

¹ Biology Teaching Concentration

BIO 432 Vertebrate/Human Anatomy/Phys I	5
BIO 433 Vertebrate/Human Anatomy/Phys II	5
BIO 452 Cell Biology.....	4
BIO/PSC 424 Organizing/Teaching Science.....	4
MCRO 320 Emerging Infectious Diseases.....	3
SCM 300 Early Field Experience, Science/Math...	4
SCM 451 Ethics in the Sciences.....	3
² Approved electives.....	11

Select 11 units from the following:

BIO 328, 330, 375, 400, 401, 415, 434, 435,
463, 472;
BOT 311, 313, 323, 326, 335, 433, 437;
MCRO 225, 421, 424, 433;
ZOO 321, 322, 323, 329, 335, 336, 341, 437

39

Ecology Concentration

<i>Ecology of the Individual (select 1 course)</i>	4-5
BIO 434, BIO 435, MCRO 424 , ZOO 437 <i>(Corrected 1/13/10)</i>	
<i>Population Ecology (select 1 course)</i>	3-4
BIO 401, BIO 439, BIO 444	
<i>Community Ecology (select 1 course)</i>	4-5
BIO 325, BIO 328, BOT 326, BOT 433, MCRO 436	
<i>Global Ecology (select 1 course)</i>	4
BIO 415, GEOG 250, GEOG 333, UNIV 350	
<i>Methodology (select 3 courses)</i>	10-12
BIO/CHEM 375, BIO 419, BIO 443, LA/NR 318, STAT 313, STAT 419	

² Approved electives.....	14-9
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Select courses from the above five lists in this concentration, and/or from the following:

BIO 400, 463, 472; BOT 311; CSC 448;
NR 307, 418; SS 321, 322

39

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 one).....	19
<i>Field Biology Emphasis</i>	
ZOO 335 General Entomology (4)	
ZOO 437 Animal Behavior (4)	
BIO 439/ZOO 322 (4)	

² Approved electives (7) Select 7 units from:

BIO 325, 327, 328, 330, 400, 401, 415, 419,
427, 439, 434, 443, 444; BOT 326, 437;
NR 141, 142, 203, 307, 317, 318, 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 Biology Methods (5)
BIO 427 Wildlife Management (4)
BIO 444 Population Ecology (3) *or*
BIO 401 Conservation Biology (4)

² Approved electives (6-7) Select 6-7 units from the approved electives list above for the Field Biology Emphasis

39

General Biology Concentration

BIO 452 Cell Biology	4
CHEM 313 Survey of Biochem and Biotech <i>or</i> CHEM 371 Biochemical Principles 12/21/09	5
<i>Anatomy/Physiology</i>	4
BIO 361, BIO 432, BIO 433, BIO 434, BIO 435, BOT 335, MCRO 424, ZOO 422	
<i>Botany</i>	4
BOT 313, BOT 323, BOT 326, BOT 335, BOT 433, BOT 437	
<i>Microbiology</i>	3-5
BIO 426, MCRO 224, MCRO 225, MCRO 320, MCRO 342, MCRO 402, MCRO 421, MCRO 433, MCRO 436, ZOO 428	
<i>Zoology</i>	4
BIO 328, ZOO 321, ZOO 322, ZOO 323, ZOO 329, ZOO 335, ZOO 336, ZOO 341, ZOO 425	

² Approved electives	15-13
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Select from:

BIO 328, 400, 401, 405, 415, 426, 432, 433,
434, 435, 463, 472;
BOT 311, 313, 323, 326, 335, 433, 437;
MCRO 224, 225, 320, 342, 402, 421, 424,
433, 436;
ZOO 321, 322, 323, 329, 335, 336, 341, 422,
425, 428;
CHEM 317;
SCM 451

39

Marine Biology and Fisheries Concentration

BIO 328 Marine Biology	5
BIO/CHEM 375 Molecular Biology Laboratory	3
BOT 437 Phycology	4
STAT 313 Applied Experimental Design and Regression Models	4
ZOO 322 Ichthyology	4
ZOO 336 Invertebrate Zoology	4

¹ To meet credentialing requirements, it is recommended that students take KINE 250 *or* ~~KINE 255~~ to fulfill GE D4, and SCM 330 to fulfill GE Area F. *6/23/09.*

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

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

¹ Approved electives.....	15
<i>Select at least 8 units from:</i>	
BIO 400, 401, 405, 419, 434, 435, 438, 439, 443, 444, 452, 462, 463;	
MCRO 436;	
ZOO 321, 323, 425, 437	
<i>Select no more than 8 units from:</i>	
CHEM 317, 313 or 371; 341, 474;	
PSC 201	
	39

Molecular and Cellular Biology Concentration

BIO/CHEM 375 Molecular Biology Laboratory	3
BIO 452 Cell Biology	4
CHEM 317 Organic Chemistry II	5
CHEM 371 Biochemistry	5
CHEM 372 Metabolism	4
CHEM 474 Protein Techniques Laboratory <i>or</i> BIO/CHEM 476 Gene Expression Laboratory	2
Choose 8 units from the following	8
BIO 405, BIO 426, BIO/CHEM 441, BIO/CHEM 476 <i>or</i> CHEM 474, BOT 450, MCRO 402, MCRO 433, SCM 201	
¹ Approved electives.....	8
<i>Select 8 units from:</i>	
List A	
BIO 400, 405, 426, 432, 433, 435, 463;	
BIO/CHEM 441;	
BIO/CHEM 476 <i>or</i> CHEM 474;	
BOT 323, 450;	
MCRO 320, 402, 423, 424, 433;	
ZOO 422, 425, 428	
List B (Only one course from this list without special petition)	
ASCI 403, 406;	
CHEM 318, 331, 377, 472, 477, 478, 528;	
SCM 201, 451	
	39

Systematics and Biodiversity Concentration

BIO 443 Molecular Ecology & Systematics	4
BIO/CHEM 375 Molecular Biology Laboratory	3
BIO 415 Biogeography	4
BIO/CHEM 441 Bioinformatics Applications	4
STAT 313 Applied Experimental Design and Regression Models	4
STAT 419 Applied Multivariate Statistics	4
¹ Approved biological diversity electives.....	16
<i>Select 16 units from:</i>	
BIO 325, 327, 328, 400, 401, 419, 427, 429, 463, 472; BOT 311, 313, 323, 326, 433, 437;	
NR 307;	
NR 317;	
STAT 324, 330, 416, 421;	
ZOO 321, 322, 323, 335, 336, 341, 425;	
CSC 448	
	39

¹ Consultation with advisor is recommended prior to selecting approved electives; bear in mind your selections may impact pursuit of post-baccalaureate studies and/or goals.