

GENERAL CURRICULUM or CONCENTRATION (select one)

General curriculum in biology

CHEM 313 or CHEM 371	5
Anatomy/Physiology (select at least one course)	4-5
BIO 361,432, 433, 434, 435; MCRO 424; ZOO 422	
Botany (select at least one course)	4
BOT 311, 313, 323, 324,335, 431,433, 437	
Ecology (select at least one course)	3-4
BIO 325, 327, 328, 401, 415, 419, 427, 438, 439, 443, 444; BOT 326; MCRO 436; ZOO 437	
Microbiology (select at least one course).....	3-5
MCRO 224, 225, 301, 320, 342, 421, 423, 433; ZOO 425	
Molecular/Cellular Bio (select at least one course).....	3-4
BIO 405, 426, 452;BIO/CHEM 375, 441, 476; BOT/HCS 450;MCRO 402; ZOO 428	
Zoology (select at least one course)	4
ZOO 321, 322, 323, 329, 335, 336, 341	
¹ Research, Project and Seminars	0-6
BIO 200, 330, 400†, 450, 462, 463, 470, 471, 472; SCM 302	
^{1,2} Approved electives	2-13
(Select additional courses in any of the areas listed or request faculty advisor approval for other courses with a max of 8 units of coursework allowed outside of the Dept)	
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Anatomy & Physiology Concentration

BIO 432 Vertebrate/Human Anat & Phys I.....	5
BIO 433 Vertebrate/Human Anat & Phys II.....	5
BIO 452 Cell Biology	4
CHEM 371 or CHEM 313.....	5
^{1,2} Approved electives	20
Select 20 units from the following:	
Eight (8) units <u>minimum</u> from:	
BIO/CHEM 375; BIO 405, 426, 434, 435; MCRO 225, 320, 342, 402, 423, 424; ZOO 422, 425, 428	
Eleven (11) units <u>maximum</u> from:	
CHEM 317, 318 372	
Eight (8) units <u>maximum</u> from:	
ASCI 351, 406; BIO 400†, 462, 463; FSN 310, 429; KINE 406, 445, 446; PHIL 339; PSY 340, SCM 451	
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¹Biology Teaching Concentration

BIO 432 Vertebrate/Human Anat & Phys I.....	5
BIO 433 Vertebrate/Human Anat & Phys II.....	5
BIO 452 Cell Biology	4
BIO/PSC 424 Organizing/Teaching Sci.....	4
MCRO 320 Emerging Infectious Diseases	3
SCM 300 Early Field Exp, Sci/Math.....	4
SCM 451 Ethics in the Sciences.....	3
^{1,2} Approved electives	11
Select eleven (11) units from the following:	
BIO 328, 330, 375, 400†, 401, 415, 434, 435, 450, 462, 463, 472; BOT 311, 313, 323, 326, 335, 433, 437; MCRO 225, 421, 424, 433; ZOO 321, 322, 323, 329, 335, 336, 341, 437	
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Ecology Concentration

Ecology of the Individual (select one course).....	4/5
BIO 434, 435; MCRO 424; ZOO 437	
Population Ecology (select one course)	3/4
BIO 327, 401, 439, 444	
Community Ecology (select one course).....	4
BIO 325, 328; BOT 326, 433; MCRO 436	
Global Ecology (select one course)	4
BIO 415; GEOG 250, 333; UNIV 350	
Methodology (select 3 courses)	10-12
BIO/CHEM 375; BIO 419, 443; LA/NR 318; STAT 313, 419	
^{1,2} Approved electives	10-14
Select any other course in this concentration, or from the major core Biological Diversity list, or from the following:	
BIO 330, 400†, 441, 462, 463, 472; BOT 311, 313, 323, 437; MCRO 224, 402; NR 307, 418; SS 321, 322; ZOO 321, 322, 323, 329, 335, 336, 341, 425	
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Field and Wildlife Biology Concentration

BOT 313 Taxonomy of Vascular Plants	4
BOT 433 Field Botany	4
ZOO 321 Mammalogy	4
ZOO 323 Ornithology	4
ZOO 341 Herpetology	4
Emphasis Area (select Field or Wildlife).....	19
Field Biology Emphasis	
ZOO 335 General Entomology (4)	
ZOO 437 Animal Behavior (4)	
BIO 439 or ZOO 322 (4)	
^{1,2} Approved electives (select 7 units from):	
BIO 325, 327, 328, 330, 400†, 401, 415, 419, 427, 439, 434, 443, 444, 462, 463; BOT 326, 437; LA/NR 318; NR 141, 142, 203, 307, 404, 416; MCRO 402; SS 121, 321, 322; STAT 313, 324, 330, 416, 419, 421; ZOO 322, 329, 335, 336, 425, 437	
³ Wildlife Biology Emphasis	
BIO 327 Wildlife Ecology (4)	
BIO 427 Wildlife Management (4)	
BIO 444 Population Ecology (3) or BIO 401 Conservation Biology (4)	
^{1,2} Approved electives. (Select 7-8 units from the Field Biology Emphasis approved electives list)	
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Marine Biology & Fisheries Concentration

BIO 328 Marine Ecology	4
BIO/CHEM 375 Molecular Biology Lab.....	3
BOT 437 Phycology	4
STAT 313 App Exp Design & Regression Models	4
ZOO 322 Ichthyology.....	4
ZOO 336 Invertebrate Zoology.....	4
^{1,2} Approved electives	16
Select a <u>minimum</u> of 8 units from the following:	
BIO 400†, 401, 405, 419, 434, 435, 438, 439, 443, 444, 452, 462, 463; MCRO 436; ZOO 321, 323, 425, 437	
Select a <u>maximum</u> of 8 units from the following:	
CHEM 317, 313 or 371, 341, 474; PSC 201	
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Molecular & Cellular Biology Concentration

BIO/CHEM 375 Molecular Biology Laboratory	3
BIO 452 Cell Biology.....	4
CHEM 317 Organic Chemistry II.....	5
CHEM 371 Biochemistry Principles.....	5
CHEM 372 Metabolism.....	4
CHEM 474 or BIO/CHEM 476	2
Choose 8 units from the following	8
BIO/CHEM 441, 476; BIO 405, 426; BOT 450; CHEM 474; MCRO 402, 433;SCM 201	
^{1,2} Approved electives.....	8
Select 8 units from the following, with a max. of one course from List B:	
List A	
BIO 400†, 405, 426, 432, 433, 435, 462, 463; BIO/CHEM 441, 476; BOT 323, 450; CHEM 474; MCRO 320, 402, 423, 424, 433; ZOO 422, 425, 428	
List B (Only one course from List B allowed)	
ASCI 403, 406; CHEM 318, 331, 377, 472, 477, 478, 528; SCM 201, 451	
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¹ Maximum of 6 units may be applied toward the major from any combination of the following: BIO 400†, 450, 462, 463.

² Consultation with advisor is recommended prior to selecting approved electives. Bear in mind that your selections may impact pursuit of post-baccalaureate studies and/or goals.

³ Students seeking Wildlife Biologist Certification should see faculty advisor for assistance.

† Total credit limited to 4 units.