

CURRICULUM IN ORGANISMAL AND INTEGRATIVE BIOLOGY

YEAR: 2008/2009

YEAR ENTERED SLU: _____

NAME: _____

W# _____

MAJOR HOURS (41) C or Better

Core Requirements (21)

GBIO 151 _____ 3
 BIOL 152 _____ 1
 GBIO 153 _____ 3
 BIOL 154 _____ 1
 MIC 205 _____ 3
 MICL 207 _____ 1
 GBIO 200 _____ 3
 GBIO 312 _____ 3
 GBIO 241 _____ 1
 GBIO 341 _____ 1
 GBIO 441* _____ 1

Concentration Elect(20) See Attached

 (300/400) _____

 (300/400) _____

 (300/400) _____

 (300/400) _____

 (300/400) _____

CHEMISTRY (16)

CHEM 121 _____ 3
 CLAB 123 _____ 1
 CHEM 122 _____ 3
 CLAB 124 _____ 1
 CHEM 265 or 261 _____ 3
 CLAB 267 or 263 _____ 1
 CHEM 266 or 281 _____ 3
 CLAB 268 or 283 _____ 1

MATHEMATICS (8-9)

MATH 161 _____ 3
 (ACT < 21 MATH 155 - 5hrs)
 MATH 162 _____ 3
 MATH 163 _____ 3
 or MATH 165 and 200
 MATH 165 _____ 3
 MATH 200 _____ 5

ENGLISH (12)

ENGL 101
 or 121H _____ 3
 ENGL 102
 or 122H _____ 3
 ENGL 230 or 231 or 232
 _____ 3
 ENGL 322 _____ 3

FOR. LANGUAGES (12)

_____ 101 _____ 3
 _____ 102 _____ 3
 _____ 201 _____ 3
 _____ 202 _____ 3

ELECTIVES (8) 6 non-Biology

SOCIAL SCIENCES (6)

(Anth,Econ,Geog,Gov,Psyc,Poli,Soc)
 _____ 3
 _____ 3

PHYSICS (8)

PHYS 191 _____ 3
 PLAB 193 _____ 1
 PHYS 192 _____ 3
 PLAB 194 _____ 1

OTHER (10-13)

ART ELECTIVE (Mus,Art,Dnc,Thea)

_____ 3
 LS 102 _____ 1
 COMM211 _____ 3
 HIST _____ 3
 SE 101 _____ 0/3

TOTAL HOURS 121-125

*Computer Literacy (GBIO 441) T=courses Taking rpt=repeated courses rpt (H) = adjusted average

If you have completed ZOO 102/104 and BOT 101/103 with a "C" or better, these courses may be used in place of GBIO 151/152/153/154. You must make a "C" or better in any Biology course for it to count for credit toward your degree

Concentration Requirements: Group A: 12 hours required, Group B: 3-4 hours required, Group C: 3-4 hours required

ADDITIONAL COURSES:

AVERAGES

HA HE QP Average

CUM: _____
 (Adj) _____

MAJOR _____
 (Adj) _____

SLU: _____
 (Adj) _____

CONCENTRATION IN ORGANISMAL AND INTEGRATIVE BIOLOGY

I. CORE COURSES ARE REQUIRED: 21 CREDIT HOURS

II. CONCENTRATION EMPHASIS IN ORGANISMAL AND INTEGRATIVE BIOLOGY (20 CREDIT HOURS ARE REQUIRED)

GROUP A: FORM AND FUNCTION

REQUIRED 12 HOURS

(3 or 4 courses)

ZOO 302 Comparative Anatomy 4 hrs
ZOO 331 Elementary Embryology 4 hrs
ZOO 332 Animal Histology 4 hrs
ZOO 392 Animal Physiology 4 hrs
ZOO 465 Animal Development 4 hrs
ZOO 471 Comparative Endocrinology 4 hrs
ZOO 488 Cytology 3 hrs
ZOO 499 Neurobiology 4 hrs
BOT 401 Plant Pathology 4 hrs
BOT 426 Plant Physiology 4 hrs
BOT 427 Plant Stress Ecophysiology 4 hrs
BOT 482 Plant Anatomy 4 hrs
MIC 460 Immunology 4 hrs
GBIO 314 Genetics Laboratory 2 hrs
GBIO 377 Applied Biostatistics 4 hrs
GBIO 407 Forensic Biology 4 hrs
GBIO 495 Biological Electron Microscopy 4 hrs

GROUP B: BIODIVERSITY

REQUIRED 3-4 HOURS

(1 or 2 courses)

ZOO 301 Invertebrate Zoology 4 hrs
ZOO 409 General Entomology 4 hrs
ZOO 455 Medical Parasitology 4 hrs
ZOO 456 Ichthyology 4 hrs
ZOO 458 Fisheries Ecology and Management 4 hrs
ZOO 470 Ornithology 4 hrs
ZOO 475 Animal Behavior 4 hrs
GBIO 442 Marine Biology 4 hrs
BOT 205 Introduction to Botany 4 hrs
BOT 347 Vascular Plant Systematics 4 hrs
BOT 433 Phycology 4 hrs
BOT 458 General Mycology 3 hrs
MIC 463 Virology 4 hrs

GROUP C: ECOLOGY & EVOLUTIONARY BIOLOGY

REQUIRED 3-4 HOURS

(1 or 2 courses)

GBIO 281 Environmental Awareness 3hrs
GBIO 395 General Ecology 3 hrs
GBIO 397 General Ecology Laboratory 2 hrs
GBIO 404 Ecological Methods 3 hrs
GBIO 405 Evolutionary Biology 4 hrs
GBIO 406 Wetland Ecology 4 hrs
GBIO 439 Introduction to Fresh Water & Estuarine Biology 4 hrs
GBIO 481 Biogeography 3 hrs
GBIO 485 Conservation Biology 4 hrs
ZOO 352 Field Zoology 4 hrs
ZOO 453 Ecological Parasitology 4 hrs
ZOO 457 Invertebrate Ecology 4 hrs
BOT 481 Plant Ecology 4 hrs
MIC 313 Microbial Ecology 3 hrs

GROUP D: Special Topics and Research Problems -These courses may be counted toward the above categories after the required courses have been met. The Dept. Head must approve the category for credit before signing up. GBIO 409 Internship - Variable credits, 1 to 3 hours (Max of 3 hours); GBIO 493 Special Topics in Biology - Credits are variable, 2 to 4 hours (Max 4 hrs). GBIO 450 Research Problems - Credits are variable, 1 to 4 hours (Max 4 hrs)

GROUP E: Concentration Electives - After taking all REQUIRED courses, you may take any of the courses listed above as a concentration elective to fulfill the 20 hour requirement.

CURRICULUM IN ECOLOGY/ENVIRONMENTAL/EVOLUTIONARY BIOLOGY

YEAR: 2008/2009
 NAME: _____

YEAR ENTERED SLU: _____
 W# _____

**MAJOR HOURS (41) C or Better
 Core Requirements (21)**

GBIO 151 _____ 3 _____
 BIOL 152 _____ 1 _____
 GBIO 153 _____ 3 _____
 BIOL 154 _____ 1 _____
 MIC 205 _____ 3 _____
 MICL 207 _____ 1 _____
 GBIO 200 _____ 3 _____
 GBIO 312 _____ 3 _____
 GBIO 241 _____ 1 _____
 GBIO 341 _____ 1 _____
 GBIO 441* _____ 1 _____

Concentration Elect(20) See Attached

 (300/400) _____

 (300/400) _____

 (300/400) _____

 (300/400) _____

 (300/400) _____

CHEMISTRY (16)

CHEM 121 _____ 3 _____
 CLAB 123 _____ 1 _____
 CHEM 122 _____ 3 _____
 CLAB 124 _____ 1 _____
 CHEM 261 or 265 _____ 3 _____
 CLAB 263 or 267 _____ 1 _____
 CHEM 281 or 266 _____ 3 _____
 CLAB 283 or 268 _____ 1 _____

MATHEMATICS (8-9)

MATH 161 _____ 3 _____
 (ACT < 21 MATH 155 - 5hrs) _____ 3 _____
 MATH 162 _____ 3 _____
 MATH 163 _____ 3 _____
 or MATH 165 and 200
 MATH 165 _____ 3 _____
 MATH 200 _____ 5 _____

ENGLISH (12)

ENGL 101 _____
 or 121H _____ 3 _____
 ENGL 102 _____
 or 122H _____ 3 _____
 ENGL 230 or 231 or 232 _____
 _____ 3 _____
 ENGL 322 _____ 3 _____

SOCIAL SCIENCES (6)

(Anth,Econ,Geog,Gov,Psyc,Poli,Soc)
 _____ 3 _____
 _____ 3 _____

PHYSICS (8)

PHYS 191 _____ 3 _____
 PLAB 193 _____ 1 _____
 PHYS 192 _____ 3 _____
 PLAB 194 _____ 1 _____

FOR. LANGUAGES (12)

_____ 101 _____ 3 _____
 _____ 102 _____ 3 _____
 _____ 201 _____ 3 _____
 _____ 202 _____ 3 _____

OTHER (10-13)

ART ELEC(Mus,Art,Dnc,Thea)
 _____ 3 _____
 LS 102 _____ 1 _____
 COMM211 _____ 3 _____
 HIST _____ 3 _____
 SE 101 _____ 0/3 _____

ELECTIVES (8) 6 non-biology

TOTAL HOURS 121-125

*Computer Literacy (GBIO 441) T=courses Taking rpt=repeated courses rpt (H) = adjusted average
 If you have completed ZOO 102/104 and BOT 101/103 with a "C" or better, these courses may be used in place of GBIO 151/152/153/154. You must make a "C" or better in any Biology course for it to count for credit toward your degree

Concentration Requirements: Group A: 2 courses required, Group B: 1 or 2 courses required, Group C: 1 or 2 courses required

ADDITIONAL COURSES:

AVERAGES

HA HE QP Average

CUM: _____
 (Adj) _____
 MAJOR _____
 (Adj) _____
 SLU: _____
 (Adj) _____

CONCENTRATION IN ECOLOGY, ENVIRONMENTAL AND EVOLUTIONARY BIOLOGY

- I. CORE COURSES ARE REQUIRED: 21 CREDIT HOURS
- II. CONCENTRATION EMPHASIS IN ECOLOGY, ENVIRONMENTAL AND EVOLUTIONARY BIOLOGY (20 CREDIT HOURS ARE REQUIRED) SELECTED FROM THE FOLLOWING GROUPS A, B & C DETERMINED IN CONSULTATION WITH YOUR ADVISOR.

GROUP A: Fundamental courses in Ecology, Environmental and Evolutionary Biology (you must select TWO COURSES from Group A **REQUIRED**):

GBIO 281 Environmental Awareness 3 hrs
GBIO 377 Biostatistics 4 hrs
GBIO 395 General Ecology 3 hrs
GBIO 397 General Ecology Laboratory 2 hrs
GBIO 405 Evolutionary Biology 4 hrs
GBIO 485 Conservation Biology 4 hrs
BOT 481 Plant Ecology 4 hrs
MIC 313 Microbial Ecology 3 hrs

GROUP B: Form and Function (you must select ONE or TWO courses from Group B **REQUIRED**):

BOT 426 Plant Physiology 4 hrs
ZOO 302 Comparative Anatomy of the Vertebrates 4 hrs
ZOO 392 Animal Physiology 4 hrs
ZOO 471 Comparative Endocrinology 4 hrs
ZOO 475 Animal Behavior 4 hrs
ZOO 499 Neurobiology 4 hrs
MIC 460 Immunology 4 hrs

GROUP C: Advanced Courses in Ecology, Environmental and Evolutionary Biology (you must select ONE or TWO courses from Group C **REQUIRED**):

GBIO 406 Wetlands Ecology 4 hrs
GBIO 418 Community Ecology 4 hrs
GBIO 439 Freshwater & Estuary Biology 4 hrs
GBIO 442 Marine Biology 4 hrs
GBIO 481 Biogeography 3 hrs
ZOO 301 Invertebrate Zoology 4 hrs
ZOO 352 Field Zoology 4 hrs
ZOO 409 General Entomology 4 hrs
ZOO 453 Ecological Parasitology 4 hrs
ZOO 456 Ichthyology 4 hrs
ZOO 457 Invertebrate Ecology 4 hrs
ZOO 458 Fisheries Ecology and Management 4 hrs
ZOO 470 Ornithology 4 hrs
BOT 347 Vascular Plant Systematics 4 hrs
BOT 427 Plant Stress Ecophysiology 4 hrs
MIC 423 Environmental Microbiology 4 hrs

III. **GROUP D: Special Topics and Research Problems**

These courses may be counted toward the above categories ONLY after the required courses have been met. The Department Head must approve the category for credit before signing up.

GBIO 409 INTERNSHIP - Variable credits, 1 to 3 hours (Max of 3 hours)
GBIO 493 Special Topics in Biology - Credits are variable, 2 to 4 hours (Maximum of 4 hrs)
GBIO 450 Research Problems - Credits are variable, 1 to 4 hours (Max 4)

IV. **GROUP E: Concentration Electives**

After taking all REQUIRED courses, you may take any of the courses listed above as a concentration elective to fulfill the 20 hour requirement.

CURRICULUM IN MICROBIOLOGY/MOLECULAR BIOLOGY

YEAR: 2008/2009

YEAR ENTERED SLU: _____

NAME: _____

W# _____

MAJOR HOURS (41) C or Better

Core Requirements (21)

GBIO 151 _____ 3 _____
 BIOL 152 _____ 1 _____
 GBIO 153 _____ 3 _____
 BIOL 154 _____ 1 _____
 MIC 205 _____ 3 _____
 MICL 207 _____ 1 _____
 GBIO 200 _____ 3 _____
 GBIO 312 _____ 3 _____
 GBIO 241 _____ 1 _____
 GBIO 341 _____ 1 _____
 GBIO 441* _____ 1 _____

Concentration Elect(20) See Attached

 (300/400) _____ 4 _____
 _____ 4 _____
 (300/400) _____ 4 _____
 _____ 4 _____
 (300/400) _____ 4 _____
 _____ 4 _____
 (300/400)

CHEMISTRY (20)

CHEM 121 _____ 3 _____
 CLAB 123 _____ 1 _____
 CHEM 122 _____ 3 _____
 CLAB 124 _____ 1 _____
 CHEM 265 _____ 3 _____
 CLAB 267 _____ 1 _____
 CHEM 266 _____ 3 _____
 CLAB 268 _____ 1 _____
 CHEM 481 _____ 3 _____
 CLAB 485 _____ 1 _____

MATHEMATICS (8-9)

MATH 161 _____ 3 _____
 (ACT < 21 MATH 155 - 5hrs) _____ 3 _____
 MATH 162 _____ 3 _____
 MATH 163 _____ 3 _____
 or MATH 165 and 200
 MATH 165 _____ 3 _____
 MATH 200 _____ 5 _____

ENGLISH (12)

ENGL 101 _____
 or 121H _____ 3 _____
 ENGL 102 _____
 or 122H _____ 3 _____
 ENGL 230 or 231 or 232 _____
 _____ 3 _____
 ENGL 322 _____ 3 _____

FOR. LANGUAGES (12)

_____ 101 _____ 3 _____
 _____ 102 _____ 3 _____
 _____ 201 _____ 3 _____
 _____ 202 _____ 3 _____

ELECTIVES (4) non-biology

SOCIAL SCIENCES (6)

(Anth,Econ,Geog,Gov,Psyc,Poli,Soc)
 _____ 3 _____
 _____ 3 _____

PHYSICS (8)

PHYS 191 _____ 3 _____
 PLAB 193 _____ 1 _____
 PHYS 192 _____ 3 _____
 PLAB 194 _____ 1 _____

OTHER (10-13)

ART Elect (Mus,Art,Dnc,Thea)
 _____ 3 _____
 LS 102 _____ 1 _____
 COMM211 _____ 3 _____
 HIST _____ 3 _____
 SE 101 _____ 0/3 _____

TOTAL HOURS 121-125

*Computer Literacy (GBIO 441) T=courses Taking rpt=repeated courses rpt (H) = adjusted average

If you have completed ZOO 102/104 and BOT 101/103 with a "C" or better, these courses may be used in place of GBIO 151/152/153/154 You must make a "C" or better in any Biology course for it to count for credit toward your degree

Concentration Requirements: Group A: 2 courses required, Group B: 1 or 2 courses required, Group C: 1 or 2 courses required (see page2)

ADDITIONAL COURSES:

AVERAGES

HA HE QP Average

CUM: _____
 (Adj) _____

MAJOR _____
 (Adj) _____

SLU: _____
 (Adj) _____

CONCENTRATION IN MICROBIOLOGY/MOLECULAR BIOLOGY

- I. CORE COURSES ARE REQUIRED: 21 credit hours
- II. Concentration Emphasis in Microbiology and Molecular Biology (20 credit hours) from the following groups determined in consultation with advisor when there is a choice (such as Group B & C).

GROUP A: GROWTH KINETICS AND METABOLISM **REQUIRED 8 Hours**

Both of the following courses are required:

- MIC 325 Advanced General Microbiology 4 hrs
- MIC 461 Bacterial Metabolism 4 hrs

(2 courses)

GROUP B: MOLECULAR/CELLULAR BIOLOGY

Choose ONE or TWO courses from the following:

- MIC 460 Immunology 4 hrs
- MIC 463 Virology 4 hrs
- MIC 465 Recombinant DNA Techniques 4 hrs

REQUIRED 4 to 8 Hours

(1 or 2 courses)

GROUP C: APPLIED, ENVIRONMENTAL, ECOLOGY

Choose ONE or TWO courses from the following:

- MIC 313 Microbial Ecology 3 hrs
- MIC 336 Pathogenic Microbiology 4 hrs
- MIC 338 Soil Microbiology 4 hrs
- MIC 423 Environmental Microbiology 4 hrs
- MIC 457 Dairy and Food Microbiology 4 hrs

REQUIRED 4 to 8 Hours

(1 or 2 courses)

GROUP D: SPECIAL TOPICS AND RESEARCH PROBLEMS

These courses may be counted toward the above categories except Group A ONLY after the required courses have been met. Your advisor must approve the category for credit before signing up.

- GBIO 409 INTERNSHIP - Variable credits, 1 to 3 hours (Max of 3 hours)
- GBIO 493 SPECIAL TOPICS IN BIOLOGY - Credits are variable, 2 to 4 hours (Max 4)
- GBIO 450 RESEARCH PROBLEMS - Credits are variable, 1 to 4 hours (Max 4)

GROUP E: CONCENTRATION ELECTIVES

After taking all REQUIRED courses, you may take any of the courses listed above as a concentration elective to fulfill the 20 hour requirement.

CURRICULUM IN HORTICULTURE

YEAR: 2008/2009

YEAR ENTERED SLU: _____

NAME: _____

W# _____

HORTICULTURE (33)

HORT 232* _____ 3 _____
 HORT 301 _____ 4 _____
 HORT 328 _____ 3 _____
 HORT 315 _____ 3 _____
 HORT320 _____ 4 _____

HORT495 _____ 1 _____
 HORT _____ 3 _____
 300/400
 HORT _____ 3 _____
 300/400
 HORT _____ 3 _____
 300/400
 HORT _____ 3 _____
 300/400
 HORT _____ 3 _____
 300/400

BIOLOGY (24)

GBIO 151 _____ 3 _____
 BIOL 152 _____ 1 _____
 BOT 426 _____ 4 _____
 BOT 401 _____ 4 _____
 MIC 205 _____ 3 _____
 MICL 207 _____ 1 _____
 GBIO 153 _____ 3 _____
 BIOL 154 _____ 1 _____
 ZOO 309 _____ 4 _____

CHEMISTRY (12)

CHEM 101 or 121 _____ 3 _____
 CLAB 103 or 123 _____ 1 _____
 CHEM 102 or 122 _____ 3 _____
 CLAB 104 or 124 _____ 1 _____
 CHEM 261 or 265 _____ 3 _____
 CLAB 263 or 267 _____ 1 _____

ENGLISH (9)

ENGL 101 or 121H _____ 3 _____
 ENGL 102 or 122H _____ 3 _____
 ENGL 230 or 231 or 232 _____ 3 _____

BUSINESS (9)

ACCT 200 _____ 3 _____
 MGMT 351 _____ 3 _____
 MRKT 303 _____ 3 _____

ORIENTATION (0-3)

SE 101 _____ 0/3 _____

SOCIAL SCIENCES (6)

(Anth,Econ,Geog,Gov,Psyc,Poli,Soc)

_____ 3 _____
 _____ 3 _____

MATHEMATICS (9)

MATH 161 _____ 3 _____
 (ACT<21 MATH 155 – 5hrs)
 MATH 162 _____ 3 _____
 MATH 241 or
 MGMT261 _____ 3 _____

OTHER (9)

ARTS ELEC(Mus,Art,Dnc,Thea)
 _____ 3 _____
 COMM211 _____ 3 _____
 HIST 201 or 202 _____ 3 _____

ELECTIVES (9)

TOTAL HOURS: 120 – 123 (rpt) = repeated courses (T) = TAKING

*Computer Literacy – HORT 232

ADDITIONAL COURSES:

AVERAGES

	HA	HE	QP	AVERAGE
CUM:	_____	_____	_____	_____
(Adj)	_____	_____	_____	_____
MAJOR	_____	_____	_____	_____
(Adj)	_____	_____	_____	_____
SLU:	_____	_____	_____	_____
(Adj)	_____	_____	_____	_____

**If you have completed ZOO 102/104 and BOT 101/103, these 4 courses may be used in place of GBIO 151/152/153/154