

BACHELOR OF ARTS in BIOLOGY NATURAL HISTORY OPTION

Revised 10/18 GPC

Concepts in Biology I (BIOLOGY 114) and *Concepts in Biology II* (BIOLOGY 115) should be taken during the freshman year. *Microbiology* (BIOLOGY 242) should be taken during the sophomore year.

Applied Statistics for the Behavioral Sciences (PSYCH 160) may be substituted for *Introduction to Statistics* (MATH 141) provided that a foundational math course is taken in the first year.

Biology Core Requirement (22-23 hrs)		Geological Science Requirement (8 hrs)	
BIOLOGY 114	Concepts in Biology I	4	<input type="checkbox"/>
BIOLOGY 115	Concepts in Biology II	4	<input type="checkbox"/>
BIOLOGY 242	Microbiology	4	<input type="checkbox"/>
BIOLOGY 233	Human Genetics	3	<input type="checkbox"/>
BIOLOGY 351	Ecology	4	<input type="checkbox"/>
BIOLOGY 430	Evolution <u>OR</u>	3	<input type="checkbox"/>
EGGS 365	Intro. to Paleontology	4	<input type="checkbox"/>
Organismal and Field Course Requirement (9 hrs)		Mathematics Requirement (3 hrs)	
Select three courses among biology and marine science organismal and field courses on page 2 ^{1,2,4} . List below.		MATH141 Introduction to Statistics 3 <input type="checkbox"/>	
_____	_____	3	<input type="checkbox"/>
_____	_____	3	<input type="checkbox"/>
_____	_____	3	<input type="checkbox"/>
Biology and Other Science Electives (6 hrs)		Anthropology Requirement (3 hrs)	
Select among biology, marine science, geology, and chemistry courses on page 2 ^{1,2,3,4} . List below.		ANTHRO 220 Human Origins 3 <input type="checkbox"/>	
_____	_____	3	<input type="checkbox"/>
_____	_____	3	<input type="checkbox"/>

Restrictions Upon the Application of Electives:

¹Research and Internship courses may be applied to the Organismal and Field Course requirement if the topic or placement is appropriate and is approved by your advisor. Otherwise, research and internship courses will count as a Biology and Other Science electives.

²Restrictions on Non-Classroom Courses: 1. A maximum of 3 credit hours of BIOL 490 may be applied as major elective credit toward the degree. 2. A maximum of 6 credit hours from among BIOLOGY 390, 391, 490, 493 and 494 may be applied as major elective credit toward the degree.

³*Introduction to Paleontology* (EGGS 365) may be used as a major elective if *Evolution* (BIOLOGY 430) is used to satisfy the core requirement.

⁴Appropriate transfer courses may be counted as Organismal and Field Courses or as Biology and Other Science Electives upon approval of your advisor.

Organismal and Field Courses. Any of the following Biology (prefix BIOLOGY) courses may be used to satisfy Organismal and Field Course Requirements. Once Organismal and Field Course Requirements are met, additional courses taken from this list will count as Biology and Other Science Electives.

200	Dendrology	3	<input type="checkbox"/>
211	Invertebrate Zoology	3	<input type="checkbox"/>
212	Vertebrate Zoology	3	<input type="checkbox"/>
213	Integrative Vertebrate Zoology	3	<input type="checkbox"/>
222	Comparative Biology of Plants	3	<input type="checkbox"/>
252	Field Zoology	3	<input type="checkbox"/>
253	Fresh Water Biology	3	<input type="checkbox"/>
263	Field Botany	3	<input type="checkbox"/>
361	Comparative Vertebrate Anatomy	3	<input type="checkbox"/>
390	Research in Biology ^{1,2}	3	<input type="checkbox"/>
452	Limnology	3	<input type="checkbox"/>
455	Environmental Microbiology	3	<input type="checkbox"/>
457	Entomology	3	<input type="checkbox"/>
459	Ornithology	3	<input type="checkbox"/>
461	Animal Behavior	3	<input type="checkbox"/>
490	Internship in Biology ^{1,2}	3	<input type="checkbox"/>
493	Honors Independent Study ^{1,2}	3	<input type="checkbox"/>

Biology Elective Courses. Any of the following Biology (prefix BIOLOGY) courses may be used to satisfy Biology and Other Science Elective requirements, but no more than 2 classes may be taken at the 100 level.

103	Biodiversity and Conservation	3	<input type="checkbox"/>
271	Cell Biology	4	<input type="checkbox"/>
332	Genetics	3	<input type="checkbox"/>
333	Molecular Biology	3	<input type="checkbox"/>
334	Molecular Biology Laboratory	1	<input type="checkbox"/>
342	Medical Microbiology	3	<input type="checkbox"/>
343	Immunology	3	<input type="checkbox"/>
350	Plant Pathology	3	<input type="checkbox"/>
363	Vertebrate Histology	3	<input type="checkbox"/>
391	Research in Biology 2 ²	3	<input type="checkbox"/>
411	Radiation Biology	3	<input type="checkbox"/>
420	Global Change Biology	3	<input type="checkbox"/>
421	Ecosystems Management	3	<input type="checkbox"/>
430	Evolution ³	3	<input type="checkbox"/>
431	Developmental Biology	3	<input type="checkbox"/>
432	Microbial and Molecular Genetics	3	<input type="checkbox"/>
435	Bioinformatics	3	<input type="checkbox"/>
442	Virology	3	<input type="checkbox"/>
445	Pharmacology	3	<input type="checkbox"/>
451	Conservation Biology	3	<input type="checkbox"/>
460	Population Biology	3	<input type="checkbox"/>
470	Medical Parasitology	3	<input type="checkbox"/>
472	Animal Cell Physiology	3	<input type="checkbox"/>
473	Cancer Biology	3	<input type="checkbox"/>
474	Human Physiology	3	<input type="checkbox"/>
476	Neurophysiology	3	<input type="checkbox"/>
477	Plant Physiology	3	<input type="checkbox"/>

Marine Science Courses. Any of the following Marine Science (prefix MARSCI) courses may be used to satisfy Organismal and Field Course Requirements. Once Organismal and Field Course Requirements are met, additional courses taken from this list will count as Biology and Other Science Electives.

221	Marine Invertebrates	3	<input type="checkbox"/>
241	Marine Biology	3	<input type="checkbox"/>
250	Wetland Ecology	3	<input type="checkbox"/>
260	Marine Ecology	3	<input type="checkbox"/>
298	Physiology Marine Invert.	3	<input type="checkbox"/>
300	Behavior Marine Organisms	3	<input type="checkbox"/>
320	Marine Microbiology	3	<input type="checkbox"/>
330	Tropical Invertebrates	3	<input type="checkbox"/>
342	Marine Botany	3	<input type="checkbox"/>
343	Marine Ichthyology	3	<input type="checkbox"/>
345	Marine Ornithology	3	<input type="checkbox"/>
394	Comp Phys Marine	3	<input type="checkbox"/>
431	Ecology of Marine Plankton	3	<input type="checkbox"/>
432	Marine Evolutionary	3	<input type="checkbox"/>
441	Biology of Molluscs	3	<input type="checkbox"/>
464	Biological Oceanography	3	<input type="checkbox"/>
470	Research Diver Methods	3	<input type="checkbox"/>
490	Marine Aquaculture	3	<input type="checkbox"/>
491	Coral Reef Ecology	3	<input type="checkbox"/>
492	Marine Mammals	3	<input type="checkbox"/>
493	Behavioral Ecology	3	<input type="checkbox"/>

Other Science Elective Courses. Any of the following may be used to satisfy Biology and Other Science Elective requirements, but no more than 2 classes may be taken at the 100 level.

EGGS 100	Intro. to Environ. Science	3	<input type="checkbox"/>
EGGS 103	Dinosaurs	3	<input type="checkbox"/>
EGGS 106	The Planets	3	<input type="checkbox"/>
EGGS 150	Quant. Meth. in Earth Sci.	3	<input type="checkbox"/>
EGGS 242	Map Use and Analysis	3	<input type="checkbox"/>
EGGS 255	Meteorology	3	<input type="checkbox"/>
EGGS 259	Oceanography	3	<input type="checkbox"/>
EGGS 260	Earth Materials	4	<input type="checkbox"/>
EGGS 264	Applied Cartography	4	<input type="checkbox"/>
EGGS 265	Geomorphology	4	<input type="checkbox"/>
EGGS 330	Special Topics in Fld. Geol.	3	<input type="checkbox"/>
EGGS 360	Principles of GIS 1	3	<input type="checkbox"/>
EGGS 365	Intro. to Paleontology ³	4	<input type="checkbox"/>
CHEM 101	Introduction to Chemistry	3	<input type="checkbox"/>
CHEM 115	Chem. for the Sciences I	4	<input type="checkbox"/>
CHEM 116	Chem. for the Sciences II	4	<input type="checkbox"/>

→ (Biology Elective Courses continued)

479	Integrated Phys. Laboratory	1	<input type="checkbox"/>
480	Comparative Animal Phys.	3	<input type="checkbox"/>
489	Current Topics in Biology	3	<input type="checkbox"/>
494	Honors Ind. Study 2 ²	3	<input type="checkbox"/>

And any other new Biology or Marine Science Course designed for majors as they are added.

NOTES ^{1,2,3} As explained on previous page.

General Education Courses for the Natural History Option

(Required courses which meet goals are in italics)
 (Suggested courses meeting goals are listed but not italicized)
 (Blanks are for other elected courses which meet goals)

GOAL 5: NATURAL SCIENCES
 (5 points: 2 departments - SATISFIED BY MAJOR)

<i>BIOLOGY</i>	114	<i>Concepts in Biology 1</i>	3	<input type="checkbox"/>
ANTHRO	220	Human Origins	2	<input type="checkbox"/>

GOAL 1: COMMUNICATION
 (7 points: 3 departments)

<i>ENGLISH</i>	101	<i>Foundations of College Writing</i>	3	<input type="checkbox"/>
BIOLOGY	290	Writing in Biology	2	<input type="checkbox"/>
ARTSTUDIO	111	Introductory Drawing	1	<input type="checkbox"/>
ARTSTUDIO	210	Life Drawing	1	<input type="checkbox"/>
ARTSTUDIO	281	Introductory Photography	1	<input type="checkbox"/>
ARTSTUDIO	291	Introductory Digital Art	1	<input type="checkbox"/>
COMMSTUD	102	Public Speaking	3	<input type="checkbox"/>
INTSTUDY	231	Technical Writing	2	<input type="checkbox"/>
POLISCI	101	Elements of Political Sciences	1	<input type="checkbox"/>
_____	_____	_____	_____	<input type="checkbox"/>
_____	_____	_____	_____	<input type="checkbox"/>

GOAL 6: SOCIAL SCIENCES
 (5 points: 2 departments)

ANTHRO	101	Intro. To Anthropology	1	<input type="checkbox"/>
ANTHRO	200	Prin. Cultural Anthropology	1	<input type="checkbox"/>
ANTHRO	210	Intro. Prehistoric Archaeology	1	<input type="checkbox"/>
EGGS	102	World Cultural Geography	1	<input type="checkbox"/>
EGGS	104	World Regional Geography	2	<input type="checkbox"/>
EGGS	105	Environ. Issues and Choices	1	<input type="checkbox"/>
POLISCI	101	Elements of Political Sciences	2	<input type="checkbox"/>
_____	_____	_____	_____	<input type="checkbox"/>
_____	_____	_____	_____	<input type="checkbox"/>
_____	_____	_____	_____	<input type="checkbox"/>
_____	_____	_____	_____	<input type="checkbox"/>

GOAL 2: INFORMATION LITERACY
 (2 points: 1 department)

BIOLOGY	290	Writing in Biology	1	<input type="checkbox"/>
EGGS	105	Environ. Issues and Choices	1	<input type="checkbox"/>
INTSTUDY	231	Technical Writing	1	<input type="checkbox"/>
_____	_____	_____	_____	<input type="checkbox"/>

GOAL 7: ARTS AND HUMANITIES
 (5 points: 2 departments)

ARTHISTRY	101	Introduction to Art History	1	<input type="checkbox"/>
ARTSTUDIO	111	Introductory Drawing	2	<input type="checkbox"/>
ARTSTUDIO	210	Life Drawing	2	<input type="checkbox"/>
ARTSTUDIO	281	Introductory Photography	2	<input type="checkbox"/>
ARTSTUDIO	291	Introductory Digital Art	2	<input type="checkbox"/>
PHIL	111	Introduction to Philosophy	3	<input type="checkbox"/>
THEATER	102	Introduction to Theater	3	<input type="checkbox"/>
_____	_____	_____	_____	<input type="checkbox"/>
_____	_____	_____	_____	<input type="checkbox"/>
_____	_____	_____	_____	<input type="checkbox"/>

GOAL 3: ANALYTICAL AND QUANTITATIVE SKILLS
 (5 points: 2 departments)

<i>BIOLOGY</i>	114	<i>Concepts in Biology</i>	1	<input type="checkbox"/>
<i>MATH</i>	141	<i>Introduction to Statistics</i>	3	<input type="checkbox"/>
EGGS	101	Intro. To Physical Geography	1	<input type="checkbox"/>
EGGS	150	Quant. Meth. in Earth Sci.	3	<input type="checkbox"/>
_____	_____	_____	_____	<input type="checkbox"/>

GOAL 8: SECOND LANGUAGE
 (2 points: 1 department - SATISFIED BY MAJOR)

<i>language</i>	102	<i>foreign language</i>	2	<input type="checkbox"/>
_____	_____	_____	_____	<input type="checkbox"/>

GOAL 4: CULTURES AND DIVERSITY
 (5 points: 2 departments)

<i>language</i>	102	<i>foreign language</i>	1	<input type="checkbox"/>
<i>ANTHRO</i>	220	<i>Human Origins</i>	1	<input type="checkbox"/>
ANTHRO	101	Intro. To Anthropology	1	<input type="checkbox"/>
ANTHRO	200	Prin. Cultural Anthropology	1	<input type="checkbox"/>
ANTHRO	210	Intro. Prehistoric Archaeology	1	<input type="checkbox"/>
ARTHISTRY	101	Introduction to Art History	2	<input type="checkbox"/>
EGGS	102	World Cultural Geography	2	<input type="checkbox"/>
EGGS	104	World Regional Geography	1	<input type="checkbox"/>
POLISCI	120	U. S. Government	1	<input type="checkbox"/>
SOC	215	Racial and Ethnic Minorities	3	<input type="checkbox"/>
_____	_____	_____	_____	<input type="checkbox"/>
_____	_____	_____	_____	<input type="checkbox"/>
_____	_____	_____	_____	<input type="checkbox"/>
_____	_____	_____	_____	<input type="checkbox"/>

GOAL 9: HEALTHY LIVING
 (2 points: 1 department)

EXERSCI	250	Lifeguarding	2	<input type="checkbox"/>
_____	_____	_____	_____	<input type="checkbox"/>
_____	_____	_____	_____	<input type="checkbox"/>

GOAL 10: CITIZENSHIP
 (2 points: 1 department)

EXERSCI	250	Lifeguarding	1	<input type="checkbox"/>
POLISCI	120	U. S. Government	2	<input type="checkbox"/>
_____	_____	_____	_____	<input type="checkbox"/>
_____	_____	_____	_____	<input type="checkbox"/>