

# MINOR IN BIOLOGY

To fulfill the requirements for a Biology minor, students must complete 24 units.

All Biology minors must complete minimum 12 units toward the minor at Towson University, with at least 6 of these units at the upper (300-400) level.

Code	Title	Units
<b>Required Courses</b>		
BIOL 200 & 200L	BIOLOGY I: INTRODUCTION TO CELLULAR BIOLOGY AND GENETICS [LECTURE] and BIOLOGY I: INTRODUCTION TO CELLULAR BIOLOGY AND GENETICS [LAB] <sup>1</sup>	4
BIOL 206 & 206L	BIOLOGY II: INTRODUCTION TO ECOLOGY AND EVOLUTION [LECTURE] and BIOLOGY II: INTRODUCTION TO ECOLOGY AND EVOLUTION [LAB]	4
BIOL 309	GENETICS	4
CHEM 131 & 131L	GENERAL CHEMISTRY I LECTURE and GENERAL CHEMISTRY I LABORATORY <sup>2</sup>	4
<b>Electives</b>		
An additional 8 units of electives must be chosen from the courses listed below. At least 6 of these units must be upper-level (300-400). The remaining 3 units may be lower-level or upper-level. When selecting coursework, please review the catalog descriptions carefully. Some electives may have prerequisites (including BIOL 205 or BIOL 207 or BIOL 208 or CHEM 132 and CHEM 132L). These prerequisites must be taken, but they may not count toward the minor.		12
BIOL 205	GENERAL BOTANY	
BIOL 207	GENERAL ZOOLOGY	
BIOL 208	BIODIVERSITY	
BIOL 215	ESSENTIALS OF MICROBIOLOGY <sup>3</sup>	
BIOL 221 & 221L	HUMAN ANATOMY & PHYSIOLOGY I [LECTURE] and HUMAN ANATOMY & PHYSIOLOGY I [LAB] <sup>4</sup>	
BIOL 304	NATURAL HISTORY INTERPRETATION AND PUBLIC ENVIRONMENTAL EDUCATION	
BIOL 306	HUMAN ECOLOGY AND SUSTAINABILITY	
BIOL 310	CONSERVATION BIOLOGY	
BIOL 318	MICROBIOLOGY <sup>3</sup>	
BIOL 325	ANIMAL PHYSIOLOGY <sup>4</sup>	
BIOL 334	HUMANS, SCIENCE AND THE CHESAPEAKE BAY	
BIOL 342	HUMAN ANATOMY AND PHYSIOLOGY I FOR BIOLOGY MAJORS <sup>4</sup>	
BIOL 347	MARINE BIOLOGY	
BIOL 353	INVERTEBRATE ZOOLOGY	
BIOL 355	ANIMAL PARASITOLOGY	
BIOL 360	HISTOLOGY	
BIOL 365	HUMAN PATHOPHYSIOLOGY	
BIOL 367	ENDOCRINOLOGY	

BIOL 371	ANIMAL BEHAVIOR
BIOL 402	GENERAL ECOLOGY
BIOL 403	ADV GENETICS
BIOL 405	MOLECULAR ECOLOGY, EVOLUTION AND CONSERVATION
BIOL 406	LIMNOLOGY
BIOL 408	CELL BIOLOGY
BIOL 409	MOLECULAR BIOLOGY
BIOL 410	MOLECULAR BIOLOGY LABORATORY
BIOL 411	CANCER BIOLOGY
BIOL 412	CELL BIOLOGY LABORATORY
BIOL 413	EVOLUTION
BIOL 415	BIOTECHNOLOGY
BIOL 418	GENETIC ANALYSIS IN MEDICINE
BIOL 419	ENVIRONMENTAL MICROBIOLOGY
BIOL 420	MICROBIOLOGY OF INFECTIOUS DISEASE
BIOL 421	IMMUNOLOGY
BIOL 425	DISSECTION OF THE UPPER EXTREMITY
BIOL 427	NEUROMUSCULAR MECHANISMS OF THE UPPER BODY
BIOL 428	VIROLOGY
BIOL 432	VASCULAR PLANT TAXONOMY
BIOL 435	PLANT ECOLOGY
BIOL 436	PLANT PHYSIOLOGY
BIOL 444	WILDLIFE MANAGEMENT
BIOL 446	TROPICAL ECOLOGY AND CONSERVATION
BIOL 447	TROPICAL FIELD ECOLOGY
BIOL 452	WETLAND ECOLOGY
BIOL 455	FISH BIOLOGY
BIOL 456	ORNITHOLOGY
BIOL 458	MAMMALOLOGY
BIOL 461	ENTOMOLOGY
BIOL 463	DEVELOPMENTAL BIOLOGY
BIOL 467	HERPETOLOGY
BIOL 470	ADVANCED PHYSIOLOGY
BIOL 471	ADVANCED PHYSIOLOGY LABORATORY
BIOL 472	ORGANISMAL FORM AND FUNCTION LABORATORY
BIOL 473	ECOLOGICAL FIELD METHODS LABORATORY
BIOL 474	MOLECULAR TECHNIQUES IN ECOLOGY, EVOLUTION, AND CONSERVATION
BIOL 475	GENETICS LABORATORY
BIOL 491	ELECTIVE IN INDEPENDENT RESEARCH
CHEM 351	BIOCHEMISTRY
CHEM 356	BIOCHEMISTRY LAB
GEOG 221	INTRODUCTION TO GEOSPATIAL TECHNOLOGY
MBBB 301	INTRO TO BIOINFORMATICS
MBBB 315	GENOMICS

**Total Units**

**28**

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<sup>1</sup> Students may substitute BIOL 191/BIOL 191L for BIOL 200/BIOL 200L if an A- or better is earned in each course component.

<sup>2</sup> Students may substitute CHEM 121/CHEM 121L for CHEM 131/CHEM 131L if a B or better is earned in each course component.

<sup>3</sup> Only one of BIOL 215 or BIOL 318 may be counted toward elective units for the minor

<sup>4</sup> Only one of BIOL 221/BIOL 221L or BIOL 325 or BIOL 342 may be counted toward elective units for the minor.