

# BIOLOGY MAJOR

## DOMAIN GENERAL EDUCATION (10 courses Required):

Domain II B is satisfied through completion of the Biology major, leaving ten courses to be completed to satisfy the remaining general education subdomains through courses taken outside the major department. Only courses designated (Gen. Ed. Domain) after the course title will meet general education requirements.

Common Core:	A. ENWR 110 Composition 2	_____
	B. MATH XXX	_____
Domain I:	A. Creative Arts	_____
	B. Humanities	_____
	C. Language	_____
Domain II:	A. Analysis, Modeling, Problem-Solving	_____
	B. Sciences (two; one must be a lab science)	X
Domain III:	A. Perspectives on the Past	_____
	B. Perspectives on Contemp. World	_____
	C. Global Comp., Eth. Reas., Human Div.	_____

## BIOLOGY MAJOR AND RELATED COURSES:

### Required Major Related Core Courses (12):

BIOL 125	The Biology Experience	_____
BIOL 135/135L	Foundations of Biological Science with Lab	_____
BIOL 208/208L	Genetics with Lab	_____
BIOL 230	Professional Communication in Biology	_____
BIOL 262/262L	Molecular Biology with Lab	_____
BIOL 402	Processes of Organic Evolution	_____
CHEM 107/107L	Principles of Chemistry with Lab	_____
CHEM 108/108L	Principles of Chemistry and Quantitative Analysis with Lab	_____
CHEM 207/207L	Organic Chemistry I with Lab	_____
MATH 180	Precalculus (CCM)*	_____
MATH 208	Biostatistics <b>OR</b>	_____
ENVS 202	Data Analysis for Scientists	_____

\*Student proficient at the precalculus level should enroll in MATH219 Calculus 1 to satisfy the Gen. Ed. Domain Common Core Math Requirement.

### Biology Major Capstone:

BIOL460	Research Experience in Biology**	_____
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\*\*An original research project is required of all Biology Majors. Prior to enrollment in BIOL469 Research Experience in Biology, the student should meet with their academic advisor and with other Biology faculty to tailor the research project to the student's interests and career goals.

### Additional Biology electives, General Biology Concentration:

**Students must take an additional six (6) courses (one of these courses must focus on plants and one on animals):**

#### **One (1) Course from Group A: Cellular and Molecular Biology Electives**

BIOL 228/228L	Microbiology with Lab	_____
BIOL 260/260L	Cellular Biology with Lab	_____

BIOL 356	Biology of Cancer	_____
BIOL 381	Theories of Infectious Diseases	_____
BIOL 400	Trends in Biotechnology	_____
BIOL 426	Human Immunity	_____
BIOL 432	Vertebrate Development	_____
CHEM 300/300L	Principles of Biochemistry with Lab <b>or</b>	_____
	CHEM 301/301L Biochemistry I with Lab	_____

#### **One (1) Course from Group B: Organismal Diversity Electives**

BIOL 203	Plants and Society*	_____
BIOL 212/212L	Wildlife Specimen Preparation Techniques	_____
BIOL 232/232L	Invertebrate Zoology with Lab	_____
BIOL 251/251L	Vascular Plant Taxonomy with Lab	_____
BIOL 320/320L	Animal Behavior with Lab	_____
BIOL 323	Biology and Conservation of Crocodiles	_____
BIOL 236/236L	Ornithology with Lab	_____

\* This course may not be used as a required plant course

#### **One (1) from the Following Group of Courses:**

BIOL 344/344L	Animal Physiological Ecology* w/Lab	_____
BIOL 235/235L	Principles of Human Physiology* w/Lab	_____
BIOL 242/242L	Human Anatomy and Physiology II* w/Lab	_____
BIOL 255/255L	Plant Physiology w/Lab	_____

\*Only one of these courses may be taken in order to receive Biology credit.

#### **One (1) from Group D: Ecological and Evolutionary Biology Electives**

BIOL 233/233L	Comparative Vertebrate Anatomy with Lab	_____
BIOL 248/248L	Principles of Ecology with Lab	_____
BIOL 291	Principles of Tropical Ecology and Conservation: Field Study	_____
BIOL 321/321L	Limnology with Lab	_____
BIOL 335/335L	Principles of Wildlife Biology with Lab	_____
BIOL 341/341L	Marine Biology with Lab	_____
BIOL 393	Wildlife Management and Conservation Topics	_____

#### **Two (2) additional Courses from Group A-E\***

##### **\* Group E: Advanced Biology Electives**

BIOL 490	Independent Study in Biology	_____
BIOL 495	Internship in Biology	_____

##### **FREE ELECTIVES (4):**

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

##### **\*For students who plan to pursue an advanced degree in Biology, the following courses are strongly recommended:**

CHEM 300/300L	Principles of Biochemistry with Lab	_____
MATH219	Calculus I	_____
PHYS 201/201L	Physics for Earth and Life Scientists with Lab <b>or both</b>	_____
	PHYS211/211L Physics I with Lab <b>AND</b>	_____
	PHYS 212/212L Physics II with lab	_____