

GENERAL CURRICULUM IN BIOLOGY

The General Curriculum in Biology is followed by default if no concentration is declared.

Biodiversity Courses ^{1,2}

Select from the following: 4

BIO 321	Mammalogy
BIO 322	Ichthyology
BIO 323	Ornithology
BIO 324	Herpetology
BIO 329	Vertebrate Field Zoology
BIO 335	General Entomology
BIO 336	Invertebrate Zoology
BIO 429	Parasitology
BOT 313	Taxonomy of Vascular Plants
MCRO 224	General Microbiology I ³
MCRO 402	General Virology
MSCI 324	Marine Mammals, Birds and Reptiles

400-level Electives ^{1,4}

Select from any 400 level BIO/BOT/MCRO/MSCI course, except BIO 400, BIO 450, BIO 461, BIO 462, BIO 463. 12

300-400 level Electives ^{1,2}

Select from any 300-400 level BIO/BOT/MCRO/MSCI course, except BIO 300, BIO 330, BIO 400, BIO 450, BIO 461, BIO 462, BIO 463, and courses which are "not open for major credit in Biological Sciences." 8

Approved Electives ^{1,5,6,7}

At least 12 units must be upper-division.

At least 4 units must be BIO/BOT/MCRO/MSCI course(s)

Select from the following: 19

Any BIO/BOT/MCRO/MSCI course except those which are "not open for major credit in Biological Sciences" ^{7,8,9}	
AG/EDES/ENGR/ISLA/SCM/UNIV 350	The Global Environment
ANT 401	Culture and Health
ASCI 239	Principles of Rangeland Management
ASCI 351	Reproductive Physiology
ASCI 403	Applied Biotechnology in Animal Science
ASCI 405 or BIO 407	Domestic Livestock Endocrinology Advanced Anatomy and Physiology: Endocrinology
ASCI 406	Applied Animal Embryology and Assisted Reproduction
ASCI 438	Systemic Animal Physiology
BMED 470	Selected Advanced Topics (Topic: Cellular Immunotherapy)
CHEM 217	Organic Chemistry II
CHEM 218	Organic Chemistry III
CHEM 220	Organic Chemistry Laboratory For Life Sciences II

CHEM 223	Organic Chemistry Laboratory for Life Sciences III
CHEM 314	Biochemistry: Fundamentals and Applications
or CHEM 369	Biochemical Principles
CHEM 331	Quantitative Analysis
CHEM 341	Environmental Chemistry: Water Pollution
CHEM 372	Metabolism
CHEM 377	Chemistry of Drugs and Poisons
CHEM 418	Neurochemistry
CHEM 428	Nutritional Biochemistry
CHEM 474	Protein Techniques Laboratory
COMS 418	Health Communication
CSC 101	Fundamentals of Computer Science
DATA 301	Introduction to Data Science
ENGR 322/ SCM 302	The Learn By Doing Lab Teaching Practicum ¹⁰
ERSC/GEOG 250	Physical Geography
ES/WGQS 350	Gender, Race, Culture, Science & Technology
FSN 310	Maternal and Child Nutrition
GEOG 441	Advanced Applications in Geospatial Technologies
KINE 406	Neuroanatomy
KINE 445	Electrocardiography
KINE 446	Echocardiography
LA/NR 218 or GEOG 218	Introduction to Geographic Information Systems (GIS) Applications in GIS
NR 141	Introduction to Forest Ecosystem Management
NR 142	Environmental Management
NR 404	Environmental Law
NR 416	Environmental Impact Analysis and Management
NR 418	Applied GIS
NR 425	Applied Resource Analysis and Assessment
PHIL 323 or PHIL 339 or PHIL 341	Ethics, Science and Technology Biomedical Ethics Professional Ethics
PSC 201	Physical Oceanography
PSY 320	Health Psychology
PSY 340	Biopsychology
SS 120	Introductory Soil Science
SS 321	Soil Morphology
SS 322	Soil Plant Relationships
SS 422	Soil Ecology
STAT 313	Applied Experimental Design and Regression Models
STAT 324 or STAT 334	Applied Regression Analysis Applied Linear Models
STAT 330	Statistical Computing with SAS

STAT 416	Statistical Analysis of Time Series
STAT 419	Applied Multivariate Statistics
STAT 421	Survey Sampling and Methodology
Total units	43

- ¹ Consultation with advisor is recommended prior to selecting electives; bear in mind your selections may impact pursuit of post-baccalaureate studies and/or goals.
- ² Excess units will be applied to Approved Electives.
- ³ Recommended for students interested in health science careers.
- ⁴ Excess units will be applied to 300-400 level Electives.
- ⁵ If a course is taken to meet a Major or Support requirement, it cannot be double-counted in the concentration.
- ⁶ Taking a General Education (GE) course that double-counts as an elective may cause an upper-division unit shortage. Use care to ensure that you have taken enough 300-400 level courses to meet the required 60 units of upper-division courses.
- ⁷ If BIO 461 or BIO 462 is used to meet the senior project requirement, it cannot be double-counted as an elective.
- ⁸ Maximum of 6 units may be applied toward Approved Electives: BIO 200, BIO 300, BIO 400, BIO 450, BIO 485, BIO 495, MSCI 401.
- ⁹ Only one of the following courses may count toward Approved Electives: BIO 231, BIO 232.
- ¹⁰ Maximum of 2 units may be applied toward Approved Electives from ENGR 322/SCM 302.