.edu/

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. Thesediverse 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

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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 (3 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 pursing 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.

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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.

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.

Professors
Benveniste, Helene, Ph.D., understanding diagnostic MR contrast parameters suitable to visualize neuro-pathology in neurodegenerative diseases.

Bluestein, Daniel, Ph.D., 1992, Tel Aviv University, Israel: Dynamics of fluid flow and cellular transport through vessels.

Brink, Peter, Ph.D., 1976, University of Illinois: Biophysical properties of gap junction properties.

Chiang, Fu-Pen, Ph.D., 1966, University of Florida: Development and application of various optical techniques such as moiré, holographic, interferometry, and speckle interferometry for stress analysis, nondestructive evaluation and metrology.

Clark, Richard, M.D., 1971, University of Rochester: Tissue engineering in wound repair.

Cohen, Ira, M.D., Ph.D., 1974, New York University: Electrophysiology of the heart.

Djuric, Petar, Ph.D., 1990, University of Rhode Island: Acoustic signal processing.

Einav, Shmuel, Ph.D., 1972, Stony Brook University: basic physiological flow phenomena as well as cellular and tissue engineering as applied to the vascular system.

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.

Fowler, Joanna, Ph.D., 1967, University of Colorado: Radiotracer synthesis with positron emitters.

Grine, Fred, Ph.D., 1984, University of the Witwatersrand, Johannesburg, South Africa: Tooth enamel thickness and structure and the stresses experienced by tooth enamel during masticatory loading in primates.

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.

Harrington, Donald, M.D., Ph.D., 1966, Marquette University: Magnetic Resonance Imaging in medicine.

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.

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.

Mathias, Richard, Ph.D., 1975, UCLA: Research in biophysics seeks physical insights into how cells and tissues function.

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.

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.

Reichek, Nathaniel, M.D., 1965, Columbia University: Cardiac Magnetic Resonance Imaging; Myocardial mechanics, perfusion, viability.

Vaska, Paul, Ph.D., 1997, State University of New York at Stony Brook: Instrumentation for positron emission tomography (PET).

Zhu, Wei, Ph.D., 1996, University of California, Los Angeles: Brain image analysis, design and analysis of clinical trials and other biomedical studies, and genetics modeling.

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Associate Professors
Button, Terry, Ph.D., 1989, University at Buffalo: High-resolution computer-aided tomography.

Dilmanian, F. Avraham, Ph.D., 1980, Massachusetts Institute of Technology: Computed tomography; radiation therapy.

Du, Congwu, Ph.D., 1996, University of Luebeck, Germany: Development of advanced biomedical optical imaging techniques for translational research.

Frame, Molly, Ph.D., 1990, University of Missouri: Microvascular flow control at the fluid dynamic and molecular levels.

Gindi, Gene, Ph.D., 1982, University of Arizona: Algorithm development for medical imaging.

McCombie, Richard, Ph.D., 1982, University of Michigan: Structure and function in complex genomes.

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.

Mueller, Klaus, Ph.D., 1998, Ohio State University: Computer graphics, data visualization, medical imaging.

Penna, Louis, Ph.D., University of California Los Angeles: develop novel radiation protection drugs, and developed a method to make analogs (mimetics) of heparin-binding cytokines / growth factors.

Powers, Scott, Ph.D., 1983, Columbia University: Cancer gene discovery; cancer diagnostics and therapeutics; cancer biology.

Rastegar, Jahangir, Ph.D., 1976, Stanford University: Robotics; biomechanics.

Reinitz, John, Ph.D., 1988, Yale University: the generation of body form, and specifically the determination of morphogenetic fields.

Skiena, Steven, Ph.D., 1988, University of Illinois: Computational geometry; biologic algorithms.

Solomon, Irene, Ph.D., 1994, University of California @ Davis: Reflex and central neural control of cardiovascular and respiratory function.

Simmerling, Carlos, Ph.D., 1994, University of Illinois, Chicago: Simulate known properties of molecules, assist in the refinement and interpretation of experimental data.

Sitharaman, Balaji, Ph.D., 2005, Rice University: Research related to related to the diagnosis/ treatment of disease and tissue regeneration

Stein, Lincoln, M.D., Ph.D., 1989, Harvard Medical School and University: Proactive approach to the genome information explosion by developing databases, data-analysis tools, and user interfaces to organize, manage, and visualize that vast body of information.

Strey, Helmut, Ph.D., 1993, Technical University, Munich: Nanostructured Materials for Applications in Bioseparation, Drug Delivery and Biosensors.

Zhang, Michael, Ph.D., 1987, Rutgers University: Identifying functional elements in eukaryotic genomes using mathematical and statistical methods.

Zhao, Wei, Ph.D., 1997, University of Toronto, Canada: Development of novel detector concept and new clinical applications for early detection of cancer.

Assistant Professors

Chan, Mei Lin, Ph.D., 2009, Columbia University: Biomechanics and cellular processes of trabecular bone, and the establishment of a 3-dimensional co-culture trabecular model studying mechanotransduction pathways of osteocytes and osteoblasts.

Dhundale, Anil, Ph.D., 1987, Stony Brook University: cDNA microarrays, functional genomics technologies; translational research.

Goldstein, Rita, Ph.D., 1999, University of Miami: Multidisciplinary approach, to measure brain function such as functional (fMRI), (PET), (ERP) recordings, and neuropsychology.

Liu, Jonathan, Ph.D., 2005, Stanford University: Biomedical optical devices for diagnostics and therapy.

Lin, Wei, Ph.D., 2001, Stony Brook University: Development of embedded systems for medical applications.

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Miura, Michiko, Ph.D., 1984, University of California at Davis: Drug delivery methods; Developing new boron- carriers for BNCT.

Neuwald, Andrew, Ph.D., 1987, University of Iowa: Statistical and algorithmic methods with their application to the classification and modeling of protein domains.

Rizzo, Robert, Ph.D., 2001, Yale University: Application of computational techniques to drug discovery

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, University of California, San Diego: Cyclotron targetry development; nuclear cross-section measurement; Biomedical imaging technology.

Yin, Wei, Ph.D., 2004, Stony Brook University: Role of disturbed shear stress on platelets, vascular endothelial cells and their interactions.

Research Faculty

Goldfarb, James, Ph.D., 2000, Catholic University of Nijmegen: Research focuses on the application of magnetic resonance imaging (MRI) to the cardiovascular system, particularly in the areas of myocardial function and blood vessels.

Hainfeld, James, Ph.D., University of Texas-Austin: Development of organometallic cluster compounds to be used as high resolution molecular labels.

Kolsky, Kathryn, Ph.D., 1989, Carnegie Mellon University: Development and production of radioisotopes using the BLIP facility, a high-energy charged particle accelerator.

Logan, Jean, Ph.D., 1976, Louisiana State University: kinetic modeling of data from PET experiments.

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.

Thanos, Peter, Ph.D., Gene therapy and dopaminergic mechanisms of alcohol and drug abuse.

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.

Welsh, Keith T.: Clinical medical physics.

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

Fall 2013

College of Business

Dean
Manuel London, Harriman Hall (631) 632-5787

Associate Dean
Thomas R. Sexton, Harriman Hall (631) 632-7181

Interim Associate Dean & Graduate Program Director
Dmytro Holod, Harriman Hall (631) 632-7183

Assistant Dean for Administration
Amy Milligan, Harriman Hall (631) 632-5708

MBA Curriculum Director
Michael Nugent, Harriman Hall, (631) 632-7478

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, Information Systems Management

Degrees Awarded
M.B.A., M.S. in Technology Management (in Korea)

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 senior Stony Brook faculty with decades of experience. 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, and located 60 miles east of New York City. We also offer some courses for the MBA program at our Manhattan campus, situated at the crossroads of the business world at Park Avenue South and East 28th Street. Beyond these two locations, our programs extend to the far corners of the globe as a result of our relationships with business schools overseas.

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, 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.

Program Description
Stony Brook offers a flexible MBA program:

Full-time MBA: This 60-credit program is completed over a two-year period. Students in the 60 credit program are required to complete an internship.

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.

48-Credit MBA: A 48-credit program for students with 5 or more years of business experience or advanced degrees beyond the bachelors.

Combined Degree Programs
Combined BA/BS/BE + MBA: A 60-credit honors program for 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.

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Combined MA / MBA in Art History

Combined MS / MBA in Mechanical Engineering

Combined MS / MBA in Computer Science

Combined MS / MBA in Biomedical Engineering

Combined MA / MBA in Public Policy

Combined MPH / MBA in Public Health

Combined MD / MBA

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 begin to take elective courses in the spring semester of the first year, and take the majority of their elective courses in their second year. Students may choose to concentrate in:

- Finance
- Management
- Health Management
- Human Resources
- Information Systems Management
- Marketing
- Innovation
- Accounting

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
The Career Center provides a variety of career and life planning services to MBA students desiring assistance with their career development and job search. These services include: career resource library materials, placement services including on-campus interviews, online resume referrals, job fairs, and workshops on resume preparation and interviewing skills, and credential files.

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/Internship Fairs are held regularly in which employers visit the campus to discuss their organizations and share available job openings. These fairs provide graduate students with unique opportunities to meet, have brief interviews, and leave resumes with a significant number and variety of employers. Continual expansion of the program is planned.

Online services, where resumes are forwarded by the Career Center to interested employers and where vacancies are posted, are provided by ZebraNet (a link on the Center's home page). In addition, vacancy copies are posted on bulletin boards and kept in binders in the Center's library.

Career Resource Library
The Career Resource Library contains 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, a CD-ROM collection of college and university bulletins, and information on entrance tests required. Detailed information on potential employers, including annual reports and related documents, is included in the "Organizational Literature" files. This library also has video tapes on specific companies and on various topics related to job search processes. You can visit the Center's Web page at: www.sunysb.edu/career.

Credential Service
Students and alumni wishing to collect letters of recommendation from faculty, past employers, and others, in one central location, may wish to establish a credentials file at the Career Center. These recommendations are available to be photocopied and sent directly to appropriate organizations, including prospective employers and admission offices of graduate and professional schools.

Workshops
For those who are about to begin the process of interviewing, writing a resume and/or searching for a job, group workshops are offered which provide information on these topics. Each workshop is two hours long and includes practical exercises as well as general theory. The "Resume Preparation" and "Interviewing Skills" workshops are offered on a weekly basis during the Fall and Spring semesters. Other workshops are scheduled less frequently and are noted on the Web pages and on the Career Center's student calendar publication.

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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, marketing the value of a graduate degree, and establishing a credential file. Those interested in discussing these and other issues are encouraged to set up an appointment by calling or visiting the Career Center.

Admission Requirements of the MBA Program

The College of Business is designed for ambitious and able students who are capable of applying what they learn toward the solutions of organizational problems. Each student is asked to forward with the application a personal statement of career objectives and the way in which he or she expects to realize these objectives through the program. Applicants are also encouraged to submit a current resume along with their online application.

Students must satisfy the following admissions requirements in addition to the minimum requirements of the Graduate School:

A. A bachelor's degree with a minimum grade point average of 3.0. In exceptional cases, students not meeting this requirement may be admitted on a conditional basis.

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.

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.

E. Acceptance by both the College of Business and the Graduate School.

F. $100 application fee.

Admission is available for both the fall and spring semesters. Applications for the fall semester should be submitted by March 15 and for the spring semester by November 1. Earlier submissions are encouraged. Applications are reviewed on a rolling basis and if seats are available applicants will be considered after the application deadlines. All MBA applications are submitted online through the following Web site: https://app.applyyourself.com/?id=sunysb-gs. You can find more information on the College of Business by visiting our Web site at: www.stonybrook.edu/business or by writing to:

Office of Student Services
Harriman Hall, Room 109
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Certificate Programs

The Advanced Graduate Certificate programs described below are open to MBA students or other graduate students at Stony Brook. Students who meet the MBA degree admissions requirements of the College of Business may also apply the certificate credits toward the MBA degree. Students must declare their decision to matriculate into a master's program after the completion of no more than 12 credits. In addition, these programs are open to students who wish to earn an Advanced Graduate Certificate without completing an MBA degree. Note that, although it is a valuable academic credential, an Advanced Graduate Certificate is not a degree.

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 Information Systems Management
The Advanced Graduate Certificate Program in Information Systems Management (ISM) is a graduate professional development program which provides an educational opportunity to combine management education with technical training in specific areas related to information systems management. Directed toward career enhancement of new professionals, as well as toward advancement of experienced professionals, the program offers both a full-time and a part-time option. Certificate program students must complete the program within a three-year period. For further information and to apply, please refer to the following Web site: http://ws.cc.sunysb.edu/spd/graduate/ism.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 school 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.

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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- 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 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.

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.

MBA Curriculum
The MBA curriculum for 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 seven electives. Four of the seven elective courses must be taken in a student's field of concentration, such as finance, management, information systems management, health systems management, human resources, or marketing. Full-time students typically complete an internship or foreign study during the summer between the first two years.

Students within the MBA program may also earn a New York State Advanced Graduate Certificate in Health Care Management, Human Resources, or Information Systems Management.

Sample schedule for 60-credit program:

First Year
Fall Semester

1. MBA 501 Managerial Economics
2. MBA 503 Data Analysis and Decision Making
3. MBA 504 Accounting
4. MBA 505 Marketing
5. MBA 592 Organizational Behavior

Spring Semester

1. MBA 502 Finance
2. MBA 506 Leadership/Team Effectiveness/Communications
3. MBA 507 Ethics and Law
4. MBA 511 Technological Innovations
5. MBA 589 Operations Management

Summer

Study abroad/internship (usually completed in the summer)

Second Year
Fall Semester

1. MBA 521 (6 credits)
2. Elective
3. Elective
4. Elective

Spring Semester

1. MBA 512 Business Planning and Strategic Management (capstone course)
2. Elective
3. Elective
4. Elective
5. Elective

Typical 48-credit Curriculum:

1. MBA 501 Managerial Economics

2. MBA 503 Data Analysis and Decision Making

3. MBA 504 Financial Accounting

4. MBA 505 Marketing

5. MBA 502 Finance

6. MBA 506 Leadership/Team Effectiveness/Communication

7. MBA 592 Organizational Behavior

8. MBA 511 Technological Innovations

9. MBA 589 Operations Management

10. MBA 507 Ethics and Law

11. MBA 521 Industry Project

12. MBA 512 Business Planning

13. Elective

14. Elective

15. Elective

16. Elective

Faculty of the MBA Department

Dean

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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
Sexton, Thomas R., Co-director of Health Services Research and Management Unit. Ph.D., 1979, Stony Brook University: Health care delivery systems; efficiency analysis; statistics.

Interim 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.

Rachev, Svetlozar (Zari), Ph.D. 1979, Lomonosov University, Finance, heavy-tailed distributions in finance, risk management

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

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

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

Assistant Professors
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.

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.

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

Smith, Noah, Ph.D., 2012, University of Michigan, Economics, financial markets

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

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

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

Visiting Professors
Comunale, Christie, Ph.D., CPA, University of South Florida

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Focardi, Sergio, Ph.D., 2009, University of Karlsruhe, 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.

Adjunct Faculty
Aguayo, Rafael, M.B.A, Finance and International Business

Andrade, Arturo, M.S., Management and Policy and Certificate in Information Systems

Andreadis, George, Business Analytics

Atalay Selim, M.I.P.P, S.A.I.S., International Management

Bhasin, Mark, Finance

Blackburn, Michael, M.B.A., Business

Collins, Howard, Business Analytics

Coverdale, John, Human Resources

Delgaizo, Edward, Ph.D., Human Resources

Feinberg, Ronald, Management

Gardner, Robert, Management

Giaccone, Scott, Management

Giardini, Vincent, Finance

Gatteau, Richard, Ph.D., Administration and Supervision

Goodfellow, Teresa, M.B.A., Operations

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

Infantino, Anthony, M.B.A., Management

Karp, Lawrence, M.B.A, C.P.A, Accounting

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

Laks, Kenneth, C.P.A., Accounting

Levanti, Gary, M.B.A., Marketing

Mager, Thomas, M.B.A

Marra, Ralph, Information Systems and Management

Marshall, Cara, Ph.D., Finance

McKean, Colleen, M.B.A., Marketing

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Milligan, Amy, M.B.A., Leadership

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

Morfopolus, Richard, Ph.D., Management

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

Palermo, Margot, M.B.A., Finance and International Business

Quarte, Robert, C.P.A., Accounting

Rosner, Lee, Real Estate Finance

Saidens, Mark, Ph.D., Educational Administration

Saltzman, Steven, Management

Schmeltz, Martin, M.S., Taxation

Seal, Amy, M.B.A, Management

Siani, Dominick, Accounting

Soloway, Martha, M.A., Management

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

Tagliaferri, Paul, Human Resources

Yung, Gracer, M.B.A., International Banking and Finance

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

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Chemistry Department

Chairperson
Nicole S. Sampson, Chemistry Building 104 (631) 632-7885

Graduate Program Director
Dale G. Drueckhammer, Chemistry Building 741 (631) 632-7923

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.chem.stonybrook.edu/

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 patients.

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 (1H, 13C, 19F, 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 1H and 13C 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 establish 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

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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 NMR Facility at Stony Brook University is housed in the Department of Chemistry and is currently composed of 5 superconducting magnet NMR instruments operating at 600 MHz, 500 MHz, 400 MHz, 300 MHz, and 250 MHz proton frequencies. These instruments are capable of a wide variety of liquids, imaging, and solids NMR experiments and are dedicated to supporting research programs across multiple disciplines, but are largely focused towards programs in structural biology and chemistry. The 600 MHz, 500 MHz, and both 400 MHz NMR instruments are state of the art research grade multi channel and multi nuclear pulsed field gradient instruments. The 600 MHz and one of the 400 MHz instruments have mixed capabilities for liquids, solids, and microimaging experiments. The 500 MHz, remaining 400 MHz, and 300 MHz instruments support only liquids experiments. All of the systems are narrow bore instruments with the exception of the mixed solids and imaging 400 MHz spectrometer, which has an 89-mm wide-bore magnet system. All instruments are capable of variable temperature operation.

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 unequaled 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.

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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 prove 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.

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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 credits of CHE 599, 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.

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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 employ¬ment 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

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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

Chu, Benjamin, Ph.D., 1959, Cornell University: Laser light scattering; synchrotron X-rays; rheometry; laser induced fluorescence; nano-/microstructures and supramolecular formation in polymer colloids; complexation in photoelectrolytes and surfactants; capillary electrophoresis; supercritical fluids; molecular composites; blends and fibers.

Dill, Kenneth, Ph.D., 1978, University of California: Statistical mechanics and dynamics of biological systems.

Hanson, David M., Distinguished Service Professor, 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.

Kerber, Robert C.[1], Emeritus, Distinguished Teaching Professor, Ph.D., 1965, Purdue University: Chemical education; esp. effects of terminology on learning; history of chemistry.

Lauher, Joseph W.[2], 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.

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Ojima, Iwao, 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.[3], Ph.D., 1981, University of North Queensland, Australia: Synthetic solid-state chemistry; structural chemistry; crystallography; materials research.

Stell, George R., *Emeritus*, Distinguished Research Professor, Ph.D., 1961, New York University: Statistical thermodynamics; molecular theory of fluids; theories of gelation and polymerization.

Takeuchi, Esther[4], 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[5], 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

Alexander, John M., Leading Professor *Emeritus*. Ph.D., 1956, Massachusetts Institute of Technology: Reactions between complex nuclei; use of detected ejectiles to characterize superheated emission sources.

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; chemistry and enzymology of coenzyme A.

Fowler, Frank W.[6],Ph.D., 1967, University of Colorado: The development of methods for the preparation of supramolecular assemblies and their application to problems in material science.

Grey, Clare P., D.Phil., 1991, Oxford University, England: Materials chemistry; solid-state NMR spectroscopy; characterizing and studies of anionic conduction in fuel cell membranes and structure of battery materials; environmental chemistry; modifying reactive sites in catalysts.

Haim, Albert[7], *Emeritus*. Ph.D., 1960, University of Southern California: Kinetics and mechanisms of inorganic reactions.

Hsiao, Benjamin S., 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.

Ishida, Takanobu, *Emeritus*, Ph.D., 1964, Massachusetts Institute of Technology: Isotope effects, stable isotope separation, electrochemistry of nitrogen oxides and carbon oxides in biological fluids.

Johnson, Francis[8], 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.

Johnson, Philip M., *Emeritus*, Ph.D., 1967, Cornell University: Optical molecular spectroscopy and the electronic structure of molecules; development of spectroscopic techniques using high powered lasers.

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.[9], Ph.D., 1987, University at Stony Brook: Nuclear chemistry; intermediate and relativistic energy heavy ion reaction studies.

le Noble, William J., *Emeritus*. Ph.D., 1957, University of Chicago: Stereoelectronics with applications such as nucleophilic and electrophilic addition, oxidation and reduction, metal complexation, pericyclic reactions and the reverse processes; reactions in compressed solutions.

London, Erwin[10], 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.

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.

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Schärer, Orlando D.8, Ph.D., 1996, Harvard University: Chemical biology of mammalian DNA repair.

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.

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

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.

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, Ph.D., 1998, Cornell University: Polymer chemistry; block copolymer materials; polymer assemblies; controlled radical polymerization.

Schneider, Robert F.[11], *Emeritus*, Ph.D., 1959, Columbia University: Chemical education; web-based instruction; Laboratory instruction.

Wishnia, Arnold, *Emeritus*, Ph.D., 1957, New York University: Physical chemistry of biological macromolecules; structure and function of ribosomes; membrane model systems; applications of nuclear magnetic resonance.

Wang, Jin, Ph.D., 1991, University of Illinois: Physics and chemistry of biomolecules; single molecule reaction dynamics.

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Assistant Professors

Allison, Thomas13, Ph.D., 2010, University of California, Berkeley: Chemical Physics. Frequency combs. ultrasenstivie femtosecond spectrocsopy, and high-order harmonic generation.

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

Rudick, Jonathan G., Ph.D., 2005, University of Pennsylvania: Organic, supramolecular, and polymer chemistry.

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.

Marschilok, 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.

Whittingham, M. Stanley, D.Phil., 1968, Oxford University, England: Preparation and chemical and physical properties of novel inorganic oxide materials, using in particular soft chemistry (chimie douce) approaches, for use in energy storage. Distinguished Professor, Chemistry and Materials Science & Engineering, Binghamton University (SUNY); Director, The Northeastern Center for Chemical Energy Storage, Stony Brook University.

Affiliated Professors

Affiliated Associate Professors

Green, David, Ph.D., 2002, Massachusetts Institute of Technology: Computational biology of protein interactions. Primary appointment: Department of Applied Math and Statistics.

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.

Affiliated Assistant Professors

Chen, Emily, Ph.D. 2002, Department of Molecular Pathology at the University of California, San Diego: Cancer metastasis: mechanisms of organ-specific metastasis in human breast cancer and protein analysis: shotgun Proteomics Primary appointment: Department of Pharmacological Sciences. Scientific Director: Proteomics Center of Stony Brook University School of Medicine.

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.

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.

Brookhaven National Laboratory (BNL) Affiliates

Fowler, Joanna, Ph.D. 1968, University of Colorado: Organic synthesis with short-lived positron-emitting isotopes; neuroscience; drug mechanisms; brain imaging.

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.

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).

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,

Rodriguez, Jose A., Ph.D., 1988, Indiana University: Surface chemistry and catalysis

Number of teaching, graduate, and research assistants, fall 2011: 171

1) Recipient of the State University Chancellor’s Award for Excellence in Teaching, 1986; Recipient of the President’s Award for Excellence in Teaching, 1986.

2) Recipient of the State University Chancellor’s Award for Excellence in Teaching, 1990; Recipient of the President’s Award for Excellence in Teaching, 1990.

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.

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6) Recipient of the State University Chancellor's Award for Excellence in Teaching, 1995

7) Recipient of the State University Chancellor's Award for Excellence in Teaching, 1981

8) Joint appointment, Department of Pharmacology.

9) Recipient of the State University Chancellor's Award for Excellence in Teaching, 1998; Recipient of the President's Award for Excellence in Teaching, 1998

10) Joint appointment, Department of Biochemistry

11) Recipient of the State University Chancellor's Award for Excellence in Teaching, 2001; Recipient of the President's Award for Excellence in Teaching, 2001

12) 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.

Fall 2013

Electrical and Computer Engineering Department

Chairperson
Serge Luryi, Light Engineering Building 273 (631) 632-8420

Graduate Program Director
Yuanyuan Yang, Light Engineering Building 215 (631) 632-8400/8397

Senior Staff Assistant
Deborah Kloppenburg, Light Engineering Building 273 (631) 632-8420

Graduate Program Coordinator
Rachel Ingrassia, Light Engineering Building 267A (631) 632-8400

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.ee.sunysb.edu/

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, telerobotics, 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 value of this commitment to industry is evidenced by the support received by the department in return; in particular, from Motorola, Lucent Technologies, AT&T, Intel Corporation, and Texas Instruments.

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.

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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 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 computer architecture, embedded microprocessor system design, fault tolerant computing, design communications and signal processing, parallel and distributed computing, computer networks, 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 and gases through a description of the mechanism which yield useful devices to a study of the design simulation, and fabrication of integrated circuits. Program’s scientific interests center on physics, characterization and development of optoelectronic devices and systems. Over the past several years, major efforts were focused on the studies of physics of 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 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 Advanced IC Design & Simulation Laboratory contains equipment and computing facilities for the design, simulation, and characterization of analog, digital and mixed-signal integrated circuits. The lab is equipped with several SUN workstations and PCs, and assorted electronic measurement equipment.

The Communications, Signal Processing, Speech, and Vision (CSPV) Laboratory has several SUN workstations and desktop computers with specialized software for research in telecommunications networks and signal processing. The computers are networked to departmental computing facilities allowing access to shared campus resources and the Internet.

The Computer-Aided Design Laboratory provides a network of 386 based workstations. Advanced computer-aided design software for analog and digital systems design is available on these workstations.

The Computer Vision Laboratory has state-of-the-art equipment for experimental research in three-dimensional machine vision. The facilities include desktop computers, imaging hardware, and printers.

The Digital Signal Processing Research Laboratory is involved in digital signal processing architectures and hardware and software research. The laboratory is presently active in the development of algorithms to be implemented on a variety of signal processing chips.

The Fluorescence Detection Lab is involved in the design, development, implementation and testing of various DNA sequencing instruments. 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 and DNA sequencing.

The Graduate Computing Laboratory has 12 Windows 2000 Professional based Windows PC's, equipped with Microsoft Office XP, Microsoft Visual Studio, X-Windows for Unix connectivity, Adobe Acrobat reader, Ghost script and Ghost view. There is an HP LaserJet 5Si/MX printer. The lab is also equipped with 8 Sun Blade 100 machines. These machines run Sun Solaris 8 operating systems and are connected to the departmental Unix servers. Industry standard packages such as Cadence tools, Synopsys, Hspice and Matlab are available from the application servers.

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 laboratory has 1 Dell PowerEdge 1800 computing server, 8 Dell OptiPlex GX620 MT workstations, 2 Sun Ultra 60 Workstations with dual processors, and 4 Sun Ultra 10 Workstations.

The Medical Image Processing Laboratory, located in the medical school, is involved in research in image reconstruction methods and image analysis with applications to medical imaging It is equipped with a SUN SPARC l0, SPARC 2, HP730 workstations and a full complement of peripherals.

The Optical Signal Processing and Fiber Optic Sensors Laboratory research emphasis is on the development and fabrication of novel fiber optic systems for very diverse applications ranging from aerospace to biomedical projects involving the development of new techniques and algorithms. Some of the current research projects include development capillary waveguide based biosensors for detection of pathogens in a marine environment, integrated fiber optic based systems for real time detection of synchronous and asynchronous vibrations in turbomachinery, and single photon based detection schemes for sub-microscopic particle sizing. Equipment includes a fiber optic fusion splicer, fiber polisher, diamond saw, optical microscope, optical spectrometer (visible range), micropositioners, optical scanners, and various laser sources. Additionally, the laboratory has the facilities for designing printed circuits and fabricating optical and electronic sub-systems. Some of the current research projects include development of fiber optic systems for real time process control in adverse environments, integrated fiber optics, fiber optic sensors and coherent optical processing.

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The Parallel and Neural Processing Laboratory conducts research in various parallel and neural network applications. Current research projects include Natural Adaptive Critic control, pattern recognitions and Bayesian Neural Networks. It is equipped with Pentium PCs and Synapse3 parallel neural network processing boards.

The Petaflops Design Laboratory is a research facility equipped with two SUN workstations, several PC's with Linex, and a 16-process Beowulf-type cluster. All computes are connected by Fast 100 Mb/sec Ethernet LAN.

The Semiconductor Optoelectronics Laboratory possesses the infrastructure for wafer processing, testing and sophisticated characterization of optoelectronics devices. Processing facilities are based on a "Class 100" clean room with Darl Suss aligner, Temescal metal film deposition system and other equipment required for modern semiconductor wafer processing. Wafer testing can be performed by low and high temperature probe-stations. Characterization of devices after processing includes electrical, optical and spectral measurements. Electrical and optical measurements can be carried out within a wide frequency range from CW to 22GHz. Semiconductor laser near and far field emission patterns can be studied in a wide spectral range from visible to mid-infrared. Spectral analysis of radiation is performed with high resolution and sensitivity using grating and two Fourier transform spectrometers in combination with state-of-the-art detector systems. Time resolved luminescence experiments are available with ns resolution. The laboratory is equipped with 150fs Nd-glass mode locked laser for optical pumping as well as other pump sources including a high energy Q-switched Nd solid-state laser. New experimental methods of studying semiconductor laser parameters, developed in the Laboratory, include direct heterobarrier leakage current measurements as well as gain, loss and alpha-factor measurements in broad area and single mode lasers.

Requirements for the M.S. Degree in Electrical and Computer 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 four following options:

Any non-ESE course will need prior approval given by the Graduate Program Director before a student can register.

I. M.S. in Electrical Engineering 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

PLEASE NOTE: Only 3 credits of ESE 698 may be used in above.

2. A minimum of eight regular courses. Of these eight, at least seven 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). Also our Topics course, ESE 670, can be counted only once as a regular course credit toward the M.S. degree. Credits for ESE 597 can only be applied toward the electrical engineering degree if the following requirements are satisfied:

Prior approval from the Graduate Program Director based on the student submitting a proposal and securing an advisor in the ECE department as well as a contact person at the company involved. Approval will only be granted if it can be demonstrated that the faculty advisor will be kept in close touch with work on the project. To this end, practicum not in the local geographic area will be discouraged.

To obtain satisfactory credit the faculty advisor must verify that a substantial engineering project was undertaken and completed. This will be based on his close contact during the entire period of the project with the student and the contact person and upon reviewing a mandatory written report submitted by the student at the project's completion. The faculty advisor will determine the final grade for the course.

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.

II. M.S. in Electrical Engineering Thesis Option
Students must inform the department in writing at the end of their first semester if they choose the M.S. 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, at least six credits of ESE 599, with a maximum of 12 credits total being taken from ESE 599, ESE 597, or ESE 698.

PLEASE NOTE: Only 3 credits of ESE 698 may be used in above.

2. 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.

3. ESE 597, ESE 599, ESE 697, ESE 698 and ESE 699 are not counted as regular courses in (2). Also our Topics course, ESE 670, can be counted only once as a regular course credit toward the M.S. degree. Credits for ESE 597 can only be applied toward the electrical engineering degree if the following requirements are satisfied:

Prior approval from the Graduate Program Director based on the student submitting a proposal and securing an advisor in the ECE department as well as a contact person at the company involved. Approval will only be granted if it can be demonstrated that the faculty advisor will be kept in close touch with work on the project. To this end, practicum not in the local geographic area will be discouraged.

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To obtain satisfactory credit the faculty advisor must verify that a substantial engineering project was undertaken and completed. This will be based on his close contact during the entire period of the project with the student and the contact person and upon reviewing a mandatory written report submitted by the student at the project's completion. The faculty advisor will determine the final grade for the course.

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 master's degrees.

Students must satisfactorily complete a thesis.

I. Computer Engineering Non-Thesis Option
Admission to the M.S. 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

All non-ESE courses that are not on the pre-approved departmental list that you wish to use toward your degree must receive prior approval from the Graduate Program Director.

The courses listed below can only be used once to satisfy the degree requirements::

Computer Hardware: One course from the following: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.

At least three Computer Engineering courses with at least one course from each of the following three sub-areas:

Networking: ESE 505 Wireless Network, ESE 506 Wireless Networking and Mobile Computing, ESE 546 Computer Communication Networks, ESE 548 Local & Wide Area Networks, and 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.

At least one software course: 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.

Up to six credits may be from ESE 597, ESE 599, or ESE 698 (only 3 credits of ESE 698 may be used)

ESE 597, ESE 599, ESE 697, ESE 698 and ESE 699 are not counted as regular courses.

Also our Topics course, ESE 670, can be counted only once as a regular course credit toward the M.S. degree. Credits for ESE 597 can only be applied toward the Computer Engineering degree if the following requirements are satisfied:

Prior approval from the Graduate Program Director based on the student submitting a proposal and securing an advisor in the ECE department as well as a contact person at the company involved. Approval will only be granted if it can be demonstrated that the faculty advisor will be kept in close touch with work on the project. To this end, practicum not in the local geographic area will be discouraged.

To obtain satisfactory credit the faculty advisor must verify that a substantial engineering project was undertaken and completed. This will be based on his close contact during the entire period of the project with the student and the contact person and upon reviewing a mandatory written report submitted by the student at the project's completion. The faculty advisor will determine the final grade for the course.

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.

II. Computer Engineering Thesis Option
Students must inform the department in writing at the end of their first semester if they choose the M.S. Thesis Option.

All non-ESE courses that are not on the pre-approved departmental list that you wish to use toward your degree must receive prior approval from the Graduate Program Director.

The M.S. degree with thesis option requires 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.

PLEASE NOTE: Only 3 credits of ESE 698 may be used in above.

The courses listed below can only be used once to satisfy the degree requirements:

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Computer Hardware: One course from the following; 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.

At least three Computer Engineering courses with at least one course from each of the following three sub-areas:

Networking: ESE 505 Wireless Network, ESE 506 Wireless Networking and Mobile Computing, ESE 546 Computer Communication Networks, ESE 548 Local & Wide Area Networks, and 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 .

At least one Software course: 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.

At least one additional regular course offered by the ECE department.

ESE 597, ESE 599, ESE 697, ESE 698, and ESE 699 are not counted as regular courses.

Also our Topics course, ESE 670, can be counted only once as a regular course credit toward the M.S. degree. Credits for ESE 597 can only be applied toward the Computer Engineering degree if the following requirements are satisfied:

Prior approval from the Graduate Program Director based on the student submitting a proposal and securing an advisor in the ECE department as well as a contact person at the company involved. Approval will only be granted if it can be demonstrated that the faculty advisor will be kept in close touch with work on the project. To this end, practicum not in the local geographic area will be discouraged.

To obtain satisfactory credit the faculty advisor must verify that a substantial engineering project was undertaken and completed. This will be based on his close contact during the entire period of the project with the student and the contact person and upon reviewing a mandatory written report submitted by the student at the project's completion. The faculty advisor will determine the final grade for the course.

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 master's degrees.

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Requirements for the Ph.D. Degree in Electrical and Computer Engineering

A. Qualifying Examination
There is a major and minor part to the qualifying examination. The written examination is offered once every year, in April. Students must pass one major written examination in two consecutive tries. The two consecutive tries do not need to be in the same area. The minor requirement can be satisfied by taking and passing a second major written examination or by taking three graduate courses in a different area than the major. Previous examinations are available in the departmental office for review, however, students must make their own copies. Please refer to the department's *Graduate Student Guide* for additional information on the qualifying examination.

B. Course Requirements
1. A minimum of six regular courses beyond the M.S. degree or 14 regular courses beyond the bachelor's degree. The choice must have the prior approval of the designated faculty academic advisor. 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. The courses ESE 597, ESE 598, ESE 599, ESE 698, and ESE 699 are not counted as regular courses. 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 once as a regular course for credit toward the M.S. degree, and not more than twice for all graduate degrees awarded by the Department of Electrical and Computer Engineering.

2. The student must satisfy the stipulations of a plan of study which must be filed with the graduate program committee within six months after the student passes the qualifying examination. The study plan, which will include the six regular courses as required in item 1, will be developed under the aegis of the designated faculty advisor (who may or may not be the eventual thesis advisor). Modification of the study plan may be made by the preliminary examination committee and at any later time by the thesis advisor. An up-to-date plan must always be placed on file with the graduate program committee each time a modification is made.

C. Preliminary Examination
A student must pass the preliminary examination within 3 years of passing the qualifying examination. Both a thesis topic and the thesis background area are emphasized.

D. 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 chairperson of the department. Students must advance advance to candidacy and pass the PreliminaryExam at least one year prior to the dissertation defense.

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 full-time status.

H. Time Limit
All requirements for the Ph.D. degree must be completed within seven years after completing 24 credits of graduate courses in the department.

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.

Luryi, Serge, Chairperson. Ph.D., 1978, University of Toronto, Canada: High speed solid-state electronic and photonic devices, physics and technology..

Professors

Djuric, Petar M., Ph.D., 1990, University of Rhode Island: Signal analysis, modeling and processing; wireless communications and sensor networks.

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 communications; performance evaluation; parallel processing; e-commerce technology.

Shamash, Yacov, Dean of the College of Engineering and Applied Sciences. Ph.D., 1973, Imperial College of Science and Technology, England: Control system; robotics.

Short, Kenneth L., Ph.D., 1973, University at Stony Brook: Digital system design; microprocessors; instrumentation.

Subbarao, Murali, Ph.D., 1986, University of Maryland: Machine vision; image processing; pattern recognition.

Yang, Yuanyuan, Graduate Program Director. 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.

Associate Professors
Dhadwal, Harbans, Ph.D., 1980, University of London, England: Laser light scattering; fiber optics; optical signal processing and instrumentation.

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.

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.

Fernandez-Bugallo, Monica, Ph.D., 2001, Universidade da Coruna (Spain): Statistical signal processing with emphasis in the topics of Bayesian analysis, sequential Monte Carolo methods, adaptive filtering, and stochastic optimization.

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Gindi, Gene, Ph.D., 1981, University of Arizona: Medical image processing; image analysis.

Gorfinkel, Vera, Ph.D., 1980, A.F. Iaffe Physical-Technical Institute, St. Petersburg, Russia: Semiconductor devices, including microwave and optoelectronics, DNA sequencing instrumentation, single

photon counting techniques.

Kamoua, Ridha, Ph.D., 1992, University of Michigan: Solid-state devices and circuits; microwave devices and integrated circuits.

Murray, John, Ph.D., 1974, University of Notre Dame: Signal processing; systems theory.

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

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.

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, Ph.D. 2004, Stony Brook University, High power and high speed light emitters, carrier dynamics in nanostructures, molecular beam epitaxy of semiconductor nanostructures.

Westerfeld, David, Ph.D. 2005, Stony Brook University, Design and characterization of high-performance mid-infared semiconductor light sources (LEDs and lasers)

Number of teaching, graduate, and research assistants, fall 2011: 60

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

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Computer Science Department

Chairperson
Arie Kaufman, Computer Science Building 2431 (631) 632-8470

Graduate Program Director for M.S. and Ph.D. Programs in Computer Science
I.V. Ramakrishnan, Computer Science Building 1431 (631) 632-8451

Graduate Program Admissions Administrator for M.S. and Ph.D. Programs in Computer Science
Lourdes Hartwell, Computer Science Building 1410, Email Contact Preferred: graduate@cs.stonybrook.edu

Degrees Awarded
M.S. in Computer Science; Ph.D. in Computer Science

Web Site
http://www.cs.stonybrook.edu/

Computer Science

The Department of Computer Science offers an M.S. and a Ph.D. in Computer Science, and an M.S. in Information Systems Engineering.

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, computation theory, logic, algorithms, concurrency, databases, languages, artificial intelligence, image processing, graphics, operating systems, networking, and 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 www.cs.sunysb.edu/graduate/GraduateHandbook.html. 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.sunysb.edu.

The program for Masters of Science in Information Systems Engineering (MSIS) emphasizes the engineering and application aspects of Information Technology (IT). The program differs from a traditional Information Systems program in that it focuses on an engineering approach to IT. The curriculum of the program also emphasizes individual communications skills and team participation.

The MSIS degree program has distinct specialization tracks geared to different classes of IT employment. The curriculum, consisting of 30 credits of coursework, is designed to accommodate students from a wide variety of backgrounds. An Executive track, specially designed for full time employees with working experience, facilitates the 30 credits to be completed with an evening/weekend schedule. Specialization tracks for the program include Systems Engineering, Telecommunications, and Software Engineering. The core component of the program consists of courses in programming; hardware; data management; analysis, modeling, and design; data communications and networking; and technology integration. Following the completion of the core requirements, students can specialize in one of the tracks by choosing appropriate electives. Students are expected to solve real world problems by applying and integrating newly acquired skills. The integration requirement can be satisfied at any time after the completion of the core courses.

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:

1. Theory of Computation: CSE 303 or CSE 540

2. Algorithms: CSE 373 or CSE 548

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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.sunysb.edu/graduate.

Admission to the M.S. in Information Systems Engineering

Admission to the regular program is based on the following criteria:

A. A baccalaureate degree from an accredited applied science or engineering program with a minimum GPA of 2.75. (Provisional admissions may be granted in exceptional cases if the GPA is less than 2.75 but above 2.25 provided it is approved by the Graduate School at the recommendation from the IS Graduate Committee. Provisionally admitted students are required to take at least two courses in the first semester and receive a B average to continue in the program.)

B. GRE scores (Provisionally admitted students without GRE scores must take the examination within the first semester of their registration.)

C. A minimum score of 550 in TOEFL for applicants whose first or native language is not English.

D. Letters of recommendation, and

E. Other documents as described in the Graduate Bulletin.

Admission to the Executive track is based on the following criteria:

A. A baccalaureate degree from an accredited applied science or engineering program, with a minimum GPA of 2.75.

B. IT related work experience,

C. Details of work experience, responsibilities/duties, and career goals, and

D. A minimum score of 550 in TOEFL if the baccalaureate degree is from a foreign institution, and

E. Letters of recommendation from current and previous employers and teachers.

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For admission to the MS in Information Systems Engineering program, all applicants are required to submit completed applications to the Graduate School through the College of Engineering and Sciences, with the following documents: (1) an official graduate application form specially designed for applicants to the proposed program with non-refundable application fee as prescribed by the University, (2) three letters of recommendation, (3) two official copies of all previous transcripts (if in a foreign language, English translation is required together with the originals), (4) details of the employment history and duties/responsibilities, (5) scores of GRE, (f) scores of TOEFL in case of applicants for whom English is not the first language, and (6) a personal statement describing the previous accomplishments, career objectives and future goals. Students in the Executive track may be waived of GRE requirements with the approval of Graduate School.

All applications submitted in time are reviewed by the Graduate Committee and applicants who meet the requirements are selected on a competitive basis. Applications are scored on a scale reflecting academic achievements, GRE scores, work experience, and career goals. Preference is given to the applicants with relevant experience. Special considerations are made for women, minorities and physically challenged applicants provided they meet the minimum admission criteria. Preference also is given first to the New York residents and second to the U.S. citizens and permanent residents.

Applicants for the Executive Track are considered in a separate pool. Their applications must contain a support letter from the employer describing the length of service in the company, the responsibilities and authority, evaluation of the job performance, and how the participation in the Executive track by the applicant benefits the company.

Students of high caliber seeking to enter the program with an incomplete set of undergraduate courses or not having enough prerequisites are required to complete a predetermined number of foundation courses (normally consisting of nine credits), including Information Systems and business:

Fundamentals of Information Systems

Information Technology Hardware and Software

Programming, Data, and Object Structures

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 choose between two options, the M.S. with thesis and the M.S. with 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. 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. No-Thesis Option
Students choosing the no thesis 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. 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.

G. 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.

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Requirements for the M.S. Degree in Information Systems Engineering

To receive the MS in Information Systems Engineering degree the student must obtain a minimum of 3.0 overall GPA in the courses taken to satisfy the requirements of this program. In addition, the student must satisfy all other requirements of the Graduate School not mentioned here. Following are the specific requirements that must be met to obtain the degree:

Each student must complete a minimum of 30 credits of graduate course work, consistent with program guidelines.

Each student must complete 15 credits of core courses (Systems Engineering Principles, Quantitative Computer Architecture, Data Management, Analysis, Modeling, and Design, Data Communications and Networking).

A three-credit course covering an integration topic is required for all students (e.g., ISE 511, CSE 580, or CSE 523).

The required courses total eighteen credits, including the fifteen credits of core courses and three credits of integration. A minimum of twelve credits of electives is required of all students, out of which nine credits must be taken in the area of specialization. In case of core courses waived for equivalent courses taken previously, the student must earn those credits through electives at the University at Stony Brook, bringing the total credits to a minimum of 30.

A maximum of six credits of graduate course work can be transferred for the courses taken elsewhere provided these credits were not used by the previous institution to award a degree.

Each student is assigned an academic advisor who must approve the coursework, area of specialization and sequence of courses.

Curriculum for the Executive Track: The executive track is designed primarily for the employees of one company (or a group of companies). This requirement is identical to the requirement of the standard program. The curriculum is common to all the students in the program and targeted to the interests of the sponsoring company (or companies).

Courses for the M.S. Degree in Information Systems Engineering

Information Systems Engineering (ESE)

ISE 503 Data Management

ISE 504 Analysis, Modeling and Design

ISE 506 Quantitative Computer Architecture

ISE 516 Systems Engineering Principles

ISE 517 Human Factors in Systems Engineering

Applied Mathematics & Statistics (AMS)

A complete description of AMS courses below can be found at www.grad.sunysb.edu/academics/bulletin/Ams.pdf.

AMS 507 Introduction to Probability

AMS 550 Operations Research: Stochastic Models

AMS 553 Simulation and Modeling

Biomedical Engineering (BME)

A complete description of BME courses below can be found at www.bme.sunysb.edu/bme/grad/courses.html.

BME 526 Biological Systems Engineering

Technology and Society (EMP and EST)

A complete description of EMP courses below can be found at www.sunysb.edu/est/courses/graduate.html.

EMP 518 Project Management

EST 530 Internet Electronic Commerce

EST 582 Systems Approach to Human-Machine Systems

Electrical and Computer Engineering (ESE)

A complete description of ESE courses below can be found at www.ee.sunysb.edu/~www/grad/coursedescriptions_b.html

ESE 504 Performance and Evaluation of Communication and Computer Systems

ESE 505 Traffic Performance Analysis of Mobile, Wireless, and Personal Communication Systems

ESE 528 Communication Systems

ESE 546 Computer Communication Networks I

ESE 547 Digital Signal Processing

ESE 548 Computer Communication Networks II

Business Technology Management

A complete description of BTM courses below can be found at www.grad.sunysb.edu/academics/bulletin/Bus.pdf

BTM 514 Quality Management and Quality Assurance

Computer Science (CSE)

A complete description of CSE courses below can be found at www.cs.sunysb.edu/graduate/courses/.

CSE 500 Patterns in Programming

CSE 506 Operating Systems

CSE 515 Introduction to Transaction Processing Systems

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CSE 523 Introduction to Software Engineering and Project Planning I

CSE 524 Introduction to Software Engineering and Project Planning II

CSE 533 Computer Network Communications Protocols

CSE 536 Introduction to User-Interface Development

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 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.

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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 69*6: At most two credits of Internship in Research can be counted toward the 20 credits required for the Ph.D. program.

*Dissertation Research, CSE 69*9: 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 *G*5, 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.

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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.

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Creative Writing and Literature Program

Director
Julie Sheehan, Southampton, Chancellors Hall 238 (631) 632-5032

Associate Director
Carla Caglioti, Southampton, Chancellors Hall 238 (631) 632-5016

Program Coordinator
Adrienne Unger, Southampton, Chancellors Hall 238 (631) 632-5030

Degree Awarded
MFA in Creative Writing and Literature

Advanced Graduate Certificate Awarded
Advanced Certificate in Creative Writing

Creative Writing and Literature

The Creative Writing and Literature program at Stony Brook Southampton emphasizes creative work in fiction, poetry, and scriptwriting. 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. In particular, the program broadens its interest to include forms of scientific writing – environmental, medical, technological – to draw benefits from the university's well-established strength in science.

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, scriptwriting, scientific writing, and writing for the media.

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 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.

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.

STONY BROOK MANHATTAN

MFA courses are regularly taught in the fall and spring semester at the Stony Brook Manhattan Center. The Stony Brook 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.

Gainful Employment Regulation Disclosures

Admission requirements of Writing and Literature Program

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Application for admission to the Graduate School is made to a specific program for a specific degree. For the MFA in Writing and Literature, applicants must fulfill both the Graduate School admission requirements and the specific requirements for the MFA in 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 Writing and Literature are made to MFA in Writing and Literature Program and not to the Graduate School.

Completed Applications should be mailed to:

MFA in Writing and Literature
Stony Brook University – Southampton Center
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 15 for the fall semester and October 1 for the spring semester.

I. MFA in Writing and Literature Admission Requirements

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, may be submitted with the online application)

• A writing sample consisting of up to 10 pages of poetry (single-spaced, stapled) or 30 pages of prose (double-spaced, stapled), 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 résumé or c.v. (may be 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.

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Admission to the Advanced Certificate in Creative Writing

Admission to the Advanced Certificate in Creative Writing 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 following must be submitted to the Creative Writing and Literature Program:
• A statement discussing the student's reasons for graduate study (1-2 pp, may be submitted with the online application)
• A writing sample consisting of up to 10 pages of poetry (single-spaced, stapled) or 30 pages of prose (double-spaced, stapled), with the student's name on the writing sample.

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 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

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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.

Faculty of Writing and Literature Program

Distinguished Professor
Rosenblatt, Roger, Ph.D., 1968, Harvard University: Literary Essay, Novel, Novella, Playwriting, Literature for Writers.

Associate Professor
Reeves, Robert, Director. B.A., 1973, M.A., 1977, Harvard University: Graduate Writing, Advanced Fiction, Comedy.

Assistant Professor
Sheehan, Julie, B.A., Yale University; M.F.A., 2000, Columbia University: Poetry, Advanced Poetry, Reading & Writing Poetry

Lecturer
Walker, Lou Ann, Editor-in-Chief, The Southampton Review. B.A., 1976, Harvard University: Memoir, Children's Literature, Publishing and Editing.

Writers
Alda, Alan. B.S., 1956, Fordham University: Science and Writing

Baitz, Jon Robin. Scriptwriting, Playwriting

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

Ginna, Robert Emmett. A.M., 1950, Harvard University: Style.

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.

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.

Norman, Marsha, M.A.T., 1971, University of Louisville: Playwriting, Musical Book

Rakoff, David. B.A., 1986, Columbia University: Familiar Essay

Emma Walton Hamilton, Children's Literature

Wolitzer, Meg. B.A., 1981, Brown University: Fiction.

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Affiliated Faculty
Westermann, John. Popular Fiction

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

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Cultural Analysis and Theory

Graduate Programs in Comparative Literature, Cultural Studies, and Women's and Gender Studies

Chairperson
Robert Harvey, Humanities Building 2048 (631) 632-7460

Graduate Program Director
Lisa Diedrich, Humanities Building 2117 (631) 632-9176

Graduate Program Coordinator
Mary Moran-Luba, Humanities Building 2049 (631) 632-7456

Degrees Awarded
M.A. and Ph.D in Cultural Analysis and Theory
Certificate programs in Cultural Studies & Women's and Gender studies

Web Site

Visit our web page at: http://www.stonybrook.edu/commcms/cat/

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.

Gainful Employment Regulation Disclosures

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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 . Two official copies of all previous college transcripts. (Transcripts of both undergraduate and graduate work must be submitted. If a student attended a junior college whose credits and grades are not listed on the senior college transcript, a separate junior college transcript is required.) International students must submit certified English translations of transcripts;

3. 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;

4. An appropriate score on the Graduate Record Examination General Test (GRE) Institution Code 2548 Department Code 2902 ;

5. Two term papers or other writing samples in literature or a related field;

6. For international students, a foreign student financial affidavit; required upon admission

7. For international students, a standard cassette, CD, or DVD demonstrating ability to speak English;

8. An application fee of $100.

Admission to the Graduate Programs (Comparative Literature Tracks)

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 Tracks)

Applicants to the graduate programs in 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.

The Cultural Analysis and Theory Department'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 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 CLCS.

Admission to the Graduate Programs (Women's and Gender Studies Tracks)

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

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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.

Admission to The Graduate Certificate Program in Women's Studies

Admission to The Graduate Certificate Program in Women's Studies is open to any full-time student enrolled in a Stony Brook graduate degree-granting program, or to free-standing certificate students who have completed their B.A.s. For applicants already admitted to the University, admission involves filling out a brief form. The forms and additional information are available through CAT office. For admission to the free-standing Graduate Certificate Program in Women's Studies, students are required to have earned a bachelor's degree and to have the intellectual skills to do advanced work in Women's and Gender Studies. The following material is required:

A. An official transcript of undergraduate record culminating in a bachelor's degree.
B. A minimum grade point average of 2.75 (B-) in all undergraduate coursework.
C. Letters of recommendation from three previous instructors.
D. An official report of the Graduate Record Examination (GRE) General Test results (this may be waived in particular circumstances).
E. Acceptance by the CAT Program and the Graduate School.

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 Comparitive 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.

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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 CLCS 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.

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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 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.

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.

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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 CLCS. 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 CLCS 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 CLCS 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 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 the faculty members of the graduate studies committee. 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.

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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 proposal, 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 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.

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 CLCS 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 CLCS 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

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course under the supervision of the CLCS 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 CLCS faculty and by the Graduate School. In the past, several T.A'.s from CLCS 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 CLCS 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. CLT 501: Theories of Comparative Literature

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

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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 CLCS 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 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 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 CLCS 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.

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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. CLT 501: Theories of Comparative Literature

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 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 CLCS, 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.

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 CLCS 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 CLCS 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 definitive version of the reading list, with a cover page bearing signatures of the committee members and indicating who will direct the

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examination and chair the dissertation, must be submitted to the graduate studies committee *no later than one month prior* to the scheduled date of examination. The list *must* be approved by the faculty members of the graduate studies committee. 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 CLCS 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 included 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 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 proposal, 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 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.

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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 CLCS 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 CLCS 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 CLCS 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 CLCS faculty and by the Graduate School. In the past, several T.A'.s from CLCS 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.

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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 699 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 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 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.

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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 699 Women's and Gender Studies Teaching Practicum
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 699).

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, 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 List: A reading list for all parts enumerated below will be compiled by the student with the help of the examination committee. 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

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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

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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. CLCS'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

Three-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 CLCS 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.

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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. Students unaffiliated with another Stony Brook graduate program may also apply to Women's and Gender Studies for admission as a free-standing graduate certificate student. Please see the on-line application forms for the free-standing certificate in Women's Studies. Such students are not eligible for teaching assistantships.

Certificate

Since its emergence as a distinct field of inquiry within the academy, Women's and Gender Studies has sought to intervene in disciplinary knowledge paradigms by raising questions about how we come to know what we know, who gets to speak and for whom, and what are legitimate fields of inquiry. The Graduate Certificate in Women's and Gender Studies at Stony Brook familiarizes students enrolled in Ph.D. programs — or, in certain cases, independent scholars and writers—with the interdisciplinary fields of feminist theory, gender and sexuality studies. It invites students to interrogate the categories through which knowledge is produced, including "women" and "gender," and it asks them to engage in a self-reflexive questioning of the status, history, methods and goals of feminist, interdisciplinary, and disciplinary scholarship. From these engagements, students will be better equipped to participate in the disciplinary and interdisciplinary transformations in and beyond the University in the 21st century.

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 699 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.

Fall 2013

For more information, contact
Department of Cultural Analysis and Theory
Room 2048
SUNY Stony Brook
Stony Brook, NY 11794-5355
(631) 632-7460

Faculty of Cultural Analysis & Theory

Kadji Amin, *Assistant Professor*, (Ph.D., 2009, Duke University) Queer studies, queer historiography and temoporality, affect studies, literary modernism, transgender studies, and French cultural studies.

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.

Françoise Cromer, *Visiting Professor* (Ph.D. University of California, Santa Barbara) Race, class and gender in health (specifically Black Women's health, breast cancer policy, complementary and alternative medicine), gender and social movements, transnational feminisms and globalization, ancient healing practices

Robyn DeLuca, *Lecturer* **(**Ph.D., Stony Brook University) Social psychological theory; psychological aspects of women's reproductive health (prdictors of health behaviors during pregnancy, childbirth satisfaction, postpartum depression, and the cognitive and emotional consequences of cesarean delivery).

Lisa Diedrich, *Associate Professor* (Ph.D**.,** 2001, Emory University) Critical medical studies, disability studies, feminist theories, interdisciplinary.

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.

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.

Raiford Guins, *Associate Professor* (Ph.D., 2000, University of Leeds): History of technology, video game history and preservatin, material and object culture, visual culture and design studies, technological governance and media regulation, cultural studies and cultural history.

Robert Harvey, *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, *Assistant 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, *Assistant Professor* (Ph.D., 1995, Yale University): Russian and Polish literature; culture and film.

E. Ann Kaplan, *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.

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.

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Affiliated Faculty

Ruth B. Bottigheimer, *Research Professor* (D.A., 1981, University at Stony Brook): Tale collections, children's literature, fairy tales; socio-cultural analysis of literature.

Lou Charnon-Deutsch, *Professor* (Ph.D., 1978, University of Chicago): 18th- and 19th-century Peninsular literature; feminist theory.

Daniela Flesler, *Associate Professor* (Ph.D., 2001, Tulane University): Contemporary Spanish Literature and Cultural Studies, Postcolonial Theory, Spain and North Africa, Immigration, Tourism.

Serene Khadar, *Assistant Professor* (Ph.D., 2008, Stony Brook University): Feminist Theory (especially feminist ethics), Transnational Feminisms, French Feminism, Global Justice.

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.

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, *Assistant Professor* (Ph.D. 1999, Northwestern University): 20th Century British Literature; Modernism; Feminist Studies.

Adrián Perez-Melgosa, *Assistant 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.

Ayesha Ramachandran, *Assistant Professor* (Ph.D., 2008, Yale University): Early modern literature in English, French, and Italian; early modern intellectual and cultural history; history of scienc and philosophy; theories of globalism and early modernity; postcolonial theory; literature and cartography.

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.

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.

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

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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For course and policy information please vist 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.

Fall 2013

Ecology and Evolution: MA in Biological Sciences

Chairperson
Jessica Gurevitch, Life Sciences Building 650, (631) 632-8600

Ph.D. Graduate Program Director
Resit Akcakaya, Life Sciences Building 674, (631) 632-8605

M.A. Graduate Program Director
Catherine Graham, Life Sciences Building 650, (631) 632-1962

Graduate Program Coordinator
Maryann Calvacca, Life Sciences Building 650, (631) 632-7540

Degree Awarded
M.A. in Biological Sciences: Concentration in Applied Ecology or Concentration in Applied Evolution

Web site
http://life.bio.sunysb.edu/ee/masters.html

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 two members 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. GPEE provides training that leads to the M.A. and Ph.D. 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, and Africa. They study terrestrial, freshwater, and marine organisms in a wide range of taxa, including fish, amphibians, reptiles, primates, birds, mollusks, insects, vascular plants, fungi, and bacteria. Their research interests incorporate experimental, comparative, theoretical, and statistical approaches and utilize field and laboratory studies. Research in GPEE includes interspecific interactions, geographical variation and phylogeography, population genetics, experimental evolution, evolutionary genomics, evolutionary developmental biology, phylogenetics, evolutionary ecology, biological invasions, phenotypic plasticity, and paleontology. There is great interest in development of methods for systematics, morphometrics, and multivariate statistics. Many faculty members are active in the application of their research to problems in conservation.

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.

Fall 2013

Master of Arts in Biological Sciences

Concentration in Applied Ecology and Concentration in Applied Evolution

The Graduate Program in Ecology and Evolution at Stony Brook University is among the finest of its kind in the world. Our program has graduate students studying toward both the master and doctoral degrees.

The masters program in Applied Ecology 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. The Applied Evolution concentration will also prepare students for work in these sectors, specifically for technical positions that require genetic, evolutionary and population based analytical skills. Career paths in biotechnology, forensics and biomedicine will also be available to graduates of this program. Both concentrations are useful for further specialized degree programs or careers in education. Both programs are particularly strong in quantitative skills, providing enhanced career opportunities for those with mastery in this area.

The plan of study is individually tailored within the course offerings and other training opportunities to match the student's personal goals. Courses offered by the Department of Ecology and Evolution provide training in ecology, evolution, conservation biology, mathematical methods, and statistics, with applications in these fields. Students must complete 30 graduate credits and a masters' project for the degree. Credits can also be earned through a traineeships and participation in research projects on or off campus. This program can be completed in three to four semesters of full time enrollment.

Requirements for Admission to the M.A. Program

The application deadline for the Masters Program is March 15 for Fall admission. Most MA students enter the program in Fall semester. 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.

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.

For more information on applying, call the Ecology and Evolution departmental office (631-632-8600). You can also email the Ecology and Evolution department's Graduate Program Coordinator, or use the Information Request Form.

For further Information, contact:

Dr. Lev Ginzburg, Director
MA Program in Applied Ecology and Applied Evolution
Department of Ecology & Evolution
Stony Brook University
Stony Brook, New York 11794-5245

Facilities of Ecology and Evolution Department

Ample laboratory, greenhouse, and environmental facilities and all of the standard laboratory equipment for molecular studies are available. All the equipment typically found in modern laboratories undertaking protein electrophoresis and DNA analysis is available, including automated DNA sequencer/fragment analyzer, high-speed and ultracentrifuges, sonicators, fraction collectors, spectrophotometers, liquid scintillation, and spectrofluorometers. The department houses laboratories of Drosophila genetics, bacterial genetics, and ecology. The department has excellent computing facilities. In addition to microcomputers in most labs, Unix-based servers are also available within the department for mail and more intense computations than can be provided by desktop computers.

Field and marine study areas are at Flax Pond, a University-affiliated laboratory near campus. 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, and Cajas National Park in Ecuador. Collaboration is possible with scientists at Brookhaven National Laboratory and Cold Spring Harbor Laboratory. 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 Ecology and Evolution

Concentration in Applied Ecology

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. 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.

Required Graduate Courses:

1. Principles of Applied Ecology and Evolution (4 cr.)
2. Applied Ecology and Conservation Biology Laboratory (3 cr.)
3. Mathematical Methods in Population Biology (3 cr.)
4. Landscape Ecology Laboratory (3 cr.) or Ecology Laboratory (3 cr.)
5. Biometry (4 cr.)

Electives include:

1. Molecular Diversity Laboratory (3 cr.)
2. Population Genetics and Evolution (3 cr.)
3. Environmental Toxicology and Public Health (3 cr.)
4. Environmental Law and Regulation (3 cr.)
5. Introduction to Ecological Modeling (3 cr.)
6. Principles of Evolution (4 cr.)

Concentration in Applied Evolution

In recent years, there has been growing recognition that what had previously been considered to be strictly ecological problems often have a significant evolutionary dimension. Environmental impacts often reduce the size of populations (the ecological component) but may also

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result in evolutionary changes within the impacted populations that adversely affect human welfare (e.g., evolution of antibiotic or pesticide resistance), reduce the sustainability of vulnerable populations, or their value to humans (e.g., higher levels of inbreeding, loss of genetic variability and valuable genetic traits). Evolutionary principles are also regularly applied in biotechnology, forensics, agricultural, pharmaceutical, and biomedical fields, and especially to problems of genome and protein sequence analysis.

Required Graduate Courses:

1. Principles of Applied Ecology and Evolution (4 cr.)
2. Population Genetics and Evolution (3 cr.) or an equivalent approved by the Program Director
3. Computational Biology (3 cr.) or AMS 533 - Numerical Methods and Algorithms in Computational Biology (3 cr.)
4. Molecular Diversity Laboratory (3 cr.)
5. Biometry (4 cr.)

Electives include:

1. Mathematical Methods in Population Biology (3 cr.)
2. Applied Ecology and Conservation Biology Laboratory (3 cr.)
3. Principles of Ecology (4 cr.)
4. Molecular Modeling of Biological Molecules (3 cr.)
5. Quantitative Genetics (3 cr.)
6. Human Evolution (4 cr.)
7. Primate Evolution (4 cr.)
8. Vertebrate Evolution (4 cr.)
9. Molecular Genetics (3 cr.)

Faculty of Ecology and Evolution Department

Distinguished Professors
Dykhuizen, Daniel E., Ph.D., 1971, University of Chicago: Population genetics and molecular evolution, especially of bacteria

Fleagle, John G.[1], 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, Ph.D., 1962, University of Kansas: Multivariate data analysis techniques applied to problems in taxonomy and ecology; computer modeling; applied ecology.

Sokal, Robert R., Emeritus. Ph.D., 1952, University of Chicago: Human population structure; spatial models in ecology and evolution; numerical taxonomy; theory of systematics.

Professors
H. Resit Ackakaya, Ph.D. Stony Brook University, 1989: 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.

Conover, David O.[2], Ph.D., 1981, University of Massachusetts: Ecology of fishes; fisheries biology.

Eanes, Walter F., Ph.D., 1976, University at Stony Brook: Population and biochemical genetics of Drosophila; molecular evolution.

Ginzburg, Lev, Director of the Master's Program in Applied Ecology. Ph.D., 1970, Agrophysical Institute, St. Petersburg, Russia: Theoretical and applied ecology.

Gurevitch, Jessica, Chairperson. Ph.D., 1982, University of Arizona: Evolutionary ecology of plant populations and communities; plant physiological ecology.

Jernvall, J., Ph. D. 1995, University of Helsinki, Finland: Mammalian tood development and evolution, vertebrate paleontology, diversity in recent and extinct communities.

Lopez, Glenn R.[2], 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.[1], Ph.D., 1976, University of Chicago: Primate ecology.

Williams, George C., Emeritus. Ph.D., 1955, University of California, Los Angeles: Evolution of life-history strategies; ecology and population genetics of marine fishes.

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Wright, Patricia[3], Ph.D., 1985, City University of New York: Primates and tropical conservation.

Associate Professors
Armstrong, Robert[2], 1975, University of Minnesota: Mathematical modeling in marine ecology and biogeochemistry.

Battley, Edwin H., Emeritus. Ph.D., 1956, Stanford University: Thermodynamics of microbial growth; ecological energetics; microbial ecology; nitrification and denitrification in aquatic systems.

Bingham, Paul[4], Ph.D., 1979, Harvard University: Regulation of transcription in developing multicellular organisms; the role of transposons in evolution and speciation.

Chase, Ivan[5], Ph.D., 1972, Harvard University: Social behavior; dominance hierarchies; cooperation; resource distribution.

Graham, Catherine, Ph.D., 2003, University of Missouri – St. Louis: Landscape and behavioral ecology.

Hechtel, George J.[6], Ph.D., 1962, Yale University: Systematics and zoogeography of marine demospongiae.

True, John, Ph.D., 1995, Duke University: Evolutionary and developmental genetics of color patterning in *Drosophila*.

Wiens, John J., Ph.D., 1995, University of Texas at Austin: Systematics and biology of reptiles and amphibians.

Assistant Professors
Baines, Stephen, Ph. D., 1993, Yale University-New Haven; Aquatic ecosystem ecology, biogeochemistry of carbon and trace elements.

Davalos, Liliana, Ph.D., 2004, Columbia University; Conservation biology, climate change, phylogeny.

Munch, Stephan[2] 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

Rest, Joshua, Ph.D., 2004, University of Michigan; Genome evolution.

Number of teaching, graduate, and research assistants, fall 2009: 39
Students on fellowships: 11

1) Department of Anatomical Sciences

2) School of Marine and Atmospheric Sciences

3) Department of Anthropology

4) Department of Biochemistry

5) Department of Sociology

6) Director, Africa Program, Wildlife Conservation Society

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

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Ecology and Evolution Department

Chairperson
Walter Eanes, Life Sciences Building 650, (631) 632-8593

Ph.D. Graduate Program Director
Resit Akcakaya, Life Sciences Building 674, (631) 632-8605

M.A. Graduate Program Director
Catherine Graham, Life Sciences Building 650, (631) 632-1962

Graduate Program Coordinator
Maryann Calvacca, Life Sciences Building 650, (631) 632-7540

Degrees Awarded
M.A. in Biological Sciences: Concentration in Applied Ecology or Concentration in Applied Evolution; Ph.D. in Ecology and Evolution

Web Site
http://life.bio.sunysb.edu/ee/programs.html

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 two members 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. GPEE provides training that leads to the M.A. and Ph.D. 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, and Africa. They study terrestrial, freshwater, and marine organisms in a wide range of taxa, including fish, amphibians, reptiles, primates, birds, mollusks, insects, vascular plants, fungi, and bacteria. Their research interests incorporate experimental, comparative, theoretical, and statistical approaches and utilize field and laboratory studies. Research in GPEE includes interspecific interactions, geographical variation and phylogeography, population genetics, experimental evolution, evolutionary genomics, evolutionary developmental biology, phylogenetics, evolutionary ecology, biological invasions, phenotypic plasticity, and paleontology. There is great interest in development of methods for systematics, morphometrics, and multivariate statistics. Many faculty members are active in the application of their research to problems in conservation.

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.

Fall 2013

Master of Arts in Biological Sciences

Concentration in Applied Ecology and Concentration in Applied Evolution

The Graduate Program in Ecology and Evolution at Stony Brook University is among the finest of its kind in the world. Our program has graduate students studying toward both the master and doctoral degrees.

The masters program in Applied Ecology 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. The Applied Evolution concentration will also prepare students for work in these sectors, specifically for technical positions that require genetic, evolutionary and population based analytical skills. Career paths in biotechnology, forensics and biomedicine will also be available to graduates of this program. Both concentrations are useful for further specialized degree programs or careers in education. Both programs are particularly strong in quantitative skills, providing enhanced career opportunities for those with mastery in this area.

The plan of study is individually tailored within the course offerings and other training opportunities to match the student's personal goals. Courses offered by the Department of Ecology and Evolution provide training in ecology, evolution, conservation biology, mathematical methods, and statistics, with applications in these fields. Students must complete 30 graduate credits and a masters' project for the degree. Credits can also be earned through a traineeships and participation in research projects on or off campus. This program can be completed in three to four semesters of full time enrollment.

Ph.D. Program in Ecology and Evolution

Graduate students in the GPEE are supervised by a temporary advisor and the Entering Student Advisory Committee (ESAC) during their first year. First year students take courses in ecology, evolution, and biometry, and they take a general preliminary examination at the end of the first year. They 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, and students appoint a permanent advisor and advisory committee during the second year. After completing a review paper in their third semester and 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. 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 http://life.bio.sunysb.edu/ee/programs.htm. Applicants are strongly encouraged to contact individual faculty members whose interests they share.

Requirements for Admission to the Ph.D. Program

In addition to Graduate School admission requirements, the department requirements include:

A. 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.

B. 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.

C. Report of Graduate Record Examination (GRE) General Test scores and, for non-native speakers of English, TOEFL scores.

D. Acceptance by the Graduate Program in Ecology and Evolution and by the Graduate School.

E. Prior correspondence with GPEE Faculty member(s) to discuss research interests and possibilities is strongly recommended.

Requirements for Admission to the M.A. Program

The application deadline for the Masters Program is March 15 for Fall admission. Most MA students enter the program in Fall semester. 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.

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.

For more information on applying, call the Ecology and Evolution departmental office (631-632-8600). You can also email the Ecology and Evolution department's Graduate Program Coordinator, or use the Information Request Form.

For further Information, contact:

Dr. Lev Ginzburg, Director
MA Program in Applied Ecology and Applied Evolution
Department of Ecology & Evolution
Stony Brook University
Stony Brook, New York 11794-5245

Facilities of Ecology and Evolution Department

Ample laboratory, greenhouse, and environmental facilities and all of the standard laboratory equipment for molecular studies are available. All the equipment typically found in modern laboratories undertaking protein electrophoresis and DNA analysis is available, including automated DNA sequencer/fragment analyzer, high-speed and ultracentrifuges, sonicators, fraction collectors, spectrophotometers, liquid scintillation, and spectrofluorometers. The department houses laboratories of Drosophila genetics, bacterial genetics, and ecology. The department has excellent computing facilities. In addition to microcomputers in most labs, Unix-based servers are also available within the department for mail and more intense computations than can be provided by desktop computers.

Field and marine study areas are at Flax Pond, a University-affiliated laboratory near campus. 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

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projects at Friday Harbor Marine Labs in Washington, Cook Inlet in Alaska, Ranomafana National Park in Madagascar, and Cajas National Park in Ecuador. Collaboration is possible with scientists at Brookhaven National Laboratory and Cold Spring Harbor Laboratory. 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 Ecology and Evolution

Concentration in Applied Ecology

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. 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.

Required Graduate Courses:

1. Principles of Applied Ecology and Evolution (4 cr.)
2. Applied Ecology and Conservation Biology Laboratory (3 cr.)
3. Mathematical Methods in Population Biology (3 cr.)
4. Landscape Ecology Laboratory (3 cr.) or Ecology Laboratory (3 cr.)
5. Biometry (4 cr.)

Electives include:

1. Molecular Diversity Laboratory (3 cr.)
2. Population Genetics and Evolution (3 cr.)
3. Environmental Toxicology and Public Health (3 cr.)
4. Environmental Law and Regulation (3 cr.)
5. Introduction to Ecological Modeling (3 cr.)
6. Principles of Evolution (4 cr.)

Concentration in Applied Evolution

In recent years, there has been growing recognition that what had previously been considered to be strictly ecological problems often have a significant evolutionary dimension. Environmental impacts often reduce the size of populations (the ecological component) but may also result in evolutionary changes within the impacted populations that adversely affect human welfare (e.g., evolution of antibiotic or pesticide resistance), reduce the sustainability of vulnerable populations, or their value to humans (e.g., higher levels of inbreeding, loss of genetic variability and valuable genetic traits). Evolutionary principles are also regularly applied in biotechnology, forensics, agricultural, pharmaceutical, and biomedical fields, and especially to problems of genome and protein sequence analysis.

Required Graduate Courses:

1. Principles of Applied Ecology and Evolution (4 cr.)
2. Population Genetics and Evolution (3 cr.) or an equivalent approved by the Program Director
3. Computational Biology (3 cr.) or AMS 533 - Numerical Methods and Algorithms in Computational Biology (3 cr.)
4. Molecular Diversity Laboratory (3 cr.)
5. Biometry (4 cr.)

Electives include:

1. Mathematical Methods in Population Biology (3 cr.)
2. Applied Ecology and Conservation Biology Laboratory (3 cr.)
3. Principles of Ecology (4 cr.)
4. Molecular Modeling of Biological Molecules (3 cr.)
5. Quantitative Genetics (3 cr.)
6. Human Evolution (4 cr.)
7. Primate Evolution (4 cr.)
8. Vertebrate Evolution (4 cr.)
9. 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 BEE 550 Principles of Ecology, BEE 551 Principles of Evolution, BEE 552 Biometry, and BEE 556 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 in order to advance to Ph.D. Candidacy.

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3. BEE 671 and BEE 672 Colloquium in Ecology and Evolution must be taken each semester in residence.

4. A minimum of one graduate seminar per year is 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 an advisory committee that recommends 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. In the third semester, each student writes a substantial paper reviewing a topic of interest in ecology and evolution.

C. Oral Examination

Preferably in the second or third year but no later than the end of the fourth 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.

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 two semesters 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., Ph.D., 1971, University of Chicago: Population genetics and molecular evolution, especially of bacteria

Fleagle, John G.[1], 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.

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Rohlf, F. James, Ph.D., 1962, University of Kansas: Multivariate data analysis techniques applied to problems in taxonomy and ecology; computer modeling; applied ecology.

Sokal, Robert R., Emeritus. Ph.D., 1952, University of Chicago: Human population structure; spatial models in ecology and evolution; numerical taxonomy; theory of systematics.

Professors

H. Resit Ackakaya, Ph.D. Stony Brook University, 1989: 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.

Conover, David O.[2], Ph.D., 1981, University of Massachusetts: Ecology of fishes; fisheries biology.

Eanes, Walter F., Ph.D., 1976, University at Stony Brook: Population and biochemical genetics of Drosophila; molecular evolution.

Ginzburg, Lev, Director of the Master's Program in Applied Ecology. Ph.D., 1970, Agrophysical Institute, St. Petersburg, Russia: Theoretical and applied ecology.

Gurevitch, Jessica, Chairperson. Ph.D., 1982, University of Arizona: Evolutionary ecology of plant populations and communities; plant physiological ecology.

Jernvall, J., Ph. D. 1995, University of Helsinki, Finland: Mammalian tood development and evolution, vertebrate paleontology, diversity in recent and extinct communities.

Lopez, Glenn R.[2], 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.[1], Ph.D., 1976, University of Chicago: Primate ecology.

Williams, George C., Emeritus. Ph.D., 1955, University of California, Los Angeles: Evolution of life-history strategies; ecology and population genetics of marine fishes.

Wright, Patricia[3], Ph.D., 1985, City University of New York: Primates and tropical conservation.

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Associate Professors

Armstrong, Robert[2], 1975, University of Minnesota: Mathematical modeling in marine ecology and biogeochemistry.

Battley, Edwin H., Emeritus. Ph.D., 1956, Stanford University: Thermodynamics of microbial growth; ecological energetics; microbial ecology; nitrification and denitrification in aquatic systems.

Bingham, Paul[4], Ph.D., 1979, Harvard University: Regulation of transcription in developing multicellular organisms; the role of transposons in evolution and speciation.

Chase, Ivan[5], Ph.D., 1972, Harvard University: Social behavior; dominance hierarchies; cooperation; resource distribution.

Graham, Catherine, Ph.D., 2003, University of Missouri – St. Louis: Landscape and behavioral ecology.

Hechtel, George J.[6], Ph.D., 1962, Yale University: Systematics and zoogeography of marine demospongiae.

True, John, Ph.D., 1995, Duke University: Evolutionary and developmental genetics of color patterning in *Drosophila*.

Wiens, John J., Ph.D., 1995, University of Texas at Austin: Systematics and biology of reptiles and amphibians.

Assistant Professors

Baines, Stephen, Ph. D., 1993, Yale University-New Haven; Aquatic ecosystem ecology, biogeochemistry of carbon and trace elements.

Davalos, Liliana, Ph.D., 2004, Columbia University; Conservation biology, climate change, phylogeny.

Munch, Stephan[2] 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

Rest, Joshua, Ph.D., 2004, University of Michigan; Genome evolution.

Number of teaching, graduate, and research assistants, fall 2009: 39
Students on fellowships: 11

1) Department of Anatomical Sciences

2) School of Marine and Atmospheric Sciences

3) Department of Anthropology

4) Department of Biochemistry

5) Department of Sociology

6) Director, Africa Program, Wildlife Conservation Society

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

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Economics Department

Chairperson
Sandro Brusco, Ward Melville Social and Behavioral Sciences Building, N-617

Ph.D Program Director
Hugo Benítez-Silva, Ward Melville Social and Behavioral Sciences Building S-649 (631) 632-7551

Graduate Secretary
Jenille Johnson, Ward Melville Social and Behavioral Sciences Building S-601 (631) 632-7540

Degree Awarded
Ph.D. in Economics
M.A. in Economics

Web Site
http://www.stonybrook.edu/economics/

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.

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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 up to four years of study and a tuition waiver for the entire duration of their study. 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

The M.A. program is rather unique in that it is research oriented. This program prepares students for careers in research institutions, government, international institutions and the private sector. Graduates from this program are also well prepared to continue their studies in top Ph.D programs

in Economics and Finance as well as the best MBA programs. The M.A. program shares most courses with the Ph.D program, the requirements for admission are identical and so is the department's dedication to these students in terms of office space, advising etc.

In the first year students take core courses that serve as a general foundation in economic theory and quantitative methods starting from the basics but done in a very mathematical way. 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. M.A. students are required to add to this one course in Computational Methods in Economics. In the second year students can choose between a basic and an advanced program.

The basic program requires a total of 11 courses and can be completed in three semesters. After the first year of study, students will take an advanced course in Econometrics and an elective and write an M.A. project.

The Advanced M.A. program requires 14 courses and can be completed in four semesters. The advanced program is attractive to both students who want to continue their studies for a Ph.D (here or elsewhere) and to those seeking employment. Students who are planning to continue into a Ph.D program may find it advantageous to take most of the remaining courses required for a Ph.D during the Spring semester. The additional semester offers students specialization in a field, at very high level and the opportunity to work with some well known experts in these fields. They are also required to write a paper in their field of specialization. This makes their degree much more marketable and well worth the extra cost and attractive to students seeking the job market after the completion of their M.A. The advanced M.A. degree offers three concentrations that utilize the special strengths of our department. The M.A in Economics with a concentration in Industrial Strategy emphasizes courses in Industrial Organization and Game Theory. The M.A in Economics with a concentration in People, Markets and Government emphasizes Labor Economics, Demography and Health. The M.A. in Economics with a concentration in Macroeconomics Policy focuses on Dynamic Macroeconomic Theory. Details about each of these concentrations and the required courses can be found at the Department's web page.

Students can decide to take the basic or advanced program and the specific concentration at the end of the first year of study. Students are required to have an average grade of "B" or higher. The first year of study is a full time program. Subsequent courses can be taken on a part time basis and some, but not all courses are offered in the evening. No courses are offered in the summer.

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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. One field may be completed on the basis of an average grade of B+ or higher in the courses in that field. At least one field must be completed by passing a written comprehensive exam. 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. Second Year Paper, Seminars, and Workshops

Each student must write a successful research paper during the second year. 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 and applied economics 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, above, and the successful work on the second year paper. 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 all graduate students to acquire teaching experience during their graduate studies. The department operates a training program to prepare teaching assistants for classroom instruction.

F. Time Limit

If the degree requirements have not been met within five years of entry into the program, departmental approval is required for continuation in the program.

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, Chairperson, Ph.D., 1993, Stanford: Mechanism design, corporate finance, political economy.

Dubey, Pradeep, Ph.D., 1975, Cornell University: Game theory; mathematical economics.

Montgomery, Mark, Ph.D., 1982, University of Michigan: Economic demography; development economics; econometrics.

Muench, Thomas J. Ph.D., 1965, Purdue University: Mathematical economics; Macro economics; econometrics.

Rizzo, John (joint with the Department of Preventive Medicine) Ph.D., 1985, Brown University: Health economics, public health.

Sanderson, Warren C., Ph.D., 1974, Stanford University: Economic demography; economic history; labor economics.

Tauman, Yair, Ph.D., 1978, Hebrew University, Jerusalem: Industrial organization; game theory.

Zweig, Michael, Ph.D., 1967, University of Michigan: Political economy; labor economics.

Associate Professors

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

Anagnostopoulos, Alexis, Ph.D., 2005, London Business School: Macroeconomics; computational economics.

Atesagaouglu, Orhan Erem, Ph.D, 2008 University of Minnesota: Macroeconomics; Consumer Finance; International Finance

Rendon, Silvio, Ph.D., 1997, New York University: Labor economics; dynamic modeling.

Tan, Wei, Ph.D., 2005, Johns Hopkins University: Industrial organization; applied econometrics; health economics.

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

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Teacher Preparation programs at Stony Brook University are administered by the School of Professional Development and the Professional Education Program. Please follow the links below for additional information:

http://www.stonybrook.edu/sb/graduatebulletin/current/academicprograms/spd/

http://stonybrook.edu/pep/

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

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Program and admissions information can be found online at http://www.stonybrook.edu/spd/edleadership/edlct.html

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

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Electrical and computer engineering Department

Chairperson
Serge Luryi, Light Engineering Building 273 (631) 632-8420

Graduate Program Director
Yuanyuan Yang, Light Engineering Building 215 (631) 632-8400/8397

Senior Staff Assistant
Rachel Ingrassia (ATC)

Graduate Program Coordinator
Susan Hayden, (631) 632-8400

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.ee.sunysb.edu/

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, telerobotics, 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 value of this commitment to industry is evidenced by the support received by the department in return; in particular, from Motorola, Lucent Technologies, AT&T, Intel Corporation, and Texas Instruments.

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.

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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 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 computer architecture, embedded microprocessor system design, fault tolerant computing, design communications and signal processing, parallel and distributed computing, computer networks, computer vision, artificial neural networks and software engineering.

Semiconductors 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 and gases through a description of the mechanism which yield useful devices to a study of the design simulation, and fabrication of integrated circuits. Program’s scientific interests center on physics, characterization and development of optoelectronic devices and systems. Over the past several years, major efforts were focused on the studies of physics of 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 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 Advanced IC Design & Simulation Laboratory contains equipment and computing facilities for the design, simulation, and characterization of analog, digital and mixed-signal integrated circuits. The lab is equipped with several SUN workstations and PCs, and assorted electronic measurement equipment.

The Communications, Signal Processing, Speech, and Vision (CSPV) Laboratory has several SUN workstations and desktop computers with specialized software for research in telecommunications networks and signal processing. The computers are networked to departmental computing facilities allowing access to shared campus resources and the Internet.

The Computer-Aided Design Laboratory provides a network of 386 based workstations. Advanced computer-aided design software for analog and digital systems design is available on these workstations.

The Computer Vision Laboratory has state-of-the-art equipment for experimental research in three-dimensional machine vision. The facilities include desktop computers, imaging hardware, and printers.

The Digital Signal Processing Research Laboratory is involved in digital signal processing architectures and hardware and software research. The laboratory is presently active in the development of algorithms to be implemented on a variety of signal processing chips.

The Fluorescence Detection Lab is involved in the design, development, implementation and testing of various DNA sequencing instruments. 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 and DNA sequencing.

The Graduate Computing Laboratory has 12 Windows 2000 Professional based Windows PC's, equipped with Microsoft Office XP, Microsoft Visual Studio, X-Windows for Unix connectivity, Adobe Acrobat reader, Ghost script and Ghost view. There is an HP LaserJet 5Si/ MX printer. The lab is also equipped with 8 Sun Blade 100 machines. These machines run Sun Solaris 8 operating systems and are connected to the departmental Unix servers. Industry standard packages such as Cadence tools, Synopsys, Hspice and Matlab are available from the application servers.

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, optical networks, high-speed networks, interconnection networks and multicast communication. The laboratory has 1 Dell PowerEdge 1800 computing server, 8 Dell OptiPlex GX620 MT workstations, 2 Sun Ultra 60 Workstations with dual processors, and 4 Sun Ultra 10 Workstations.

The Medical Image Processing Laboratory, located in the medical school, is involved in research in image reconstruction methods and image analysis with applications to medical imaging It is equipped with a SUN SPARC l0, SPARC 2, HP730 workstations and a full complement of peripherals.

The Optical Signal Processing and Fiber Optic Sensors Laboratory research emphasis is on the development and fabrication of novel fiber optic systems for very diverse applications ranging from aerospace to biomedical projects involving the development of new techniques and algorithms. Some of the current research projects include development capillary waveguide based biosensors for detection of pathogens in a marine environment, integrated fiber optic based systems for real time detection of synchronous and asynchronous vibrations in turbomachinery, and single photon based detection schemes for sub-microscopic particle sizing. Equipment includes a fiber optic fusion splicer, fiber polisher, diamond saw, optical microscope, optical spectrometer (visible range), micropositioners, optical scanners, and various laser sources. Additionally, the laboratory has the facilities for designing printed circuits and fabricating optical and electronic sub-systems. Some of the current research

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projects include development of fiber optic systems for real time process control in adverse environments, integrated fiber optics, fiber optic sensors and coherent optical processing.

The Parallel and Neural Processing Laboratory conducts research in various parallel and neural network applications. Current research projects include Natural Adaptive Critic control, pattern recognitions and Bayesian Neural Networks. It is equipped with Pentium PCs and Synapse3 parallel neural network processing boards.

The Petaflops Design Laboratory is a research facility equipped with two SUN workstations, several PC's with Linex, and a 16-process Beowulf-type cluster. All computes are connected by Fast 100 Mb/sec Ethernet LAN.

The Semiconductor Optoelectronics Laboratory possesses the infrastructure for wafer processing, testing and sophisticated characterization of optoelectronics devices. Processing facilities are based on a "Class 100" clean room with Darl Suss aligner, Temescal metal film deposition system and other equipment required for modern semiconductor wafer processing. Wafer testing can be performed by low and high temperature probe-stations. Characterization of devices after processing includes electrical, optical and spectral measurements. Electrical and optical measurements can be carried out within a wide frequency range from CW to 22GHz. Semiconductor laser near and far field emission patterns can be studied in a wide spectral range from visible to mid-infrared. Spectral analysis of radiation is performed with high resolution and sensitivity using grating and two Fourier transform spectrometers in combination with state-of-the-art detector systems. Time resolved luminescence experiments are available with ns resolution. The laboratory is equipped with 150fs Nd-glass mode locked laser for optical pumping as well as other pump sources including a high energy Q-switched Nd solid-state laser. New experimental methods of studying semiconductor laser parameters, developed in the Laboratory, include direct heterobarrier leakage current measurements as well as gain, loss and alpha-factor measurements in broad area and single mode lasers.

Requirements for the M.S. Degree in Electrical and computer 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 four following options:

I. M.S. in Electrical Engineering 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

PLEASE NOTE: Only 3 credits of ESE 698 may be used in above.

2. A minimum of eight regular courses. Of these eight, at least seven 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). Also our Topics course, ESE 670, can be counted only once as a regular course credit toward the M.S. degree. Credits for ESE 597 can only be applied toward the electrical engineering degree if the following requirements are satisfied:

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.

II. M.S. in Electrical Engineering Thesis Option
Students must inform the department in writing at the end of their first semester if they choose the M.S. 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, at least six credits of ESE 599, with a maximum of 12 credits total being taken from ESE 599, ESE 597, or ESE 698.

PLEASE NOTE: Only 3 credits of ESE 698 may be used in above.

2. 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.

3. ESE 597, ESE 599, ESE 697, ESE 698 and ESE 699 are not counted as regular courses in (2). Also our Topics course, ESE 670, can be counted only once as a regular course credit toward the M.S. degree. Credits for ESE 597 can only be applied toward the electrical engineering degree if the following requirements are satisfied:

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 master's degrees.

Students must satisfactorily complete a thesis.

I. Computer Engineering **Non-Thesis Option**
Admission to the M.S. 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

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ESE 333 Real-Time Operating Systems

Courses selected must satisfy the following requirements:

Computer Hardware: One course from the following: ESE 545 Computer Architecture, ESE 565 Parallel Processing Architectures, ESE 580 Microprocessor-Based Systems I, ESE 581 Microprocessor-Based Systems II.

At least three Computer Engineering courses with at least one course from each of the following three sub-areas:

Networking: ESE 505 Wireless Network, ESE 506 Wireless Networking and Mobile Computing, ESE 546 Computer Communication Networks, ESE 548 Local & Wide Area Networks, and 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.

Architecture and Hardware/Software: ESE/CSE 536 Switching and Routing in Parallel and Distributed Systems, ESE 554 Computational Models for Computer Engineers, ESE 565 Parallel Processing Architectures, ESE 566 Hardware-Software Co-Design of Embedded Systems.

At least one software course: 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 Analysis of Algorithms.

Up to six credits may be from ESE 597, ESE 599, or ESE 698 (only 3 credits of ESE 698 may be used)

ESE 597, ESE 599, ESE 697, ESE 698 and ESE 699 are not counted as regular courses.

Also our Topics course, ESE 670, can be counted only once as a regular course credit toward the M.S. degree. Credits for ESE 597 can only be applied toward the Computer Engineering degree if the following requirements are satisfied:

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.

II. Computer Engineering Thesis Option
Students must inform the department in writing at the end of their first semester if they choose the M.S. Thesis Option.

The M.S. degree with thesis option requires 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.

PLEASE NOTE: Only 3 credits of ESE 698 may be used in above.

All non-ESE courses that are not on the pre-approved departmental list that you wish to use toward your degree must receive prior approval from the Graduate Program Director.

Computer Hardware: One course from the following; ESE 545 Computer Architecture, ESE 565 Parallel Processing Architectures, ESE 580 Microprocessor-Based Systems I, ESE 581 Microprocessor-Based Systems II.

At least three Computer Engineering courses with at least one course from each of the following three sub-areas:

Networking: ESE 505 Wireless Network, ESE 506 Wireless Networking and Mobile Computing, ESE 546 Computer Communication Networks, ESE 548 Local & Wide Area Networks, and 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.

Architecture and Hardware/Software: ESE/CSE 536 Switching and Routing in Parallel and Distributed Systems, ESE 554 Computational Models for Computer Engineers, ESE 565 Parallel Processing Architectures, ESE 566 Hardware-Software Co-Design of Embedded Systems.

At least one Software course: 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 Analysis of Algorithms.

At least one additional regular course offered by the ECE department.

ESE 597, ESE 599, ESE 697, ESE 698, and ESE 699 are not counted as regular courses.

Also our Topics course, ESE 670, can be counted only once as a regular course credit toward the M.S. degree. Credits for ESE 597 can only be applied toward the Computer Engineering degree if the following requirements are satisfied:

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 master's degrees.

Requirements for the Ph.D. Degree

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A. Qualifying Examination
There is a major and minor part to the qualifying examination. The written examination is offered once every year, in April. Students must pass one major written examination in two consecutive tries. The two consecutive tries do not need to be in the same area. The minor requirement can be satisfied by taking and passing a second major written examination or by taking three graduate courses in a different area than the major. Previous examinations are available in the departmental office for review, however, students must make their own copies. Please refer to the department's *Graduate Student Guide* for additional information on the qualifying examination.

B. Course Requirements
1. A minimum of six regular courses beyond the M.S. degree or 14 regular courses beyond the bachelor's degree. The choice must have the prior approval of the designated faculty academic advisor. 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. The courses ESE 597, ESE 598, ESE 599, ESE 698, and ESE 699 are not counted as regular courses. 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 once as a regular course for credit toward the M.S. degree, and not more than twice for all graduate degrees awarded by the Department of Electrical and Computer Engineering.

2. The student must satisfy the stipulations of a plan of study which must be filed with the graduate program committee within six months after the student passes the qualifying examination. The study plan, which will include the six regular courses as required in item 1, will be developed under the aegis of the designated faculty advisor (who may or may not be the eventual thesis advisor). Modification of the study plan may be made by the preliminary examination committee and at any later time by the thesis advisor. An up-to-date plan must always be placed on file with the graduate program committee each time a modification is made.

C. Preliminary Examination
A student must pass the preliminary examination not more than 18 months after passing the qualifying examination. Both a thesis topic and the thesis background area are emphasized.

D. 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 chairperson of the department. Students must advance one year prior to the dissertation defense.

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 years after completing 24 credits of graduate courses in the department.

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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.

Luryi, Serge, Chairperson. Ph.D., 1978, University of Toronto, Canada: Solid-state electronic devices.

Zemanian, Armen H., Eng.Sc.D., 1953, New York University: Network theory; computational methods; VLSI modeling.

Professors
Chen, Chi-Tsong, Ph.D., 1966, University of California, Berkeley; CA systems and control theory.

Djuric, Petar M., Ph.D., 1990, University of Rhode Island: Signal processing; signal and systems modeling.

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 communications; performance evaluation; parallel processing; e-commerce technology.

Shamash, Yacov, Dean of the College of Engineering and Applied Sciences. Ph.D., 1973, Imperial College of Science and Technology, England: Control system; robotics.

Short, Kenneth L., Ph.D., 1973, University at Stony Brook: Digital system design; microprocessors; instrumentation.

Subbarao, Murali, Ph.D., 1986, University of Maryland: Machine vision; image processing; pattern recognition.

Tuan, Hang-Sheng, Ph.D., 1965, Harvard University: Electromagnetic theory; integrated optics; microwave acoustics.

Yang, Yuanyuan, Graduate Program Director. Ph.D., 1992, Johns Hopkins University: wireless networks, optical networks, high speed networks, parallel and distributed computing systems, multicast communication, high performance computer architecture, and computer algorithms.

Associate Professors
Dhadwal, Harbans, Ph.D., 1980, University of London, England: Laser light scattering; fiber optics; optical signal processing and instrumentation.

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.

Dorojevets, Mikhail, Ph.D., 1988 Siberian Division of the USSR Academy of Sciences, Novosibirsk: Computer architectures, systems design.

Gindi, Gene, Ph.D., 1981, University of Arizona: Medical image processing; image analysis.

Gorfinkel, Vera, Ph.D., 1980, A.F. Iaffe Physical-Technical Institute, St. Petersburg, Russia: Semiconductor devices, including microwave and optoelectronics, DNA sequencing instrumentation, single

photon counting techniques.

Kamoua, Ridha, Ph.D., 1992, University of Michigan: Solid-state devices and circuits; microwave devices and integrated circuits.

Murray, John, Ph.D., 1974, University of Notre Dame: Signal processing; systems theory.

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.

Sussman-Fort, Stephen E., Ph.D., 1978, University of California, Los Angeles: RF and microwave circuits; computer-aided circuit design; active and passive filters; classical network theory.

Tang, K. Wendy, Ph.D., 1991, University of Rochester: Interconnection networks, parallel computing, and neural networks.

Assistant Professors
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.

Fernandez-Bugallo, Monica, Ph.D., 2001, Universidade da Coruna (Spain): Statistical signal processing with emphasis in the topics of Bayesian analysis, sequential Monte Carolo methods, adaptive filtering, and stochastic optimization.

Stanacevic, Milutin, Ph.D., 2005, Johns Hopkins University: Analog and mixed-signal VLSI integrated circuits and systems; adaptive Microsystems; implantable electronics.

Shterengas, Leon, Ph.D. 2004, Stony Brook University, High power and high speed light emitters, carrier dynamics in nanostructures, molecular beam epitaxy of semiconductor nanostructures.

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.

Number of teaching, graduate, and research assistants, fall 2009: 52

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

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English Department

Chairperson
Eugene Hammond, Humanities Building 2022 (631) 632-7415

Graduate Program Director
Andrew Newman, Humanities Building 2089 (631) 632-7784

Graduate Coordinator
Dorothy Mason, Humanities Building 2087 (631) 632-7373

Degrees Awarded
M.A. in English; Ph.D. in English

Web Site
http://www.stonybrook.edu/english/

English Department

Stony Brook's Department of English, in the College of Arts and Sciences, is known for scholarship and teaching. Over the past ten years, faculty members have published more than 47 books of criticism, fiction, and poetry. Among the many awards individuals have won are the Pulitzer Prize, the National Book Critics' Circle Award, Guggenheim fellowships, Fulbright research and teaching fellowships, and National Endowment for the Humanities fellowships and grants. Five faculty members have received both the Chancellor's and the President's Award for Excellence in Teaching, two have been appointed SUNY Distinguished Teaching Professors, and two have been named SUNY Distinguished Professors. Supplementing the resources of the English department's staff are campus institutes with which the department is affiliated. The Humanities Institute provides a place for interdisciplinary and theoretical work, offers an annual graduate student seminar, and sponsors an ongoing lecture series and annual conferences of international speakers.

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 of study, 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 1.

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. 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

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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 (15-20 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 foreign language equivalent to two years of college work;

H. Acceptance by both the Department of English and the Graduate School.

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 graduate courses completed with a 3.0 overall grade point average, competence in one foreign language, and submission of a master's thesis. Of the ten courses, one must be in the history and structure of the English language and one must be in rhetoric or composition theory (including problems in the teaching of composition); courses previously taken on the undergraduate level and passed with a grade of B or better may be accepted as fulfilling these requirements and replaced with an elective. Students will sign up for three credits of thesis research while writing a master's thesis. The other seven courses must include one course on literature before 1700 and one course after 1700, and four courses in at least two of the following topic areas:

EGL 583: Topics in Theory

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

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Only one course numbered EGL 599, Independent Studies, 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. Foreign Language Requirement
Competence in one foreign language may be satisfied 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 foreign 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.

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. Foreign Language Requirements
Students must demonstrate the ability to translate writings of moderate difficulty in one foreign language 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.

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Students will not be permitted to take the Special Field Conversation without first satisfying the foreign language requirement. Students choosing Option I must satisfy one language requirement before taking the General Examination and the second before taking the Special Field Conversation.

C. 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.

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D. 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 six weeks prior to the meeting date. The Graduate Office will then schedule a place for the meeting.

At least four 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.

E. 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.

F. 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.

G. 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.

H. 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, including composition and introductions to poetry, fiction, and drama, and assist in large lecture courses. An important part of the teaching experience is the Practicum in Teaching, required of all teaching assistants.

I. 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.

J. 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

K. 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

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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 year 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 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.

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[5], Director of the Humanities Institute. Ph.D., 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

Hammond, Eugene, Chair. Ph.D., 1977, Yale University: Writing Instruction, Biography, 18th Century Studies, Jonathan Swift.

Huffman, Clifford C.[1], Ph.D., 1969, Columbia University: The Renaissance; Shakespeare.

Martinez-Pizarro, Joaquin[5], Ph.D., 1976, Harvard University: Literary history of the Middle Ages; classical and medieval backgrounds; comparative studies.

Manning, Peter, J., Ph.D., 1968, Yale University: English Romantic literature; literary theory.

Munich, Adrienne, Ph.D., 1976, City University of New York: Victorian literature, art, and culture; feminist theory and women's studies.

Olster, Stacey[3,4], Ph.D., 1981, University of Michigan: American literature; 20th-century fiction; popular culture; film.

Rosen, Carol, Ph.D., 1975, Columbia University: Dramatic theory and criticism; dramaturgy; comparative modern drama; Renaissance drama and Shakespeare.

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

Dunn, Patricia A., D.A., 1991, The University at Albany: Composition and rhetoric; English education; disability studies.

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, Director of the English Teacher Education Program. Ph.D., 1996, Syracuse University: English education; theory, history and practice of composition-rhetoric; discourse pragmatics.

Marshik, Celia[7], Graduate Program Director. Ph.D., 1999, Northwestern University: British and American modernism, cultural studies, women's studies.

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Newman, Andrew, Ph.D., 2004, University of California, Irvine: Early American literatures; Native American studies, media and memory studies.

Phillips, Rowan Ricardo, Ph.D., 2002, Brown University: Poetry; African-American literature; Caribbean literature; the writing of poetry.

Robinson, Benedict, Undergraduate Program Director. Ph.D., 2001, Columbia University: Early modern literature and culture; representations of Islam; religion and literature; Shakespeare; Milton.

Scheckel, Susan, Ph.D., 1992, University of California, Berkeley: 19th-century American literature and culture.

Assistant Professors
Choi, Helen Onhoon, Ph.D., 2006, UCLA: 20th-century American literature, race and ethnicity, cultural studies.

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.

Pfeiffer, Douglas, Ph.D., 2005, Columbia University: Renaissance; humanism; history of literary theory and rhetoric; Erasmus; Spenser; Donne.

Ramachandran, Ayesha, Ph.D., 2008, Yale University: Early modern poetry and prose; continental influences on the English renaissance; history of ideas, especially political theory and aesthetics.

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.

Tondre, Michael, Ph.D., 2010, University of Michigan: Nineteenth-century British literature; cultural history of science; gender and sexuality studies; aesthetics.

Wakankar, Milind, Ph.D., 2002, Columbia University: Post-colonial literature and theory; vernacular literatures.

Full-time Lecturer
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.)

Mary Jo Bona (European Languages): Italian American studies; ethnic American women writers; theories of race and ethnicity.

Krin Gabbard (Comparative Literature and Cultural Studies): Film; psychoanalysis; jazz.

Lorenzo Simpson (Philosophy): Critical race theory; Frankfurt school; cosmopolitanism.

Tracey Walters (Africana Studies): African-American; African diasporic writers.

Number of teaching, graduate, and research assistants, fall 2012: 30

1) Recipient of the State University Chancellor’s Award for Excellence in Teaching, 1993. Recipient of the President’s Award for Excellence in Teaching, 1993

2) Recipient of the State University Chancellor’s Award for Excellence in Teaching, 1991

3) Recipient of the President’s Award for Excellence in Teaching, 1987

4) Recipient of the State University Chancellor’s Award for Excellence in Teaching, 1988

5) Joint appointment, Comparative Literature

6) Recipient of the President’s Award for Excellence in Teaching as Part-time Faculty, 2003 and the Students’ Choice Award for Most Influential Professor, 2004

7) Recipient of the Dean’s Award for Excellence in Graduate Teaching, 2007

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8) Recipient of the Dean’s Award for Excellence in Graduate Mentoring, 2010

9) Recipient of the Dean's Award for Excellence in Graduate Teaching, 2011

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

Fall 2013

European Languages, Literatures, and Cultures

Chairperson
Nicholas Rzhevsky, Humanities Building 1055 (631) 632-7440

Graduate Program Director
Sophie Raynard-Leroy, Humanities Building 1055, (631) 632-7440

Graduate Secretary
Mary Wilmarth, Humanities Building 1055, (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/

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 Professor, 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. 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.

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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: 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. [Program in German 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).

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

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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)

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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

Students may choose two of the three Romance languages taught at Stony Brook, with one as major and one as minor. 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 for 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.

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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

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.

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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, *Co-Coordinator of the Italian Program*, Ph.D., 1981, Harvard University: Modern Italian literature; 20th-century Italian poetry.

Kerth, Thomas A., Ph.D., 1977, Yale University: Medieval literature; Middle High German; philology; German poetry. Recipient of the State University Chancellor's Award for Excellence in Teaching, 1992.

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, *Chair*, Ph.D., 1972, Princeton University: Russian and Soviet literature; Russian theater; ideology.

Associate Professors

Bloomer, Robert K.,*Coordinator of the German Program*, Ph.D., 1990, University of Michigan: Germanic linguistics; morphology; etymology.

Fedi, Andrea, Ph.D., 1994, University of Toronto: Italian Renaissance literature; historiography.

Franco, Charles, *Co-Coordinator of the Italian Program* and *Coordinator of the Medieval Studies Program*, Ph.D., 1977, Rutgers University: Dante; medieval Italian literature.

Raynard-Leroy, Sophie, *Director of Graduate Studies*, Ph.D., 1999, Columbia University: French literature and culture; Romance philology.

Westphalen, Timothy, *Coordinator of the Slavic Languages Program* and *Coordinator of the European Studies Program*, Ph.D., 1991, Harvard University: Russian poetry; Russian symbolism; 19th-century Russian literature; Bakhtin.

Assistant Professors

Dalmas, Franck, Ph.D., 2006, University of North Carolina at Chapel Hill: French language and literature.

Gazzola, Giuseppe, Ph.D., 2008, Yale University: 19th-century Italian literature; travel literature.

Jourdain, Sarah, *Director of Foreign Language Teacher Education & The Language Learning Research Center, Coordinator of the Teacher Training Program*, Review Editor, Methods & Materials, The French Review, Ph.D., 1996, Indiana University: pedagogy and teacher training; French language.

Lecturers

Balducci, Gioacchino, Dottore in Lingue e Civiltà Orientali, 1964, Oriental Institute at the University of Naples: Italian cinema and theater.

Costa, Giuseppe,*Student Volunteer Tutoring Coordinator*, D.A., 2006, Stony Brook University: Italian language and culture.

Godfrey, Aaron W., *Coordinator of the Classics Studies Program*, M.A., 1960, Hunter College: Latin; Medieval studies.

Grenkov, Tatyana, Ph.D., 1991, SUNY Stony Brook: Comparative Studies: Medieval, Classical and European Studies.

Kang, Mathilde, Ph.D., 1998, University of Quebec.

Marchegiani, Irene, *Director of Undergraduate Studies, Coordinator of Student Teaching and Field Experience, Co-Director of the Accelerated College Education Program*, Dottore in Lettere e Filosofia, 1973, University of Florence: Italian language and literature; pedagogy.

Morena, Antonio, BA/MA, 1997-1998, Middlebury College, Dottore in Lettere, 2003, Università di Firenze, Ph.D., 2009 Harvard University.

Sanou, Sini Prosper, *Coordinator of the French Program*, Ph.D., 1992, University of Minnesota: French language and pedagogy.

Turan, Madeline, *Co-Director of the Accelerated College Education Program*, M.S., 1975, Long Island University: foreign language pedagogy; French.

Viola Grosse-Middledorf, Birgit, D.A., 1990, Stony Brook University: German language and culture; business German.

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Affiliated Faculty

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, Coordinator of American Studies, Ed.D., transnationalism

Harvey, Robert, *Department of Cultural Analysis and Theory, Professor*, Ph.D., 1988, University of California at Berkeley: contemporary French and Maghrebian Francophone literature; critical theory; film. Recipient of the State University Chancellor's Award for Excellence in Teaching, 1996.

Hurley, E. Anthony, *Department of Africana Studies, Associate Professor*, Ph.D., 1992, Rutgers University: francophone literature of the Caribbean and Africa; 19th-century French literature.

Petrey, Sandy, *Department of Comparative Studies, Professor*, Ph.D., 1966, Yale University: 19th-century French literature; comparative literature; literary theory.

Reich, Jacqueline, Ph.D., 1994, University of California at Berkeley: modern Italian literature; Italian film studies.

Repetti, Lori, *Department of Linguistics, Associate Professor*, Ph.D., 1989, University of California, Los Angeles: Romance linguistics; Italian dialectology; history of the Italian language.

Roncero López, Victoriano, *Department of Hispanic Languages, Professor*, Ph.D., 1988, University of Illinois at Urbana-Champaign: Golden Age literature; Quevedo studies, picaresque novel; 16th-century Spanish poetry.

Rubin, James, Department of Art, Ph.D., 1972, Harvard University: 18th and 19th century art; and politics.

Volat, Hélène, *Head of Information and Reference Services, Lecturer*, M.A., 1973, Stony Brook University, M.L.S., 1983, Long Island University, C.W. Post: Humanities bibliography; research methods.

Emeriti Faculty

Allentuch, Harriet, Emerita, Ph.D., Columbia University: 17th-century French literature.

Blum, Carol, Emerita, Ph.D., 1966, Columbia University: 18th-century French literature; literature of the French revolution.

Elling, Barbara, Emerita, *SUNY Distinguished Teaching Professor*, Ph.D., 1971, New York University: Romanticism; German cultural studies. Recipient of the State University Chancellor's Award for Excellence in Teaching, 1973.

Tursi, Joseph, Emeritus, Ph.D., 1965, CUNY: Italian language and culture; pedagogy.

Weinreb, Ruth Plaut, Emerita, Ph.D., 1966, Columbia University: 18th-century French literature.

Zimmermann, Eléonore M., Emerita, Ph.D., 1956, Yale University: 17th- and 20th-century French literature; comparative studies.

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

Fall 2013

Genetics Department

Graduate Program Director
Martha Furie, (631) 632-4232

Graduate Program Coordinator
Kathryn Bell, Life Sciences Building, Room 130 (631) 632-8812

Degree Awarded
Ph.D. in Genetics;

Web Site
http://life.bio.sunysb.edu/gen/

Genetics Department

The Graduate Program in Genetics was created as an inter-institutional program, focusing and combining the strengths in genetics at Stony Brook University, Cold Spring Harbor Laboratory, and Brookhaven National Laboratory. With the resources and faculty drawn from all three institutions, the program offers an exceptional variety of research topics and experimental systems for graduate study. The curriculum is designed to expose students to many different areas of specialization within the broad field of genetics including, but not limited to, molecular genetics, developmental genetics, genomics and bioinformatics, evolutionary genetics, and human genetics. This experience ensures that the student will be prepared to take maximum advantage of the broad range of challenges that may be encountered after graduation. The breadth of the Graduate Program in Genetics draws entering pre-doctoral trainees from throughout the world, with varied backgrounds and many different research interests. This enriches the Genetics Program as a whole and enhances student peer interactions.

The first year student experience includes several core courses that provide a foundation for further study. In addition, each student conducts three or four laboratory rotations selected by the student from nearly 100 different faculty labs. These rotations allow the student to gain firsthand knowledge of the methods and approaches taken by each laboratory and provide a basis for selecting a thesis research advisor. Students are expected to join a laboratory within their first year so they may begin to develop their own research project during their second year of study.

All Genetics students further broaden their knowledge by participating in journal clubs on thematic topics that are offered by faculty, and by taking elective courses from offerings both within and outside the Genetics Program. The specific elective course or courses taken by a student are determined in conjunction with a faculty advisor to best meet the student's particular needs. Trainees participate in two ongoing research seminar series throughout their graduate studies. A student research seminar provides each trainee with a regular opportunity to present his or her work to colleagues and to faculty. Students also attend research seminars given by internal and visiting faculty in order to keep abreast of the latest developments and potential areas of future excitement in the field of genetics. Students are encouraged to attend and participate in research seminars at all three institutions, to take full advantage of the diverse interests and opportunities for collaboration within the program. Most thesis advisors also hold internal lab research seminars in which students present and discuss their latest findings.

Admission requirements of Genetics Department

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 2010-2011 academic year is $26,500. 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 Department

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 faculty in the Departments of Medicine, Molecular Pathology and Immunology, and Pharmacological Sciences and Physiology and Biophysics. In addition to the Departments, 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 four interdepartmental thematic research centers: The Centers for Developmental Genetics, Infectious

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Diseases, Brain and Spinal Cord Research, 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 between Stony Brook scientists with common interest in these areas of modern biology, irrespective of their departmental affiliation.

Cold Spring Harbor 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 unique 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 phenomenon. 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. Graduate Biochemistry (MCB 520)

4. Cell Biology (MCB 656)

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 thesis 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 one or more elective courses, for a minimum total of 3 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.

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B. Comprehensive (Preliminary) Qualifying Examination
At the beginning of the fourth semester, students will take a written comprehensive (preliminary) examination covering diverse areas of genetics which tests each student's ability to read and interpret primary scientific literature.

C. Thesis Proposal Examination
After successful completion of the comprehensive (preliminary) examination, the student prepares a written proposal for the thesis research project. This proposal has a format of a grant application, including information of 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 thesis 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 thesis proposal defense should occur during the fifth semester of graduate study. Generally, the faculty who participate in a student's thesis proposal examination committee then join with the thesis advisor to form the student's thesis advisory committee.

D. Advancement to Candidacy
After successful completion of all required and elective courses, the comprehensive (preliminary) examination, and the thesis proposal examination, the student will be recommended to the Graduate School for advancement to candidacy. Each student must meet with his/her Thesis 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 thesis 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 examining committee and by other members of the audience.

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. 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 Genetics Department

Distinguished Professors

Benach, Jorge[3], Ph.D., 1971, Rutgers University: Host response to bacterial infections.

Grollman, Arthur[6], M.D., Johns Hopkins University: DNA damage, mutagenesis and repair; chemical carcinogenesis.

Lennarz, William J.[2], Ph.D., 1959, University of Illinois: Biosynthesis and function of glycoproteins in cell-cell interactions.

Rubin, Clinton[9], Ph.D., 1983, Bristol University: Physical factors influencing bone, cell, and tissue kinetics; treatments.

Sternglanz, Rolf[2], Ph.D., 1967, Harvard University: Chromatin structure and function in yeast; histone modifying enzymes.

Wimmer, Eckard[3], 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[5], M.D., 1980, Massachusetts Medical Center: Human genetics; gene therapy; genetic disorders of hemostasis and thrombosis.

Bell, Michael[4], Ph.D., 1976, University of California, Los Angeles: Evolutionary genetics.

Bingham, Paul[2], Ph.D., 1979, Harvard University: Regulation of differentiation; transposable elements; regulation of splicing.

Bliska, James B.[3], Ph.D., 1988, University of California, Berkeley: Molecular and cellular basis of bacterial-host cell interactions.

Bogenhagen, Daniel[6], M.D., 1977, Stanford University: Molecular biology of oocyte development.

Brown, Deborah[2], Ph.D., 1987, Stanford University: Structure and function of sphingolipid and cholesterol-rich membrane domains.

Carter, Carol A.[3], Ph.D., 1972, Yale University: HIV and retroviral asembly and replication.

Chen, Wen-Tien[5], Ph.D., 1979, Yale University: Proteases and integrins in cancer invasion, metastasis and angiogenesis.

Citovsky, Vitaly[2], Ph.D., 1987, Hebrew University, Jerusalem: Nuclear transport and intercellular communication in plants.

Dean, Neta[2], Ph.D., 1988, University of California, Los Angeles: Protein glycosylation, fungal cell wall biosynthesis; fungal pathogenesis.

Deutsch, Dale G., Ph.D., 1972, Purdue University: Metabolism and uptake of the endocannabinoids (anandamide and 2-AG).

Eanes, Walter[4], Ph.D., 1976, University at Stony Brook: Molecular evolution, phylogenetic analysis, population genetics.

Frohman, Michael[6], M.D., Ph.D., 1985, University of Pennsylvania: Lipid signaling; vesicle trafficking and fusion; mitochondrial fusion, myogenesis.

Furie, Martha B.[8], Ph.D., 1980, Rockefeller University: Interactions among endothelial cells, leukocytes, and pathogenic bacteria.

Futcher, A. Bruce[3], D.Phil., 1981, University of Oxford: Cell cycle control, microarrays, genomics.

Gergen, J. Peter[2] Ph.D., 1982, Brandeis University: Pattern information and the regulation of gene expression during *Drosophila* development.

Ghebrehiwet, Berhane[5], D.V.M./D.Sc., 1974, University of Paris, France: Biochemistry; role of complement C1q receptors during infection and inflammation.

Hearing, Patrick[3], Ph.D., 1980, Northwestern University: Viral molecular genetics; eukaryotic transcriptional regulation; gene therapy.

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Konopka, James[3], Ph.D., 1985, University of California, Los Angeles: G-protein coupled receptor signal transduction; fungal pathogenesis (*Candida albicans*).

Kritzer, Mary[1], Ph.D., 1989, Yale University: Sex differences in cortical microcircuitry.

Mackow, Erich R. [3], Ph.D., 1984, Temple University: Viral regulation of cell signaling responses; Hantavirus, Influenza, Dengue and Rotavirus pathogenesis.

Malbon, Craig[6], Ph.D., 1976, Case Western Reserve University: Signal transduction and gene regulation in differentiation and development; Roles of G proteins.

Marcu, Kenneth B.[2], Ph.D., 1975, University at Stony Brook: NF-kappaB kinase signaling in stress, immunity and cancer; Mechanisms of action of AID in adaptive immune responses.

Marshall, Nancy Reich, Ph.D., 1983, University at Stony Brook: Signal transduction and activation of gene expression by cytokines; cellular defense responses to viral infection.

Mendell, Nancy, [11],Ph.D., 1972, University of North Carolina at Chapel Hill: Biostatistics.

Moll, Ute[8], M.D., 1985, University of Ulm: Tumor suppressor genes; role of p53 in human cancer.

Reinitz, John[11], Ph.D., 1988, Yale University: Computational biology; modeling of gene regulatory networks.

Smith, Steven O.[2], Ph.D., 1985, University of California, Berkeley: Structure and function of membrane proteins.

Thomsen, Gerald[2], Ph.D., 1988, Rockefeller University: Embryonic developmental mechanisms, regeneration, stem cells and the evolution of developmental processes.

Associate Professors

Canli, Turhan[13], Ph.D., 1993, Yale University: Biopsychology, Neural and genetic basis of emotion and cognition.

Crawford, Howard[6], Ph.D.: University of Texas Southwestern Medical Center at Dallas: Pancreatic cancer.

Hadjiargyrou, Michael[9], Ph.D., 1992, City University of New York: Human molecular genetics; functional genomics; molecular mechanisms of bone development and regeneration.

Hatchwell, Eli[5], M.D., 1985 University of Cambridge; Ph.D., 1995 University of Oxford,
Sporadic human genetic disease; genomics.

Holdener, Bernadette[2], Ph.D., 1990, University of Illinois: The role of protein folding and *O*-fucosylation during embryonic development and stem cell differentiation.

Hollingsworth, Nancy[2], Ph.D., 1988, University of Washington, Seattle: Regulation of meiotic recombination in yeast.

Karzai, Wali[2], 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[1], Ph.D., 1990, University of Wisconsin: Genetics of touch and hearing in *Drosophila*; ciliogenesis and ciliarysignaling.

Leatherwood, Janet[3], Ph.D., 1993, Johns Hopkins University: Cell cycle control of DNA replication.

Neiman, Aaron[2], Ph.D., 1994, University of California, San Francisco: Vesicle trafficking and intracellular signaling in yeast.

Sirotkin, Howard[1], Ph.D., 1996, Albert Einstein: Specification and patterning of the neural plate; vertebrate developmental genetics.

Thanassi, David[3], Ph.D., 1995, University of California, Berkeley: Biogenesis of bacterial adhesion organelles.

True, John R.[4], Ph.D., 1995, Duke University; Evolutionary and developmental genetics of color patterning in *Drosophila*.

Tsirka, Stella[6], Ph.D., 1989, Aristotelian University of Thessaloniki, Greece: Tissue

plasminogen activator in the mammalian hippocampus; neuronal-microglial interactions.

White, Thomas[12], Ph.D., 1994, Harvard Medical School: Gap junction functions defined by genetic diseases and gene knockouts.

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Assistant Professors

Carpino, Nicholas[3], Ph.D., 1997, Stony Brook University: Positive and Negative Regulation of T Cell Receptor Signaling

Cohen, J. Craig[14], Ph.D., 1976, University of Mississippi Medical Center: Molecular genetics and physiology, gene therapy.

Colognato, Holly[6], Ph.D., 1999, Rutgers University: Extracellular matrix in the brain: roles during development and during neurodegeneration.

Czaplinski, Kevin[2], Ph.D.,1999, UMDNJ-Robert Wood Johnson Medical School; Post transcriptional control of gene expression in the nervous system.

Davalos, Liliana M.[4], Ph.D., 2004, Columbia University: conservation biology, climate change, phylogeny.

Ge, Shaoyu[1], Ph.D., University of Science and Technology.of China: Molecular mechanisms and function of new neurons in the brain.

Hsieh, Jen-Chih[2], Ph.D., 1994, Duke University: The molecular mechanism of Wnt signaling

Krug, Laurie, Ph.D., 2001, Emory University: Virus-host interactions during chronic gammaherpesvirus infection.

Rest, Joshua S.[4], Ph.D. 2004, University of Michigan: Regulatory evolution; protein network evolution; bioinformatics.

Takemaru, Ken-Ichi[6], Ph.D. Graduate University for Advanced Studies, Japan: Wnt Signaling in Development and Disease.

van der Velden, Adrianus[3], Ph.D., 2000, Oregon Health and Science University : Salmonella pathogenesis.

Zong, Wei-Xing[3] , Ph.D., 1999, UMDNJ - Robert Wood Johnson Medical School, New Jersey: Molecular regulation of apoptotic and necrotic cell death.

Adjunct Faculty at Cold Spring Harbor Laboratory

Dubnau, Josh, Assistant Professor. Ph.D., 1995 Columbia University, Learning, memory, genetics, behavior.

Enikolopov, Grigori, Associate Professor. Ph.D., 1978, USSR Academy of Sciences: Stem cell; neurogenesis; development; signal transduction.

Gingeras, Thomas R., Professor, Head of Functional Genomics, Ph.D., 1976, New York University: Genome-wide organization of transcription and the functional roles of non-protein coding RNAs.

Hannon, Gregory, Professor. Ph.D., 1992, Case Western Reserve University: Growth control in mammalian cells; post-transcriptional gene silencing.

Huang, Z. Josh, Professor. Ph.D., 1994, Brandeis University: Neuroscience; experience-dependent development of the neocortex; mouse genetics; neurotrophins.

Jackson, David, Professor. Ph.D., 1991, East Anglia, England: Plant development; genetics, cell-to-cell mRNA, and protein trafficking.

Joshua-Tor, Leemor, Professor. Ph.D., 1990, Weizmann: 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; pre-mRNA splicing mechanisms, fidelity and genetic diseases; alternative splicing; RNA-protein interactions; cell-free systems

Lazebnik, Yuri, Professor. Ph.D., 1986, St. Petersburg State University: Apoptosis; caspases; cancer chemotherapy; proteases

Li, Bo, Assistant Professor, Ph.D., 2003, The University of British Columbia: neuroscience; glutamanergic synapse; synaptic plasticity; schizophrenia; depression; rodent models of psychiatric disorders.

Lowe, Scott, Professor. Ph.D., 1994, Massachusetts Institute of Technology: Modulation of apoptosis; chemosensitivity; senescence by cancer genes.

Lucito, Robert, Assistant Professor, Ph.D., 1993, New York University: Genome microarrays; copy number fluctuation; cancer genomics; amplification; deletion; oncogene; tumor suppressor.

Martienssen, Robert, Professor. Ph.D., 1986, University of Cambridge: Plant genetics; transposons; development; gene regulation; DNA methylation.

McCombie, W. Richard, Professor. Ph.D., 1982, University of Michigan: Genome structure; DNA sequencing; computational molecular biology; Human Genome Project.

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Mills, Alea, Associate Professor. Ph.D., 1997, University of California, Irvine: Functional genomics; tumorigenesis; development.

Muthuswamy, Senthil, Associate Professor. Ph.D., 1995, McMaster University: Understanding cancer initiation using 3-D epithelial structures.

Powers, Scott, Associate Professor, Ph.D., 1983, Columbia University: Cancer gene discovery; cancer diagnostics and therapeutics; cancer biology

Sebat, Jonathan, Assistant Professor, Ph.D., 2002, University of Idaho: Copy number variation; segmental duplication; genetics; neurogenetics; ROMA; microarray

Sordella, Raffaella, Assistant Professor, Ph.D., 1998, University of Turin: Molecular therapeutics, signal transduction.

Spector, David L., Professor. Ph.D., 1980, Rutgers University: Cell biology; gene expression; nuclear structure; microscopy; non-coding RNAs.

Stenlund, Arne, Associate Professor. Ph.D., 1984, Uppsala, Sweden: Papillomavirus; cancer; DNA replication.

Stillman, Bruce, Professor. Ph.D., 1979, Australian National University: DNA replication; chromatin assembly; biochemistry; yeast genetics; cancer; cell cycle.

Timmermans, Marja, Professor. Ph.D., 1996, Rutgers University: Small RNA regulation, pattern formation, stem cell function, plant development.

Trotman, Lloyd, Assistant Professor, Ph.D., 2001, University of Zurich: Molecular mechanisms of tumor suppression; cancer modeling and treatment; molecular cancer visualization; PTEN regulation.

VanAelst, Linda, Professor. Ph.D., 1991, Leuven, Belgium: Signal transduction; Ras and Rho proteins; tumorigenesis; neuronal development.

Wigler, Michael H., Professor. Ph.D., 1978, Columbia University: Genomics; cancer genes; signal transduction; yeast genetics; bioinformatics.

Zhang, Michael Q., Professor. Ph.D., 1987, Rutgers University: Computational genomics; statistical pattern recognition; gene expression and regulation.

Zhong, Yi, Professor. Ph.D., 1991, University of Iowa: Neurophysiology; *Drosophila*; learning and memory; neurofibromatosis; signal transduction.

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Research Faculty at Brookhaven National Laboratory
Anderson, Carl W., Biology Chairman, Ph.D., 1970, Washington University: Molecular biology of adenovirus assembly; protein synthesis.

Dunn, John J., Senior Microbiologist. Ph.D., 1970, Rutgers University: Transcription, processing, and translation of RNA.

Freimuth, Paul I., Scientist, Ph.D. 1986, Columbia University: Mechanism of adenovirus entry into cells; role of cell adhesion molecules.

Fu, Dax, Biochemist, Ph.D., 1996, Mayo Graduate School of Medicine: Structures of representative channel and transporter proteins.

Henn, Fritz A., Senior Scientist and Associate Laboratory Director for Life Sciences, Ph.D., 1967. The Johns Hopkins University School of Medicine, M.D., 1971, University of Virginia: Cell circuits and genes, pathology of depression.

Number of teaching, graduate, and research assistants, Fall 2009: 50

1) Department of Neurobiology and Behavior

2) Department of Biochemistry and Cell Biology

3) Department of Molecular Genetics and Microbiology

4) Department of Ecology and Evolution

5) Department of Medicine

6) Department of Pharmacological Sciences

7) Department of Oral Biology and Pathology

8) Department of Pathology

9) Department of Orthopaedics

10) Department of Computer Sciences

11) Department of Applied Mathematics and Statistics

12) Department of Biophysics and Physiology

13) Department of Psychology

14) Department of Pediatrics, Neonatology

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

Fall 2013

Geosciences Department

Chairperson
Richard J. Reeder, Earth and Space Sciences Building 252 (631) 632-8139

Graduate Program Director
Brian Phillips, Earth and Space Sciences Building 240 (631) 632-6853

Graduate Coordinator
Yvonnne Barbour, Earth and Space Sciences Building 255 (631) 632-8554

Web Address
www.geosciences.stonybrook.edu

Degrees Awarded
M.S. in Geosciences; Ph.D. in Geosciences; M.A.T. in Earth Sciences

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

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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 of 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

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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.

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.

Admission requirements for Geosciences Department

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 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.

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 503 Mineral Equilibria

GEO 507 Petrogenesis

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GEO 514 Physical Hydrogeology

GEO 515 Geohydrology

GEO 517 Crystal Chemistry

GEO 518 Carbonate Sediments

GEO 519 Geochemistry of Natural Waters

GEO 521 Isotope and Trace Element Geology

GEO 524/ MAR 524 Organic Contaminant Hydrology

GEO 526 Low-Temperature Geochemistry

GEO 533 Geochemistry of the Solid Earth

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 Hydromechanical Behavior of Geomaterials

A number of other 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 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 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

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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.

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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 562/AMS 564 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.A.T. Degree in Earth Science

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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
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.

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.

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.

Distinguished Service Professors
Hanson, Gilbert N., Ph.D., 1964, University of Minnesota: Application of radiometric and geochemical methods to petrologic and tectonic problems.

Liebermann, Robert C., Ph.D., 1969, Columbia University: Mineral physics; elastic and anelastic properties of rocks and minerals and their applications to the Earth's interior.

Professors
Davis, Daniel M., 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.

McLennan, Scott M., Ph.D., 1981, Australian National University: Geochemistry of sedimentary rocks; sedimentary petrology.

Nekvasil, Hanna, Undergraduate Program Director, Ph.D., 1986, Pennsylvania State University: Experimental and thermodynamic investigations of mineral/melt equilibria in silicic magmas.

Reeder, Richard J., Department Chair, 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.

Wong, Teng-fong, Ph.D., 1980, Massachusetts Institute of Technology: Experimental rock physics; fault mechanics.

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.

Phillips, Brian L., Graduate Program Director. Ph.D., 1990, University of Illinois at Urbana-Champaign: Aqueous geochemistry, NMR spectroscopy, mineralogy and structural chemistry of silicates and other oxides.

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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

Rasbury, E. Troy, Ph.D., 1998, Stony Brook University: Sedimentary geochemistry; geochronology; chronostratigraphy.

Glotch, Timothy, Ph.D., 2004, Arizona State University: Planetary geology; remote sensing; Martian surface mineralogy.

Assistant Professor

Rogers, Andrea Deanne, Ph.D., 2005, Arizona State University: Remote sensing; planetary surface processes; GIS.

Sperazza, Michael, Ph.D.,2006, University of Montana, Paleoclimatic change over the Pleistocene and Holocene

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
Krause, David W.[2], Ph.D., 1982, University of Michigan: Vertebrate paleontology; mammalian evolution, including primates.

Professors
Bokuniewicz, Henry J.[1], Ph.D., 1976, Yale University: Marine geophysics.

Cochran, J. Kirk[1] , Ph.D., 1979, Yale University: Marine geochemistry; use of radionuclides as geochemical tracers; diagenesis of marine sediments.

Flood,Roger D.[1], Ph.D., 1978, Massachusetts Institute of Technology, Woods Hole Oceanographic Institution: Marine geology; sediment dynamics; continental margin sedimentation.

Harbottle, Garman[3], Ph.D., 1949, Columbia University: nuclear chemistry, archeology.

Research Associate Professors
Li, Baosheng[4], Ph.D., 1996, SUNY Stony Brook: mineral physics, elasticity of minerals, high-pressure research.

Vaughan, Michael T.[4], Ph.D., 1979, SUNY Stony Brook: experimental geophysics, crystallography, synchrotron X-ray studies

Assistant Professor
O'Leary, Maureen [2], Ph.D., 1997, Johns Hopkins: vertebrate paleontology, phylogenetic systematics, mammalian evolution.

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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.

Geospatial Science (GSS)

The Geospatial Science program is part of the Sustainability Studies Program.

Sustainability Studies Program Director
Heidi Hutner, W0511 Melville Library, (631) 632-5360

Graduate Program Director
Michael Sperazza, Earth and Space Sciences 340, (631) 632-1687

Graduate Coordinator
Ginny Clancy, W0511 Melville Library, (631) 632-9404

Web Address
http://www.stonybrook.edu/commcms/gss/

Degrees Awarded
Advanced Graduate Certificate

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 design 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 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 or a bachelor's degree with a cumulative grade point average of 2.75 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):

GIS513 GIS Fundamentals I, 3cr or GEO513 or MAR587

GIS525 GIS Fundamentals II, 3cr or GEO525

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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

GEO540 Geological Applications of Remote Sensing

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.

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Health and Rehabilitation Sciences

Chairperson: Richard Johnson, L2-419 Health Sciences Center, Stony Brook, NY 11794-8201, (631) 634-3251

Graduate Program Director: Sue Ann Sisto, SUITE BUILDING SEVENTEEN, Stony Brook, NY 11794-6018 (631) 634-6014

Interim Coordinator: Margaret Sheryll, 400 Health Sciences Center, Stony Brook, NY 11794-8201, (631) 634-6057

Website: http://healthtechnology.stonybrookmedicine.edu/programs/hrs.

Description of the program can be found at: http://healthtechnology.stonybrookmedicine.edu/programs/hrs/about
Information regarding Admissions can be found at: http://healthtechnology.stonybrookmedicine.edu/programs/hrs/admissions
Facilities information can be found at http://healthtechnology.stonybrookmedicine.edu/programs/hrs/admissions/techstandards
Requirements information can be found at: http://healthtechnology.stonybrookmedicine.edu/programs/hrs/admissions/requirements
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.

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Program and admissions information can be found online at http://www.stonybrook.edu/spd/hea/

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

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Hispanic Languages and Literature

Chairperson
Kathleen Vernon , Frank Melville Jr. Memorial Library N3022 (631) 632-9668

Graduate Program Director
Adrian Perez-Melgosa, Frank Melville Jr. Memorial Library N3013

Graduate Coordinator
Joann Broderick, Frank Melville Jr. Memorial Library N3017 (631) 632-6959

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/

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. The M.A. degree may emphasize either literary or linguistic research or language teaching. 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 a maximum of three years for Ph.D. students entering with an M.A. or equivalent, or four years for Ph.D. students entering with a B.A. or equivalent. Students who are ABD (all but dissertation) may be eligible for a fifth year in certain circumstances. 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 urges people to take it, but students 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 students who do not speak English as a native language, any new or transfer Ph.D. students, supported Masters students and students for whom the TOEFL has been waived as a requirement for admissions must take the English proficiency exam or SPEAK (Speaking Proficiency English Assessment Kit) test. SPEAK scores lower than 55 may require a student to take an ESL class(es) or be ineligible to teach. A recent TSE or IELTS exam can be substituted for the SPEAK test. The ESL Program from the Linguistics Department gives this exam, which is administered by appointment only. Students must score at least 55 points or higher to satisfy Stony Brook's English proficiency requirements.

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

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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.

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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. 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.

Students select their five Spanish content area courses in consultation with the Graduate Director. Upon approval of the Graduate Director additional courses may become part of the students content area but those listed below are the most suitable for the MAT program:

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 (a repeatable topics course)

SPN 515 Spanish composition and stylistics

SPN other 500-level courses in literature (in consultation with the Graduate Director)

SPN 691 Practicum in Teaching Spanish

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. Linguistics/Pedagogy (a minimum of two courses), Applied Linguistics, History of the Spanish Language, Translation, Practicum

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, Catalán, Basque and another language if related to the field chosen for the dissertation. The student is urged

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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
The student, with the advice of the graduate program director, will choose four members of the Hispanic department faculty, one of whom will act as chairperson of the committee for his or her comprehensive examination. The comprehensive examination is an oral exam based on a list of texts chosen by the student in conjunction with all members of his or her committee who must formally approve the lists. The total (minimum) number of texts for the exam will be 60. The Spanish portion will include six books in each of four categories and a minimum of six theoretical texts, the Latin American section will include eight books in each of three categories and a minimum of six theoretical texts. In selecting the lists, students should strive for balance among genres. After obtaining the written approval of each member of his or her exam committee, the student will submit his or her list to the graduate director, who will then approve the list or suggest modifications if necessary. This process must be completed one month before the proposed date for the exam.

Categories for Comprehensive Exam:

I. Peninsular

a. Medieval to Early Renaissance

b. Renaissance and Baroque

c. 18th and 19th century (up to the Generation of '98)

d. 20th and 21st century

II. Latin America

a. Colonial

b.19th-Century and Modernism

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c. Contemporary

The oral comprehensive exam will last a total of three hours, with approximately an hour and a half devoted to each section with a brief break between the two sections. The exam will be conducted in Spanish or English. Upon satisfactory completion both sections of the exam, the student will be granted ABD status.

Dissertation Proposal
During the comprehensive exam, students will be expected to announce the topic of their dissertation and their dissertation advisor. The dissertation proposal will be presented to each member of the dissertation committee within three months following successful completion of the comprehensive exam. The proposal should be composed of three parts: (1) an introduction and description of the project consisting of approximately 10-20 pages; (2) a table of contents listing proposed chapters; and (3) a detailed bibliography of primary and critical sources. A copy of the proposal containing the signatures of the dissertation committee should also be forwarded to the graduate director.

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 in writing 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.

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Faculty of Hispanic Languages and Literature Program

Professors

Charnon-Deutsch, Lou[1,3,4], 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.

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.

Lastra, Pedro, Emeritus, Ph.D., 1967, Universidad de Chile: Modern and contemporary Spanish-American literature.

Vasvari, Louise. Emeritus[1], Ph.D., 1969, University of California, Berkeley: Medieval literature, translation theory; literature and linguistics, romance philology.

Associate Professors

Firbas, Paul [5],Ph.D., 2001, PrincetonUniversity: Colonial Latin American Literature, Modernity in Perú, Textual Criticism.

Flesler, Daniela[3], Ph.D., 2001, Tulane University: Contemporary Spanish literature, postcolonial theory, cultural studies.

Vernon, Kathleen M.[3, 4, 5], Ph.D., 1982, University of Chicago: 20th-century Spanish and Latin American literature, cinema and popular culture, gender and cultural studies.

Klein-Andreu, Flora, Emeritus, Ph.D., 1972, Columbia University: Linguistic meaning, language evolution and variation, relation between theory and research methods.

McKenna, James B., Emeritus. Ph.D., 1965, Harvard University: 20th-century Hispanic culture and literature.

Assistant Professors

Burgos-Lafuente, Lena[5], Ph.D., 2011, New York University: Latin American and Caribbean literature, poetry, literary politics, Transatlantic literature.

Pérez-Melgosa, Adrián[3, 5], Ph.D.,1995, University of Rochester: Film and literature in the Americas, cultural studies, film studies.

Visiting Assistant Professor

Uriarte, Javier, Ph.D. 2012, New York University: 19th century Latin American literature and culture; travel writing, war and state-sponsored violence.

Director of the Spanish Language Program

Ruiz-Debbe, Lilia, Ph.D., 1997, University of Geneva, Switzerland: Applied linguistics, second language research, and language pedagogy.

Lecturers

Davidiak, Elena, M.A., 2004Northern 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 2012: 17

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's 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.

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History Department

Chairperson
Gary Marker, Ward Melville Social and Behavioral Sciences Building N-309 (631) 632-7510/-7500

Graduate Program Director
Shirley Lim, Ward Melville Social and Behavioral Sciences Building S-345 (631) 632-7515

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://history.sunysb.edu/

Description of the History Department

The Department of History has a faculty of 33 distinguished researchers and teachers. Each year we admit 9 to 12 students into the doctoral program and 4-6 students into the terminal master's program. The department currently has approximately 100 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 follow the same basic course of study as that followed by doctoral students during their first year, and the oral examination 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.

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 M.A. and Ph.D. programs for study beginning in the fall semester.

Requirements for the M.A. Degree in History

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

A. Coursework

1. Core Seminar (HIS 525/HIS 526, 3 credits each semester): This course provides an intensive, year-long introduction to historical theory and research and familiarizes students with the thematic organization of the Stony Brook graduate program. All full-time students in the master's and doctoral programs are required to take this course, which is offered only as a fall/spring sequence, during their first year.

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2. Two 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: Europe, U.S., Latin America, and Asia. These courses include HIS 501/HIS 502, HIS 521/HIS 522, HIS 541/ HIS 542, and HIS 561/HIS 562. These courses are offered, at a minimum, on a two-year cycle, though many of these are offered each year. Students choosing to concentrate in the history of a specific region are encouraged, but not required, to complete both parts of the field seminar sequences 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. These seminars are offered in the following areas: (1) Gender, Race, and Sexuality; (2) Nation-State, Civil Society, and Popular Politics; (3) Empire, Colonialism, and Globalization; and (4) Environment, Health, Science, and Technology. 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. Four Electives (3 credits each): The remaining 12 credits can be selected from Field Seminars, Theme Seminars, the graduate courses offered in conjunction with other departments (e.g., sociology, Africana studies, and comparative literature and cultural studies), and workshops.

B. Language Requirement
Master's students with a concentration in European history must pass a written exam in an appropriate foreign language, and masters 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 masters degree.

C. Oral Examination
By the second semester in the program the student in consultation with her/his advisor should name one other member of the department to be on her/his examination committee. The two-person committee will help the student define her/his examination field based on her/his coursework and reading in the program.

The oral examination is taken at the end of the student's course of study. By the end of the semester that precedes the examination, the student shall present a list of books and topics to both members of the examining committee. At that time the committee shall advise the student of any additional reading to be completed before the examination. This reading may be completed as part of an Orals Workshop during the semester of the examination. The student should see the Graduate Program Coordinator to set the time and date of the examination. The committee will grade the examination "pass with distinction," "pass," or "fail."

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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 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.

The first phase of 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 "advancement to candidacy" 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, as well as Field, Theme, and Research seminars. 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 525/HIS 526, HIS 524/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 masters and doctoral programs 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) are offered frequently. In addition, 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). Some of these Field Seminars are populated with students in the Masters 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.

Most of these Field courses are offered on a one- or two-year cycle, though some are offered less frequently. 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 themes. 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, "Text and Context," 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 must register for this course.

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 advisor. Completion of the workshop and the dissertation prospectus 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. Reading Workshops (3 credits each): 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 with an individual faculty member 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 the 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 areas in their major geo-political field, and one examiner 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 affinity 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, and Comparative Literature and Cultural Studies, as well as such interdisciplinary programs as Women's 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.

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Below is a sample course of study that might be followed by a first-year student without a master's degree who also holds a teaching assistantship. (New students 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 to register for only 9 credits per semester.):

Fall	Credits	Spring	Credits
Core Seminar I (HIS 525)	3	Core Seminar II (HIS 526)	3
Field Seminar	3	Supervised Teaching (HIS 581)	3
Teaching Practicum (HIS 582)	3	Theme Seminar	3
Theme Seminar	3	Reading Workshop	3
Total	**12**		**12**

B. Full-time Status
Students who have not yet advanced to G4 status are required to take 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 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
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 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, and in consultation with that 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 course work, as well as monitor the student's progress on the dissertation. In some cases, the committee will review and endorse the student's dissertation prospectus, as well.

The student's Oral Exam Committee must be submitted and approved by the Graduate School at least three weeks prior to the exam. The "Statement of Fields" form is available in the Graduate Program Coordinator's Office. 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 have been met. Students should check with Roxanne Fernandez, our Graduate Coordinator, to make sure his/her 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 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 dissertation 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 until the dissertation. Teaching assistants will register for 9 credits of Research for the Ph.D. (HIS 699). The student must present the completed dissertation in such

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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.

The dissertation is the basic requirement for the conferral of the Ph.D. The completed dissertation must be in the hands of the committee *at least* one full month before the scheduled date of the dissertation defense. Ideally, the dissertation committee has one or two months to read and correct the dissertation and to give the student their written criticisms and suggestions. These 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 the 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 Advisor and one faculty member outside the field of History or the institution of Stony Brook. The Defense is also open to interested students and faculty. The Graduate School must give advanced approval of the Dissertation Committee. (The same form used for the oral exam will be used for the defense. These forms are available in the Graduate Program Coordinator's Office and must be forwarded to the Graduate School at least ONE MONTH BEFORE the scheduled date of the defense.) All the paperwork for both the Oral Exam and Dissertation Defense must go through the History Department's Graduate Coordinator.

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.

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.

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.

Sanderson, Warren., Ph.D., 1974, Stanford University (joint appointment with Economics): U.S. economic history; demography.

Schäfer, Wolf, Dr. Phil., 1983, University of Bremen, Germany: history of technoscience, social history, and global history.

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^{th}-19^{th} centuries; cultures of imperialism; gender studies; cultural, feminist, and postcolonial theory.

Zimansky, Paul, Ph.D., 1980, University of Chicago: Ancient Near East.

Associate Professors
Cash, Floris B., Ph.D., 1986, Stony Brook University: African-American history; African-American women's studies.

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.

Frohman, Larry, Ph.D. 1992, University of California, Berkeley: European intellectual history; history of welfare and social policy; social studies education.

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.

Lim, Shirley, Ph.D., 1998, UCLA: Asian American women's cultural history.

Lipton, Sara, Ph.D., 1991, Yale University: Medieval cultural and religious history, Jewish-Christian relations, gender.

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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, 19th century.

Mimura, Janis, Ph.D., 2002, University of California, Berkeley: Japan.

Owens, Leslie H., Ph.D., 1972, University of California, Riverside: African-American history; U.S. southern history.

Rilling, Donna J., Ph.D., 1993, University of Pennsylvania: Early national U.S. history; business, legal, urban and labor 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.

Zolov, Eric, Ph.D., Ph.D., 1995, University of Chicago: Modern Latin America, U.S.-Latin American relations, popular culture, global 1960s.

Assistant 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.

Flores, Lori, Ph.D., 2011, Stanford University: U.S. history; immigration, ethnicity, and civil rights; labor history; Latino history.

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.

Seifman, Eli, Ph.D., 1965, New York University: U.S. social history; history of education; the People's Republic of China.

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.

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

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Computer Science Department

Chairperson
Arie Kaufman, Computer Science Building 2431 (631) 632-8470

Graduate Program Director for M.S. and Ph.D. Programs in Computer Science
I.V. Ramakrishnan, Computer Science Building 1431 (631) 632-8451

Graduate Program Administrator for M.S. and Ph.D. Programs in Computer Science
Dolores Ambrose, Computer Science Building 1440 (631) 632-8462

Graduate Program Director for M.S. Program in Information Systems Engineering (MSIS)
Robert F. Kelly, 2427 Computer Science, (631) 632-7543

Staff Assistant for MSIS
Marion Mastauskas, 127 Engineering Building, (631) 632-8760

Degrees Awarded
M.S. in Computer Science; M.S. in Information Systems Engineering; Ph.D. in Computer Science

Web Site
http://www.cs.stonybrook.edu/

Computer Science

The Department of Computer Science offers an M.S. and a Ph.D. in Computer Science, and an M.S. in Information Systems Engineering.

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, computation theory, logic, algorithms, concurrency, databases, languages, artificial intelligence, image processing, graphics, operating systems, networking, and 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 www.cs.sunysb.edu/graduate/GraduateHandbook.html . 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.sunysb.edu .

The program for Masters of Science in Information Systems Engineering (MSIS) emphasizes the engineering and application aspects of Information Technology (IT). The program differs from a traditional Information Systems program in that it focuses on an engineering approach to IT. The curriculum of the program also emphasizes individual communications skills and team participation.

The MSIS degree program has distinct specialization tracks geared to different classes of IT employment. The curriculum, consisting of 30 credits of coursework, is designed to accommodate students from a wide variety of backgrounds. An Executive track, specially designed for full time employees with working experience, facilitates the 30 credits to be completed with an evening/weekend schedule. Specialization tracks for the program include Systems Engineering, Telecommunications, and Software Engineering. The core component of the program consists of courses in programming; hardware; data management; analysis, modeling, and design; data communications and networking; and technology integration. Following the completion of the core requirements, students can specialize in one of the tracks by choosing appropriate electives. Students are expected to solve real world problems by applying and integrating newly acquired skills. The integration requirement can be satisfied at any time after the completion of the core courses.

Admission to the M.S. in Information Systems Engineering

Admission to the regular program is based on the following criteria:

A. A baccalaureate degree from an accredited applied science or engineering program with a minimum GPA of 2.75. (Provisional admissions may be granted in exceptional cases if the GPA is less than 2.75 but above 2.25 provided it is approved by the Graduate School at the recommendation from the IS Graduate Committee. Provisionally admitted students are required to take at least two courses in the first semester and receive a B average to continue in the program.)

B. GRE scores (Provisionally admitted students without GRE scores must take the examination within the first semester of their registration.)

C. A minimum score of 550 in TOEFL for applicants whose first or native language is not English.

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D. Letters of recommendation, and

E. Other documents as described in the Graduate Bulletin.

Admission to the Executive track is based on the following criteria:

A. A baccalaureate degree from an accredited applied science or engineering program, with a minimum GPA of 2.75.

B. IT related work experience,

C. Details of work experience, responsibilities/duties, and career goals, and

D. A minimum score of 550 in TOEFL if the baccalaureate degree is from a foreign institution, and

E. Letters of recommendation from current and previous employers and teachers.

For admission to the MS in Information Systems Engineering program, all applicants are required to submit completed applications to the Graduate School through the College of Engineering and Sciences, with the following documents: (1) an official graduate application form specially designed for applicants to the proposed program with non-refundable application fee as prescribed by the University, (2) three letters of recommendation, (3) two official copies of all previous transcripts (if in a foreign language, English translation is required together with the originals), (4) details of the employment history and duties/responsibilities, (5) scores of GRE, (f) scores of TOEFL in case of applicants for whom English is not the first language, and (6) a personal statement describing the previous accomplishments, career objectives and future goals. Students in the Executive track may be waived of GRE requirements with the approval of Graduate School.

All applications submitted in time are reviewed by the Graduate Committee and applicants who meet the requirements are selected on a competitive basis. Applications are scored on a scale reflecting academic achievements, GRE scores, work experience, and career goals. Preference is given to the applicants with relevant experience. Special considerations are made for women, minorities and physically challenged applicants provided they meet the minimum admission criteria. Preference also is given first to the New York residents and second to the U.S. citizens and permanent residents.

Applicants for the Executive Track are considered in a separate pool. Their applications must contain a support letter from the employer describing the length of service in the company, the responsibilities and authority, evaluation of the job performance, and how the participation in the Executive track by the applicant benefits the company.

Students of high caliber seeking to enter the program with an incomplete set of undergraduate courses or not having enough prerequisites are required to complete a predetermined number of foundation courses (normally consisting of nine credits), including Information Systems and business:

Fundamentals of Information Systems

Information Technology Hardware and Software

Programming, Data, and Object Structures

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 Information Systems Engineering

To receive the MS in Information Systems Engineering degree the student must obtain a minimum of 3.0 overall GPA in the courses taken to satisfy the requirements of this program. In addition, the student must satisfy all other requirements of the Graduate School not mentioned here. Following are the specific requirements that must be met to obtain the degree:

Each student must complete a minimum of 30 credits of graduate course work, consistent with program guidelines.

Each student must complete 15 credits of core courses (Systems Engineering Principles, Quantitative Computer Architecture, Data Management, Analysis, Modeling, and Design, Data Communications and Networking).

A three-credit course covering an integration topic is required for all students (e.g., ISE 511, CSE 580, or CSE 523).

The required courses total eighteen credits, including the fifteen credits of core courses and three credits of integration. A minimum of twelve credits of electives is required of all students, out of which nine credits must be taken in the area of specialization. In case of core courses waived for equivalent courses taken previously, the student must earn those credits through electives at the University at Stony Brook, bringing the total credits to a minimum of 30.

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A maximum of six credits of graduate course work can be transferred for the courses taken elsewhere provided these credits were not used by the previous institution to award a degree.

Each student is assigned an academic advisor who must approve the coursework, area of specialization and sequence of courses.

Curriculum for the Executive Track: The executive track is designed primarily for the employees of one company (or a group of companies). This requirement is identical to the requirement of the standard program. The curriculum is common to all the students in the program and targeted to the interests of the sponsoring company (or companies).

Courses for the M.S. Degree in Information Systems Engineering

Information Systems Engineering (ESE)

ISE 503 Data Management

ISE 504 Analysis, Modeling and Design

ISE 506 Quantitative Computer Architecture

ISE 516 Systems Engineering Principles

ISE 517 Human Factors in Systems Engineering

Applied Mathematics & Statistics (AMS)

A complete description of AMS courses below can be found at www.grad.sunysb.edu/academics/bulletin/Ams.pdf.

AMS 507 Introduction to Probability

AMS 550 Operations Research: Stochastic Models

AMS 553 Simulation and Modeling

Biomedical Engineering (BME)

A complete description of BME courses below can be found at www.bme.sunysb.edu/bme/grad/courses.html.

BME 526 Biological Systems Engineering

Technology and Society (EMP and EST)

A complete description of EMP courses below can be found at www.sunysb.edu/est/courses/graduate.html.

EMP 518 Project Management

EST 530 Internet Electronic Commerce

EST 582 Systems Approach to Human-Machine Systems

Electrical and Computer Engineering (ESE)

A complete description of ESE courses below can be found at www.ee.sunysb.edu/~www/grad/coursedescriptions_b.html

ESE 504 Performance and Evaluation of Communication and Computer Systems

ESE 505 Traffic Performance Analysis of Mobile, Wireless, and Personal Communication Systems

ESE 528 Communication Systems

ESE 546 Computer Communication Networks I

ESE 547 Digital Signal Processing

ESE 548 Computer Communication Networks II

Business Technology Management

A complete description of BTM courses below can be found at www.grad.sunysb.edu/academics/bulletin/Bus.pdf

BTM 514 Quality Management and Quality Assurance

Computer Science (CSE)

A complete description of CSE courses below can be found at www.cs.sunysb.edu/graduate/courses/.

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CSE 500 Patterns in Programming

CSE 506 Operating Systems

CSE 515 Introduction to Transaction Processing Systems

CSE 523 Introduction to Software Engineering and Project Planning I

CSE 524 Introduction to Software Engineering and Project Planning II

CSE 533 Computer Network Communications Protocols

CSE 536 Introduction to User-Interface Development

Faculty of Computer Science Department

Professors
Bachmair, Leo, Ph.D., 1987, University of Illinois, Urbana-Champaign: Computational logic; automated deduction..

Chiueh, Tzi-cker, Ph.D., 1992, University of California, Berkeley: Processor architecture; parallel I/O; high-speed networks; compression.

Kaufman, Arie, Chairperson. Ph.D., 1977, Ben-Gurion University: Computer graphics; visualization; user interfaces; computer architecture; virtual reality; multimedia.

Kifer, Michael, Graduate Program Director. Ph.D., 1984, Hebrew University of Jerusalem: Database systems; logic programming; knowledge representation; Web information systems, workflow management systems.

Ko, Ker-I, Ph.D., 1979, Ohio State University: Computational complexity; theory of computation; computational learning theory.

Liang, Jerome, Ph.D., 1987, The City University of New York: Medical imaging; image processing.

Mitchell, Joseph, Ph.D., 1986, Stanford University: Operations research; computational geometry; combinatorial optimization.

Qin, Hong, Ph.D., 1995, University of Toronto, Canada: Computer graphics; geometric and physics-based modeling; computer aided design; computer animation and simulation; scientific computing and visualization; virtual environments; computational vision; medical imaging; human-computer interaction; robotics.

Ramakrishnan, I.V., Graduate Program Advisor, Ph.D., 1983, University of Texas, Austin: Automated reasoning; technologies for web-based computing.

Sekar, R.C., Ph.D., 1991, University at Stony Brook: Computer security; distributed systems; programming languages/software engineering.

Skiena, Steven, Ph.D., 1988, University of Illinois, Urbana-Champaign: Computational biology; combinatorial algorithms; combinatorial computing environments; data structures..

Smolka, Scott A., Ph.D., 1984, Brown University: Computer-aided verification of safety-critical systems; computer system security.

Stark, Eugene, Ph.D., 1984, Massachusetts Institute of Technology: Programming language semantics; theory of concurrency; formal methods; operating systems.

Warren, David S., Ph.D., 1979, University of Michigan: Logic programming; database systems; knowledge representation; natural language and logic.

Wittie, Larry D., Ph.D., 1973, University of Wisconsin: Computer Architecture; massively parallel computation; simulation of memory and attention in mammal brains.

Yang, Yuanyuan, Ph.D., 1992, Johns Hopkins University: Parallel and distributed computing systems; high speed networks; multicast communication; optical networks; high performance computer architecture; computer algorithms; fault tolerant computing.

Associate Professors
Arkin, Esther, Ph.D., 1986, Stanford University: Combinatorial optimization; network flows; computational geometry.

Badr, Hussein G., Ph.D., 1981, Pennsylvania State University: Computer communication networks and protocols; performance evaluation; modeling and analysis.

Brennan, Susan, Ph.D., 1990, Stanford University: Cognitive psychology; linguistics; human-computer interaction.

Bender, Michael, Ph.D., 1998, Harvard University: Algorithms; scheduling; data structures; cache and I/O-efficient computing; parallel computing.

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Das, Samir, Ph.D., 1994, Georgia Institute of Technology: Mobile/wireless networking; ad hoc and sensor networks; parallel discrete-event simulation; performance evaluation.

Grosu, Radu, Ph.D., 1994, Technical University of Munich, Germany: Model-based design and verification of embedded software systems; model checking; abstract interpretation; logic and automata theory; type theory; computational models in systems biology; applied formal methods; software and systems engineering.

Liu, Yanhong Annie, Ph.D., 1996, Cornell University: Programming languages; compilers; software systems.

Mueller, Klaus, Ph.D., 1998, Ohio State University: Computer graphics; visualization; projector-based graphics; augmented reality; virtual reality; medical imaging face recognition; GPU-acceleration of general purpose computing; visual data mining; functional brain analysis.

Ramakrishnan, C.R., Ph.D., 1995, University at Stony Brook: Formal verification of concurrent systems; logic programming; computer security.

Samaras, Dimitris, Ph.D., 2000, University of Pennsylvania: computer vision; computer graphics; medical imaging; animation and simulation; image-based rendering; physics-based modeling.

Stoller, Scott, Ph.D., 1997, Cornell University: Distributed systems; software testing and verification; program analysis and optimization.

Wasilewska, Anita, Ph.D., 1975, Warsaw University: Logic; knowledge representation; artificial intelligence.

Zadok, Erez, Ph.D., 2000, Columbia University: Operating systems; file systems; storage; networking; software engineering; security.

Zelinsky, Gregory J., Ph.D., 1994, Brown University: Visual search; visual working memory; object detection and recognition; visual attention and eye movements; scene perception and representation.

Assistant Professors
Gao, Jie, Ph.D., 2004, Stanford University: Algorithms; ad hoc communication and sensor networks; computational geometry.

Gu, Xianfeng, Ph.D., 2004, Harvard University: Computer graphics; computer vision; medical imaging; computational conformal geometry; global differential geometry; harmonic analysis; computational algebraic topology; computational optics; biometrics.

Gupta, Himanshu, Ph.D., 1999, Stanford University: Databases, data mining, data warehousing.

Johnson, Robert, Ph.D., 2007, University of California, Berkeley: Software security; system and network security; cryptography; digital rights management; operating systems; networks; algorithm design and analysis.

Lv, Qin, Ph.D., 2006, Princeton University: Development of efficient systems for managing and exploring massive amounts of digital data. Focus on search systems, data management, distributed systems, storage systems and networking, but also spans the areas of algorithm design, machine learning, data mining, and specific application domains such as multimedia, bioinformatics, sensor networks, healthcare, and scientific computing.

Rizzo, Robert, Ph.D., 2001, Yale University: Computational Biology.

Sion, Radu, Ph.D., 2004, Purdue University: Data security and privacy in distributed networked environments.

Stent, Amanda, Ph.D., 2001, University of Rochester: Natural language processing.

Vasilescu, M. Alex O., , University of Toronto: Computer vision; computer graphics; tensor algebra; physics-based modeling; machine learning.

Wong, Jennifer, Ph.D., 2006, University of California, Los Angeles: Interaction of statistical models and optimization for CAD and embedded systems, low power wireless communication, and sensor networks.

Number of teaching, graduate, and research assistants, Fall 2006: 120

Affiliated Faculty for Program in Information Systems Engineering
Tzi-cker Chiueh, Computer Science

Alex Doboli, Electrical and Computer Engineering

Petar Djuric, Electrical and Computer Engineering

Dmitri Donetski, Electrical and Computer Engineering

Eugene Feinberg, Applied Mathematics

Peisen Huang, Mechanical Engineering

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Imin Kao, Mechanical Engineering

Arie E. Kaufman, Computer Science

Robert F. Kelly, Computer Science

W. Brent Lindquist, Applied Mathematics

Lilianne Mujica-Parodi, Biomedical Engineering

John Murray, Electrical and Computer Engineering

Thomas G. Robertazzi, Electrical and Computer Engineering

Tian-Lih Teng, Technology & Society

Rong Zhou, Computer Science

Executive Committee of Program in Information Systems Engineering
Petar Djuric Electrical and Computer Engineering

Arie E. Kaufman, Computer Science

Robert F. Kelly, Computer Science

W. Brent Lindquist, Applied Mathematics

Thomas G. Robertazzi, Electrical and Computer Engineering

Tian-Lih Teng, Technology & Society

Rong Zhou, Computer Science

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

Fall 2013

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

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 one summer. It is SUNY's only journalism master's program.

Faculty with real-world experience, working in an up-to-date $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 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/

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Admission to the M.S. in Journalism

Students can be admitted with degrees in any field. Admissions requirements include:

- Bachelors 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, Flash, Dreamweaver, 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, and a control room. Mobile equipment available for use by journalism students in the field includes Sony and JVC high-definition video cameras; Nikon D7000 SLR video/still cameras, and Canon Digital Rebel still cameras.

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 560, 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.

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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 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.

Visiting Associate Professor

Miller, Dean. Nieman Fellow, 2007, Harvard University; B.A., 1983, Cornell University. Director of the Center for News Literacy. News literacy, national and international outreach.

Assistant Professors

Ahmad, Wasim. M.S., Photography, 2010, S.I. Newhouse School of Public Communications, Syracuse University. Online journalism, photography, web design, multimedia.

Kaplan-Liss, Evonne. MPH, 2005, Mailman School of Public Health, Columbia University. M.D., 1997, Mount Sinai School of Medicine. Health and science communications.

Ricioppo, Richard E. M.S., Communication, 2006, Illinois State University. Broadcast writing and reporting, video camera operation and non-linear video editing.

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.

Lecturers

Bass, Elizabeth. MPH, 2010, Stony Brook University. Director of the Center for Communicating Science, interim director of the School of Journalism's graduate program. Health and science reporting, communciation 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.

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.

Fall 2013

Linguistics Department

Chairperson
Richard Larson, Ward Melville Social and Behavioral Sciences Building S-227 (631) 632-7776

Masters (LIN) Program Director
Francisco Ordonez, N-243 Social and Behavioral Sciences

Masters (TESOL) Program Director
Ellen Broselow, N-261 Social and Behavioral Sciences, (631) 632-7780

Doctoral Program Director
John Bailyn, S-217 Social and Behavioral Sciences, (631) 632-7779

Degrees Awarded
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/

Description of the Linguistics Department

The Department of Linguistics, in the College of Arts and Sciences, offers graduate training in Linguistics that leads to the Doctor of Philosophy in 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 Ph.D. program is designed to prepare students for advanced research in all branches of theoretical linguistics including syntax, semantics, morphology, phonology, phonetics and first and second language acquisition as well as experimental approaches to these areas. Students develop their research interests further through advanced seminars in Linguistics as well as courses in Psychology, Computer Science, Philosophy, and the interdisciplinary Language, Mind and Brain seminar series. Students are encouraged to develop an area of concentration beyond their primary specialization by focusing a number of their electives in a specific direction. The M.A. in Linguistics is normally part of the Ph.D. in Linguistics. It is typically granted to students who satisfactorily complete 30 credits, which include the courses required for the Ph.D.

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.

Admission requirements for Linguistics Department

Interested students 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.

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.

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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. 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. The Semantics Lab houses MacIntosh computers, and is devoted to research and instructional projects in semantics, natural language computation, and software development. The Phonetics Laboratory suite includes a sound-treated room, a teaching lab and a research lab. Speech analysis platforms available are CSL and Praat. Speech perception experiments are run with Superlab and E-Prime. There is also a computer lab for students with internet access and printing facilities.

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
LIN 625 Semantics (Syntax I must be taken before Semantics)
plus an additional 15 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:

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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

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.

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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

LIN 625 Semantics (Syntax I must be taken before Semantics)

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. The final version of the first qualifying paper must be submitted not later than six weeks before the last day of classes of the fifth 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 will 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.

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, Massachusetts Institute of Technology: Morphology; orthography.

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.

Harris, Alice C., Ph.D., 1976, Harvard University: Historical linguistics; morphology; languages of the Caucasus.

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.

Associate Professors
Bailyn, John F., Ph.D., 1995, Cornell University: Syntax; Russian syntax; Slavic linguistics.

Huffman, Marie K., Ph.D., 1989, University of California, Los Angeles: Phonetics; phonology.

Repetti, Lori, Ph.D., 1989, University of California, Los Angeles: Italian linguistics; Romance linguistics; phonology; Italian dialectology.

Number of teaching, graduate, and research assistants, fall 2009: 19

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

Fall 2013

Marine and Atmospheric Sciences (MAS)

Dean and Director
Minghua Zhang, Endeavour Hall 145 (631) 632-8700

Graduate Program Director
Anne McElroy, Dana Hall 113 (631) 632-8488

Director Institute of Terrestrial and Planetary Atmospheres and Coordinator of Atmospheric Sciences Program Sultan Hameed, Endeavour Hall 131 (631) 632-8319

Academic Coordinator Marine Conservation and Policy Program
Lesley Thorne, Challenger Hall 143 (631) 632-5117

Graduate Program Coordinator
Carol Dovi, 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 Oceanic Science; Graduate Certificate in Environmental Management

Web Site
http://www.somas.stonybrook.edu/

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 a 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.

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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. in program.

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.

Gainful Employment Regulation Disclosures

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 coursework 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 or earth sciences, 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. Center and University computing facilities are excellent and include the new 100 TFlop IBM Blue Gene supercomputer recently installed at BNL. 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 Blue Ocean Institute also maintains an office at SoMAS. MASIC

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(the Marine and Atmospheric Sciences and Information Center) 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.

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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: : 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. Four credits of seminar style elective courses (Ph.D. students only);

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, MAR 502, MAR 503, or MAR 506); and 3) Two or three out of the five following advanced courses, for M.S. and Ph.D. students respectively (MAR 593 Atmospheric Physics, MAR 594 Atmospheric Dynamics, MAR 544 Atmospheric Radiation, MAR 596 Atmospheric Chemistry and MAR 598 Synoptic and Mesocale Meteorology);

B. MAR 595 Graduate Seminar in Atmospheric Sciences (two semesters);

C. Minimum of 24 course credits for Ph.D. students.

Faculty

Distinguished Professors
Aller, Robert C., Ph.D., 1977, Yale University: Marine geochemistry; marine animal-sediment relations.

Cess, Robert D., Emeritus, Ph.D. 1959, University of Pittsburgh: Atmospheric Sciences.

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., 1975, University of California, San Diego (Scripps): Marine geochemistry of organic compounds; organic and inorganic nitrogen cycle biochemistry.

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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
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

Conover, David O., Ph.D., 1981, University of Massachusetts: Ecology of fishes; fisheries biology.

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., 1969, Massachusetts Institute of Technology: Atmospherics dynamics; climate and the upper atmosphere.

Gobler, Christopher, Ph.D. 1999, Stony Brook University: Phytoplankton, harmful algal blooms, estuarine ecology, aquatic biogeochemistry.

Hameed, Sultan, Coordinator of Atmospheric Sciences Program. Ph.D., 1968, University of Manchester, England: Atmospheric sciences.

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.

McElroy, Anne E., Ph.D., 1985, Massachusetts Institute of Technology, Woods Hole Oceanographic Institute: 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.

Zhang, Minghua, Ph.D., 1987, Institute for Atmospheric Physics, Academia Sinica, Beijing: Atmospheric sciences; modeling of climate.

Associate Professors

Allam, Bassem, Ph.D., 1998, University of Western Brittany, France: Diseases of shellfish.

Armstrong, Robert A., Ph.D., 1975, University of Minnesota: Marine ecosystem ecology; marine biogeochemistry; population and community ecology.

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 elasmobranches.

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.

Mak, John E., Ph.D., 1992, University of California, San Diego (Scripps): Atmospheric chemistry and biosphere-atmosphere interactions; isotope geochemistry.

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.

Assistant Professors

Black, David E., Ph.D., 1998, Rosenstiel School of Marine and Atmospheric Science, University of Miami: Paleoclimatology, paleoceanography, deep-sea sediments, marine micropaleontology.

Kim, Hyemi, Ph.D. 2008, School of Earth and Environmental Sciences, Seoul National University: Low frequency climate variability, tropical meteorology, ocean-atmosphere interaction, prediction and predictability, tropical cyclone activity, extreme events.

Nye, Janet. {j/D/. 2008, University of Maryland: Fish ecology, climate variability, global environmental change, ecosystem-based management.

Zhu,Qingzhi, Ph.D., 1997, Xiamen University, China: Biogeochemistry, Environmental Analytical Chemistry, Trace Elements, Sensor.

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Joint Faculty

Akcakaya, Resit. Ph.D. 1989, Stony Brook University: Ecological risk assessment, metapopulation modeling, population viability analysis, threatened species assessment, uncertainty analysis.

Baines, Stephen, Ph.D. 1993, Yale University: Aquatic biogeochemistry of carbon and trace elements. Assistant Professor, Ecology and Evolution

De Zafra, Robert. Emeritus. Ph.D., 1958, University of Maryland: Positron annihilation. Physics.

Koppelman, Lee E., Ph.D., 1970, Cornell University: Coastal zone management; planning; policy studies. Center for Regional Policy Studies

Levinton, Jeffrey, PhD. 1971, Yale University: Marine ecology. Professor Ecology and Evolution

Padilla, Diana, Ph.D. 1987, University of Alberta: Mollusc ecology; invasive species.

Reaven, Sheldon, Ph.D., 1975, University of California, Berkeley: Energy and environmental problems; waste management; science and society.

Adjunct Faculty

Ammerman, James, Ph.D. 1983, Scripps Institution of Oceanography: Aquatic microbial ecology and biogeochemistry. Interests in microbial cell-surface enzymes, phosphorus cycling, and automated instrumentation for aquatic microbiology.

Baumann, Hannes, Ph.D., 2006, University of Hamburg: Evolutionary fish ecology.

Bluestein, Howard, Ph.D. 1976, MIT: Professor of Meteorology.

Buonaiuto, Frank, Ph.D. 1999, Stony Brook University: Coastal processes, numerical modeling of waves, tides and sediment transport.

Bowser, Paul, Ph.D. 1978, Auburn University: Fish pathology.

Brenninkmeijerm, Carl, Ph.D. 1983 University of Groningen, Netherlands Atmopsheric Chemistry.

Cahill, Michael J. , JD 1978, DePaul: Application and development of environmental law in local government.

Chistoserdov, Andre Y. Ph.D., 1985, Institute of Genetics and Selection of Industrial Microorganisms, Russia: Marine microbiology; molecular genetics of methylotrophic bacteria; marine biotechnology and bioremediation.

Dove, Alistair, Ph.D. 1999, University of Queensland: Parasites and diseases of marine organisms.

Engel, Anga: Organic matter cycling marine gel particles, ocean acidification.

Espinosa, Emmanuelle pales, Ph.D. 1999. University of Nante, France: Shellfish physiology, particle selection mechanisms in suspension-feeding bivalves, algology.

Fast, Mark D. Ph.D. 2005, Dalhousie University, Canada: Aquatic diseases and immunology.

Ferson, Scott, Ph.D. 1988, Stony Brook University: Risk assessments and uncertainty analysis.

Flagg, Charles, Ph.D. 1977, Massachusettes Institute of Technology/Woods Hole Oceanogrphic Institution: Sructure and dynamics of coastal oceans

Fowler, Scott, Ph.D. 1969. Zooplankton ecology, biogeochemistry of metals, marine pollution, radioecology, ecotoxicology.

Goodbred Jr., Steven, Ph.D. 1999. Coastal and marine sedimentology, Quaternary development of continental margins, salt-marsh processes and responses.

Karimi, Roxanne, Ph.D., 2007, Dartmouth College: Environmental health, freshwater and marine pollutants, ecological stoichiometry, physiological ecology.

Kavanagh, Kathryn, Ph.D., 1998, James Cook University, Australia

Letherman, Stephen P., 1975, University of Virginia: Coastal geomorphology.

Lin, Wuyin , Ph.D., 2002, Stony Brook University: Climate Modeling, climate change.

Munch, Stephan, Ph.D., 2002, Stony Brook University: Evolutionary ecology of growth and life history traits, evolution in harvested populations, applied population dynamics modeling, mathematical modeling and statistics.

Riemer, Nicole, Ph.D., 2002, University of Karlsruhe, Germany: Cloud microphysics, aerosol physics and chemistry

Roethel, Frank, Ph.D. Stony Brook University: Environmental chemistry, Municipal solid waste management impacts.

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Safina, Carl, Ph.D., 1987, Rutgers University: Marine vertebrates, fisheries policy, and raising awareness of ocean change.

Vogelmann, Andrew, Ph.D., 1994, The Pennsylvania State University: Meteorology, Climate and atmospheric radiative transfer.

Wang, Dong-Ping, Ph.D., 1975, University of Miami: Coastal ocean dynamics.

Wang, Jian, Ph.D., 2002, California Institute of Technology.

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

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Materials Science and Engineering Department

Chairperson
Michael Dudley, Old Engineering Building 312 (631) 632-8500

Graduate Program Director
Dilip Gersappe, Old Engineering Building 316 (631) 632-8499

Department Office
Old Engineering Building 314, Zip 2275 (631) 632-8484

Office Staff
Chandrani Roy, Sr. Staff Assistant; Shauntae Smith, 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/

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

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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 3,000ºC 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

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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 laster 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.

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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.

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Faculty of Materials Science and Engineering Deparment

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, PhD., 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, PhD., 1985, Standford 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.

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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.

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Mathematics Department

Chairperson
Mikhail Lyubich, Mathematics Building 5-116 (631) 632-8290

Graduate PhD Program Director
Claude LeBrun, Mathematics Building 3-108 (631) 632-8254

Graduate Professional Option Program Director
Marco Martens, Math Tower Room 4-113 (631) 632-4893

Graduate Secondary Teacher Option Program Director
Oleg Viro, Mathematics Building 5-110 (631) 632-8286

Graduate Secretary
Donna McWilliams, Mathematics Building P-143 (631) 632-8282

Degrees Awarded
M.A. in Mathematics 7-12; M.A. in Mathematics; Ph.D. in Mathematics

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

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

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.

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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 542 Complex Analysis I, MAT 544 Analysis, MAT 550 Real Analysis I, 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 542, MAT 544, and MAT 550 during their first-year; this requirement is automatically waived for students who have passed the comprehensive examination (see the Guide to Graduate Study for exemption guidelines).

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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

Professors
Anderson, Michael, Ph.D., 1981, University of California, Berkeley: Differential geometry, geometric analysis, mathematical physics.

Barcus, William, *Emeritus*, D. Phil., 1955, University of Oxford, England: Algebraic topology.

Bishop, Christopher, Ph.D., 1987, University of Chicago: Complex analysis.

de Cataldo, Mark, Ph.D., 1995, University of Notre Dame: Higher dimensional geometry.

Ebin, David, Ph.D., 1967, Massachusetts Institute of Technology: Global analysis; mathematics of continuum mechanics; partial differential equations.

Geller, Daryl, Ph.D., 1977, Princeton University: Partial differential equations; harmonic analysis.

Glimm, James[3,6], Ph.D., 1959, Columbia University: Applied mathematics; numerical analysis; mathematical physics.

Hill, C. Denson, Ph.D., 1966, New York University: Partial differential equations; several complex variables.

Jones, Lowell, Ph.D., 1970, Yale University: Topology; geometry.

Lawson, H. Blaine, Jr.[3], Ph.D., 1968, Stanford University: Differential geometry; topology; algebraic geometry.

LeBrun, Claude, *Graduate Program Director*, D.Phil., 1980, University of Oxford, England: Differential geometry; complex analysis; mathematical physics; algebraic geometry.

Lyubich, Mikhail[4], *Director of Institute for Mathematical Sciences*, Ph.D., 1983, Tashkent State University, Russia: Dynamical systems, Kleinian groups and their deformation spaces.

Michelsohn, Marie-Louise, Ph.D., 1974, University of Chicago: Differential geometry.

Milnor, John W.[3,4], *Co-Director of Institute for Mathematical Sciences*, Ph.D., 1954, Princeton University: Dynamical systems; topology, geometry

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Morgan, John[5], *Director of Simons Center for Geometry and Physics*, Ph.D., 1969, Rice University: Topology, algebraic geometry, three and four dimensional manifolds

Phillips, Anthony V., Ph.D., 1966, Princeton University: Differential topology and applications to mathematical physics.

Simons, James H., Ph.D., 1962, University of California, Berkeley: Functionals of Riemannian metrics and connections

Sullivan, Dennis[3,4], Ph.D., 1965, Princeton University: Dynamical systems; topology; geometry; partial differential equations, quantum topology

Takhtajan, Leon, *Chairperson*, Ph.D., 1975, Leningrad Branch of the Steklov Mathematical Institute, Russia: Mathematical physics and applications to complex and algebraic analysis

Viro, Oleg, Ph.D., 1974, Leningrad University: Geometry and topology

Associate Professors
Grushevsky, Samuel, Ph.D. 2002, Harvard University: Geometry, several complex variables

Kirillov Jr., Alexander, *Undergraduate Program Director*, *P*h.D., 1995, Yale University: Representation theory; low dimensional topology; mathematical physics.

Martens, Marco, Ph.D., 1990, Delft University, The Netherlands: Dynamics

Movshev, Michael, Ph.D., 1997, University of Pennsylvania: Algebra

Starr, Jason, Ph.D., 2000, Harvard University: Algebraic geometry

Sutherland, Scott[2,4], Ph.D., 1989, Boston University: Dynamical systems; root-finding algorithms; computing.

Varolin, Dror, Ph.D., 1997, University of Wisconsin-Madison: Complex analysis and geometry.

Zinger, Aleksey. Ph.D., 2002, Massachusetts Institute of Technology: Symplectic topology, enumerative algebraic geometry.

Assistant Professors
Berger, Lisa, Ph.D., 2007, University of Arizona: Number Theory, Mathematics Education of Teachers

Chas, Moira, Ph.D., 1998, Universitat Autonoma de Barcelona: Geometric topology, dynamical systems

Kahn, Jeremy, Ph.D.,1995, University of California, Berkeley: Dynamical Systems, complex analysis

Kennedy, Nadia, Ed.D., 2005, Montclair State University: Mathematics Education

Khuri, Marcus, Ph.D., 2003, University of Pennsylvania: Differential geometry, Partial differential equations, and General relativity

Laza, Radu, Ph.D., 2005, Yale University: Algebraic geometry, several complex variables

Plamenevskaya, Olga, *Undergraduate Program Associate Director*, Ph.D., 2004, Harvard University: Contact and symplectic geometry, Low-dimensional topology

Schul, Raanan, Ph.D., 2004 Harvard University: Real analysis, geometric measure theory

James H. Simons Instructors
DeLand, Matthew, Ph.D., 2009, Columbia University: Algebraic geometry, algebra

Kamenova, Ljudmila, Ph.D., 2006: Massachusetts Institute of Technology: Complex geometry

Young, Andrew, Ph.D., 2008, Princeton University: Algebraic geometry, differential geometry, several complex variables

Adjuncts
Alexander, Douglas, MA, 2005, Stony Brook University: Mathematics Education

Andersen, Robert, MS, 1974, Adelphi University, NY: Mathematics Education

Bernhard, William, MA, 2000, Stony Brook University: Mathematics Education

Biondo, Barbara, P.D., 1985, C.W. Post College: Mathematics Education

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Wiegand, Judy, MS., 1969, Polytechnic Institute of New York, Brooklyn: Hamilton graph theory, teacher education

Institute for Mathematical Sciences
Lyubich, Mikhail, *Director*, Ph.D., 1983, Tashkent State University, Russia: Dynamical systems.

Milnor, John W.[3], *Co-Director*, Ph.D., 1954, Princeton University: Dynamical systems; topology, geometry.

Institute for Mathematical Sciences, Lecturers
Bowman, Joshua, Ph.D., 2009, Cornell University: Dynamical systems.

Brooks, Shimon, Ph.D., 2009, Princeton University: Quantum theory, dynamical systems, numbers theory.

Curry, Clinton, Ph.D., 2009, University of Alabama: Dynamical systems.

Donzelli, Fabrizio, Ph.D. 2009, University of Miami: Algebraic geometry, complex analysis, mathematical physics.

Lobb, Andrew, Ph.D., 2009, Harvard University: Low-dimensional topology.

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.

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Mechanical Engineering Department

Chairperson
Fu-pen Chiang, Light Engineering Building 105 (631) 632-8311

Graduate Program Director
Lin-Shu Wang, Light Engineering Building 171 (631) 632-8816

Graduate Secretary
Mayra Santiago, Light Engineering Building 103 (631) 632-8340

Degrees Awarded
M.S. in Mechanical Engineering; Ph.D. in Mechanical Engineering

Web Site
http://me.eng.sunysb.edu/

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.

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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

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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

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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 proving 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 and Chairperson, 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 Deputy Chair, Ph.D., 1990, University of California, Irvine: Design kinematics; robotics; CAD/CAM; mechanical systems analysis and simulation.

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Kao, Imin, Professor. Ph.D.. 1991, Stanford University: Robotics; stiffness control; wiresaw manufactururing process; manufacturing automation; Taguchi methods.

Kincaid, John, Professor, Ph.D., 1974, Rockefeller University: Statistical mechanics; thermodynamics, and energy technology.

Longtin, Jon P., 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.

Sharma, Satya, Professor, Ph.D., 1975, University of Pennsylvania: Manufacturing and production.

Tasi, James, Emeritus, Ph.D., 1962, Columbia University: Solid mechanics; shock waves in crystal lattices.

Walker, Harold, Professor, Ph.D., 1996, University of California, Irvine: Water and wastewater treatment, fate and transport of emerging contaminants, membrane technology, water-energy nexus, harmful algal blooms

Worek, William, Visiting Professor, Ph.D., 1980, Illinois Institute of Technology. Associate Dean of Graduate Studies for the College of Engineering and Applied Sciences.

Associate Professors

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.

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.

Rastegar, Jahangir, Associate Professor, Ph.D., 1976, Stanford University: Mechanical design.

Wang, Lin-Shu, Associate Professor, Ph.D., 1966, University of California, Berkeley: Thermodynamic theory; heat extraction principle; dynamic design of eco-dwellings.

Zuo, Lei, Associate Professor, Ph.D., 2005, Massachusetts Institute of Technology: Energy harvesting (vibration, thermoelectrics, etc), mechatronic system design, vibration damping and isolation, dynamic systems and control, multifunctional smart structures, sensors and sensing systems.

Assistant Professors

Alkhader, Maen, Assistant Professor. Ph.D., 2008, Illinois Institute of Technology, Chicago, Il: Experimental solid mechanics; time-dependent materials, time dependent materials, cellular materials and composites, dynamic failure of materials, mechanics of novel materials for energy technology.

Chang, Qing (Cindy), Assistant 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.

Colosqui, Carlos, Assistant Professor, Ph.D. 2009, Boston University: Thermal-fluids, Microfluidics, Colloidal systems, Fuel Cells, and Nano/ Micro-Electromechanical Systems (N/MEMS).

Giles, Ryan Kent; Assistant Professor; PhD 2013, University of Illinois at Urbana-Champaign: Structural health monitoring, structural dynamics and control, system identification, historic materials and building systems.

Hwang, David (Jae-Seok), Assistant Professor. Ph.D., 2005, University of California at Berkeley: Micro-and nanoscle heat transfer, laser-assisted solar photovoltaic manufacturing and diagnostics, advanced diagnostics of light-matter interaction.

Machtay, Noah, Research Assistant Professor, Ph.D. 2009, Stony Brook University.

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.

Moon, Juhyuk, Assistant Professor, Ph.D. 2013, University of California at Berkeley: Micro/Nano structure of structural materials, Application of synchrotron radiation facility, Multi-scale simulation.

Sesay, Juldeh, Visiting Assistant Professor, Ph.D., 2005, Stony Brook University.

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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.

Adjunct Faculty

Lu, Ming, Adjunct Assistant Professor, Staff Scientist at Brookhaven National Lab, Ph.D., 2006, State University of New York at Stony Brook: Micro/Nanofabrication, MEMS devices, X-ray optics.

Mayourian, Moez, Visiting Associate Professor, Ph.D., 1985, Columbia University: Design and Manufacturing. Principal Engineer at Time Warner Cable, NYC.

Rosati, Thomas, Visiting Assistant Professor. Ed.D., 2008, Saint John's University: Special education, assistive education, education technologies, independent evaluations.

Testa, Kenneth, Lecturer, M.S., 2009, Stony Brook University: Energy Technologies

Affiliated Faculty

Cess, Robert D., SUNY Distinguished Professor Emeritus, Marine Sciences Research Center, Ph.D., 1959, University of Pittsburgh: Atmospheric sciences; climate modeling; greenhouse effect; nuclear winter theory.

Einav, Shmuel, Professor and Associate Dean, College of Engineering and Applied Sciences, Ph.D., 1972, Stony Brook University: Biomedical engineering, two dimensional flow systems.

Sampath, Sanjay, Professor, Center for Thermal Spray Research, Ph.D. 1989, Stony Brook University: Thermal spraying, coatings, direct write electronics, thick film sensors, multifunctional systems.

Wong, Teng-Fong, Professor, Department of Geosciences, Ph.D., 1980, Massachusetts Institute of Technology: Experimental rock physics; fault mechanics.

Number of teaching, graduate, and research assistantships, fall 2013: 33

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

Fall 2013

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.

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. Five core courses, including our capstone course, are required. For the remaining five elective courses, students must take at least three with our Centerfaculty 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 504 Special Topic in Biotechnology

HCB 599 Capstone Course

Electives

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

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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

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.

Fall 2013

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.

Fall 2013

Molecular Genetics and Microbiology Department

Chairperson
Jorge Benach, Life Sciences Building 280C (631) 632-4225

Graduate Program Director
Janet Hearing, Life Sciences Building 250B (631) 632-8778

Graduate Program Coordinator
Kathryn Bell, 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

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. The final decision concerning admissions is made by the Dean of the Graduate School, and the candidate is officially notified by letter from the Dean's office.

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 2014-2015 is $27,630 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 cell culture and hybridoma facility, 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. Coller 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, 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

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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 each fall on human diseases, with outstanding researchers 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 (offered in alternate [even] years)

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 522 Biology of Cancer (offered in alternate [even] years)

HBM 599 Graduate Research

HBM 690 Molecular Genetics and Microbiology Seminar

HBM 693 Research Proposal Preparation in Molecular Genetics and Microbiology

B. Qualifying Exam

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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 16 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 written comprehensive 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 two semesters 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

Distinguished Professors

Benach, Jorge, Ph.D., 1971, Rutgers University: Pathogenesis of spirochetal infections and their host responses.

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.

Furie, Martha[1], Ph.D., 1980, The Rockefeller University: Interactions among endothelial cells, leukocytes, and pathogenic bacteria

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.

Katz, Eugene R., Emeritus, Ph.D., 1969, University of Cambridge, England: Developmental and genetic studies on *Dictyostelium discoideum*; the role of membrane sterols in cell growth and development.

Konopka, James B., Ph.D., 1985, University of California, Los Angeles: G-protein coupled receptor signal transduction; fungal pathogenesis (*Candida albicans*).

Li, Ellen[3], M.D., Ph.D., 1986, Washington University: inflammatory bowel diseases.

Mackow, Erich R., Ph.D., 1984, Temple University: Rotavirus and hantavirus pathogenesis.

Marcu, Kenneth[2], Ph.D., 1975, University at Stony Brook: Immunoglobulin gene expression and recombination; regulation and mechanisms of action of the inhibitor of NF-kB kinase (IKK) complex.

Marshall, Nancy Reich, Ph.D., 1983, University at Stony Brook: Signaling switches in gene expression by hormones or viral infection.

Steigbigel, Roy[3], M.D., 1966, University of Rochester School of Medicine: Treatment of HIV infection.

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Thanassi, David, Ph.D., 1995, University of California, Berkeley: Secretion of virulence factors by bacterial pathogens; pilus biogenesis by uropathogenic E. coli.

Zong, Wei-Xing, Ph.D., 1999, University of Medicine and Dentistry of New Jersey-Robert Wood Johnson Medical School: Cell death in response to stress and chemotherapeutic agents.

Associate Professors

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[2], Ph.D., 1995, Johns Hopkins University: Structure and function of RNA-binding proteins and biochemical studies of the SmpBSsrA quality control system.

Leatherwood, Janet, Ph.D., 1993, The Johns Hopkins University: Cell cycle control of DNA replication.

Paul, Aniko, Ph.D., 1966, Stanford University: Biochemical and genetic studies of poliovirus replication.

Assistant Professors

Bhaduri-McIntosh, Sumita[4], M.D., Ph.D., 1991, Byramjee Jeejeebhoy Medical College: Epstein-Barr virus-host interactions

Chan, Edward[4], M.D., 1997, State University of New York, Buffalo: Growth factor receptors and cancer.

Krug, Laurie, Ph.D., 2001, Emory University: Virus-host interactions during chronic gammaherpesvirus infection.

van der Velden, Adrianus, Ph.D., 2000, Oregon Health and Science University : Salmonella pathogenesis.

Adjunct Faculty

Hannon, Gregory, Associate Professor.[6] Ph.D., 1992, Case Western Reserve University: cellular proliferation control; double-stranded RNA-induced gene silencing.

Li, Huilin, Biophysicist.[5] Ph.D., 1994, University of Sciences and Technology, China: Structural biology of macromolecular assemblies and membrane proteins by cryo-electron microscopy.

Steinberg, Bettie M., Associate Professor.[7] Ph.D., 1976, University at Stony Brook: Papilloma viruses; cell-virus interactions; viral transformation.

Stillman, Bruce W., Professor.[6] Ph.D., 1979, Australian National University: Mechanism of eukaryotic DNA replication.

Research Faculty

Boon, Elizabeth, Assistant Professor.[9] Ph.D., 2002, California Institute of Technology: Biofilms.

Freimuth, Paul, Associate Biochemist.[5] Ph.D., 1980, Stanford University: Adenovirus reproduction; virus-cellular receptor binding.

Hannun, Yusef, Professor.[8] M.D. American University in Beirut, Lebanon, 1983: lipid mediators of cancer cell signaling.

Kew, Richard, Assistant Professor.[12] Ph.D., 1986, Stony Brook University: Leukocyte chemotaxis; inflammation; pulmonary immunopathology.

Krainer, Adrian, Professor.6 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.

Ma, Yupo, Professor.[12] M.D., Jinan University, Ph.D., University of South Alabama: Leukemic stem cells, stem cell therapy and tissue repair.

Moll, Ute, Professor.[12] M.D., 1985, University of Ulm: Tumor suppressor genes; role of p53 in human cancer.

Neiman, Aaron, Associate Professor.[11] Ph.D., 1994, University of California, San Francisco: Vesicle trafficking and intracellular signaling in yeast.

Obeid, Lina, Professor.[8], M.D., 1983, American University in Beirut, Lebanon: signaling lipids in cell stress and disease.

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Seeliger, Jessica, Assistant Professor[13], Ph.D., 2007, Stanford University: synthesis and assembly of cell membranes in Mycobacterium tuberculosis.

Spitzer, Eric, Associate Professor.[8] M.D., Ph.D., 1985, Johns Hopkins University: Molecular biology of microbial pathogens.

Stenlund, Arne, Associate Professor.[6] Ph.D., 1984, Uppsala University, Sweden: DNA replication of bovine papillomavirus.

Studier, F. William, Professor.[5] Ph.D., 1963, Caltech: Genetics and physiology of bacteriophage T7; structural genomics.

Tonge, Peter J., Professor.[9] Ph.D., 1986, University of Birmingham: Enzyme mechanisms and rational drug design.

Tonks, Nicholas, Professor.[6] Ph.D., 1985, University of Dundee: Post-translational modification, phosphorylation and phosphatases.

Vakoc, Christopher, Assistant Professor.[6] M.D., Ph.D., 2007, University of Pennsylvania: chromatin regulators and oncogenic signal transduction cascades.

Wigler, Michael, Professor.[6] Ph.D., 1978, Columbia University: Signal transduction and growth control in eukaryotes.

Number of teaching, graduate, and research assistants, fall 2014: 23

1) Joint appointment, Department of Pathology

2) Joint appointment, Department of Biochemistry and Cell Biology

3) Joint appointment, Department of Medicine

4) Joint appointment, Department of Pediatrics

5) Brookhaven National Laboratory

6) Cold Spring Harbor Laboratory

7) The Feinstein Institute for Medical Research

8) Department of Medicine

9) Department of Chemistry

10) Department of Periodontics

11) Department of Biochemistry and Cell Biology

12) Department of Pathology

13) Department of Pharmacological Sciences

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

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The Molecular and Cellular Biology Program

Graduate Program Director
Wali Karzai, CMM Building, Room 244, (631) 632-1688

Graduate Program Coordinator
Joann DeLucia-Conlon, Life Sciences Building, Room 338, Tel: (631) 632-8613

Graduate Program Senior Staff Assistant
Beverly Piazza, Life Sciences Building, Room 336, Tel: (631) 632-8533

Degree Awarded
Ph.D. in Molecular and Cellular Biology

Web Site
http://www.stonybrook.edu/biochem/mcb/

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: Molecular Biology and Biochemistry, Cellular and Developmental Biology, or Immunology and Pathology. 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 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. Each of the specializations enhances knowledge within the field to ensure our graduates are well equipped for a successful career in research.

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. During two semesters students assist in teaching undergraduate laboratory or lecture courses. 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. In the third 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 http://www.stonybrook.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;

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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. 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 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 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 year also rotate in four laboratories with the goal of selecting an environment for their thesis research.

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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 fifth semester. 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.

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. 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.

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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 one of two terminal Masters degrees.

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.

2. 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.

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.

Sternglanz, Rolf[1], Ph.D., 1967, Harvard University: Chromatin structure and function in yeast;histone modifying enzymes.

Wimmer, Eckard[2], 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, Deborah[1], 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-Tien[8], Ph.D., 1979, Yale University: Proteases and integrins in cancer invasion, metastasis, and angiogenesis.

Citovsky, Vitaly[1], Ph.D., 1987, Hebrew University, Israel: Nuclear targeting and intercellular communication in plants.

Dean, Neta[1], Ph.D., 1988, University of California, Los Angeles: Protein glycosylation, fungal cell wall biosynthesis; fungal pathogenesis.

Deutsch, Dale[1], 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, Martha[5], Ph.D., 1980, Rockefeller University: Interactions among pathogenic bacteria, endothelium, and leukocytes.

Futcher, Bruce[2], Ph.D., 1981 Oxford University; Cell cycle control, microarrays, genomics.

Gergen, J. Peter[1], Ph.D., 1982, Brandeis University: Pattern information and the regulation of gene expression during Drosophiladevelopment.

Ghebrehiwet, Berhane[8], D.V.M./D.Sc., 1974, University of Paris, France: Biochemistry; Role of complement C1q receptors during infection and inflammation.

Halegoua, Simon[3], Ph.D., 1978, Stony Brook University: Control of the neuronal phenotype and survival by growth factors using biochemical, molecular and cell biological approaches.

Haltiwanger, Robert[1], Ph.D., 1986, Duke University: Glycobiology; role of glycosylation in signal transduction and development.

Hayman, Michael[2], Ph.D., 1973, Institute for Medical Research, England: Viral/cellular oncogenes; differentiation of erythroid cells.

Hearing, Patrick[2], Ph.D., 1980, Northwestern University: Adenovirus-host cell interactions, adenovirus assembly and vectors for gene therapy.

Hollingsworth, Nancy[1], Ph.D., 1988, University of Washington, Seattle: Regulation of meiotic recombination in yeast.

Johnson, Roger A.[6], Ph.D., 1968, University of Southern California, Los Angeles: Regulation of cell function by pro-nucleotide inhibitors of transmembrane signaling mechanisms.

Katz, Eugene[2, 14], Ph.D., 1969, University of Cambridge, England: Genetics/development in cellular slime molds.

Konopka, James[2], 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, Richard[6], M.D., 1988, University of California, San Francisco: Physiology of phosphoinositide 3-kinase signaling

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London, Erwin[1], Ph.D., 1979, Cornell University: Membrane protein structure/translocation/folding. Structure and function of sphingolipid/ cholesterol rafts in membranes.

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, Stuart[6], 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.

Reich, Nancy L.[2], Ph.D., 1983, Stony Brook University: Signal transduction and gene expression in response to cytokines and virus.

Scarlata, Suzanne[6], Ph.D., 1984, University of Illinois: Structure/function studies of G proteins and effectors.

Schechter, Nisson[1], Ph.D., 1971, Western Michigan University: Homeobox and filament proteins in neuronal differentiation, growth and regeneration.

Shroyer, Kenneth[5], 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.

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.

Tseng, Linda[11], Ph.D., 1968, University of North Dakota: Reproductive molecular endocrinology.

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.

Wollmuth, Lonnie[3], Ph.D., 1992 University of Washington: Molecular mechanisms regulating excitatory synaptic transmission in the brain.

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Associate Professors

Fleit, Howard B.[5], Ph.D., 1980, New York University: Leukocyte Fc receptors; macrophage differentiation.

Ghazizadeh, Soosan[10], Ph.D., 1994, Stony Brook University: Epithelial stem cell biology; skin bioengineering and gene therapy.

Holdener, Bernadette[1], Ph.D., 1990, University of Illinois: The role of protein folding and *O*-fucosylation during embryonic development and stem cell differentiation

Karzai, Wali[1], Ph.D. 1995, Johns Hopkins University: Post-transcriptional Regulation of Gene Expression Kernan, Maurice3, Ph.D., 1990, University of Wisconsin: Genetics of touch and hearing in *Drosophila;* ciliogenesis and ciliarysignaling.

Kew, Richard R.[5], Ph.D, 1986, Stony Brook University: Role of complement activation and leukocyte chemotaxis in inflammation.

Leatherwood, Janet[2], Ph.D., 1993, Johns Hopkins University: Cell-cycle control and DNA replication; fission yeast molecular biology.

Lyman, Harvard[1], Ph.D., 1960, Brandeis University: Photocontrol of chloroplast development.

McKinnon, David[3], Ph.D., 1987, John Curtin School of Medical Research, Australia: Molecular physiology of sympathetic neurons and cardiac muscle.

Moriya, Masaaki[4], Ph.D. 1981, Nagoya University, Japan: Cellular responses to DNA damage.

Neiman, Aaron[1], Ph.D., 1994, University of California, San Francisco: Vesicle trafficking and intracellular signaling in yeast.

Prives, Joav[4], Ph.D., 1968, McGill University, Canada: Cytoskeletal membrane interactions in muscle cells.

Quitschke, Wolfgang[7], Ph.D., 1983, Stony Brook University: Gene regulation of proteins associated with neurodegenerative diseases.

Rebecchi, Mario J.[8], Ph.D., 1984, New York University: Phospholipases and signal transduction.

Schärer, Orlando D.[4,9], Ph.D., 1996, Harvard University: Chemistry and biology of DNA damage and repair.

Simmerling, Carlos[9], 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[3], Ph.D., 1996, Albert Einstein College of Medicine: Vertebrate neural development and patterning.

Spector, Illan[6], Ph.D., 1967, University of Paris, France: Neuronal differentiation and microfilaments.

Spitzer, Eric D.[5], M.D./Ph.D., 1985, Johns Hopkins University: Molecular biology of Cryptococcus neoformans.

Thanassi, David G.[2], Ph.D.,1995 University of California at Berkeley: Virulence factors of pathogenic bacteria.

Thomsen, Gerald H.[1], Ph.D., 1988, Rockefeller University: Emproyic development mechanisms and their evolution.

Tsirka, Styliani-Anna[4], Ph.D., 1989, University of Thessaloniki, Greece: Neuronal-microglial interactions in the physiology and pathology of the central nervous system.

Wang, Hsien-yu[6], Ph.D., 1989, Stony Brook University: Wnt/Frizzled and G-protein signal transduction in development.

White, Thomas[6], Ph.D., 1994, Harvard University: Molecular biology and physiology of gap junction channels.

Zieve, Gary[5], Ph.D., 1977, Massachusetts Institute of Technology: Assembly/transport of snRNP particles.

Assistant Professors

Boon, Elizabeth M.[9], Ph.D., 2003, California Institute of Technology: Nitric oxide signaling in bacteria.

Bowen, Mark[6], Ph.D., 1998, University of Illinois, Chicago: Molecular recognition at the synapse.

Cao, Jian[8], 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.

Carrico, Isaac[9], Ph.D., 2003, California Institute of Technology: Site-specific protein labeling; glycoproteins.

Chen, Emily[4], Ph.D., 2002, University of California, San Diego: identifying determinants of breast cancer metastasis and mass spectrometry-based proteomics.

Colognato, Holly[4], Ph.D., 2000, Rutgers University: Exracellular matrix in the brain; roles during development and during neurodegeneration.

Czaplinski, Kevin[1], Ph.D., 1999, UMDNJ-Robert Wood Johnson Medical School: Post transcriptional control of gene expression in the nervous system.

Garcia-Diaz, Miguel[4], Ph. D., 2003, UAM University (Madrid, Spain): DNA repair and mitochondrial gene expression.

Seeliger, Markus[4], Ph.D., 2003, Cambridge University: Function and mechanism of protein kinases and ubiquitin ligases.

Takemaru, Ken-Ichi[4], Ph.D., 1997, The Graduate University for Advanced Studies, Japan: Wnt signaling in development and disease.

Zong, Wei-Xing[2], Ph.D., 1999, Univeristy of Medicine & Dentistry of New Jersey: Molecular regulation of apoptotic and necrotic cell death.

Adjunct Faculty

Dunn, John, Microbiologist.[13] Ph.D., 1970, Rutgers University: Structure/function of bacteriophage T7 RNA polymerase.

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Hannon, Gregory, Professor.[15] Ph.D., 1992, Case Western Reserve University: Genetics of growth in mammalian cells and dsRNA-induced gene silencing.

Joshua-Tor, Leemor, Professor.[15] Ph.D., 1991, The Weizmann Institute of Science: Structural biology; X-ray crystallography; molecular reconginition; nucleic acid regulation; RNAi.

Krainer, Adrian, Professor.[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 Professor[15], 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 Technoloy: 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.

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.

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

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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.

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Molecular and Cellular Pharmacology Department

Chairperson
Michael A. Frohman, Center for Molecular Medicine CMM 438 (631) 444-3050

Graduate Program Co-Director
Miguel Garcia-Diaz and Holly Colognato, Basic Sciences Tower Level 7, Room 122 (631) 444-3054

Graduate Program Administrator
Odalis Hernandez, Basic Sciences Tower (BST)-8, Room 140 631-444-3057 Fax: (631) 444-9749

E-mail
grad@pharm.stonybrook.edu

Web Site
http://www.pharm.stonybrook.edu/about-graduate-program

Degree Awarded
Ph.D. in Molecular and Cellular Pharmacology; MS in Biomedical Science (Molecular and Cellular Pharmacology track)

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 (2010-2011) is $26,500 and includes health insurance coverage.

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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

Physiology: HBY 561 Statistical Analysis of Physiological Data

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Physiology: HBY 564 Experimental Techniques in Systems Physiology

Requirements of the MS Degree in Biomedical Science (Molecular and Cellular Pharmacology track)

Completion will require 42 graduate level credits and a thesis. 24 credits in required courses, up to 6 credits in electives and 12-18 research credits.
Required:
1. Principals of Pharmacology (HBH 501)
2. Advanced Pharmacology (HBH 502)
3. Pharmacology Colloquium (HBH 506)
4. Seminar (three times) (HBH 590)
5. Molecular genetics (MCB 503)
6. Graduate Biochemistry (MCB 520)
7. Cell Biology (MCB 656)
8. Integrity in Science (GRD 500)
Electives (choose 0 to 6 credits)
1. Principles of Development (MCB 657)
2. Signal Transduction (HBH 553)
3. Neuropharmacology (HBH 655)
Research (choose 12 - 18 credits)
1. Research Lab Rotation
2. Thesis Research

Faculty of Molecular and Cellular Pharmacology Department

Distinguished Professors
Grollman, Arthur P.,[1] M.D., 1959, Johns Hopkins University: Chemical carcinogenesis and mutagenesis.

Reich, Edward, M.D., 1956, Johns Hopkins University; Ph.D., 1962, Rockefeller University: Autocrine regulation; parasite biochemistry; design of new therapeutic systems.

Leading Professor
Malbon, Craig C., Ph.D., 1976, Case Western Reserve University: Wnt-frizzled signaling via G-proteins in development; analysis of signaling complexes.

Professors
Bliska, James, Ph.D.,[10] 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.

Cohen, Ira S.,[14] M.D., Ph.D., 1974, New York University: Electrophysiology of the heart.

Eisenberg, Moises, Ph.D., 1972, California Institute of Technology: Application of bioinformatics tools to study comparative genen organization.

Demple, Bruce, Ph.D.,UC Berkeley; Mechanisms and roles of human enzymes that repair oxidative (free radical) damage in DNA

Fisher, Paul A., M.D., Ph.D., 1980, Stanford University: Structure and function of the cell nucleus; DNA metabolism and mutagenesis; human neurodegenerative diseases.

Frohman, Michael A., *Chair*, M.D., Ph.D., 1985, University of Pennsylvania: Neural differentiation and signal transduction.

Ghebrehiwet Berhane,[9] D.V.M., D.Sc.: C1q receptor mediated cellular responses with particular emphasis on inflammation and microbial infection.

Haltiwanger, Robert,[7] Ph.D., 1986, Duke University: Regulation of signal transduction by glycoproteins.

Hearing, Patrick[10], Ph.D., 1980, Northwestern University: Adenovirus regulation of cellular proliferation and gene expression; adenovirus vectors for human gene therapy.

Iden, Charles R., Ph.D., 1971, Johns Hopkins University: Biomedical applications of mass spectrometry; proteomics; characterization of DNA adducts and DNA repair mechanisms; synthesis of modified oligodeoxynucleotides.

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Johnson, Francis, Ph.D., 1954, University of Glasgow, Scotland: Synthesis of natural products; DoM reactions; antiviral agents; mechanism of action of carcinogens and mutagens; site-specific mutagenesis; DNA damage and mechanisms of action of DNA-repair enzymes.

Levine, Joel,[11] Ph.D., 1980, Washington University: Glial Cells, Proteoglycans and the Regulation of Axonal Growth

McKinnon, David,[11] Ph.D., 1987, Australian National University, Australia: Molecular physiology of neurons and cardiac muscle.

Miller, W. Todd,[14] Ph.D., 1987, Rockefeller University: Signal transduction by tyrosine kinases.

Moll, Ute M.,[12] M.D., 1970, Ulm, Germany: Tumor suppressor gene research; mechanism of p53 inactivation.

Prives, Joav M., Ph.D., 1968, McGill University, Canada: Regulation of surface receptors in muscle cells.

Reich, Nancy C.,[10] Ph.D., 1983, University at Stony Brook: Signal transduction and gene expression induced by cytokines and viral infection.

Rigas, Basil[1], M.D. 1972, Athens Univ Med School; D.Sc. 1975, Athens Univ. Med. School, Greece: NSAIDs in the prevention of colon cancer.

Said, Sami I,.[9] M.D., 1951, Cairo University, Egypt: Physiology and pharmacology of VIP and related neuropeptides, with special reference to their modulation of cell injury, inflammation, and cell death, and their potential as therapeutic agents.

Sampson, Nicole,[2] Ph.D., 1990, University of California, Berkeley: Integrin receptor interactions in mammalian fertilization/enzymology of cholesterol oxidase.

Schechter, Nisson,[15] Ph.D., 1971, Western Michigan University: Structure, function, and regulation of intermediate filament proteins and homeobox proteins during zebrafish neurogenesis.

Steigbigel, Roy,,[1] M.D., 1966, University of Rochester: HIV treatment and immunoreconstitution.

Tonge, Peter,[2] 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.[16], *Graduate Program Director*, Ph.D., 1989, University of Thessaloniki, Greece: Neuronal-microglial interactions in the physiology and pathology of the central nervous system.

Van Nostrand, William,[9] Ph.D., 1985, University of California: Cerebrovascular pathology in Alzheimer's disease and related disorders

Associate Professors

Crawford, Howard, Ph.D., 1993, University of Texas Southwestern Medical Center at Dallas: Pancreatic cancer.

De los Santos, Carlos, Ph.D., 1987, University of Buenos Aires, Argentina: NMR solution structures of damaged nucleic acids and repair proteins.

Evinger, Marian J.,[13] Ph.D., 1978, University of Washington: Transcriptional regulation of PNMT gene expression; genex expression in neuronal tumors.

Enikolopov, Grigori N.,[17] Ph.D. 1978, Institute of Molecular Biology, USSR Academy of Science: Stem cells; neurogenesis; development; signal transduction

Karzai, Wali A.[7], Ph.D., 1995, Johns Hopkins University: Biochemistry and structural biology of RNA-protein interactions, translational control of gene expression, and drug discovery.

Morrison, Sidonie A.,[1] D.Phil., 1973, University of Oxford, England: Mechanisms of infection and pathogenesis in HIV-1 disease, especially host-cell factors; restoration of immune function during highly active antiretroviral therapy.

Simmerling, Carlos, [2] Ph.D., 1994, University of Illinois, Chicago: Computational chemistry and structural biology; molecular dynamics of biological macromolecules.

Schärer, Orlando, Ph.D., 1996, Harvard University: Chemical Biology of Mammalian DNA Repair.

Takemaru, Ken-Ichi, Ph.D., 1997, Graduate University for Advanced studies, Japan: Wnt Signaling in Development and Disease.

Talmage, David,[10] Ph.D., 1981, University of Minnesota; Interactions between retinoids and receptor tyrosine kinase signaling pathways.

Thomsen, Gerald H.,[7] Ph.D.,1988, The Rockefeller University: Vertebrate Embryonic Development

Wollmuth, Lonnie[11], Ph.D., 1992, University of Washington: Molecular mechanisms of synaptic transmission.

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White, Thomas[14], Ph.D., 1994, Harvard University; Molecular biology and physiology of gap junction channels.

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.

Bowen, Mark,[14] Ph.D. 1998, Univ. of Illinois at Chicago: Single molecule spectroscopy; Coordination of post-synaptic glutamate receptor signaling by the MAGUK family of scaffolds.

Chen, Emily, Ph.D. 2002, Univ. of California, San Diego: Proteome signature of organ-specific metastasis.

Cao, Jian,[12] M.D. 1985, Henan Medical College (China), M.S. 1992, Peking Union Medical College, Biology and prevention of cancer metastasis.

Colognato, Holly, Ph.D. 1999, Rutgers University: Extracellular matrix in the brain: roles during development and during neurodegeneration.

Carpino, Nicolas,[10] Ph.D., 1997, Stony Brook University.

Chen, Emily, Ph.D., 2002, University of California, San Diego; Breast Cancer Metastasis and Shotgun Proteomics.

Fu, Dax,[6] Ph.D., 1995, Mayo Graduate School of Medicine: Biochemical and x-ray crystallographic studies of transmembrane active processes via membrane channels and transporters.

Garcia-Diaz, Miguel; Ph.D. 2003, University of Madrid, Spain: Structural enzymology of DNA/RNA transactions.

Nassar, Nicolas[14], Ph.D., 1992, European Molecular Biology Laboratory, Grenoble, France: Regulation of signaling proteins.

Rizzo, Robert,[19] Ph.D. 2001, Yale University: Computational Research Projects in Cancer, HIV/AIDS, Influenza, and Method Development.

Seeliger, Markus, Ph.D., 2003, Cambridge University, Trinity College; Using NMR and ligand binding kinetics to study Abl and Src kinase domains.

Wei-Xing Zong,[10] Ph.D. 1999, UMDNJ -Robert Wood Johnson Medical SchooL, New Jersey: Molecular Regulation of apoptotic and necrotic cell death.

Research Faculty

Berrios, Miguel, Associate Professor. Ph.D., 1983, Rockefeller University: Polypeptide structure of the cell nucleus; nuclear assembly and disassembly; mapping genomic DNA damage and repair assembly and disassembly; fertilization and pronuclear formation.

Dewey, Stephen L., Ph.D., 1985, University of Iowa: Imaging neurotransmitter interactions with PET and fMRI

Dickman, Kate, Assistant Professor, Ph.D., Investigation of aristolochic acid, a compound found in certain herbal medicines, and its association with renal disease and cancer.

Li, Feng-Qian, Assistant Professor; Ph.D., University of Advanced Studies/ National Insitute of Genetics, Japan: Function of signaling regulators involved in cell growth regulation, cancer biology and adipogenesis.

Moriya, Masaaki, Professor. Ph.D., 1981, Nagoya University, Japan: Cellular response to DNA damage.

Rosenquist, Thomas, Assistant Professor. Ph.D., 1989, University of Wisconsin-Madison; Genetic analysis of mammalian oxidative DNA damage repair.

Shibutani, Shinya, Professor. Ph.D., 1983, Toyama Medical and Pharmaceutical University, Japan: Mechanisms of translesional DNA synthesis.

Volkow, Nora D. [15,16] M.D., 1981, National University, Mexico: Imaging studies of neuropharmacological agents; positron emission (PET) scanning.

Robert Watson, Ph.D., The University of Iowa**;** Insulin-stimulated Translocation of the GLUT4 Glucose Transporter.

Number of teaching, graduate, and research assistants, Fall 20010: 37

1) Joint appointment, Department of Medicine

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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

7) Primary appointment with Department of Biochemistry and Cell Biology

8) Primary appointment with Department of Chemistry

9) Primary appointment with Department of Medicine

10) Primary appointment with Department of Molecular Genetics and Microbiology

11) Primary appointment with Department of Neurobiology and Behavior

12) Primary appointment with Department of Pathology

13) Primary appointment with Department of Pediatrics

14) Primary appointment with Department of Physiology and Biophysics

15) Primary appointment with Department of Psychiatry

16) Primary appointment with Brookhaven National Laboratory

17) Primary appointment with Cold Spring Harbor

18) Primary appointment with Department of Neurology

19) Primary appointment with Department of Applied Math

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

Fall 2013

Department of Music

Chairperson
Perry Goldstein, Staller Center 3332 (631) 632-7330

Graduate Program Director
Ryan Minor, Staller Center 3330 (631) 632-7330

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)

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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.

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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).

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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 st 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.

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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.

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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

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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.

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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.

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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,[1] Ph.D., 1969, University of California, Berkeley: Medieval and Renaissance music; history of music theory

Goldstein, Perry,[3] 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, [4] 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 Julliard School of Music; Mus.D., 1995, Middlebury College: Violin; chamber music.

Winkler, Peter,[2] 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. Universitiy 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: 2oth-century theory and analysis; music history.

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.

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.

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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.

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Neuroscience

Chairperson
Lorna Role, Life Sciences Building 573 (631) 632-8616

Graduate Program Director
Mary Kritzer, Life Sciences Building 510 (631) 632-8634

Graduate Program Administrator
Odalis Hernández, Life Sciences Building 535 631-632-8616, FAX (631) 632-6661

Degree Awarded
Ph.D. in Neuroscience, MA in Biological Sciences and MS in Biomedical Science (Neuroscience track)

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.

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), 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.

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.

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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

Completion of this track will require 30 credits from the approved PhD curriculum in Neuroscience and a thesis.

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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.

Frohman, Michael[5], Ph.D., M.D., 1985, University of Pennsylvania: Lipid signaling pathways regulating mitochondrial, membrane organelle. and cellular shape and function.

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.

La Camera, 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 circiuts.

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, P.h.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.[7], 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, P.h.D, University of Maryland at Baltimore: Depression, Dementia and brain imaging technologies such as Positron Emission Tomography.

Puopolo, Michelino, P.h.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.[6], 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.[5], Ph.D., 1989, University of Thessaloniki: Neuronal-microglial interactions in the physiology and pathology of the central nervous system.

Van Nostrand, William[3], 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.

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Brookhaven National Laboratory

Thanos, Peter9, Ph.D., 1997, Eastern Virginia Medical School: Behavioral neuropharmacology and neuroimaging of addiction (including alcohol, drugs and food) and ADHD.

Peña, Louis, P.h.D., UCLA: Cellular and molecular mechanisms of radiation sensitivity.

Cold Spring Harbor Laboratories

Enikolopov, Grigori[10], Ph.D., 1978, Academy of Science, Russia: Stem cells, neurogenesis, and signal transduction.

Huang, Z. Josh[10], Ph.D., 1994, Brandeis University: Development and plasticity of the neocortical GABAergic circuits.

Kepecs, Adam[10], Ph.D., 2003, Brandeis University: Neurobiology of decision-making, neuromodulation, behavioral electrophysiology.

Kirkanides, Stephanos, D.D.S., University of Athens, Greece: Neuroinfammation & Neurodegeneration .

Li, Bo[10], Ph.D., 2003, University of British Columbia: Regulation of NMDA receptor function in hippocampal neurons.

Shea, Stephen D.[10], Ph.D., 2004, University of Chicago: olfactory and auditory social communication in mice.

Turner, Glenn[10], Ph.D., 2000, California Institute of Technology, Neural coding; learning and memory; sensory processing; Drosophila; electrophysiology.

Van Aelst, Linda, P.h.D., 1991, Catholic University of Leuven: Signal Transduction; Ras and Rho proteins; tumorigenesis; neuronal development and disorders.

Zador, Anthony[10], M.D., Ph.D., 1994, Yale University: Cortical circuits underlying auditory processing and attention.

Zhong, Yi[10], Ph.D., 1991, University of Iowa: Neurogenetics.

Number of teaching, graduate, and research assistants, Fall 2012: 37

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

8) Primary appointment with Psychology

9) Primary appointment with Brookhaven National Laboratory

10) Primary appointment with Cold Spring Habor Laboratory

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

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Program and Course information can be found in the Health Sciences Center Bulletin and online at The School of Nursing web site.

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

Fall 2013

Program and admissions information can be found in the Health Sciences Center Bulletin and online at http://medicine.stonybrookmedicine.edu/familymed/nutrition/ms-ctf/announcements.

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

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Program and admissions information can be found in the Health Sciences Center Bulletin and online at www.hsc.stonybrook.edu/shtm/index.cfm

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

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Oral Biology and Pathology Department

Chairperson
Maria Ryan, Westchester Hall (631) 632-9529

Graduate Program Director
Marcia Simon, Westchester Hall 105 (631) 632-8922, Fax (631) 632-9704
E-mail: Marcia.Simon@stonybrook.edu

Graduate Program Coordinator
Marguerite Baldwin, 185 Westchester Hall (631) 632-9189
E-mail: 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

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.

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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

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Adjunct Professors
Cutler, Christopher D.D.S., 1986,Emory University School of DentistryPh.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 erythematosis.

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.

Fall 2013

Philosophy

Chairperson
Eduardo Mendieta, Harriman Hall 209 (631) 632-7585

Doctoral Program Director
Anne O'Byrne, Harriman Hall 235 (631) 632-7577

Master's Program Director
Megan Craig, Harriman Hall 244 (631) 632-7581

Assistant to the Chair
Alissa Betz, Harriman Hall 211-A (631) 632-7590

Graduate Program Coordinator
Kathleen-Anna Amella, Harriman Hall 216 (631) 632-7580

Department Secretary
Ann Marie Monaghan, Harriman Hall 213 (631) 632-7570

Degrees Awarded
M.A. in Philosophy; Ph.D. in Philosophy; Advanced Graduate Certificate in Art and Philosophy

Description of the Philosophy Department

The Department of Philosophy, in the College of Arts and Sciences, offers programs leading to the Master of Arts in Philosophy and to the Doctor of 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 sponsor of Transatlantic Philosophical Collegium that offers advanced students opportunity for extended study at the University of K#ln and Wuppertal. Departmentally based, funded exchanges with the University of Tübingen and the University of Paris give students further opportunity to study abroad.

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.

M.A. Degree in Philosophy with a focus on the Arts and Aesthetics
Many of the questions that occasioned Plato's reflection on art are still with us: What is the relationship between art and truth? Is the task of the artist to represent already existing things or to create altogether new things? Is the spectator of art to be regarded as a mere witness or as an active participant? What is the role of emotion in the experience of art? What are the most salient differences between the various arts?

Other questions have arisen with increasing urgency in more recent times: What does psychoanalysis have to teach us about the place of art in our lives? How are class, race, and gender pertinent to the production and enjoyment of art? Do we need to reconceive aesthetics in view of a global electronic culture?

This master's program offers an open and informal setting in which to explore such questions in seminars and lectures taught by renowned philosophers of art. Practicing artists will also participate in an intensive discussion of issues in the philosophy of art that are of enduring as well as contemporary interest.

M.A. in Philosophy Curriculum and Degree Requirements
For the master's degree, a student must take 30 course credits, i.e., the equivalent of 10 courses. Many of these courses are listed below, the full list is subject to revision. Of the 30 credits, six can be taken as independent study. An M.A. thesis option is available.

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.

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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 M.A. 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. This handbook offers a statement of the purposes, policies, structures, and requirements of the MA Program and applies to all students currently enrolled in the program.

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 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. (See Appendix A). 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 for 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. See Appendix A for the form.

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.

Requirements for the Ph.D. Degree in Philosophy

The doctoral program is designed to be completed in five years of full-time work. The Graduate School regulations prescribe a minimum of two semesters of full-time enrollment. 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

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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 seminars 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 prospectus seminar 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 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. A grade of B or better in an undergraduate symbolic logic course is normally adequate evidence of competence.

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.

Course Requirements
Requirements for the Doctoral Program in Philosophy

I. History Courses
Three of the four history courses marked with an asterisk (*) are required, plus two additional courses for a concentration in the history of philosophy. History courses will feature an intensive writing component.

II. Interface Studies Seminars

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Two seminars, selected from either team-taught interface seminars or graduate seminars in another discipline, will fulfill the basic interface requirement. For a concentration in Interface Studies two additional seminars must be taken (from among team-taught or approved non-philosophy graduate seminars).

III. Contemporary Philosophy Seminars
The two seminars marked with an asterisk (*) are required. Three additional seminars chosen from the remaining list of contemporary philosophy seminars must be taken to fulfill the basic requirement. Two more seminars may be chosen to fulfill concentration requirements.

IV. Independent and Directed Studies

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.

Distinguished Professors
Casey, Edward S., Ph.D., 1967, Northwestern University: Aesthetics; phenomenology; philosophy of psychology.

Ihde, Don, Ph.D., 1964, Boston University: Phenomenology; philosophy of technology; hermeneutics.

Distinguished Service Professor
Gelber, Sidney, Emeritus. Ph.D., 1954, Columbia University: Political philosophy.

Distinguished Teaching Professor
Grim, Patrick[7], B. Phil., 1975, University of St. Andrews, Scotland; Ph.D., 1976, Boston University: Logic; ethics; computer modeling; contemporary analytic philosophy.

Professors
Allison, David B., Ph.D., 1974, Pennsylvania State University: Contemporary European philosophy.

Crease, Robert, Ph.D., 1987, Columbia University: Philosophy of science; aesthetics.

Dilworth, David, Ph.D., 1963, Fordham University; Ph.D., 1970, Columbia University: East Asian languages and cultures.

Kittay, Eva, Ph.D., 1978, City University of New York: Philosophy of language; philosophy and literature; feminism.

Kuspit, Donald B.[1], D.Phil., 1960, University of Frankfurt, Germany; Ph.D., 1971, University of Michigan: Art criticism; 20th-century art; northern Renaissance art.

Mendieta, Eduardo, Ph.D., 1996, New School for Social Research: Latin American philosophy; critical theory.

Miller, Clyde Lee[6], Ph.D., 1974, Yale University: History of philosophy.

Silverman, Hugh J.[2, 4], Ph.D., 1973, Stanford University: Continental philosophy (hermeneutics, deconstruction, and postmodern theory); Aesthetics and cultural theory; Contemporary European philosophies, literatures, and cultures.

Simon, Michael A., Emeritus, Ph.D., 1967, Harvard University: Social philosophy; philosophy of biological and social science; philosophy of mind; philosophy of law.

Simpson, Lorenzo[9], Ph.D., 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.

Spector, Marshall, Ph.D., 1963, Johns Hopkins University: Philosophy of science; philosophy of technology; environmental issues.

Tejera, Victorino, Emeritus. Ph.D., 1956, Columbia University: Aesthetics; classical philosophy.

Watson, Walter, Emeritus. Ph.D., 1958, University of Chicago: History of philosophy.

Welton, Donn[10], Ph.D., 1973, Southern Illinois University: Phenomenology and epistemology; philosophical psychology; Contemporary German philosophy.

Williams, Peter[3,5], Ph.D., 1973, Harvard University: Philosophy of law; ethics.

Associate Professors

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Cormier, Harvey J., Ph.D., Harvard University: American philosophy; William James and pragmatism; philosophy and culture.

De Laurentis, Allegra, Ph.D., 1982, University of Frankfurt: Greek philosophy; Hegel.

Edwards, Jeffrey B., Ph.D., 1987, Universitat Marburg, Germany: History of philosophy; Kant; modern philosophy.

Manchester, Peter[2], Ph.D., 1972, Graduate Theological Union: Greek philosophy; Heidegger.

Mar, Gary[8], 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: 20th-century and contemporary European philosophy.

Rawlinson, Mary C., Ph.D., 1978, Northwestern University: 19th-century philosophy; Hegel; aesthetics and literary theory; philosophical psychology; philosophy of medicine.

Assistant Professors
Craig, Megan, Ph.D., 2006, New School of Social Research: Ethics; aesthetics; pragmatism; phenomenolgy; Levinas.

Khader, Serene, Ph.D, 2008, Stony Brook University: Global ethics; feminist philosophy, philosophy and disability, 20th century French philosophy.

Number of teaching, graduate, and research assistants, fall 2011: 27

1) Joint appointment, Department of Art

2) Joint appointment, Department of Comparative Studies

3) Joint appointment, Community and Preventive Medicine

4) Recipient of the State University Chancellor's Award for Excellence in Teaching, 1977

5) Recipient of the State University Chancellor's Award for Excellence in Teaching, 1978

6) Recipient of the State University Chancellor's Award for Excellence in Teaching, 1980

7) Recipient of the State University Chancellor's Award for Excellence in Teaching, 1988

8) Recipient of the State University Chancellor's Award for Excellence in Teaching, 1993

9) Recipient of the Commonwealth of Virginia's Outstanding Faculty Award, 1990; University of Richmond's Distinguished Educator Award, 1984

10) Recipient of President's and Chancellor's Award for Excellence in Scholarship and Creative Activity, 2005

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

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Program and admissions information can be found in the Health Sciences Center Bulletin and online at www.hsc.stonybrook.edu/shtm/index.cfm

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

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Program and admissions information can be found in the Health Sciences Center Bulletin and online at www.hsc.stonybrook.edu/shtm/index.cfm

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

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Physics and Astronomy

Chairperson
Laszlo Mihaly, Physics Building P-110 (631) 632-8100

Graduate Program Director
Jacobus Verbaarschot, Physics Building P-107 (631) 632-8279

Assistant Graduate Program Director
Sara Lutterbie, 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/

Description of the Physics and Astronomy Department

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 or Biophysics 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 and Astronomy Department 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.

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Research Areas

Research areas for the program include, Accelerator Physics and the Center for Accelator Science and Education; Astronomy, Astrophysics and Cosmology; Atmospheric and Marine Sciences: Brookhaven National Laboratory; Atomic, Molecular and Optical Physics; C.N. Yang Institute for Theoretical Physics; Experimental Condensed Matter and Devices; Experimental High Energy Physics; Experimental Nuclear Physics; Physical Biology at the Laufer Center; Simons Center for Geometry and Physics; Theoretical Condensed Matter and Statistical Physics; and Theoretical Nuclear Physics. For information on this topic, please visit the program website at the link provided below.

http://graduate.physics.sunysb.edu/research/index.shtml

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. The degree requirements are described below.

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.

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. Note that the Physics GRE subject test is also recommended.

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.

Physics and Astronomy Department

Physics research is conducted in the areas of particle, nuclear, condensed matter, mesoscopic, nanoscale, device, atomic, molecular and optical physics on campus and at research facilities elsewhere.

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 new 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. It is housed in a new building that was completed in 2010.

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 www.bnl.gov/bnlweb/sciindex.asp 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, 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 Fermilab Tevatron Collider, the Large Hadron Collider at CERN, Argonne National Laboratory and Lawrence Berkeley National Laboratory.

The Department has a Tandem Van de Graaff accelerator that after 40 years of nuclear research is now being 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.

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)

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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 works 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.

For further information on this program, contact Professor Harold Metcalf.

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.

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 suf#ciently good performance in the corresponding parts of a placement examination given at the beginning of each fall semester (2nd 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 satis#ed by PHY 517, Laboratory Course in Astronomical Techniques.

3. Two advanced courses, each in an area outside that of the student's thesis research, chosen from a list of courses approved for this purpose.

C. Passing of the written comprehensive examination. This is offered at the beginning of each semester and has comprehensive problems on astronomy, atomic physics, physical biology, condensed matter physics, nuclear and particle physics, and there will be a balance between more experimentally and more theoretically focused problems. It must be passed in the student's fourth semester of study at Stony Brook or earlier.

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.

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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 either four astronomy core courses or three astronomy core courses (PHY 521, PHY 522, PHY 523, PHY 524) and one of the advanced courses mentioned under B3. 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. The exam will have 4 questions in Physical Biology and students have the option to pass this exam based on these problems.
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.

Faculty of the Department of Physics and Astronomy

Einstein Professor
Yang, Chen Ning[1], Emeritus. Ph.D., 1948, University of Chicago: Theoretical physics; field theory; statistical mechanics; particle physics.

Distinguished Professors
Dill, Ken, Ph.D., 1978, UCSD, La Jolla: Physical Biology.

Brown, Gerald E[1]., *Emeritus*, Ph.D., 1950, Yale University: Theoretical physics; the many-body problem.

Grannis, Paul D., *Emeritus*, Ph.D.,1965, University of California, Berkeley: Experimental high-energy physics.

Jacak, Barbara, Ph.D., 1984, Michigan State University: Experimental nuclear physics; relativistic heavy ions.

Kirz, Janos, *Emeritus*, Ph.D., 1963, University of California, Berkeley: X-ray optics and microscopy; synchrotron radiation.

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., 1979, Moscow State University, Russia: Mesoscopic physics.

McCoy, Barry M.[1], Ph.D., 1967, Harvard University: Theoretical physics; statistical mechanics.

Shuryak, Edward, Ph.D., 1974, Institute of Nuclear Physics, Novosibirsk, Russia: Theoretical nuclear physics.

Sprouse, Gene D., Editor in Chief, American Physical Society. Ph.D., 1968, Stanford University: Atomic and nuclear spectroscopy with trapped radioactive atoms.

Sterman, George[1], Director of Yang Institute for Theoretical Physics. Ph.D., 1974, University of Maryland: Theoretical physics.

Van Nieuwenhuizen, Peter[1], Ph.D., 1971, University of Utrecht, Netherlands: Theoretical physics; quantum field theory.

Distinguished Service Professor

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Paul, Peter, *Emeritus*, Ph.D., 1959, University of Freiburg, Germany: Experimental nuclear physics;.

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

Allen, Philip B., Ph.D., 1969, University of California, Berkeley: Theoretical condensed matter physics.

Aronson, Meigan, Ph.D., 1988, University of Illinois: Experimental condensed matter.

Averin, Dmitrii V., Ph.D., 1987, Moscow State University, Russia: Theoretical condensed matter physics.

Courant, Ernest D., *Emeritus*[1], Ph.D. 1943, University of Rochester: Theoretical physics; high-energy accelerator design.

DeZafra, Robert L., *Emeritus*., Ph.D., 1958, University of Maryland: Atmospheric sciences; remote sensing, stratospheric dynamics, and trace constituent measurements; millimeter-wave spectroscopy.

Douglas, Michael [2], Ph.D,, 1988, California Insitute of Technology: String Theory.

Drees, Klaus Axel, Ph.D., 1989, University of Heidelberg, Germany: Experimental nuclear physics; relativistic heavy ions.

Engelmann, Roderich, Ph.D., 1966, University of Heidelberg, Germany: Experimental high-energy physics.

Feingold, Arnold, *Emeritus*. Ph.D., 1952, Princeton University: Theoretical nuclear physics.

Goldhaber, Alfred S. [1], Ph.D., 1964, Princeton University: Theoretical physics; nuclear theory; particle physics.

Goldman, Vladimir J., Ph.D., 1985, University of Maryland: Experimental condensed matter physics.

Gurvitch, Michael, Ph.D., 1978, University at Stony Brook: Experimental condensed matter physics.

Hobbs, John, Ph.D., 1991, University of Chicago: Experimental high-energy physics.

Jacobsen, Chris, Undergraduate Program Director. Ph.D., 1988, University at Stony Brook: X-ray microscopy and holography.

Jung, Chang Kee, Ph.D., 1986, Indiana University: Experimental high-energy physics.

Kahn, Peter B., *Emeritus.* Ph.D., 1960, Northwestern University: Theoretical physics; nonlinear dynamics.

Kharzeev, Ph.D., 1990, Moscow State University: Heavy ion physics and partlcle theory.

Koch, Peter M., Ph.D., 1974, Yale University: Experimental atomic physics; quantum chaos; nonlinear dynamics.

Korepin, Vladimir [1], Ph.D., 1977, Leningrad University, Russia: Theoretical physics.

Kuo, Thomas T.S., Ph.D., 1964, University of Pittsburgh: Nuclear theory.

Lanzetta, Kenneth M., Ph.D., 1988, University of Pittsburgh: Formation and evolution of galaxies; evolution of the intergalactic medium.

Lee, Linwood L., *Emeritus*. Ph.D., 1955, Yale University: Experimental nuclear physics.

Lukens, James, *Emeritus*, Ph.D., 1968, University of California, San Diego: Experimental condensed matter physics.

McCarthy, Robert L., Ph.D., 1971, University of California, Berkeley: Experimental high-energy physics.

McGrath, Robert L., , *Emeritus*. Ph.D., 1965, University of Iowa: Experimental nuclear physics.

Mendez, Emilio E., Director, Center for Functional Nanomaterials, BNL. Ph.D., 1979, Massachusetts Institute of Technology: Experimental condensed matter physics.

Mihaly, Laszlo, Chair of the Department, Ph.D., 1977, Eotvos Lorand University, Budapest, Hungary: Experimental condensed matter physics.

Rijssenbeek, Michael, Ph.D., 1979, University of Amsterdam, Netherlands: Experimental high-energy physics.

Rocek, Martin[1], Ph.D., 1979, Harvard University: Theoretical physics: supersymmetry and supergravity.

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Shrock, Robert[1], Ph.D., 1975, Princeton University: Theoretical physics; gauge theories; statistical mechanics.

Siegel, Warren[1], Ph.D., 1977, University of California, Berkeley: Theoretical physics; strings.

Simon, Michal, *Emeritus*. and Research Professor, Ph.D., 1967, Cornell University: Infrared astronomy; physics of the interstellar medium; star formation; solar astronomy.

Smith, John[1], *Emeritus*, Ph.D., 1963, University of Edinburgh, Scotland: Theoretical physics; elementary particle physics.

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.

Walter, Fredrick M., Ph.D., 1981, University of California, Berkeley: Stellar astrophysics, including X-ray optical and infrared photometry and spectroscopy; RS CV objects; pre-main sequence objects.

Weisberger, William[1], *Emeritus*. Ph.D., 1961, MIT. Theoretical physics.

Yahil, Amos, *Emeritus*. Ph.D., 1970, California Institute of Technology: Galaxies; clusters of galaxies; physical cosmology; accretion processes; stellar collapse; supernovae; nuclear astrophysics.

Zahed, Ismail, Ph.D., 1983, Massachusetts Institute of Technology: Theoretical nuclear physics.

Associate Professors
Abanov, Alexander, Ph.D., 1997, University of Chicago: Theoretical Condensed Matter Physics.

Deshpande, Abhay, Ph.D., 1995, Yale University: Nucleon spin and heavy ion physics.

Gonzalez-Garcia, Concha[1], Ph.D., 1991, Universidad de Valencia, Spain: Theoretical Elementary Particle Physics

Graf, Erlend H., Ph.D., 1967, Cornell University: Experimental low-temperature physics.

McGrew, Clark, Ph.D., 1994, University of California Irvine: Experimental High Energy Physics.

Mould, Richard A., *Emeritus*. Ph.D., 1957, Yale University: Theoretical physics; general relativity; quantum theory of measurements.

Peterson, Deane M., Ph.D., 1968, Harvard University: Stellar atmospheres; radiative transfer; optical interferometry, stellar imaging.

Rastelli, Leonardo[1], Ph.D., 2000, Massachusetts Institute of Technology: String Theory.

Schneble, Dominik A., Ph.D., 2002, University of Konstanz: Experimental atomic physics, ultracold quantum gases.

Weinacht, Thomas, Ph.D., 2000, University of Michigan: Quantum Optics and Atomic Physics.

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Assistant Professors
Allison, Thomas, Ph.D., 2010, University of California at Berkeley: Atomic, Molecular and Optical Experiment.

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: Theoretical particle physics.

Fernandez-Serra, Maria, Ph.d., 2005, Cambridge University: Theoretical condensed matter physics.

Fidkowski,Lukasz,Ph.D.,2007, Stanford University: Condensed Matter Theory.

Figueroa, Eden, Ph.D. , 2008, University of Calgary/University of Konstanz, 2008: Atomic, Molecular and Optical Experiment.

Herzog, Christopher, Ph.D., 2002, Princeton University: Theoretical physics.

Joanna Kiryluk, Ph.D., 2000, University of Warsaw: Neutrino physics.

Koda, Jin, Ph.D., University of Tokyo, 2002. Astronomy.

Patrick Meade, Ph.D. , 2006, Cornell University: phenomenological and theoretical explorations of the terascale. theoretical physics

Sehgal, Neelima, Ph.D., 2008, Rutgers University: Galaxies and cosmology.

Teaney, Derek. Ph.D., 2001 Stony Brook University: Nuclear theory.

Tsybychev, Dmitri, Ph.D., 2004 University of Florida: Experimental high-energy physics.

Wei, Tzu-Chieh, Ph.D., 2005,University of Illinois, Urbana: Theoretical Particle physics.

Research Faculty
Patel, Vijay, Ph.D., 2001 Stony Brook University: Experimental condensed matter physics.

Schamberger, Robert Dean, Ph.D., 1977, State University of New York at Stony Brook: Experimental high-energy physics.

Semenov, Vasili, Ph.D., 1975, Moscow State University, Russia: Experimental condensed matter physics.

Swesty, Douglas F., Ph.D., 1993 University at Stony Brook: Computational and nuclear astrophysics.

Yanagisawa, Chiaki, Ph.D. 1981, University of Tokyo, Japan: Experimental high energy physics.

Adjunct Faculty
Aronson, Samuel, Director of Brookhaven National Laboratory, Ph.D, 1968, Princeton University: Experimental nuclear physics

Bai, Mei, Ph.D. , 1999, Indiana University, Bloomington: Overcoming Intrinsic Spin Resonance by Using an RF Dipole.

Belomestnykh, Sergey, Ph.D., 1998, Budker Institute of Nuclear Physics: Accelerator Physics.

Ben-Zvi, Ilan, Ph.D., 1967, Weizmann Institute, Israel: Accelerator and beam physics.

Bergeman, Thomas, Ph.D., 1971, Harvard University: Theoretical atomic physics, interaction of light and matter, laser cooling, Bose condensation.

Creutz, Michael[1], Ph.D., 1970, Stanford University, Lattice gauge theory.

Cunsolo, Alesandro, Ph.D., 1999, University of Grenoble: Condensed matter physics.

Dawson, Sally[1], Ph.D., 1981, Harvard University, High energy theory.

Dickerson, James, Ph.D., 2002, Stony Brook University: Experimental Condensed Matter Physics.

DiMauro, Louis, Ph.D., Experimental atomic physics.

Dierker, Steven, Ph.D., 1983, University of Illinois: Experimental solid state physics.

Eisaman, Matthew, Ph.D. , 2006, Harvard Univesrity: Experimental Condensed Mater Physics.

Forman, Miriam, Ph.D., 1972, University at Stony Brook: Cosmic rays.

Geller, Marvin, Ph.D., 1969, Massachusetts Institute of Technology: Atmospheric physics.

Gibbs, Doon, Ph.D., 1982, University of Illinois: Accelerator physics.

Gu, Genda, Ph.D,, 1989, Harbin Inst. Of Technology: Experimental Condensed Matter Physics.

Hao, Yue, Ph.D., 2008, Indiana University: Accelerator physics.

Johnson, Peter, Ph.D., 1978, Warwick University: Experimental solid state physics.

Karsch, Frithjof, Ph.D. 1982, University of Bielefeld: Lattice QCD.

Ku, Wei, Ph.D., 2000, University of Tennessee: Theoretical condensed matter physics.

Litvinenko, Vladimir, Ph.D. 1989, Institute of Nuclear Physics, Novosibirsk, Russia: Accelerator physics and free electron lasers.

Maslov, Sergei, Ph.D., 1996, Stony Brook University: Theoretical condensed matter physics.

Ocko, Ben, Ph.D., MIT, 1984: Experimental condensed matter.

Peggs, Steven, Ph.D., 1981, Cornell University: Accelerator physics.

Perna, Rosalba, Ph.D., 1999, Harvard University: High Energy Astrophysics.

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Petrovic, Cedomir, Ph.D., 2000, Florida State University: Condensed matter physics.

Ptitsyn, Vadim, Ph.D. , 1997, Novosibirsk State University: Nuclear Physics.

Takai, Helio, Ph.D., 1986, Rio de Janeiro: Experimental particle & heavy ion physics.

Tsoupas, Nicholaos, Ph.D., 1975, Ohio State University: Accelerator physics.

Tsvelik, Alexei, Ph.D., 1980, Kurchatov Institute of Atomic Energy, Moscow, Russia : Theoretical condensed matter physics.

Raju Venugopalan, Ph.D., Stony Brook University: Nuclear theory.

Vogelsang, Werner[1], Ph.D., 1993, University of Dortmund: Theory YITP.

Zhu, Yimei, Ph.D., 1987, Nagoya University: Condensed matter physics.

Affiliated Faculty

Wang, Jin, Ph.D. 1991, University of Illinois, Biology of physics.

1) Member, C.N. Yang Institute for Theoretical Physics
2) Member, Simons Institute for Geometry and Physics

Number of teaching, graduate, and research assistants, fall 2013: 164

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

Fall 2013

Physiology and Biophysics Department

Chairperson
Peter R. Brink, Basic Science Tower T-6, Room 140 (631) 444-8818

Ph.D. Graduate Program Director
Mark Bowen, Basic Science Tower T-6, Room 145A (631) 444-3049
M.S. Graduate Program Director
Kelly Warren, Basic Science Tower T-5, Room 167 (631)-444-2932

M.S. Program Coordinator
Michele Leva, Basic Science Tower T-5, Room 184 (631)-444-8818

Graduate Program Administrator
Melanie Bonnette, Basic Science Tower T-6, Room 142 (631) 444-2299

Degrees Awarded
Ph.D. in Physiology and Biophysics; M.S. in Basic Health Sciences*
*Currently not admitting new students; Instead, prospective students can apply to: MS in Biomedical Sciences, Physiology and Biophysics

Web Site
http://pnb.informatics.stonybrook.edu/general/index.shtml

Physiology and Biophysics Department

The Department of Physiology and Biophysics offers graduate studies leading to the Ph.D. degree. The department's faculty has a broad spectrum of research interests, with a major emphasis on understanding the mechanisms of regulation of cellular and organ function in mammalian systems.

The overall goals of the new Master of Science degree program in Physiology and Biophysics are to prepare students for a research staff scientist career in industry (without a focus on R&D), a teaching career at the undergraduate college level, or further graduate study leading to the Ph.D degree in the Biomedical Sciences. For students interested in attending medical school, the M.S. degree program can complement and enhance your background in the physiological sciences, including biomedical research. 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. Elective courses 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. For more information, please contact Dr. Solomon at irene.solomon@stonybrook.edu.

There are five main research areas in the department: 1) Regulation of cell function and metabolism, 2) Intercellular and intracellular signaling mechanisms, 3) Biophysical studies of membranes, 4) Cellular and systems electrophysiology and neurobiology, and 5) Cardiac pre-conditioning and arrhythmia prevention.

The department strives to offer a broad spectrum of experimental approaches and a wide range of research interests, including membrane biophysics, systems biology, cardiac physiology, membrane transport, and the molecular physiology of cell signaling systems. The department also offers expertise in a wide range of experimental methods including patch clamping, protein chemistry, optical spectroscopy, recombinant DNA and siRNA technology and state of the art cell imaging.

Some department faculty members are associated with the Health Sciences Center Diabetes and Metabolism Center and others participate in University-wide program in Molecular and Cellular Biology, Structural Biology, Biophysics and Biosystems. Most faculty have collaborative arrangements with other basic science and clinical departments. Through joint faculty appointments, students have access to the unique facilities of Brookhaven National Laboratory and Cold Spring Harbor Laboratory, which are located near Stony Brook.

Housed within the Department of Physiology and Biophysics is the Institute of Molecular Cardiology. Since heart disease is still the number one cause of death in the United States, the Institute of Molecular Cardiology was established to bring a multidisciplinary group of basic scientists and clinical investigators together to focus on clinically relevant problems. Biophysicists, molecular biologists, cell biologists, engineers, and cardiovascular surgeons compose the group which currently works together investigating ischemic preconditioning, atrial and ventricular arrhythmias, cardiac contractility, and the development of stem-cell-based therapies.

The Graduate Program in Physiology and Biophysics

Goals
The diverse nature of the department's research provides a unique environment for graduate study. The overall goal of our program is to prepare students to investigate complex physiological and biophysical problems that often bridge traditional academic boundaries. This requires sound training in a broad range of biological disciplines, plus experience in using the latest techniques in physiology, biochemistry, molecular biology, physics, applied mathematics, and computing.

To accomplish this goal, we recruit a relatively small number of students with diverse undergraduate training in the physical and biological sciences. Individual courses of study are then designed that reflect the background and goals of each student.

Overview of Curriculum
During the first year, all students take courses in cellular and organ systems physiology, biochemistry, and experimental design and data analysis methods. During the second-year, students select from a variety of advanced courses that suit their scientific interests, goals, and background.

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Most students complete their coursework at the end of the fall semester of their second year. Students rotate through at least three faculty laboratories to gain research experience in their first year. Students also participate, under faculty supervision, in the teaching of physiology or biophysics. Upon completion of the qualifying examination and the selection of a faculty advisor for their research, the students then devote essentially all of their time to dissertation research.

There are three research concentrations available to graduate students: Cellular and Molecular Physiology, Biophysics, and Systems Physiology.

Cellular and Molecular Physiology
The goal of the Cellular and Molecular Physiology concentration is to train students to investigate significant problems in human physiology using modern techniques of molecular and cellular biology. Students who choose this option generally have undergraduate degrees in biochemistry or biology, and will take advanced graduate classes in cellular and molecular biology and molecular genetics during their second year. To increase the training and research opportunities available to our students, this program is affiliated with an interdepartmental program in Molecular and Cellular Biology (MCB). The MCB Program consists of approximately 100 faculty from 11 departments, as well as investigators at Cold Spring Harbor and Brookhaven National Laboratories. It offers several core courses taken by all graduate students in the biological sciences.

Biophysics
The goal of the Biophysics Studies concentration is to train students with strong backgrounds in physics and/or chemistry in modern biophysics. The program is an interdepartmental effort, consisting of faculty from Cold Spring Harbor and Brookhaven National Laboratories. Students who choose this option generally take advanced courses in biophysical chemistry, computational biophysics, electrophysiology, or advanced biochemistry. Biophysics students carry out rotations and dissertation research in the lab of any faculty member affiliated with the Biophysics Program.

Systems Physiology
The primary goal of the systems physiology concentration is to provide an educational framework that focuses on preparing students to attack complex integrative problems using interdisciplinary approaches, and to work effectively as part of a multi-disciplinary team. Areas of specialization in the department include systems neurophysiology, cardiovascular and microvascular physiology, and vision research. The systems physiology concentration is a central element in the BioSystems Group, which is an interdepartmental consortium of faculty members drawn from 6 departments, including Physiology & Biophysics, Biomedical Engineering, Neurobiology & Behavior, Pharmacological Sciences, Medicine, and Applied Mathematics & Statistics, as well as members from Brookhaven National Laboratories and Cold Spring Harbor Laboratories.

The campus-wide nature of the BioSystems Group provides educational and research opportunities of exceptional depth and diversity, and the ability to accommodate students with a broad spectrum of interests and backgrounds. This diversity is reflected in the areas of specialization within the graduate programs. These include the general areas of systems physiology, cellular/molecular physiology, biophysics, biomedical engineering, neuroscience, pharmacology, computational biology, and signal processing.

Requirements and Procedures Advisory Committee
After admission and until the student qualifies for candidacy, the student's education is directed by the Departmental Graduate Committee. The Committee will assess the student's background and preparation and will develop with each student an individual program of courses, laboratory experiences, and independent study. The Committee is also responsible for monitoring student performance and assessing progress after the end of the first year.

Laboratory Experience
During the first year, students rotate through at least three laboratories affiliated with the department. The duration of these rotations may vary, but should not exceed six months. At the end of each rotation, students will submit a written report of the aims and results, as well as the difficulties with the project.

Teaching Experience
Students are required to serve as teaching assistants for one semester in a course offered by the Department. This will fulfill the Teaching Practicum required for doctoral degrees awarded by the State University of New York.

Seminars and Journal Club
The Department hosts an extensive series of seminars on topics of direct and indirect relevance to research interests of the faculty. Seminars are given by faculty and visiting scientists. Students are required to attend all departmental seminars. Students are also required to participate in the student journal club, in which a student critically presents a journal article to members of the department.

Course of Study
Ph.D Graduate students are required to take the following courses:

Cellular Physiology and Biophysics HBY 530, Human Physiology HBY 501 or

Medical Physiology HBY 531, Biomembranes MCB 517, Graduate Biochemistry MCB 520, Statistical Analysis of Physiological Data HBY 561, Model-based Analysis of Physiological Data HBY 562, Teaching Practicum HBY 695, Research in Physiology and Biophysics HBY 591, Journal Club HBY 570, Seminar in Physiology and Biophysics HBY 690, and Thesis Research in Physiology and Biophysics HBY 699 or HBY 700, GRD 500 Scientific Integrity.

Students must also take at least four elective courses equaling 12 credits.

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Cellular,Molecular, and Systems Physiology: Molecular Genetics HBM 503, Molecular and Physiological Basis of Drug Action HBH 533, Immunology HBP 533, Advanced Physiology HBY 557, Experimental Techniques in Systems Physiology HBY 564, Mathematical Models of Physiologic & Biophysical Systems HBY 565, and other courses with approval.

Students are also required to demonstrate competency in statistics and computer programming, either by formal undergraduate or graduate courses, or by passing an exam after self study.

Qualifying for Candidacy
The major purpose of the Qualifying Examination is to establish how well the student is able to formulate scientific questions independently. To accomplish this, the student will be required to write, within a prescribed period of time, a formal research proposal with format and scope similar to a NIH Postdoctoral Fellowship Application under the guidance of a faculty committee.

The qualifying exam will be administered to all second-year students in the Spring semester. At that time, the student will choose a topic which may complement but not be directly in the area of the student's own major research interest. The student will then meet with the Preliminary Examination Committee, twice over the course of 6-8 weeks. The student will then distribute copies of the proposal to the faculty and present a seminar to the entire department describing the proposal. Following the seminar, the student will meet with the faculty to defend the proposal. The Preliminary Examination Committee will then vote on whether the student passes, fails or must amend portions of his/her exam.

Doctoral Program Committee
After completing three rotations, the student will select a faculty committee to provide guidance throughout the dissertation research The thesis advisor will join (but will not chair) this committee. The committee will meet at least once a year to assess the progress of the work toward a dissertation. The committee will advise the student when it is appropriate to assemble the committee for the dissertation defense.

Thesis Research Proposal
In consultation with the student's advisor and Doctoral Program Committee, the student is required to submit a written thesis proposal to the Doctoral Program Committee as soon as the direction and scope of the dissertation research project is established. The student is also required to present a seminar describing his proposal to the entire department and to defend the proposal in a closed meeting with the Doctoral Program Committee. The approved thesis proposal should be submitted 1 – 2 years after advancement to candidacy.

Dissertation Defense
A Dissertation Defense Committee is appointed by the dean of the Graduate School, and is to include at least four faculty members, of whom at least one must be from outside the Program. The thesis advisor may be in attendance, but is without vote.

Doctoral Thesis
The thesis will be written in the form of one or more scientific publications in accordance with the guidelines of the Graduate School. The student then presents his/her thesis work to departmental members in an open seminar, after which, the student meets privately with the Dissertation Defense Committee for an oral examination. The Dissertation Defense Committee evaluates both the oral exam and the completed thesis.

Time Limits
All requirements must be completed within seven years.

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Master of Science Degree in Biomedical Sciences, Physiology and Biophysics

Goals of the Program

The overall goals of the Master of Science degree program in Physiology and Biophysics are to prepare students for a research staff scientist career in industry (without a focus on R&D), a teaching career at the undergraduate college level, or further graduate study leading to the Ph.D. degree in the Biomedical Sciences. For students interested in attending medical school, the M.S. degree program can complement and enhance your background in the physiological sciences, including biomedical research. 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. Elective courses 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.

Master of Science Degree in Biomedical Sciences, Physiology and Biophysics

Admission requirements of Physiology and Biophysics Department

For admission to the Ph.D. program in Physiology and Biophysics or the M.S. program, the following, in addition to the minimum Graduate School requirements, are normally required:

A. A four-year undergraduate degree including the following courses: one year of calculus, one year of general biology with laboratory, one year of physics using calculus, and one year of chemistry. Training in the following areas is strongly recommended: organic chemistry, biochemistry,

and physical chemistry. Courses in genetics, cell biology, and biostatistics will also be useful. In exceptional circumstances, permission may be granted to correct deficiencies in undergraduate training during the first year of graduate study.

B. Three letters of reference are required.

C. The Graduate Record Examination (GRE) General Test is required. Instructions on reporting scores to this campus is on the Graduate School Web site. So that the scores will be available for a timely admission decision, the test should be taken no later than January. The deadline for receipt of the online applications for admission in the Fall is March 1. The TOEFL examination is also necessary for non-native speakers of English. Acceptance by both the Department of Physiology and Biophysics and the Graduate School is required.

D. A GPA of 3.0 or higher is required.

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.

Fall 2013

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)

Completion of this track will require 30 credits from the approved PhD curriculum in the Physiology and Biophysics and a thesis.

Faculty of Physiology and Biophysics Department

Professors

Brink, Peter R., Chairperson. 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.

Dilger, James P.[5], Ph.D., 1980, Stony Brook University: Neuromuscular junction; ion channels in nerve membranes.

Johnson, Roger A., Emeritus, Ph.D., 1968, University of Southern California: Mechanism of hormone action; inter- and intracellular regulation of membrane-bound hormone-sensitive enzymes.

Richard, Lin, MD, Univ. of California, San Francisco; P3kinase signalling

Mathias, Richard T., Ph.D., 1975, University of California, Los Angeles: Electrophysiology of cardiac muscle; volume regulation in the lens.

McLaughlin, Stuart, Emeritus, Ph.D., 1968, University of British Columbia, Canada: Biophysics of membranes.

Mendell, Lorne[1], Ph.D., 1965, Massachusetts Institute of Technology: Physiology and modify ability of synapses in the spinal cord.

Miller, W. Todd, Ph.D., 1988, Rockefeller University: Protein structure and function; molecular mechanisms of signal transduction.

Moore, Leon C., Ph.D., 1976, University of Southern California: Renal physiology.

Qin, Yi-Xian[18], Ph.D., 1997, Stony Brook University: Mechanisms in the control of tissue growth, bone adaptation by mechanical environment.

Scarlata, Suzanne, Ph.D., 1984, University of Illinois: Biophysics of signaling proteins.

Smith, Steven O.[14], Ph.D., 1985, University of California, Berkeley: Molecular mechanisms of signal transduction.

Solomon, Irene C., Graduate Program Director (M.S.), Ph.D., 1994, University of California, Davis: Neural control of respiratory motor output and fast oscillatory rhythms.

White, Thomas W., Ph.D., 1984, Harvard University: Biology of cell-to-cell communication and gap junction.

Van der Kloot, William G., Distinguished Professor, Emeritus, Ph.D, 1952, Harvard Univ.; Cellular Neurophysiology

Associate Professors

Bowen, Mark, Ph.D., 1998 , , University of Illinois, Chicago; Molecular aspects of signal transduction.

Clausen, Chris, Ph.D., 1979, University of California, Los Angeles: Electrical properties of transporting epithelia.

Collins, William[1], Ph.D., 1980, Univ. of Pennsylvania: Relationship between intrinsic properties of individual neurons and nervous system function.

Konopka, James B.[17], Ph.D., 1985, UCLA: G protein-coupled receptor signal transduction and yeast morphogenesis.

McKinnon, David[1], Ph.D., 1987, Australian National University: Control of ion channel expression.

Spector, Ilan, Ph.D., 1967, University of Paris, France: Electrophysiology of nerve and muscle cell lines; ion channels; neurotoxins.

Assistant Professors

Acosta, Maricedes, Ph.D, 2002, Albert Einstein College of Medicine; Neuroendocrine regulation of the reproductive axis; signal transduction pathways and metabolic control.

Entcheva, Emilia[18], Ph.D., 1998, Memphis: Cardiac cell function.

Frame, Mary[18], Ph.D., 1990, University of Missouri: Microcirculation; tissue engineering; nanofabrication.

Research Faculty

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.

Gao, Junyuan, Assistant Professor. Ph.D., 1994, Stony Brook University: Sodium potassium pump current in cardiac myocytes.

Fall 2013

Kumari, Sindhu, Assistant Professor. Ph.D., 1988, Madurai Kamaraj University, India: Biochemical and molecular characterization of gap junction channels and sodium potassium pumpChiara Luberto, Ph.D, 1997, Catholic Univ of Rome and School of Medicine, Rome, Italy, Dept. of Physiology and Biophysics, Cancer biology and hematologic malignancies

Pentyala, Srinivas N., Assistant Professor.[5] Ph.D., 1989, Sri Venkateswara University: Molecular mechanics of the action of anesthetics.

Rebecchi, Mario J., Associate Professor.[5] Ph.D., 1984, New York University School of Medicine: Signal transduction in mammalian cells.

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.

Wang, Hsien Yu, Associate Professor. Ph.D., 1989, Stony Brook University: Signal transduction and development.

Physiology and Biophysics Program Affiliated Faculty

Colognato, Holly, Ph.D., 1999, Rutgers Univ., Department of Pharmalogical Scinces;Extracellular matrix in brain: roles during development and during neurodegeneration

Frohman, Michael, MD, Ph.D., Univ. of Pennsylvania, School of Medicine, Department of Pharmalogical Sciences; Lipid Signalling

Grollman, Arthur P., Distinguished Professor, M.D., 1959, Johns Hopkins University: Department of Pharmacological Science. Chemical carcinogenesis and mutagenesis.

Jacobsen, Chris J., Professor, Ph.D., 1988, Stony Brook University; Department of Physics. Soft X-ray microscopy of cellular structure and materials structure.

Joshua-Tor, Leemor, Assistant Investigator, Ph.D., 1991, The Weizmann Institute of Science; Cold Spring Harbor Laboratory. Structural biology; X-ray crystallography; molecular recognition; transcription; proteases.

Kirz, Janos, Professor, Ph.D., 1963, University of California, Berkeley: Department of Physics. Microscopy and microanalysis of cellular architecture with soft X-rays.

Krainer, Adrian R., Professor, Ph.D., 1986, Harvard University; Cold Spring Harbor Lab. Mechanisms and regulation of messenger RNA splicing in human cells.

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.

Fall 2013

Raleigh, Daniel P., Professor, Ph.D., 1988, Massachusetts Institute of Technology: Department of Chemistry. Experimental studies of protein folding and amyloid formation.

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: Department of Chemistry. Enzyme mechanisms and protein structure-function relationships.

Setlow, Richard, Professor, Ph.D., 1947, Yale University; Senior Scientist, Department of Biology, Brookhaven National Laboratory. DNA damage and repair.

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.

Fall 2013

Department of Political Science

Chairperson

Jeffrey Segal, Ward Melville Social and Behavioral Sciences Building S-711 (631) 632-7667

Graduate Program Director

Matthew Lebo, Ward Melville Social and Behavioral Sciences Building (631) 632-7667

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

Ph.D in Political Science: http://www.stonybrook.edu/commcms/polisci/phd_program.html

M.A. in Political Science: http://www.stonybrook.edu/commcms/polisci/ma_political_science.html

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

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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 requiremetns 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

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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

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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, Ph.D., 1965, Columbia University: Comparative politics; political theory.

Professors
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.

Koppelman, Lee E., 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.

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., Graduate Program Director, Ph.D., 1991, University of Illinois: International relations; political psychology; foreign policy; conflict modeling; computational modeling (AI).

Associate Professors
Cover, Albert D., Ph.D., 1976, Yale University: American politics: congressional elections.

Lavine, Howard, Ph.D., 1994, University of Minnesota: Political psychology; cognition.

Lahav, Gallya, Ph.D., 1995, City University of New York: Political psychology; comparative politics.

Lebo, Matthew, Ph.D., 1999, University of North Texas: Political parties; public opinion; elections; political methodology.

Assistant Professors
Garretson, Jeremiah, Ph.D., 2009, Vanderbilt University: American politics, Congress, political methodology.

Levitan, Lindsey Clark, Ph.D., 2007, University of Chicago: Social networks; attitudes; prejudice.

Steinwand, Martin, PhD., 2010, University of Rochester: Political economy, game theory, economics of foreign aid.

Smirnov, Oleg, Ph.D., 2005, University of Oregon: Evolutionary game theory; computational and agent-based modeling; experimental economics; evolutionary psychology.

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.

Fall 2013

Political Science, M.A. in Public Policy

Chairperson

Jeffrey Segal, Ward Melville Social and Behavioral Sciences Building S-711 (631) 632-7667

Graduate Program Director

Peter Salins, Ward Melville Social and Behavioral Sciences Building (631) 632-7624

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/ma_public_policy.html

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.

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Admission requirements of the Department of Political Science

The M.A in Public Policy prepares students for entry and mid-level analytic and management positions in state, local, and federal agencies, in non-profit organizations that interact with government, and in corporations that deal with public policy. Courses are taught by members of the department, as well as by outstanding local practitioners affiliated with the Center for Regional Policy Studies, headed by Dr. Lee Koppelman.

Admission

Applicants should have an undergraduate Grade Point Average of 3.0 (out of 4.0), and Graduate Record Examination (GRE) scores indicating a potential for success in a rigorous graduate program. Consideration will also be given to letters of recommendation and work experience.

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).

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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.

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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.

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Degree Requirements M.A. in Public Policy

Program Tracks

M.A. Track

This track requires the completion of 30 credits of graduate coursework, typically distributed as follows:

Fall:

POL 501 Introductions to Statistics for Public Policy (3 credits)

POL 535 Public Policy Analysis & Evaluation (3 credits)

POL 509 Public Budgeting and Finance (3 credits)

POL 537 Administrative Law for Public Analysts (3 credits)

or

500-level elective approved by Graduate Director (only one elective permitted outside of Department of Political Science)

Spring:

POL 502 Intermediate Statistics for Public Policy (3 credits)

POL 536 Public Management & Organizational Behavior (3 credits)

POL 510 Personnel Systems for Public Policy (3 credits)

POL 534 Intergovernmental Relations and Policy Delivery (3 credits)

or

500-level elective (as approved)

Summer:

POL 599 Internship in Public Policy (6 credits)

or

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POL 597 Master's Paper (6 credits)

Full-time students without past significant full-time public policy work experience are required to take the Internship in Public Policy. Part-time students can fulfill their capstone requirement by the Internship (POL 599), the M.A. Paper (POL 597), or two additional elective 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

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Segal, Jeffrey A., Chairperson, Ph.D., 1983, Michigan State University: Judicial process and behavior; research methods; American politics.

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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.

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School of Professional Development (SPD)

Interim Dean
Thomas R. Sexton, Ward Melville Social and Behavioral Sciences Building N-203 (631) 632-7181

Associate Dean and Teacher Certification Officer
Marvin J. Glockner, Ward Melville Social and Behavioral Sciences Building N-223 (631) 632-7055

Associate Dean for Finance and Administration
Joyce Wellinger, Ward Melville Social and Behavioral Sciences Building N-203 (631) 632-7053

Assistant Dean for Curriculum and Academic Planning
Carolyn Jankowski, Ward Melville Social and Behavioral Sciences Building N-215 (631) 632-9159

Assistant Dean for Academic Services
Judith Daly, Ward Melville Social and Behavioral Sciences Building N-201 (631) 632-7751

Advanced Graduate Certificates (AGCs) Awarded
Coaching; Educational Computing; Environmental Management; Higher Education Administration; Human Resource Management; Industrial Management, Information Systems Management; Operations Research.

Post-Master's Advanced Graduate Certificate (AGCs) Awarded
Educational Leadership and School District Business Leader

Degrees Awarded
Master of Arts in Liberal Studies (MA/LS); Master of Arts in Higher Education Administration; Master of Science in Human Resource Management; Master of Arts in Teaching (MAT): MAT in English, grades 7-12; MAT in Foreign Languages, grades 7-12 (French, German, Italian, or Spanish); MAT in Mathematics, grades 7-12; MAT in Science, grades 7-12 (Biology, Chemistry, Earth Science or Physics with a General Science Extension for grades 7-12); MAT in Social Studies, grades 7-12; Master of Professional Studies (MPS), with a concentration in Environmental Management. Also, all M.A.Ts offer an option to extend the certification to include grades 5 and 6 and most M.A.T.s are offered as dual-degree programs in conjunction with a B.A. or B.S. in the same content area.

Description of School of Professional Development (SPD)

The School of Professional Development (SPD) offers graduate degree and certificate programs designed for working adults. Courses are scheduled in the evenings, on Saturdays, off-campus and online; students may enroll on a part-time or full-time basis.

From Human Resource Management to Environmental Management, SPD offers a wide range of programs that address the needs of the Long Island region and emerging professions. Its most popular programs, however, are in the field of professional education. SPD supports educators in each step of their careers by preparing new teachers seeking initial licensure (the Master of Arts in Teaching), assisting current teachers in obtaining their professional license (the Master of Arts in Liberal Studies) and helping advance seasoned teachers into the ranks of administration (the Educational Leadership programs).

Since 1996, SPD has been at the forefront of online learning and currently has the highest online graduate enrollment of any SUNY school. As of Fall 2007, SPD offers five fully online degree and advanced graduate certificate programs. All of SPD's online graduate programs are accredited, and its Master of Arts in Liberal Studies and post-master's Educational Leadership Advanced Graduate Certificate have been approved by the New York State Department of Education for the purposes of initial and professional certification (refer to individual program descriptions for specific information about how these programs meet certification requirements.) In addition, the Advanced Graduate Certificate in Coaching is valid for district recommendation to BOCES for a New York State coaching license.

SPD is also Stony Brook's admissions gateway for non-matriculating graduate students. These are students who hold a baccalaureate degree or higher and wish to continue their studies by taking graduate or undergraduate courses without committing to a degree program.

For more information, visit the SPD Web site at www.stonybrook.edu/spd.

Master of Arts in Higher Education Administration
The Master of Arts in Higher Education Administration, a 30-credit program, addresses the unique professional development needs of college and university administrators who seek to advance in their careers through focused graduate-level study. Combining aspects of theory and practice within the dynamic context of American higher education, the curriculum equips practitioners to sharpen their analytical skills and improve decision-making through an interdisciplinary program drawing upon the academic strengths of Stony Brook. For complete admission and program requirements, visit SPD on the Web at www.stonybrook.edu/spd/hea.

Master of Arts in Liberal Studies (MA/LS)
The Master of Arts in Liberal Studies program is a 33-credit interdisciplinary degree program that examines issues and themes in the arts and humanities, social and behavioral sciences, and natural and applied sciences. Developed primarily for adult students who seek educational enrichment and professional development on a part-time evening basis, the MA/LS is not structured specifically to serve as a prerequisite to a more advanced degree.

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The MA/LS is acceptable as a functionally-relevant master's degree that initially licensed teachers may use to achieve professional certification through the New York State Education Department (provided that they complete a minimum of four (4) courses in their content area of certification as part of their program).

The degree program is also available in a completely online, asynchronous format that has been approved by the New York State Education Department. For complete admission and program requirements, visit SPD on the Web at www.stonybrook.edu/spd/graduate/mals.

Master of Professional Studies (MPS)
The Master of Professional Studies has been developed as the professional studies counterpart to the Master of Arts in Liberal Studies. It is an interdisciplinary degree whose core curriculum focuses on the theoretical structure and methodology of social science disciplines and their application to professional studies. Two concentrations are available within this program: Human Resource Management or Environmental Management. The program stresses the application of research and experience to complex social and political issues. Structured primarily for working adults who seek educational study and professional development on a part-time evening basis, the MPS does not specifically serve as a prerequisite for a more advanced degree.

The MPS with a concentration in Human Resource Management is also available in an asynchronous, fully online format.

For complete admission and program requirements, visit SPD on the Web at www.stonybrook.edu/spd/graduate/mps.html.

Master of Arts in Teaching (MAT)
Each Master of Arts in Teaching program includes a set of professional education courses and a concentration in an academic discipline. Students who complete an MAT program satisfy both the registered and approved program requirements for New York State secondary grades 7-12 initial teacher certification in MAT subject areas (i.e., English, Spanish, French, German, Italian, Russian, Biology, Chemistry, Earth Science, Mathematics, Physics, and Social Studies) and the master's degree requirement for professional certification. All MAT programs offer an extension option for grades 5-6.

SPD Office of Teacher Certification: SPD_teachercertprograms@notes.cc.sunysb.edu.

All advisement on how to meet requirements for state certification by the alternate route (i.e., minimum requirements) must be obtained from the State Education Department in Albany, (518) 474-3901 or visit NYSED online at ohe32.nysed.gov/tcert/.

Master of Arts in Teaching (MAT): English
Offered through SPD in collaboration with the Professional Education Program and the English Department, the Master of Arts in Teaching English is designed as a course of study leading to New York State certification for teaching English in the secondary schools (grades 7-12). This program consists of 41 credits of graduate coursework.

For complete admission and program requirements, please visit SPD on the Web at www.stonybrook.edu/spd/graduate/matenglish.html. Prospective students may also address inquiries to:
Dr. Kenneth Lindblom, Director
MAT in English Program
Stony Brook University, Stony Brook, New York 11794-5350
Telephone: (631) 632-7403 or 632-7055
E-mail: *Kenneth.Lindblom@stonybrook.edu*

Master of Arts in Teaching (MAT): Foreign Languages
French, German, Italian, or Spanish
The Master of Arts in Teaching Foreign Languages programs are individually designed to lead to New York State certification for teaching Spanish, French, Italian, or German in the secondary schools (grades 7-12). Each program requires 44 graduate credits of coursework.

The programs are offered through SPD in collaboration with the Professional Education Program and the Department of European Languages, Literatures and Cultures, For complete admission and program requirements, visit SPD on the Web at www.stonybrook.edu/spd/graduate/matfl.html. Prospective students may also address inquiries to:
Dr. Sarah Jourdain, Director
MAT in Foreign Language Programs
Stony Brook University, Stony Brook, New York 11794-3359
Telephone (631) 632-7440 or 632-7055
E-mail: *Sarah.Jourdain@stonybrook.edu*

Master of Arts in Teaching (MAT): Mathematics
The Master of Arts in Teaching Mathematics is a course of study leading to New York State certification for teaching Mathematics in the secondary schools (grades 7-12). This 42-credit program, offered in collaboration with the University's Department of Mathematics and

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Professional Education Program, is designed for those who have little or no previous coursework in education or formal classroom teaching experience.

For complete admission and program requirements, visit SPD on the Web at www.stonybrook.edu/spd/graduate/matmath.html. Prospective students may also address inquiries to:
Dr. Lisa Berger, Director
MAT in Mathematics Program
Stony Brook University, Stony Brook, New York 11794-3651
Telephone (631) 632-8278 or 632-7055
E-mail: lbrgr@math.sunysb.edu

Master of Arts in Teaching (MAT): Science
Biology, Chemistry, Earth Science, or Physics
Offered by the Departments of Biochemistry and Cell Biology, Chemistry, Geosciences, Physics and the Professional Education Program in collaboration with SPD, these Master of Arts in Teaching programs are individually designed to lead to New York State certification for teaching Biology, Chemistry, Earth Science, or Physics in the secondary schools (grades 7-12). Candidates admitted may also qualify for a General Science Extension (grades 7-12). Each program consists of a total of 41 graduate credits of coursework.

For complete admission and program requirements, visit SPD on the Web at www.stonybrook.edu/spd/graduate/matscience.html, or contact the appropriate program director at the phone numbers listed below:

Biology MAT: Dr. Zuzana Zachar; (631) 632-8970 or *Zuzana.Zachar@stonybrook.edu*

Chemistry MAT: Dr. Robert Kerber; (631) 632-7940 or *Robert.Kerber@stonybrook.edu*

Earth Science MAT: Dr. Gilbert Hanson; (631) 632-8210 or *Gilbert.Hanson@stonybrook.edu*

Physics MAT: Dr. Robert McCarthy; (631) 632-8086 or *Robert.McCarthy@stonybrook.edu*

Master of Arts in Teaching (MAT): Social Studies
The Master of Arts in Teaching Social Studies, with a concentration in history, is designed as a course of study leading to New York State certification for teaching social studies in the secondary schools (grades 7-12). It is offered through SPD in collaboration with the Professional Education Program and the Department of History. The program consists of a total of 36 graduate credits of coursework.

For complete admission and program requirements, visit SPD on the Web at www.stonybrook.edu/spd/graduate/matss.html. Prospective students may also address inquiries to:
Dr. Lawrence Frohman, Director
MAT in Social Studies Program
Stony Brook University, Stony Brook, New York 11794-4333
Telephone (631) 632-7686 or 632-7055
E-mail: *Lawrence.Frohman@stonybrook.edu*

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Educational Leadership Program
SPD has the largest Educational Leadership program in New York State and is the first program of its kind to be offered both in-person and completely online. The program is open to teachers who have at least three years of full-time teaching experience and have already earned a master's degree. Completion of this 36-credit Post-Masters Advanced Graduate Certificate program leads to a credential that serves as a pathway for certification at both the district and building levels. Such positions include superintendent of schools, district superintendent, assistant superintendent, principal, assistant principal, department chairperson, or athletic director. The Educational Leadership Program is offered in collaboration with the University's Professional Education Program and fully articulates with Ed.D programs at Seton Hall and Fordham universities.

Admission and program requirements may be found on the Web at *www.stonybrook.edu/spd/edleadership*. Admissions questions should be directed to SPD at *spd@stonybrook.edu* or (631) 632-7050 (option 3). Prospective students may also address academic inquiries to:

Dr. Robert Moraghan
School of Professional Development
Stony Brook University, Stony Brook, NY 11794-4310
Telephone: (631) 632-7702 or 632-7050 (option 3)
E-mail: *moraghan@math.sunysb.edu*

School District Business Leader (SDBL) Post Master's Advanced Graduate Certificate
This post-master's Advanced Graduate Certificate 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 as assistant superintendent for school business

positions. This 36-credit program is offered in collaboration with the University's Professional Education Program. Courses in this program fully articulate with Ed.D. programs at Seton Hall and Fordham universities.

Admission and program requirements may be found on the Web at www.stonybrook.edu/spd/graduate/sdbl. Admissions questions should be directed to SPD at *spd@stonybrook.edu* or (631) 632-7050 (option 3). For academic questions, contact:
Dr. Robert Moraghan
School of Professional Development
Stony Brook University, Stony Brook, NY 11794-4310
Telephone: (631) 632-7702 or 632-7050 (option 3)
E-mail: *moraghan@math.sunysb.edu*

Advanced Graduate Certificate (AGC) Programs
SPD offers a variety of Advanced Graduate Certificate programs for individuals who seek a specialized professional credential beyond the Baccalaureate Degree. Programs are currently offered in the following areas of study: Coaching, Educational Computing, Environmental Management, Human Resource Management, Industrial Management, Information Systems Management, and Operations Research. Credit requirements range from 18 to 21 credits, some of which may be applicable toward a Master's Degree. Please consult with an SPD Academic Advisor to determine how the graduate courses that meet the requirements for each of these certificates may, where appropriate, also be used to satisfy SPD degree program requirements.

Advanced Graduate Certificate (AGC) in Coaching
The Advanced Graduate Certificate in Coaching program offers the necessary course work to meet New York State certification or licensing requirements. 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 can be completed in person at our Stony Brook campus or completely online.

For complete admission and program requirements, visit SPD on the Web at www.stonybrook.edu/spd/graduate/coaching.html. Prospective students may also call (631) 632-7050 (option 3).

Advanced Graduate Certificate (AGC) in Educational Computing
The 18-credit Advanced Graduate Certificate program in Educational Computing is offered in collaboration with the Department of Technology and Society. This certificate is designed to provide background training and intervention techniques for students who wish to become proficient in educational computing in either an education-based or business/industry-based situation.

The education track will train the student to become a leader in the innovative use of computers and computer-based technologies in a school setting. Graduates of this program may assume roles such as curriculum developers, coordinators of instructional computing, or technology planners that help schools select appropriate hardware and software to support technology-enriched curricula.

The business/industry track will train the student to become a leader in the use of the computer as a tool in training and education. In addition, the program will help the student to become an expert in the teaching of applications software such as spreadsheets and databases. Graduates of this program may assume roles as teachers of applications software, multi-media developers, experts on human-computer interface, or experts on the infusion of computer-based technologies in various business/industry environments.

For complete admission and program requirements, visit SPD on the Web at www.stonybrook.edu/spd/graduate/edcomputing.html. For academic questions, prospective students may contact:

Rita Reagan Redko, Department of Technology and Society
Telephone: (631) 632-1057
E-mail: *Rita.Reagan-Redko@stonybrook.edu*

or

Marypat Taveras, Department of Technology and Society
Telephone: 631) 632- 8762
E-mail: *Marypat.Taveras@stonybrook.edu*

Advanced Graduate Certificate (AGC) in Environmental Management
SPD's 18-credit Advanced Graduate Certificate in Environmental Management is offered in collaboration with Stony Brook's School of Marine and Atmospheric Sciences. The certificate program qualifies individuals to confront the complex and controversial problems of environmental management by providing students with the educational background for making informed decisions on these matters. Areas to be covered in this program include community land use planning, systems and risk management, policy and the democratic process, wetland and water resource studies, and issues relating to communication and participatory processes.

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This certificate should appeal to those who consider access to the most current expertise in environmental management essential to working effectively in their professional careers or public service activities. It is designed to meet the immediate demands for environmental management solutions and the more long-range goal of promoting the environmental and economic welfare of the New York region.

For complete admission and program requirements, visit SPD on the Web at www.stonybrook.edu/spd/graduate/environmental.html. For academic questions, prospective students may contact Dr. Larry Swanson at the School of Marine and Atmospheric Sciences at (631) 632-8704 or *Lawrence.Swanson@stonybrook.edu*.

Advanced Graduate Certificate in Higher Education Administration
The Advanced Graduate Certificate (AGC) in Higher Education Administration is an 18-credit program designed to provide practitioners with the opportunity to enhance their knowledge of student affairs and college and university administration through graduate study. For complete admission and program requirements, visit SPD on the Web at www.stonybrook.edu/spd/hea.

Advanced Graduate Certificate (AGC) in Human Resource Management
Offered in collaboration with the College of Business, this program provides the educational background necessary to make informed decisions in management and policy analysis as related to human resource issues. It is designed for private- and public-sector managers, industrial relations specialists, union representatives, human resource/personnel managers, and employee training professionals. Eighteen of the 21 credits required to earn this Advanced Graduate Certificate may be applied toward SPD's Master of Professional Studies degree. Course work for this certificate program may be completed on-campus, online or in combination.

For complete admission and program requirements, visit SPD on the Web at www.stonybrook.edu/spd/graduate/hrm.html. For academic questions, prospective students may contact Dr. Manuel London, Associate Dean, College of Business at (631) 632-7179 or *Manuel.London@stonybrook.edu*.

Advanced Graduate Certificate (AGC) in Industrial Management
The goals of this 18-credit program 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.

For complete admission and program requirements, visit SPD on the Web at www.stonybrook.edu/spd/graduate/industrial.html. For academic questions, prospective students may contact Dr. David Ferguson at (631) 632-8763 or *David.Ferguson@stonybrook.edu*.

Advanced Graduate Certificate (AGC) in Information Systems Management
This 18-credit program provides an educational opportunity to combine management education with technical training in specific areas related to information systems. Offered in collaboration with the College of Business, this graduate certificate program should interest students from various professional fields. For students without formal training in management of information systems, the program can be used as an introduction to the field. For students with management experience, the program offers specialized courses in selected subjects such as systems analysis and design, database management, telecommunications, expert systems, and personal computing. For technical workers in the information systems field without formal managerial training, the program offers managerial courses and a professional credential.

For complete admission and program requirements, visit SPD on the Web at www.stonybrook.edu/spd/graduate/ism.html. For academic questions, prospective students may contact Aristotle Lekacos, College of Business, at (631) 632-7389 or *Aristotle.Lekacos@sunysb.edu.*

Advanced Graduate Certificate (AGC) in Operations Research
This certificate program is offered in collaboration with the Department of Applied Mathematics and Statistics in the College of Engineering and Applied Sciences and correlates with the M.S. in Applied Mathematics and Statistics as well as the Master of Arts in Liberal Studies offered through SPD.

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 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.

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For complete admission and program requirements, visit SPD on the web at www.stonybrook.edu/spd/graduate/operations.html. For academic questions, prospective students may contact Professor Alan Tucker, Coordinator of Operations Research in the Department of Applied Mathematics and Statistics at (631) 632-8365 or *atucker@notes.stonybrook.edu*.

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

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Department of Psychology

Chair
Daniel Klein, Psychology B 154 (631) 632-7808

Graduate Program Advisor
Nancy Franklin, Psychology B 338 (631) 632-7840

Graduate Program Coordinator
Marilynn Wollmuth, Psychology B 150 (631) 632-7855

Web Site
http://www.psychology.sunysb.edu/psychology/index.php?MAgraduate

Degrees Awarded
MA in Psychology

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.

Requirements for the MA in Psychology

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

Facilities of the Department of Psychology

Faculty in each area maintain active laboratories with state-of-the-art equipment for research and graduate training.

The **Clinical** area research interests of the core faculty center on depressive disorders, anxiety disorders, personality disorders, discord and aggression among couples, romantic competence among adolescents and adults, social problem solving, psychotherapy process and outcome, and lesbian/gay/bisexual issues. 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 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 Psychological Center, an Anxiety Disorders Clinic provides assessment and treatment of various anxiety disorders such as obsessive-compulsive disorder and post-traumatic stress 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, North Shore University Hospital, Long Island Jewish Hillside Hospital, local public schools, and

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Northport Veteran's Administration Hospital. The Department-sponsored University Preschool enrolls children from 18 months to five years of age, permitting both research and observation.

The **Biopsychology** Program provides opportunities to learn the neural genetics, anatomy, circuitry, physiology and chemistry underlying a broad array of behaviors and disorders. The program develops conceptual knowledge of issues ranging from social, affective, cognitive and clinical neuroscience to behavioral and molecular neuroscience. Likewise we offer opportunities for developing a wide range of research skills, from behavioral and systems analysis to cellular, subcellular and genetic analysis. Students have the opportunity for research training with core faculty or affiliated faculty in the Departments of Neurobiology, Medicine and the Medical Department at Brookhaven National Labs. Students have access to facilities for histological and neuroanatomical analysis, behavioral analysis, molecular and genetic analysis, transcranial magnetic stimulation, human electrophysiology, eye-tracking, PET and fMRI imaging. Human imaging is conducted with a research dedicated, state-of-the art 3T MRI system housed in our new NSF-funded SCAN (Social, Cognitive and Affective Neuroscience) center. 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 **Cognitive/Experimental** area offers training in cognitive science in its affiliations with the Departments of Linguistics and Computer Science, and in cognitive neuroscience, in cooperation with the Biopsychology Program, the Department of Neurobiology and Behavior, and Brookhaven National Laboratory's Medical Department. Laboratory facilities include a state-of-the-art 3Tesla fMRI research dedicated scanner, aPurkinje eyetracker and several lightweight head-mounted 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, the Army Research Office, and the National Patient Safety Foundation. Faculty, students, and postdoctoral associates rely primarily on the Psychology Department's large volunteer pool of human subjects.

The **Social and Health** area 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 and close relationships 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; and coping with breast cancer, pregnancy, or the loss of a spouse. Social and Health Area faculty have affiliations with the Department of Psychiatry, 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 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 Department of 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, two semesters 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

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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.

Biopsychology
Complete the following courses (required of all Biopsychology Area students):

PSY 561 Cognitive and Behavioral Neuroscience I

PSY 562 Cognitive and Behavioral Neuroscience II

Complete at least twoof the following courses:

PSY 560 Neuropsychology

PSY 564 Neuropsychopharmacology

PSY 620 Seminars in Selected Topics: Affective Neuroscience

PSY 620 Seminars in Selected Topics: Cognitive Neuroscience)

Sign up for the following sequence each year (required of all Biopsychology Area students):

PSY 581 Cognitive and Behavioral Neuroscience Colloquium I

PSY 582 Cognitive and Behavioral Neuroscience Colloquium II

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

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Complete the following courses in the second year (required of all Clinical Area students):

PSY 535 Advanced Research Methods

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 533 Principles Applicable to Clinical Psychology: Historical & Systemic Perspectives

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 fourth year and complete internship (PSY 608) in the fifth year.

Cognitive/Experimental Psychology
Complete three of the following:

PSY 513 Attention and Thought

PSY 514 Sensation and Perception

PSY 518 Memory

PSY 520 Psycholinguistics

PSY 610/620 Seminars in Selected Topics: Cognition

Sign up for the following sequence each year (required of all students):

PSY 583 Experimental Colloquium I

PSY 584 Experimental Colloquium II

The Cognitive/Experimental Area also requires submission of a First-Year Research Paper requiring data collection and analysis. This paper must be submitted to the advisor and area head at the end of the second semester of graduate study.

Social and Health Psychology
Complete two of the following courses:

PSY 541 Social Psychology of Close Relationships

PSY 543 Attachment

PSY 544 Emotions & Cognition

PSY 549 Prejudice & Discrimination

PSY 555 Social Psychology

PSY 558 Theories of Social Psychology: Health Applications

PSY 559 Psychology of Women's Health

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 or Area Head.

PSY 505 Structural Equation Modeling & Advance Multivariate Methods

PSY 506 Psychometrics

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PSY 535 Advanced Research Methods

PSY 610 Seminars in Selected Topics: Meta-Analysis

Faculty of the Department of Psychology

Distinguished Professors

Goldfried, Marvin, Ph.D., 1961, University at Buffalo: Lesbian, gay and bisexual issues; psychotherapy process research; cognitive behavior therapy; delineation of common therapeutic principles across theoretical orientations. Clinical Program

O'Leary, K. Daniel, Director of Clinical Training. Ph.D., 1967, University of Illinois: Etiology and treatment of marital discord and spouse abuse; physical aggression in intimate relationships; the effects of marital discord on partner depression; memory for interpersonal events. 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, Ph.D., 1970, University of Toronto, Canada: Motivation and cognition in close relationships; intergroup relations; social neuroscience. Social and Health Program

Brennan, Susan E., Graduate Program Director, 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

Davila, Joanne, Director, Clinical Training Program, Ph.D., 1993, University of California, Los Angeles: Interpersonal functioning and psychopathology, depression, maladaptive personality styles, close relationships, attachment processes. Clinical Program

D'Zurilla, Thomas J., Emeritus, Ph.D., 1964, University of Illinois: Social problem solving; problem-solving therapy; preventive problem-solving training. Clinical Program

Gerrig, Richard, Ph.D., 1984, Stanford University: Psycholinguistics; text understanding and representation; nonconventional language; cognitive experiences of narrative worlds. Cognitive Science Program

Klein, Daniel N., Chair, Ph.D., 1983, University at Buffalo: Psychopathology; mood disorders; assessment, classification, course, development, familial transmission, and treatment of depression: child temperament and personality development. Clinical Program

Levine, Marvin, Emeritus, Ph.D., 1959, University of Wisconsin: Problem solving, especially heuristics, and the use of spatial information; comparison of Buddhist and Western views of human nature. Clinical Program

Lobel, Marci, Head, Social and Health Program, Ph.D., 1989, University of California, Los Angeles: Stress, coping, and physical health; psychosocial factors in pregnancy and birth outcomes; 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: Human memory and amnesia; implicit and explicit memory distinctions; new learning in amnesia; priming, social influences on individual memory; experimental investigation of remembering and knowing the past. Cognitive Science Program

Robinson, John, Ph.D., 1991, University of New Hampshire: Behavioral Neuroscience. Integrative Neuroscience/Biopsychology 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., Dean, College of Arts & Sciences, 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/ Biopsychology Program

Waters, Everett, Ph.D., 1977, University of Minnesota: Social and personality development; parent-child and adult-adult attachment relationships. Social and Health Program

Waters, Harriet Salatas, 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, Ph.D., 1979, University of Toronto: Animal models of autism and Down syndrome; serotonin and its role in brain development. Integrative Neuroscience/Biopsychology Program

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Wortman, Camille, 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, Head, Cognitive Science Program, Ph.D., 1994, Brown University: Attention and eye movements during visual search and visual working memory tasks. Cognitive Science Program

Associate Professors

Anderson, Brenda J., Co-Head, Integrative Neuroscience Program, Ph.D., 1993, University of Illinois: Rodent models of the effects of exercise and stress on brain structure, metabolism, and function. Integrative Neuroscience/Biopsychology Program

Canli, Turhan, Ph.D., 1993, Yale University: The genetic and neural basis of personality and emotion. Integrative Neuroscience/Biopsychology Program

Franklin, Nancy. Ph.D., 1989, Stanford University: Human memory; source monitoring; spatial cognition; mental models. Cognitive Science Program

Freitas, Antonio L., Ph.D., 2002, Yale University: Social cognition, motivation, self-regulation. Social and Health Program

Hajcak, Greg, Ph.D., 2006, University of Delaware: Psychophysiology, emotion, cognition; anxiety disorders and their treatment. Clinical Program

Leung, Hoi-Chung, Co-Head, Integrative Neuroscience Program, 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/Biopsychology Program

Levy, Sheri, Ph.D., 1998, Columbia University: Ideologies and lay theories; intergroup relations; prejudice reduction; volunteerism. Social and Health Program

Moyer, Anne, Undergraduate Director, Ph.D. 1995, Yale University: Psychosocial issues surrounding cancer risk: research synthesis and research methodology. Social and Health Program

Vivian, Dina, Associate 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

Assistant Professors

Eaton, Nicholas, Ph.D., 2012, University of Minnesota: Conceptualization, classification, assessment, and structure of psychopathology; normal and pathological personality; quantitative methods and psychometrics; comorbidity; individual differences; aging; sexuality and sexual orientation. Clinical Program

Hymowitz, Genna, Clinical 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

London, Bonita, 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

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/Biopsychology 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

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

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Evinger, Leslie Craig, Ph.D., 1978, University of Washington: Motor control and learning; movement disorders. Integrative Neuroscience/ Biopsychology 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/Biopsychology Program

Goldstein, Rita, Z., Associate Scientist, Ph.D., 1999, University of Miami: Neuroimaging (fMRI, PET, ERP); Neuropsychology (reward processing/salience attribution, inhibitory control, and extinction); and Drug Addiction (comorbidity with depression, PTSD, aggression and anger). Integrative Neuroscience/Biopsychology Program

Huffman, Marie K., Associate Professor, Linguistics, Ph.D., 1989, University of California, Los Angeles: Phonetics; phonology. 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/Biopsychology 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/Biopsychology 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

Lavine, Howard, Associate Professor, Political Science, Ph.D., 1994, University of Minnesota: Political psychology; cognition. Social and Health Program

London, Manuel, 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

Maczaj, Marta, M.D., 1989, Stony Brook University: Director, Sleep Disorders Center, University Hospital. Integrative Neuroscience/ Biopsychology Program

Morin, Lawrence P., Professor, Psychiatry, Ph.D., 1974, Rutgers University, Institute of Animal Behavior: Biological rhythms; environment and reproduction; endocrine system and behavior. Integrative Neuroscience/Biopsychology 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/Biopsychology Program.

Sprafkin, Joyce, Associate Professor, Psychiatry. Ph.D., 1975, Stony Brook University: Child psychopathology; AHDH; tic disorders; effects of television on child behavior. Clinical Psychology Program

Stone, Arthur, Professor, Psychiatry. Ph.D., 1978, Stony Brook University: Stress, coping, and illness; immune system functioning and health. Clinical Program, Social and Health Program

Thanos, Peter, Staff Scientist, Laboratory for Neuroimaging, Brookhaven National Lab, Ph.D., 1997, Eastern Virginia Medical School: Addiction, including: alcohol, drug abuse and obesity. Integrative Neuroscience/Biopsychology Program

Adjunct Faculty

Burkhard, Barbara, Assistant Professor and Director, Child Treatment Program, North Suffolk Center, Ph.D., 1976, Stony Brook University: Child abuse and neglect.

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.

Fall 2013

Psychology Department

Chair
Dr. Daniel Klein, Psychology B 154 (631) 632-7808

Graduate Program Director
Dr. Susan Brennan, Psychology B 152 (631) 632-7855

Graduate Program Coordinator
Marilynn Wollmuth, Psychology B 150 (631) 632-7855

Web Site
www.psychology.sunysb.edu

Degree Awarded
Ph.D. in Clinical Psychology, Ph.D. in Cognitive Science, Ph.D. in Integrative Neuroscience, Ph.D. in Social/Health Psychology

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.

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.

Admission requirements of Psychology Department

The requirements for admission to doctoral 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 3.5 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, and, for applicants to Clinical Psychology, three supplementary recommendations. The Clinical supplemental recommendation form can be found at the departmental Web site: www.psychology.sunysb.edu.

E. The Graduate Record Examination (GRE) General Test. The subject GRE is not required.

F. For international students, TOEFL or IELTS scores (unless their native language is English or they attended college where English was the language of instruction) 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 deadline for receipt of applications and all supporting materials for fall admission is December 15. Applications must be submitted online. Links to the online application system are on the department Web site at: www.psychology.sunysb.edu.

Facilities of Psychology Department

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, anxiety disorders, personality disorders, discord and aggression among couples, romantic competence among adolescents and adults, social problem solving, psychotherapy process and outcome, and lesbian/gay/bisexual issues. Faculty labs are equipped with state-of-the-art facilities including equipment for observational research (e.g.,

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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 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 Psychological Center, an Anxiety Disorders Clinic provides assessment and treatment of various anxiety disorders such as obsessive-compulsive disorder and post-traumatic stress 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, North Shore University Hospital, Long Island Jewish Hillside Hospital, local public schools, and Northport Veteran's Administration Hospital.

The **Cognitive Science** Program offers training in cognitive science in 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, the Army Research Office, and the National Patient Safety Foundation.

The **Integrative Neuroscience** Program provides opportunities to learn the neural genetics, anatomy, circuitry, physiology and chemistry underlying a broad array of behaviors and disorders. The program develops conceptual knowledge of issues ranging from social, affective, cognitive and clinical neuroscience to behavioral and molecular neuroscience. Likewise, the program offers opportunities for developing a wide range of research skills, from behavioral and systems analysis to cellular, subcellular and genetic analysis. Students have the opportunity for research training with core faculty or affiliated faculty in the Departments of Neurobiology, Medicine and the Medical Department at Brookhaven National Labs. Students have access to facilities for histological and neuroanatomical analysis, behavioral analysis, molecular and genetic analysis, transcranial magnetic stimulation, human electrophysiology, eye-tracking, PET and fMRI imaging. Human imaging is conducted with a research dedicated, state-of-the art 3T MRI system housed in our new NSF-funded SCAN (Social, Cognitive and Affective Neuroscience) center. 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 and close relationships 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; and coping with breast cancer, pregnancy, or the loss of a spouse. Social and Health Area faculty have affiliations with the 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 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.

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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, two semesters 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 535 Advanced Research Methods

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:

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PSY 533 Principles Applicable to Clinical Psychology: Historical & Systemic Perspectives

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 fourth year and complete internship (PSY 608) in the fifth year.

Cognitive Science

Complete three of the following:

PSY 513 Attention and Thought

PSY 514 Sensation and Perception

PSY 518 Memory

PSY 520 Psycholinguistics

PSY 610/620 Seminars in Selected Topics: Cognition

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 area head at the end of the second semester of graduate study.

Integrative Neuroscience

Complete the following courses (required of all Integrative Neuroscience Area students):

PSY 561 Cognitive and Behavioral Neuroscience I

PSY 562 Cognitive and Behavioral Neuroscience II

Complete at least two of the following courses:

PSY 560 Neuropsychology

PSY 564 Neuropsychopharmacology

PSY 620 Seminars in Selected Topics: Affective Neuroscience

PSY 620 Seminars in Selected Topics: Cognitive Neuroscience)

Sign up for the following sequence each year (required of all Biopsychology 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 544 Emotions & Cognition

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PSY 549 Prejudice & Discrimination

PSY 555 Social Psychology

PSY 558 Theories of Social Psychology: Health Applications

PSY 559 Psychology of Women's Health

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 or Area Head.

PSY 505 Structural Equation Modeling & Advance Multivariate Methods

PSY 506 Psychometrics

PSY 535 Advanced Research Methods

PSY 610 Seminars in Selected Topics: Meta-Analysis

Faculty of Psychology Department

Distinguished Professors

Goldfried, Marvin, Ph.D., 1961, University at Buffalo: Lesbian, gay and bisexual issues; psychotherapy process research; cognitive behavior therapy; delineation of common therapeutic principles across theoretical orientations. Clinical Program

O'Leary, K. Daniel, Director of Clinical Training. Ph.D., 1967, University of Illinois: Etiology and treatment of marital discord and spouse abuse; physical aggression in intimate relationships; the effects of marital discord on partner depression; memory for interpersonal events. 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, Emeritus, Ph.D., 1970, University of Toronto, Canada: Motivation and cognition in close relationships; intergroup relations; social neuroscience. Social and Health Program

Brennan, Susan E., Graduate Program Director, 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

Davila, Joanne, Director, Clinical Training Program, Ph.D., 1993, University of California, Los Angeles: Interpersonal functioning and psychopathology, depression, maladaptive personality styles, close relationships, attachment processes. Clinical Program

D'Zurilla, Thomas J., Emeritus, Ph.D., 1964, University of Illinois: Social problem solving; problem-solving therapy; preventive problem-solving training. Clinical Program

Gerrig, Richard, Head, Cognitive Science Program, Ph.D., 1984, Stanford University: Psycholinguistics; text understanding and representation; nonconventional language; cognitive experiences of narrative worlds. Cognitive Science Program

Klein, Daniel N., Chair, Ph.D., 1983, University at Buffalo: Psychopathology; mood disorders; assessment, classification, course, development, familial transmission, and treatment of depression: child temperament and personality development. Clinical Program

Levine, Marvin, Emeritus, Ph.D., 1959, University of Wisconsin: Problem solving, especially heuristics, and the use of spatial information; comparison of Buddhist and Western views of human nature. Clinical Program

Lobel, Marci, Head, Social and Health Program, Ph.D., 1989, University of California, Los Angeles: Stress, coping, and physical health; psychosocial factors in pregnancy and birth outcomes; 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: Human memory and amnesia; implicit and explicit memory distinctions; new learning in amnesia; priming, social influences on individual memory; experimental investigation of remembering and knowing the past. Cognitive Science Program

Robinson, John, Ph.D., 1991, University of New Hampshire: Behavioral Neuroscience. Integrative Neuroscience/Biopsychology Program

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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., Dean, College of Arts & Sciences, 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/ Biopsychology Program

Waters, Everett, Ph.D., 1977, University of Minnesota: Social and personality development; parent-child and adult-adult attachment relationships. Social and Health Program

Waters, Harriet Salatas, 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, Ph.D., 1979, University of Toronto: Animal models of autism and Down syndrome; serotonin and its role in brain development. Integrative Neuroscience/Biopsychology Program

Wortman, Camille, 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, Ph.D., 1994, Brown University: Attention and eye movements during visual search and visual working memory tasks. 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/Biopsychology Program

Canli, Turhan, Ph.D., 1993, Yale University: The genetic and neural basis of personality and emotion. Integrative Neuroscience/Biopsychology Program

Franklin, Nancy. Ph.D., 1989, Stanford University: Human memory; source monitoring; spatial cognition; mental models. Cognitive Science Program

Freitas, Antonio L., Ph.D., 2002, Yale University: Social cognition, motivation, self-regulation. Social and Health Program

Proudfit, Greg Hajcak, Ph.D., 2006, University of Delaware: Psychophysiology, emotion, cognition; anxiety disorders and their treatment. Clinical Program

Leung, Hoi-Chung, Head, Integrative Neuroscience Program, 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/Biopsychology Program

Levy, Sheri, Ph.D., 1998, Columbia University: Ideologies and lay theories; intergroup relations; prejudice reduction; volunteerism. Social and Health Program

Moyer, Anne, Undergraduate Director, Ph.D. 1995, Yale University: Psychosocial issues surrounding cancer risk: research synthesis and research methodology. Social and Health Program

Vivian, Dina, Associate 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

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: Conceptualization, classification, assessment, and structure of psychopathology; normal and pathological personality; quantitative methods and psychometrics; comorbidity; individual differences; aging; sexuality and sexual orientation. Clinical Program

Hymowitz, Genna, Clinical 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

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Lerner, Matthew, Ph.D., 2013, University of Virginia: Elucidating novel models of and processes underlying social functioning in youth; design and development of empirically-supported social competency interventions for youth with developmental disorders (e.g. autism spectrum disorders & attention-deficit/hyperactivity disorder); therapeutic process variables (mediators and moderators of outcomes) in social competency intervention research; developmental psychopathological and neuroplastic models of social competence deficits; peer relations and their impact on developmental psychopathology. Clinical Program

London, Bonita, 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

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

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

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

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/Biopsychology Program

Goldstein, Rita, Z., Associate Scientist, Ph.D., 1999, University of Miami: Neuroimaging (fMRI, PET, ERP); Neuropsychology (reward processing/salience attribution, inhibitory control, and extinction); and Drug Addiction (comorbidity with depression, PTSD, aggression and anger). Integrative Neuroscience/Biopsychology Program

Huffman, Marie K., Associate Professor, Linguistics, Ph.D., 1989, University of California, Los Angeles: Phonetics; phonology. 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/Biopsychology 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/Biopsychology 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

Lavine, Howard, Associate Professor, Political Science, Ph.D., 1994, University of Minnesota: Political psychology; cognition. Social and Health Program

London, Manuel, 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

Maczaj, Marta, M.D., 1989, Stony Brook University: Director, Sleep Disorders Center, University Hospital. Integrative Neuroscience/ Biopsychology Program

Morin, Lawrence P., Professor, Psychiatry, Ph.D., 1974, Rutgers University, Institute of Animal Behavior: Biological rhythms; environment and reproduction; endocrine system and behavior. Integrative Neuroscience/Biopsychology 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/Biopsychology Program.

Sprafkin, Joyce, Associate Professor, Psychiatry. Ph.D., 1975, Stony Brook University: Child psychopathology; AHDH; tic disorders; effects of television on child behavior. Clinical Program

Fall 2013

Stone, Arthur, Professor, Psychiatry. Ph.D., 1978, Stony Brook University: Stress, coping, and illness; immune system functioning and health. Clinical Program, Social and Health Program

Adjunct Faculty

Burkhard, Barbara, Assistant Professor and Director, Child Treatment Program, North Suffolk Center, Ph.D., 1976, Stony Brook University: Child abuse and neglect.

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.

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Program info is available at the Public Health's web site.

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

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Science Education

Graduate Program Director:

Keith Sheppard, Life Sciences Building 094 (631) 632-2989 (keith.sheppard@stonybrook.edu)

Graduate Program Coordinator:

Judy Nimmo, Life Sciences Building 094(631) 632-9750 (judith.nimmo@stonybrook.edu)

Associate Program Director:

Angela Kelly, Life Sciences Building 094, (631) 632-1683 (angela.kelly@stonybrook.edu)

Degree awarded:

Ph.D. in Science Education

Program web site:

http://www.stonybrook.edu/cesame/students/PhDSciEd/PhDSciEd.shtml

Science Education

The Center for Science and Mathematics Education (CESAME) 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. Acceptance by the graduate school

H. Completed application form

I. Interview and writing sample

J. Statement of intent

For more information visit the CESAME Web site at http://www.stonybrook.edu/cesame/students/PhDSciEd/PhDSciEd.shtml

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Degree Requirements for the Ph.D. in Science Education

A. Course Requirements

Science Education Coursework (5 courses)

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

Statistics and Research Methodology courses (3 courses)

Science Content Breadth and Depth Courses (6 courses)

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.

B. 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

C. 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.

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

The dissertation research outlined in the thesis proposal will be supervised by the committee, which will normally include both science education and science faculty.

F. 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.

G. 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.

H. Residence Requirement

The University requires at least two consecutive semesters of full-time graduate study.

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Science Education Faculty

Core Faculty

Sheppard, Keith, EdD 1997, Columbia University, Teachers College: Science Education

Affiliated Faculty

Full Professors

Bynum, R. David, Professor. Ph.D., 1981, Dartmouth College: Science Education

Ferguson, David L., Chairperson.[1] 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., Ph.D., 1964, University of Minnesota: Application of radiometric and geochemical methods to petrologic and tectonic problems.

Hanson, David M., Distinguished Service Professor, 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.

Kerber, Robert C.[4], Distinguished Teaching Professor, Ph.D., 1965, Purdue University: Chemical education; esp. effects of terminology on learning; history of chemistry.

Lopez, Glenn R., Ph.D., 1976, Stony Brook University: Benthic ecology; animal-sediment interactions.

Marx, Michael D., Vice President for Brookhaven Affairs, Ph.D., 1974, Massachusetts Institute of Technology: Experimental high-energy physics. McCarthy, Robert L., Ph.D., 1971, University of California, Berkeley: Experimental high-energy physics.

Associate Professors

Scarlatos, Lori L., Ph.D. 1993, Stony Brook University: Educational technology; tangible, physical, multi-modal, and collaborative human-computer interfaces; serious games; computer graphics; multimedia.

Assistant Professors

Berger, Lisa, Ph.D., 2007, University of Arizona: Number Theory, Mathematics Education of Teachers

Research Assistant Professor

Zachar, Zuzana, Ph.D., Stony Brook University, Director of Masters of Arts in Teaching Biology Program.

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

Fall 2013

Social Welfare Department

Dean
Frances L. Brisbane, 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

Doctoral Program Director
Joel Blau, Health Sciences Center, Level 2, Room 093 (631) 444-3149

Administrative Assistant for Master's Program
Kathy Albin, Health Sciences Center, Level 2, Room 093 (631) 444-3141

Graduate Program Coordinator
Jennifer Davidson, Health Sciences Center, Level 2, Room 093 (631) 444-8361

Degree Awarded
Ph.D. in Social Welfare

Health Sciences Center Bulletin

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 professional social work practice. Professional social work practice includes direct service with clients, the organization and management of service delivery systems, and the formulation and analysis of social welfare 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.

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. The scholarly research paper of publication quality is required at the end of the fourth semester.

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.

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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. In order to meet residence requirements, they must take nine credits in each of two consecutive semesters. 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

Newly admitted students may begin classes during the fall semester only. Applications for admission for the following fall should be received by February 1.

Admission requirements include:

A) A master's degree from a program accredited by the Council of Social Work Education

B) Academic promise as evidenced by superior achievement in undergraduate and master's level education

C) Satisfactory performance on the Graduate Record Examination

D) A personal interview

E) Professional competence as demonstrated through substantial experience in responsible social work and/or human services positions supported by three letters of reference including one, if possible, from someone familiar with the applicant's capacity to conduct research

F) A sample of writing in the form of a published article, a manuscript submitted for publication, a document completed for the applicant's agency or in connection with a research interest, or a paper prepared in your previous graduate studies

G) Personal qualities indicating a potential for leadership, compatibility with the School's mission statement, flexibility and openness to new ideas, maturity, a spirit of inquiry, and a commitment to furthering the knowledge base of the profession of social work

H) Competence in quantitative skills as evidenced by performance on the Graduate Record Exam and a college level course in statistics completed with a grade of B or better

Under special circumstances, applications from persons who do not meet all of these requirements will be considered. Applicants without the M.S.W. degree must have a master's degree in a closely related field and must demonstrate a high potential for success in the program.

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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 exam

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) 444-8361.

Faculty of the Social Welfare Department

Professors

Blau, Joel, Director of the Ph.D. Program. D.S.W., Columbia University: Social policy; history of social welfare; poverty; homelessness; the political economy of social welfare; comparative social welfare.

Brisbane, Frances, Dean, Ph.D., Union Graduate School: Alcoholism; counseling with people of color; complementary medicine; aging and trauma.

Farberman, Harvey A., Ph.D., University of Minnesota: Philosophy of social work; aging policy; public mental health services; research.

Associate Professors

Fineberg,Iris Cohen, Associate Dean for Academic Affairs; Ph.D. Boston University: Palliative and end of life care, oncology, advance care planning, family-oriented health care, interdisciplinary education and teamwork, qualitative research methods, mixed methods, evaluation.

Monahan, Kathleen, Associate Dean and Director of the Family Violence Education and Research Center; D.S.W., Adelphi University: Siblings and sexual abuse; battered women; domestic violence; disability.

Robbins, Charles L., Vice Provost for Undergraduate Education, Dean of the Undergraduate Colleges, Stony Brook University; D.S.W. Yeshiva University: health; violence, and ethics; social justice; gender issues.

Assistant Professors

Hayward, R. Anna, Ph.D., University of Maryland, Baltimore: Child welfare, undocumented immigrant children, family-centered practice, research, program evaluation, environmental social work.

Linden, Pamela, Ph.D., Stony Brook University: Juvenile delinquency; mental health; identity theory; problem-solving courts.

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.

Zhai, Fuhua, Ph.D., Columbia University: Social policy, policy analysis, child welfare, research methods.

Clinical Associate Professors

Farrington, Jack, Ph.D., Nova Southeastern University. Community health orientation; advocacy; human rights for Long Island teenagers and domestic violence.

Finch, Jeanne Bertrand, Assistant Dean and Director of Graduate Program, D.S.W., Columbia University. Child welfare; social work practice, drug involved women and their children; clinical practice with children in foster care; qualitative research; and quality assurance within non-profit organizations.

Peabody, Carolyn, Ph.D., Stony Brook University: Critical Social Work Theory, Community Organizing & Development, Advocacy/ empowerment theory and practice; feminist theory and practice; lesbian and gay issues; development of political identity among oppressed populations.

Clinical Assistant Professors

Adams, Gloria. D.Min., Hartford Seminary: Spirituality and Health Care Practice, Spirituality in Social Work; Spirituality and the Martial Arts.

Kardaras, Nicholas, Ph.D., The Institute of Transpersonal Psychology: Treatment of addiction, Jungian psychology, philosophical counseling and existential and/or psychospiritual emergencies.

Morgan, Richard, Ph.D., Fordham University: Child welfare policy and programs; child sexual abuse and juvenile sex offenders; research.

Pastore, Joan. D.S.W, Adelphi University: Aging, bio-ethics, end of life decision making, clinical practice, inter-organizational relations.

Pilgrim, Dina. LMSW, New York University: Child welfare, children with developmental and learning disabilities. intimate partner domestic violence, forensic social work, social work field instruction and advisement.

Spence, Hyacinth.. M.S.W., Fordham University: Mental health, cultural competency, youth, aging.

Wrase, Betty Jean, Director of Field Education, M.S.W., Stony Brook University: Program evaluation; social welfare administration, case management and health.

Lecturers

Colon, John, Lecturer; M.A., Inter-American University of Puerto Rico. Substance abuse; methadone treatment; inner-city community-based organizations; grant reviewer for SAMSHA.

Leslie Kulewicz, M.S.W., Stony Brook University: Field education, supervision; communivation, parenting and empowerment in clinical work with individuals and families.

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Clinical Instructor

Coverdale, Christopher; J.D., Columbia Law School: Social change, law, spirituality, comparative religion, psychology of change, sociology, anthropology, neurobiology, ethno botany, holistic health.

Affiliated Faculty

Cohen, Shelly, D.Phil., Oxford University: Senior Research Specialist, Child Welfare Training Program, juvenile justice, problem solving course, program evaluation and statistical analysis.

Diana Filiano, D.S.W., Adelphi University: Director, Child Welfare Training Program, Stony Brook University; social work practice; child welfare, family violence; program development and evaluation.

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

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Sociology Department

Chairperson
John Shandra, Ward Melville Social and Behavioral Sciences Building S-409 (631) 632-7755

Graduate Program Director
Kathleen Fallon, Ward Melville Social and Behavioral Sciences Building S-415 (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

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 must 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.

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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

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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.

Gagnon, John H., Emeritus.[2] Ph.D., 1969, University of Chicago: AIDS research; simulations; sexual conduct; social control; cognitive.

Kimmel, Michael, Ph.D., 1981, University of California, Berkeley: Comparative and historical development; social movements; gender and sexuality.

Distinguished Service Professors
Arjomand, Said, Ph.D., 1980, University of Chicago: Comparative; historical; political; religion.

Goodman, Norman, also a Distinguished Teaching Professor.[3] Ph.D., 1963, New York University: Social psychology; family; socialization; emotions.

Distinguished Teaching Professor
Tanur, Judith, Emerita. [4] Ph.D., 1972, University at Stony Brook: Statistics; methodology; survey research; social psychology

Professors
Barthel-Bouchier, Diane[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.

Feldman, Kenneth[6], Ph.D., 1965, University of Michigan: Social psychology; higher education; socialization.

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.

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Schwartz, Michael[7], Ph.D., 1971, Harvard University: Methodology; historical; political economy; business structure; social movements.

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.

Levy, Daniel, Ph.D., 1999, Columbia University: Political sociology; comparative/historical sociology; global sociology.

Fallon, Kathleen, Ph.D., 2002, Indiana Unniversity: Global sociology; gender and development; political sociology; social movements; health.

Moran, Timothy, Graduate Program Director, Ph.D., 2000, University of Maryland: Social inequality; global political economy; contentious collective action; quantitative methods.

Oyewumi, Oyeronke, Ph.D., 1993, University of California, Berkeley: Gender; race; family; culture; knowledge; social inequalities; globalization.

Shandra, John, Chairperson, Ph.D., 2005, Boston College: Quantitative methods; environmental sociology; political economy.

van de Rijt, Arnout, Ph.D., 2007, Cornell University: Social networks; migration and immigration; quantitative methodology.

Assistant Professors
Burroway, Rebekah, Ph.D., 2011, Duke University: Medical sociology; sex and gender; stratification/mobility.

Fleming, Crystal, Ph.D., 2011, Harvard University: Cultural sociology; race; racial and ethnic relations.

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

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.9, Assistant Professor, Ph.D., 2008, University of Texas-Austin: Ethnography (Anthropology); sex and gender, social change.

Gootenberg, Paul, E.10, Professor, Ph.D., 1985, University of Chicago: Religion; colonial and modern, Andes, comparative economic.

Research Faculty
Schwartz, Joseph,[11] Professor, Ph.D., 1978, Harvard University: Quantitative methods; social stratification; sociology of work and occupations; social networks.

Visiting Appointment
Bourgos, Giovani, Visiting Assistant Professor, Ph.D., 2006, Indiana University: Medical sociology, racial ethnic stratification; segregation and discrimination; quantitative methods; latino health

Number of teaching, graduate, and research assistants, fall 2012: 27

1) Recipient of the President's Award for Excellence in Teaching, 1992

2) Affiliated appointment, Department of Psychology

3) Recipient of State University Chancellor's Award for Excellence in Teaching, 1976

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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) Recipient of the State University Chancellor's Award for Excellence in Teaching, 1975

8) Joint appointment, Core Faculty, Graduate Program in Public Health

9) Joint title, Cultural Analysis and Theory Department

10) Affiliated appointment, History Department

11) Affiliated appointment, Department of Psychiatry

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

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Please refer to the Linguistics Department Bulletin for more information.

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Technology and Society

Chairperson
David L. Ferguson, Harriman Hall 347 (631) 632-8763

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Advanced Graduate Certificate Awarded
Advanced Graduate Certificate in Educational Technology

Degrees Awarded
M.S. in Technological Systems Management (concentrations: Educational Technology, Energy and Environmental Systems, Global Operations 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 pursue one of these areas of concentrations: Educational Technology,

Energy and Environmental Systems, or Global Operations Management. Students take a common core of 6 credits, a block of 15 credits specific to their concentration, and 9 credits of electives. A master's project also must be completed by students in the Energy and Environmental Systems and Educational Technology concentrations.

A deep understanding of the technology and a broad knowledge of the social implications of technology are essential to identifying, understanding, and addressing a growing number of complex issues facing our society. The Ph.D. program in Technology, Policy, and Innovation (TPI) is at the forefront of current and emerging efforts in science and engineering education that aim to address these challenges. The Ph.D. degree in TPI is for students who wish to be engines of national leadership in gauging the prospects and charting the future course of technologies. Students in this program will carry out policy and design/planning research in three interacting socio-technological areas: energy and environmental systems; education (including educational technologies, and education in engineering and applied sciences); technology management, engineering entrepreneurship, and science and technology policy. TPI equips its doctoral graduates with skills that may be applied to careers in both the public and private sectors. The graduates will find strong needs for their skills—and job opportunities—in government agencies, think-tanks and research organizations, industries and consulting firms, and academia, both in the United States and overseas.

Advanced Graduate Certificate in Educational Technology
The Certificate prepares current and prospective teachers to use advanced technologies in learning and teaching, and helps business and industrial trainers and educators develop and teach computer applications, multimedia technologies and computer-based documentation. Students elect either the school track or the business/industry track.

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 Energy and Environmental Systems concentration of the M.S., one year of calculus (MAT 131, 132 or equivalent) is required. For admission to the Global Operations Management concentration of the M.S., an introductory calculus course (MAT 123 or equivalent) is required.

B. A minimum undergraduate grade point average of 3.00.

C. Three letters of recommendation.

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D. Graduate Record Examination (GRE) General Test scores.

E. Acceptance by the Department of Technology and Society and the Graduate School.

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.

F. A Statement of Purpose describing the applicant's relevant past experience and immediate and long-term goals. Applicants for admission to the Ph.D. program 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, (energy and environmental systems; education (including educational technologies, and education in engineering and applied sciences); technology management, engineering entrepreneurship, and science and technology policy.

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

Students in the master's program choose one of three concentrations. In general, students are expected to complete two core courses for six credits, five required courses specific to the concentration for 15 credits, and three eligible electives for nine credits. Electives for consideration are listed for each concentration, but a student's selection of electives must be approved by his or her advisor.

(See course titles and descriptions below.)

Core 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.

Global Operations Management Concentration
Required Courses (15 credits):EMP 502, EMP 504, EMP 506, EMP 509, EMP 518, Suggested Electives (9 credits): EMP 503, EMP 507, EMP 511, EMP 517, EMP 521, EMP 522, EMP 523, EMP 524, EMP 525, EST 530, EST 599.

Educational Technology Concentration
Required Courses (15 credits): EST 568, EST 570, EST 571, EST 578, EST 590, Master's Project

Suggested Electives (9 credits): EST 574, EST 575, EST 576, EST 579, EST 585, EST 589, EST 591, EST 599

Energy and Environmental Systems Concentration
Required Courses (15 credits): EST 592, EST 593, EST 594, EST 595, EST 590, Master's Project

Suggested Electives in TSM (9 credits): EST 502, EST 540, EST 541, EST 553, EST 576, EST 580, EST 584, EST 586, EST 588, EST 591, EST 597, EST 599,

Electives from other departments: AMS 520, AMS 571, BEE 550, CEY 501, CEY 509, GEO 564, ESM 513, MAR 512, MBA 570, MEC 502, POL 531, POL 543, SOC 511.

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Requirements for the Advanced Graduate Certificate in Educational Technology

(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 Ph.D. Degree in Technology, Policy, and Innovation

Application deadline is February 1. 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.

Part B: The student solves a take-home problem designed by departmental faculty. The student is required to finish the analysis in a week and to prepare a report. The purpose of this is to evaluate the student's ability to apply his or her knowledge of theory and analytical methods to a real-world TPI issue that is not necessarily in his/her own research area.

Part C: A proctored comprehensive examination, with a time limit, will be offered every spring semester. The purpose of this is to evaluate the student's understanding of theory and analytical methods. This exam will be based on material covered in the three core courses described below. *Part C* of the examination will be waived if a student's GPA on core courses is 3.5 or higher.

A student who fails one or more parts of the qualifying examination will be given one additional attempt on each failed part. If the student does not pass a failed part of the examination on the second attempt, he/she will be dismissed from the program.

Having passed the qualifying 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 qualifying examination within the specified timeframe and obtain the G5 status is considered evidence of unsatisfactory progress.

C. Course Requirements
Our course requirement is designed to ensure TPI graduates have competency in two areas: (1) a specific technological area, and (2) policy research and analysis. Students are required to take 34 credits of course work beyond the B.S. degree level. These credits are comprised of the following:

10 credits of core courses to provide students with a common core of knowledge and techniques essential to research and practice in TPI. Core courses consist of Technology, Policy, and Innovation in Theory and Practice (4 credits); Data Analysis and Experimental Methods (3 credits); and Methods of Socio-Technological Decision Making (3 credits).

15 credits of courses in a specific technological area (engineering, science, mathematics, statistics) that are relevant to his or her individual research.

9 credits in related social sciences (economics, political science, law, history, business management, psychology, sociology, education) to become proficient with social science methods of analysis.

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In addition, 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 in the first year.

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, invited Technology and Society faculty, and invited graduate students. 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 DTS. 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.

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.

I. Switching Between the M.S. and Ph.D. Programs
A Ph.D. student who has passed the Qualifying Examination can complete the requirements for an M.S. degree by satisfying the proficiency requirements and completing 30 credits of coursework. 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 and do the masters project.)

Faculty of the Department of Technology and Society

Distinguished Service Professors

Ferguson, David L., Chairperson.[1] 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., Ed.D., 1971, Columbia University: Computers in education; science and technology education.

Professors

Hogan, Joseph S., Emeritus, Ph.D., 1968, New York University: Planetary atmospheres; environmental satellites; climate change.

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Piel, Emil J., Emeritus, Ed.D., 1960, Rutgers University: Decision making; technology-society issues; human-machine systems.

Teng, Tian-Lih**,** Ph. D., 1969, University Of Pittsburgh, Pittsburgh: Electrical engineering, computer science, management of information systems, and electronics commerce.

Visich, Marian, Jr., Emeritus. Ph.D., 1956, Polytechnic Institute of Brooklyn: Aerospace engineering; technology-society issues.

Associate Professors
Kaplan, Edward, Visiting Associate Professor, Ph.D., 1973, University of Pennsylvania: Environmental systems engineering.

Morris, Samuel C., Visiting Associate Professor, Sc.D., 1973 University of Pittsburgh: Environmental science; risk analysis.

Reaven, Sheldon J., Graduate Program Director. 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.

Scarlatos, Lori L., Ph.D. 1993, Stony Brook University: Educational technology; tangible, physical, multi-modal, and collaborative human-computer interfaces; serious games; computer graphics; multimedia.

Assistant Professors
Todd L. Pittinsky, Associate Professor, Ph.D., Harvard University. Models intergroup relations in their ecosystems of society, technology, and policy.

Karen Sobel-Lojeski, Ph.D., Stevens Institute of Technology: Societal impact of technology on human cognition, emotion, and overall well-being; Effects of networked technologies on education and business performance drivers such as leadership, innovation, and student acheivement.

Sun, Guodong, Ph.D., 2001, Carnegie Mellon University: Energy and environmental policy; technology assessment; technology innovation management.

Tonjes, David J., 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).

Research Professors
Braun, Ludwig, Research Professor, DEE, Polytechnic Institute of Brooklyn (now Polytechnic University of New York); Biomedical engineering, computers in education, science education.

Glynn, Graham, Adjunct Research Professor, Ph.D., Kent State University; Integrating technology into teaching, developing course web sites and information management.

Htun, Nay, Research Professor, Ph.D., Imperial College London; Environmental governance; sustainable development; pathways to low-carbon society.

Lecturer
Lewis, Herbert, Lecturer, Ph.D., Stony Brook University: Applied mathematics and statistics; operations research; management science; information systems; productivity and efficiency analysis.

Adjunct Lecturers
Gucciardo, Richard, MBA, 1986, New York Institute of Technology.

Levanti, Gary, MBA, 1992, Binghamton University.

Laspina, Peter J., M.S., 1978, C.W. Post College; M.S., 1987, Stony Brook University: Technological Systems Management.

Lebel, Roy, B.S 1979, Dowling College: Aeronautics, Aeronautical Management.

Leonhardt, Nina, M.S., 1978, Stony Brook University: Technological Systems Management.

Lynch, Margaret, MBA, 1983, New York University: Finance and Marketing.

MacLeod, Charles, MA, 2004, Stony Brook University: Liberal Studies.

Moriarty, Kevin, MBA Dowling College.

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Reagan-Redko, Rita, M.S.,1998, Stony Brook University: Technological Systems Management.

Rotchford, Louise M., M.S., 1990, Polytechnic University: Management.

Stenton, Kenneth, MBA, 1992, Wharton School of Business, University of Pennsylvania.

Taveras, Marypat, MS, 2002, Stony Brook University, Technological Systems Management.

Tong, Alvin, Ph.D., 1968, University of Minnesota, Electrical Engineering

Zakrezewski, Michael, MBA, 1995, J.L. Kellogg Graduate School of Management- Northwestern University.

Number of teaching, graduate, and research assistants, Fall 2011: 10

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

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B. A minimum undergraduate grade point average of 3.00.

C. Three letters of recommendation.

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D. Graduate Record Examination (GRE) General Test scores.

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Facilities of the Department of Technology and Society

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Requirements for the M.S. Degree in Technological Systems Management

Students in the master's program choose one of three concentrations. In general, students are expected to complete two core courses for six credits, five required courses specific to the concentration for 15 credits, and three eligible electives for nine credits. Electives for consideration are listed for each concentration, but a student's selection of electives must be approved by his or her advisor.

(See course titles and descriptions below.)

Core 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.

Global Operations Management Concentration
Required Courses (15 credits):EMP 502, EMP 504, EMP 506, EMP 509, EMP 518, Suggested Electives (9 credits): EMP 503, EMP 507, EMP 511, EMP 517, EMP 521, EMP 522, EMP 523, EMP 524, EMP 525, EST 530, EST 599.

Educational Technology Concentration
Required Courses (15 credits): EST 568, EST 570, EST 571, EST 578, EST 590, Master's Project

Suggested Electives (9 credits): EST 574, EST 575, EST 576, EST 579, EST 585, EST 589, EST 591, EST 599

Energy and Environmental Systems Concentration
Required Courses (15 credits): EST 592, EST 593, EST 594, EST 595, EST 590, Master's Project

Suggested Electives in TSM (9 credits): EST 502, EST 540, EST 541, EST 553, EST 576, EST 580, EST 584, EST 586, EST 588, EST 591, EST 597, EST 599,

Electives from other departments: AMS 520, AMS 571, BEE 550, CEY 501, CEY 509, GEO 564, ESM 513, MAR 512, MBA 570, MEC 502, POL 531, POL 543, SOC 511.

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Requirements for the Advanced Graduate Certificate in Educational Technology

(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 Ph.D. Degree in Technology, Policy, and Innovation

Application deadline is February 1. 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.

Part B: The student solves a take-home problem designed by departmental faculty. The student is required to finish the analysis in a week and to prepare a report. The purpose of this is to evaluate the student's ability to apply his or her knowledge of theory and analytical methods to a real-world TPI issue that is not necessarily in his/her own research area.

Part C: A proctored comprehensive examination, with a time limit, will be offered every spring semester. The purpose of this is to evaluate the student's understanding of theory and analytical methods. This exam will be based on material covered in the three core courses described below. *Part C* of the examination will be waived if a student's GPA on core courses is 3.5 or higher.

A student who fails one or more parts of the qualifying examination will be given one additional attempt on each failed part. If the student does not pass a failed part of the examination on the second attempt, he/she will be dismissed from the program.

Having passed the qualifying 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 qualifying examination within the specified timeframe and obtain the G5 status is considered evidence of unsatisfactory progress.

C. Course Requirements
Our course requirement is designed to ensure TPI graduates have competency in two areas: (1) a specific technological area, and (2) policy research and analysis. Students are required to take 34 credits of course work beyond the B.S. degree level. These credits are comprised of the following:

10 credits of core courses to provide students with a common core of knowledge and techniques essential to research and practice in TPI. Core courses consist of Technology, Policy, and Innovation in Theory and Practice (4 credits); Data Analysis and Experimental Methods (3 credits); and Methods of Socio-Technological Decision Making (3 credits).

15 credits of courses in a specific technological area (engineering, science, mathematics, statistics) that are relevant to his or her individual research.

9 credits in related social sciences (economics, political science, law, history, business management, psychology, sociology, education) to become proficient with social science methods of analysis.

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In addition, 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 in the first year.

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, invited Technology and Society faculty, and invited graduate students. 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 DTS. 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.

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.

I. Switching Between the M.S. and Ph.D. Programs
A Ph.D. student who has passed the Qualifying Examination can complete the requirements for an M.S. degree by satisfying the proficiency requirements and completing 30 credits of coursework. 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 and do the masters project.)

Faculty of the Department of Technology and Society

Distinguished Service Professors

Ferguson, David L., Chairperson.[1] 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., Ed.D., 1971, Columbia University: Computers in education; science and technology education.

Professors

Hogan, Joseph S., Emeritus, Ph.D., 1968, New York University: Planetary atmospheres; environmental satellites; climate change.

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Piel, Emil J., Emeritus, Ed.D., 1960, Rutgers University: Decision making; technology-society issues; human-machine systems.

Teng, Tian-Lih**,** Ph. D., 1969, University Of Pittsburgh, Pittsburgh: Electrical engineering, computer science, management of information systems, and electronics commerce.

Visich, Marian, Jr., Emeritus. Ph.D., 1956, Polytechnic Institute of Brooklyn: Aerospace engineering; technology-society issues.

Associate Professors
Kaplan, Edward, Visiting Associate Professor, Ph.D., 1973, University of Pennsylvania: Environmental systems engineering.

Morris, Samuel C., Visiting Associate Professor, Sc.D., 1973 University of Pittsburgh: Environmental science; risk analysis.

Reaven, Sheldon J., Graduate Program Director. 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.

Scarlatos, Lori L., Ph.D. 1993, Stony Brook University: Educational technology; tangible, physical, multi-modal, and collaborative human-computer interfaces; serious games; computer graphics; multimedia.

Assistant Professors
Todd L. Pittinsky, Associate Professor, Ph.D., Harvard University. Models intergroup relations in their ecosystems of society, technology, and policy.

Karen Sobel-Lojeski, Ph.D., Stevens Institute of Technology: Societal impact of technology on human cognition, emotion, and overall well-being; Effects of networked technologies on education and business performance drivers such as leadership, innovation, and student acheivement.

Sun, Guodong, Ph.D., 2001, Carnegie Mellon University: Energy and environmental policy; technology assessment; technology innovation management.

Tonjes, David J., 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).

Research Professors
Braun, Ludwig, Research Professor, DEE, Polytechnic Institute of Brooklyn (now Polytechnic University of New York); Biomedical engineering, computers in education, science education.

Glynn, Graham, Adjunct Research Professor, Ph.D., Kent State University; Integrating technology into teaching, developing course web sites and information management.

Htun, Nay, Research Professor, Ph.D., Imperial College London; Environmental governance; sustainable development; pathways to low-carbon society.

Lecturer
Lewis, Herbert, Lecturer, Ph.D., Stony Brook University: Applied mathematics and statistics; operations research; management science; information systems; productivity and efficiency analysis.

Adjunct Lecturers
Gucciardo, Richard, MBA, 1986, New York Institute of Technology.

Levanti, Gary, MBA, 1992, Binghamton University.

Laspina, Peter J., M.S., 1978, C.W. Post College; M.S., 1987, Stony Brook University: Technological Systems Management.

Lebel, Roy, B.S 1979, Dowling College: Aeronautics, Aeronautical Management.

Leonhardt, Nina, M.S., 1978, Stony Brook University: Technological Systems Management.

Lynch, Margaret, MBA, 1983, New York University: Finance and Marketing.

MacLeod, Charles, MA, 2004, Stony Brook University: Liberal Studies.

Moriarty, Kevin, MBA Dowling College.

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Reagan-Redko, Rita, M.S.,1998, Stony Brook University: Technological Systems Management.

Rotchford, Louise M., M.S., 1990, Polytechnic University: Management.

Stenton, Kenneth, MBA, 1992, Wharton School of Business, University of Pennsylvania.

Taveras, Marypat, MS, 2002, Stony Brook University, Technological Systems Management.

Tong, Alvin, Ph.D., 1968, University of Minnesota, Electrical Engineering

Zakrezewski, Michael, MBA, 1995, J.L. Kellogg Graduate School of Management- Northwestern University.

Number of teaching, graduate, and research assistants, Fall 2011: 10

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

Fall 2013

MFA in Theatre

Tracks in Acting, Playwriting, Directing, Dramaturgy, and Film

Southampton Graduate Arts

Director
Nick Mangano, Chancellors Hall (631) 632-5071

Administrative Coordinator
Adrienne Unger, Chancellors Hall 239 (631) 632-5030

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. 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

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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. Students also take classes and work at our Manhattan Facility located at 387 Park Avenue South. The Faculty is an easy commute by train, bus, or car, and Manhattan's 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.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

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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:

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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.

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Theatre Arts

Chairperson
John Lutterbie, Staller Center for the Arts 3046 (631) 632-7300

Graduate Studies Director
Steve Marsh, Staller Center for the Arts 3006 (631) 632-7300

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

Web Site
http://www.stonybrook.edu/theatrearts/graduate.html

Description of Theatre Arts

The Department of Theatre Arts offers a 30-credit Master of Arts in Theatre. The M.A. program at Stony Brook University fosters a dramaturgical approach to the creation of new and non-traditional works for the theatre. Its 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. We have recently developed an Art and Technology Laboratory in conjunction with the departments of Music and Art. Our graduates can get training in computer graphics, interactive media studies, and digital performance. 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.

By "fostering a dramaturgicalapproach" to theatre, 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 is responsible for advising on choice of repertoire, choosing or commissioning translations of foreign plays, collaborating with directors and dramatists in research of many kinds, and making public statements about policy and productions. The dramaturg 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.

Therefore, 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.

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. 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

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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 department has a Laboratory for Technology in the Arts and an Electronic Classroom.

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

Baldwin, Phillip, Associate Professor, M.F.A., 1987, Yale University: Scene design; interactive media; cultural studies.

Catlett, Mallory, Assistant Professor, M.F.A., 2000, Simon Fraser University, Interdisciplinary arts, directing and critical studies

Lutterbie, John, Professor, Chair, Ph.D., 1983, University of Washington, Theatre history: performance theory and criticism; dramaturgy; directing.

Mayo, Deborah, Director of Undergraduate Studies, M.F.A., 1973, Yale School of Drama: Acting.

Zelenak, Michael X., D.F.A., 1990, Yale University: Dramaturgy, criticism, and theatre history.

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Lecturers

Margarita Espada, MFA, Dramaturgy, Stony Brook University, 1998, Movement

Marsh, Steve, Director of Graduate Studies, M.F.A., 2000, Stony Brook University: Dramaturgy.

Morin, Margaret, M.F.A., 2001, Stony Brook University: Dramaturgy, costume/technical theatre.

Bojza, Elizabeth, M.F.A., 2004, Stony Brook University: Dramaturgy.

Yew, Jeanette, M.F.A., 2006, California Institute of the Arts: Theatre Design.

Adjunct Faculty

Prusslin, Norman L., Director of Media Director, B.A., 1973, University at Stony Brook: Broadcast management.

Valerie Clayman Pye, PhD, 2012, Performance Practice, University of Exeter Acting
Jessica Pab#n, PhD (ABD), Performance Studies, NYU; MA, Women's Studies, University of Arizona

Christopher Brown, MFA, Lighting Design, NYU Tisch School for the Arts, 1999

Faculty Members from Participating Departments

Rosen, Carol.2 Ph.D., 1975, Columbia University: Dramatic theory and criticism; dramaturgy; comparative modern drama.

Kim, Theresa, Professor Emeritus, Ph.D., 1988, New York University: Music, performance, composition

Number of teaching and graduate assistants, fall 2013: 15

1) Recipient of the State University Chancellor’s Award for Excellence in Teaching, 1991

2) Department of English

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

Fall 2013

Writing and Rhetoric

Director
Eugene Hammond, (631) 632-7390

Program Assistant and Graduate Certificate Coordinator
Adam Schultheiss, (631) 632-7390

Graduate Certificate Awarded
Advanced Certificate in Teaching Writing

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 literary studies or provide further professional development for those already teaching composition.

Composition Studies gained disciplinary status in the early 1970's because of a growing body of research focused specifically on the learning processes involved in gaining writing literacy. It is a multi-disciplinary field, drawing its theories, research, and practices from psycholinguistics, sociolinguistics, cognitive psychology, language acquisition research, genre theory, rhetorical theory, and linguistic anthropology.

Teachers who are grounded in this body of theory and research will be better equipped to diagnose students' writing problems and implement effective teaching strategies or to begin a doctoral research project in composition.

Individuals who could benefit from this certificate program include M.A. and M.A.T. candidates in English who are preparing for a teaching career in high school or community college teaching, Ph.D. candidates in English who would like a broad-based degree program and may want to do research in Composition Studies, and high school and college teachers seeking advanced training, accreditation, or promotion.

The certificate may, but need not, be completed in four semesters and may be started in the first year of graduate study or in subsequent years. It is recommended that students begin their work in the fall semester, with one of the practicum courses, so that the theoretical work in subsequent courses in grounded in first-hand experience of working with students on their writing. Graduate students who have a teaching assistantship in the Writing and Rhetoric program would take WRT 698 or EGL 698. Masters level students and public school teachers with a BA degree or MA degree would start with WRT 592 or EGL 592, Problems in Teaching of Writing.

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Gainful Employment Regulation Disclosures

Admission to the Graduate Certificate Program in Composition Studies 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 B.A.'s 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 Composition Studies, 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 core required courses:

WRT 506 / EGL 506 Studies in Literary Theory

WRT 509 / EGL 509 Studies in Language and Linguistics or LIN 527 Structure of English
WRT 612 / EGL 612 Composition Theory

WRT 613 / EGL 613 Research in Composition

WRT 698 / EGL 698 Practicum in Teaching of Writing
(for Ph.D. candidates or teachers with an M.A. degree) or

WRT 592 / EGL 592 Problems in the Teaching of Writing

(for M.A. and M.A.T. candidates or teachers with a B.A. degree)

Affiliated Faculty
Broselow, Ellen, Linguistics, Ph.D., 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.
Patricia Dunn, English. D.A. The University at Albany, 1991. Composition and Rhetoric; English Education; Disability Studies.

Finer, Daniel, Linguistics, 1976, University of Massachusetts-Amherst: Syntax; semantics; language acquisition.

Hammond, Eugene. Writing. Ph.D., 1977, Yale University; Composition and Rhetoric; History of Rhetorical Theory.

Khost, Peter. Writing and Rhetoric. PhD 2011. CUNY: Teaching Writing and Teaching
Literature, Political Implications of Teaching Writing.

Lindblom, Kenneth. English, Director of the English Teacher Education Program. Ph.D. Syracuse University, 1996; English Education; Theory, History, and Practice of Composition-Rhetoric; Discourse Pragmatics

Martinez-Pizarro, Joaquin, English, Ph.D., 1976, Harvard University: Literary history of the Middle Ages; classical and medieval backgrounds; comparative studies.

Pfeiffer, Douglas. English. Ph.D. 2005, Columbia; Renaissance, Humanism, History of Literary and Rhetorical Theory.

Sharma, Ghanashyam. Writing and Rhetoric. PhD 2012. Louisville: Writing in the Disciplines,
English as Second Language.

Thompson, Roger. Writing and Rhetoric. PhD, 2000. Texas Christian: Rhetorical Theory,
History of Rhetorical Theory, Writing about War Experience.

Executive Committee
Glockner, Marvin, Associate Dean, School of Professional Development, Stony Brook University.

Joyce, Edward, Department of English, Suffolk Community College.

Kaufman, Dorit, Chair, TESOL Certification, Department of Linguistics, Stony Brook University.

Lewis, Lorna, Executive Director of Teaching and Learning, Three Village School District.

Schneider, Howard, Dean, School of Journalism, Stony Brook University.

Stephen Spector,, Chair, Department of English, Stony Brook University.

Rianna, Maria, Assistant Superintendent of Schools, Port Jefferson.

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

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