

## Biology Minor Checklist

Please refer to the Undergraduate Bulletin for the official policy, full course options, and requirements in detail.

### Requirements for the Minor in Biology

Completion of the Minor in Biology requires a minimum of 20 credits. All courses for the minor must be taken for a letter grade and be passed with a grade of C or higher, including at least 9 credits at the 300 level. All Advanced Courses for the minor must be taken at Stony Brook in BIO-designator courses from the list of Advanced Courses in Biology (Refer to Page 2 of this checklist).

1. At least two of the following core lecture courses: BIO 201, BIO 202, BIO 203
2. Two semesters of fundamental lab including BIO 204, and either BIO 205 or BIO 207.
3. At least 9 credits of Upper Division courses in Biology, in at least two of the four Areas (I-IV) of Advanced Courses in Biology (this list can be found on the back of this page). **Only courses with BIO indicators are accepted for the biology minor except for: EBH 302, EBH 370, EBH 359, EBH 380, EBH 381.**
4. Any additional courses as needed to reach the 20 credits required for the minor. Note, a grade of Satisfactory in at most two credits of biology independent research (BIO 484, BIO 486, BIO 487, BIO 489) and at most one credit of tutorial readings (BIO 446, BIO 447, BIO 449) may be applied toward the minor. This course can be the remaining core lecture course.

Core Courses in Biology	(10 Credits)
Biology 201 or 202 or 203	
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BIO 204: Fundamentals of Scientific Inquiry 1	
BIO 205 or BIO 207: Fundamentals of Scientific Inquiry 2A or 2B	

Advanced Courses *	Area	Credits

\* At Least 9 credits of Upper division biology courses, in at least two of the four areas is required

Additional Course(s) to Meet 20 Credits	Course	Credits
Biology Minor Credit Total (20 Credit Minimum)		

## Advanced BIO Courses and Accepted Electives for the Biology Minor

The advanced BIO courses and Accepted Electives are listed below in groupings that correspond to four broad areas of biology. The advanced courses are listed below as: Course Indicator, Course Name, Course Type (lecture or lab), and semester usually offered. Please refer to the Undergraduate Catalog for the most up-to date list including full course options, descriptions, policies, and pre-requisites in detail.

### Area I: Biochemistry, Molecular and Cellular Biology:

- BIO 310 Cell Biology (Lec)(SPRING)
- BIO 312 Bioinformatics and Computational Biology (Lec/Lab) (FALL) ♦
- BIO 314 Cancer Biology (Lec)(SPRING)
- BIO 316 Molecular Immunology (Lec)(SUMMER)
- BIO 320 General Genetics (Lec)(SPRING) ♦
- BIO 361 Biochemistry I (Lec)(FALL/SPRING)
- BIO 362 Biochemistry II (Lec)(SPRING)
- BIO 364 Laboratory Techniques in Cancer Biology (Lab)(FALL) ♦
- BIO 365 Biochemistry Laboratory (Lab)(FALL) ♦
- BIO 368 Food Microbiology Laboratory (Lec)
- EBH 302 Human Genetics (Lec)(FALL) ♦

♦ Indicates that the upper division writing requirement can be completed in the course

### Area II: Neurobiology and Physiology

- BIO 317 Principles of Cellular Signaling (Lec)(FALL)
- BIO 328 Mammalian Physiology (Lec)(SPRING)
- BIO 332 Computational Modeling of Physiological Sys. (Lec)(SPRING)
- BIO 333 Neurotechnology (Lec) (SPRING)
- BIO 334 Principles of Neurobiology (Lec)(SPRING)
- BIO 335 Neurobiology Laboratory (Lab)(FALL) ♦
- BIO 337 Neurotransmission and Neuromodulation (Lec)(SPRING)
- BIO 338 Self organization of the Brain (Lec)(FALL)
- BIO 339 Neurobiology of Disease (Lec)(SPRING)
- BIO 347 Introduction to Neural Computation (Lec)(FALL)
- BIO 369 Animal Nutrition (Lec)(Spring)

### Area III: Organisms

- BIO 315 Microbiology (Lec)(SPRING)
- BIO 325 Animal Development (Lec)(FALL)
- BIO 327 Developmental Genetics Laboratory (Lab)(SPRING) ♦
- BIO 341 Plant Diversity (Lec/Lab) (SPRING)
- BIO 344 Chordate Zoology (Lec/Lab) (SPRING) ♦
- BIO 348 Herpetology (Lec/Lab) (SPRING)
- BIO 366 Molecular Microbiology Laboratory (Lec/Lab) (FALL) ♦

### Area IV: Ecology and Evolution

- BIO 319 Landscape Ecology Laboratory (Lab)(FALL)
- BIO 321 Ecological Genetics (Lec)(SPRING) ♦
- BIO 336 Conservation Biology (Lec)(FALL) ♦
- BIO 351 Ecology (Lec)(FALL)
- BIO 352 Ecology Laboratory (Lab)(FALL) ♦
- BIO 353 Marine Ecology (Lec)(SPRING) ♦
- BIO 354 Evolution (Lec)(FALL) ♦
- BIO 356 Applied Ecology & Conservation Biology Laboratory (Lab)(SPRING)
- BIO 358 Biology & Human Social & Sexual Behavior (Lec)(SPRING)
- BIO 367 Molecular Diversity Laboratory (Lab)(SPRING) ♦
- BIO 383 Paleobiology (Lec/Lab) (SPRING)
- BIO 384 Intermediate Statistics (Lec)(FALL)
- BIO 385 Plant Ecology (Lec)(SPRING) ♦
- BIO 386 Ecosystem Ecology & the Global Environ. (Lec)(SPRING) ♦
- EBH 359 Behavioral Ecology (Lec)(FALL)
- EBH 380 Genomics (Lec)(FALL)
- EBH 381 Genomics Laboratory (Lec/Lab)(SPRING)