

Biology Minor Checklist

Name: _____ SB ID: _____ Today's Date: _____

Overall GPA: _____ Anticipated Graduation Date: _____ Future Plans: _____

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 the back of this page).

Core Courses in Biology (10 Credits)

1. At least two of the following three core fundamental lecture courses:
 - BIO 201 - Organisms to Ecosystems
 - BIO 202 - Molecular and Cellular Biology
 - BIO 203 - Cellular and Organ Physiology
2. Two semesters of the core fundamental lab courses which include BIO 204, and either BIO 205 or BIO 207

Advanced Course Requirements for the Biology Minor

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. All Advanced Courses for the minor must be taken at Stony Brook. Only courses with BIO indicators are accepted for the Biology minor with the exception of: 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.

Lecture Courses

BIO 201, 202, or 203: _____	
BIO 201, 202, or 203: _____	

Lab Courses

BIO 204	
BIO 205 or BIO 207	

Area Credits

	Area	Credits
Advanced Course in Biology: _____		
Advanced Course in Biology: _____		
Advanced Course in Biology: _____		

At least 9 credits of Upper Division courses in Biology are required

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

Only students with majors other than Biology, Biochemistry, Human Evolutionary Biology, Pharmacology, Marine Sciences, or Marine Vertebrate Biology may elect the Biology minor.

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 Bulletin 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)(FALL)
- 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/SPRING) ♦
- BIO 368 Food Microbiology (Lec)
- EBH 302 Human Genetics (Lec)(FALL) ♦
- EBH 370 Advanced Human Genetics (Lec/Lab)(SPRING)

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 Systems(Lec)(SPRING)
- BIO 334 Principles of Neurobiology (Lec)(SPRING)
- BIO 335 Neurobiology Laboratory (Lab)(FALL) ♦
- BIO 337 Neurotransmission and Neuromodulation: Implications for Brain Function (Lec)(SPRING)
- BIO 338 From synapse to circuit: Self-organization of the Brain (Lec)(FALL)
- BIO 339 Neurobiology of Disease (Lec)(FALL)
- BIO 347 Introduction to Neural Computation (Lec)(FALL)
- BIO 369 Animal Nutrition (Lec)(SPRING)
- BIO 547 Introduction to Neural Computation (Lec)(FALL)

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 342 Invertebrate Zoology (Lec)(FALL)
- BIO 343 Invertebrate Zoology Laboratory (Lab)(FALL)
- BIO 344 Chordate Zoology (Lec/Lab)(SPRING) ♦
- BIO 348 Diversity and Evolution of Reptiles and Amphibians (Lec)
- 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 350 Darwinian Medicine (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 Population and Community Ecology Computer Laboratory (Lab)(SPRING) ♦
- BIO 358 Biology and Human Social and 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 Environment (Lec)(SPRING) ♦
- BIO 558 Biology and Human Social and Sexual Behavior (Lec)(SPRING)
- EBH 359 Behavioral Ecology (Lec)(FALL)
- EBH 380 Genomics (Lec)(FALL) ♦
- EBH 381 Genomics Laboratory (Lec/Lab)(SPRING)

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