

2+2 Articulation Agreement for Carroll Community College and Towson University

Associate's Degree: A.S. in Biology

Bachelor's Degree:

Carroll CC Requirement	Carroll CC Course to Take	Credits	Towson University Equivalent Course
Program Requirement	BIOL 215 Microbiology	4	BIOL 215 Essentials of Microbiology
Program Requirement	BIOL 240 Genetics	4	BIOL T09 Genetics
Program Requirement	CHEM 106 Principles of General Chemistry 2	4	CHEM 132 & CHEM 132L General Chemistry II Lecture & Lab
Program Requirement	CHEM 201 Organic Chemistry 1	5	CHEM T31 Organic Chemistry I
Program Requirement	CHEM 202 Organic Chemistry 2	5	CHEM T32 Organic Chemistry II
Program Requirement	Calculus MATH 132 Applied Calculus MATH 135 Calculus of a Single Variable 1	3 or 4	

This section explains any specific course selections made in section 1 and provides transfer planning guidance specific to this degree plan. Students must follow the course selections outlined in this document. If s

This section outlines the remaining degree requirements for students transferring into the Organismal Biology and Ecology concentration. This concentration is designed for students seeking advanced studies in botany, zoology, conservation biology or ecology, and/or careers in environmental education, government environmental regulatory agencies, or the private sector. Refer to section 4 for additional major requirements, recommendations, and university-wide degree requirements.

CORE CURRICULUM REQUIREMENTS: 6 NITS

Core 9 Advanced Writing Seminar

Core 14 Ethical Perspectives

BIOLOGY MAJOR FOUNDATION COURSES : 1 NIT

BIOL 204 Educational and Career Planning for the Biologist (1 unit)

BIOLOGY MAJOR BREADTH COURSES : 10-20 NITS

Select one of the following for 3-8 units:

BIOL 205 General Botany & BIOL 207 General Zoology (8 units)

BIOL 208 Biodiversity (3 units)

Select one of the following for 4 units:

BIOL 405 Molecular Ecology, Evolution, and Conservation

BIOL 408 Cell Biology

BIOL 409 Molecular Biology

Select one of the following for 3-8 units:

BIOL 221 & 221L Human Anatomy & Physiology I Lecture & Lab and BIOL 222 & 222L Human Anatomy & Physiology II Lecture & Lab (8 units)

BIOL 325 Animal Physiology (4 units)

BIOL 436 Plant Physiology (3 units)

PRINCIPLES OF ECOLOGY ELECTIVE: 4 NITS

Select one of the following for 4 units:

BIOL 310 Conservation Biology

BIOL 402 General Ecology

BIOL 405 Limnology

BIOL 435 Plant Ecology

DIVERSITY ELECTIVE: 3-4 NITS

Select one of the following for 3-4 units:

BIOL 334 Humans, Science, and the Chesapeake Bay (3 units)

BIOL 347 Marine Biology (3 units)

BIOL 353 Invert Zoology (4 units)
 BIOL 371 Animal Behavior (4 units)
 BIOL 413 Evolution (3 units)
 BIOL 432 Vascular Plant Taxonomy (4 units)
 BIOL 444 Wildlife Management (3 units)
 BIOL 446 Tropical Ecology and Conservation (3 units)
 BIOL 447 Tropical Field Ecology (4 units)
 BIOL 452 Wetland Ecology (4 units)
 BIOL 455 Fish Biology (4 units)
 BIOL 456 Ornithology (4 units)
 BIOL 458 Mammalogy (4 units)
 BIOL 461 Entomology (4 units)
 BIOL 467 Herpetology (4 units)
 GEOG 221 Introduction to Geospatial Technology (3 units)

ORGANISMAL ELECTIVES : 6-12 UNITS

Take two courses (6-8 units) if BIOL 205 & 207 were taken for the breadth requirement; take three courses (9-12 units) if BIOL 208 was taken for the breadth requirement. Select from any of the following options:

Any course from the Principles of Ecology electives list

Any course from the Diversity electives list

BIOL 491 Elective in Independent Research

PHYS 212 General Physics II Non Calculus-Based or PHYS 242 General Physics II Calculus-Based (depending on which course is taken in the ancillary requirement for physics)relrgSsee.9 (-25.33 (n)0.00n(rP (s9 (e)e)7 (c)-7 (t)24 (l)4 (OL)5 (4)3 (9 r) /L2BDC s

ADDITIONAL BIOLOGY MAJOR REQUIREMENTS AND RECOMMENDATIONS:

Students in this concentration are encouraged to take BIOL 205 and BIOL 207 as their breadth courses.

BIOL 484 Seminar in Ecology, Evolution, Conservation, and Behavior (1 unit) is recommended as a general elective for this concentration.

A research experience or internship (e.g. BIOL 491, 493, or 499) is strongly encouraged for students in this concentration.

All Biology majors must complete a minimum of 19 units of biology major courses as TU credit. At least 10 of these units must be at the upper-level. This does not include ancillary coursework outside of the biology subject.

BACHELORS DEGREE REQUIREMENTS FOR ALL STUDENTS :

A C (2.0) or higher is required in all major courses and prerequisites.

A cumulative grade point average (GPA) of 2.0 is required.

32 units of the bachelor's degree must be completed at the upper level (courses numbered 300 or above).

TU B.S.	Dg	120 NITS
CCC A.S. Dg	iBd	