

CURRICULUM IN ORGANISMAL AND INTEGRATIVE BIOLOGY

8/11/06

YEAR: 2006/2007

YEAR ENTERED SLU: _____

NAME: _____

W# _____

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

GBIO 151 _____ 3 _____
 BIOL 152 _____ 1 _____
 GBIO 153 _____ 3 _____
 BIOL 154 _____ 1 _____
 MIC 205/105 _____ 3 _____
 MICL207/107 _____ 1 _____
 GBIO 200 _____ 3 _____
 GBIO 312 _____ 3 _____
 GBIO 241 _____ 1 _____
 GBIO 341 _____ 1 _____
 GBIO441* _____ 1 _____

Concentration Elect(20) See Attachment

ENGL 230/231 _____
 (200/300/400) _____

 (300/400) _____

 (300/400) _____

 (300/400) _____

 (300/400) _____

MATHEMATICS (9)

(Math 200 may sub for 161 & 163)

MATH 161 _____ 3 _____
 MATH 162 _____ 3 _____
 MATH 163 _____ 3 _____

ENGLISH (12)

ENGL 101 _____ 3 _____
 ENGL 102 _____ 3 _____
 or 122 _____
 ENGL 230/231 _____
 or 232 _____ 3 _____
 ENGL 322 _____ 3 _____

SOCIAL SCIENCES (6)

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

_____ 3 _____
 _____ 3 _____

PHYSICS (8)

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

CHEMISTRY (16)

CHEM 121 _____ 3 _____
 CLAB 123 _____ 1 _____
 CHEM 122 _____ 3 _____
 CLAB 124 _____ 1 _____
 CHEM 265/361 _____ 3 _____
 CLAB 267/363 _____ 1 _____
 CHEM 266/362 _____ 3 _____
 CLAB 268/364 _____ 1 _____

FOR. LANGUAGES (12)

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

ELECTIVES (8) 6 non-Biology

OTHER (10/11)

ART ELECTIVE(Mus,Art,Dnc,Thea)

_____ 3 _____
 LS 102 _____ 1 _____
 COMM211 _____ 3 _____
 HIST _____ 3 _____
 ORNT 101 _____ 1 _____

TOTAL HOURS 122-123

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

GROUP B: BIODIVERSITY

REQUIRED 3-4 HOURS

(1 or 2 courses)

ZOO 301 Invertebrate Zoology 4 hrs
ZOO 455 Medical Parasitology 4 hrs
ZOO 309 General Entomology 4 hrs
ZOO 456 Ichthyology 4 hrs
ZOO 470 Ornithology 4 hrs
GBIO 442 Marine Biology 4 hrs
BOT 205 Advanced General Botany 4 hrs
BOT 347 Vascular Plant Systematics 4 hrs
BOT 433 Phycology 4 hrs
BOT 458 General Mycology 3 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 404 Ecological Methods 3 hrs
GBIO 406 Wetland Ecology 4 hrs
GBIO 439 Introduction to Fresh Water & Estuarine Biology 4 hrs
GBIO 405 Evolutionary Biology 4 hrs
GBIO 481 Biogeography 3 hrs
GBIO 485 Conservation Biology 4 hrs
ZOO 352 Field Zoology 4 hrs
ZOO 457 Invertebrate Ecology 4 hrs
ZOO 453 Ecological Parasitology 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 with approval of the Department Head. GBIO 409 – Internship – Credits are variable, 1- 3 hrs (Max 3 hrs). 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: 2006/2007
 NAME: _____

YEAR ENTERED SLU: _____
 W# _____

**MAJOR HOURS (41) Cor Better
 Core Requirements (21) Required**

GBIO 151 _____ 3 _____
 BLAB 152 _____ 1 _____
 GBIO 153 _____ 3 _____
 BLAB 154 _____ 1 _____
 MIC 205/105 _____ 3 _____
 MIC 207/107 _____ 1 _____
 GBIO 200 _____ 3 _____
 GBIO 312 _____ 3 _____
 GBIO 241 _____ 1 _____
 GBIO 341 _____ 1 _____
 GBIO441* _____ 1 _____

Concentration Elect (20) See Attachment

 (200/300/400)

 (300/400)

 (300/400)

 (300/400)

 (300/400)

CHEMISTRY (16)

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

MATHEMATICS (9)

(Math 200 may sub for 161&163)
 MATH 161 _____ 3 _____
 MATH 162 _____ 3 _____
 MATH 163 _____ 3 _____

ENGLISH (12)

ENGL 101 _____ 3 _____
 ENGL 102 _____ 3 _____
 or 122
 ENGL 230/231
 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 _____
 PHYS 193 _____ 1 _____
 PHYS 192 _____ 3 _____
 PHYS 194 _____ 1 _____

OTHER (10/11)

ART ELEC(Mus,Art,Dnc,Thea)

_____ 3 _____
 LS 102 _____ 1 _____
 COMM211 _____ 3 _____
 HIST _____ 3 _____
 ORNT 101 _____ 1 _____

TOTAL HOURS 122-123

*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 395 General Ecology 3 hrs
GBIO 405 Evolutionary Biology 4 hrs
BOT 481 Plant Ecology 4 hrs
GBIO 485 Conservation Biology 4 hrs
GBIO 377 Biostatistics 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 332 Histology 4 hrs
ZOO 392 General Physiology 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 442 Marine Biology 4 hrs
GBIO 481 Biogeography 3 hrs
GBIO 439 Freshwater & Estuary Biology 4 hrs
ZOO 301 Invertebrate Zoology 4 hrs
ZOO 352 Field Zoology 4 hrs
ZOO 453 Ecological Parasitology 4 hrs
ZOO 456 Ichthyology 4 hrs
ZOO 457 Invertebrate Ecology 4 hrs
ZOO 470 Ornithology 4 hrs
BOT 427 Plant Stress Ecophysiology 4 hrs
BOT 347 Vascular Plant Systematics 4 hrs
MIC 423 Environmental Microbiology 4 hrs

GROUP D: Special Topics and Research Problems - These courses may be counted toward the above categories with approval of the Department Head. GBIO 409 - Internship - Credits are variable, 1- 3 hrs (Max 3 hrs). 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)

III. 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: 2006/2007
 NAME: _____

YEAR ENTERED SLU: _____
 W# _____

MAJOR HOURS (41) C or Better

Core Requirements (21) Required

GBIO 151 _____ 3 _____
 BIOL 152 _____ 1 _____
 GBIO 153 _____ 3 _____
 BIOL 154 _____ 1 _____
 MIC 205/105 _____ 3 _____
 MIC 207/107 _____ 1 _____
 GBIO 200 _____ 3 _____
 GBIO 312 _____ 3 _____
 GBIO 241 _____ 1 _____
 GBIO 341 _____ 1 _____
 GBIO441* _____ 1 _____

Concentration elect (20) See Attachment

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

CHEMISTRY (20)

CHEM 121 _____ 3 _____
 CLAB 123 _____ 1 _____
 CHEM 122 _____ 3 _____
 CLAB 124 _____ 1 _____
 CHEM 265/361 _____ 3 _____
 CLAB 267/363 _____ 1 _____
 CHEM 266/362 _____ 3 _____
 CLAB 268/364 _____ 1 _____
 CHEM 481 _____ 3 _____
 CLAB 486 _____ 1 _____

MATHEMATICS (9)

(Math 200 may sub for 161or163)

MATH 161 _____ 3 _____
 MATH 162 _____ 3 _____
 MATH 163 _____ 3 _____

ENGLISH (12)

ENGL 101 _____ 3 _____
 ENGL 102 _____ 3 _____
 or 122
 ENGL 230/231
 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 _____
 PHYS 193 _____ 1 _____
 PHYS 192 _____ 3 _____
 PHYS 194 _____ 1 _____

OTHER (10/11)

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

TOTAL HOURS 122-123

*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: _____

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

REQUIRED 4 to 8 Hours

Choose ONE or TWO courses from the following:

(1 or 2 courses)

MIC 460 Immunology 4 hrs

MIC 465 Recombinant DNA Techniques 4 hrs

MIC 463 Virology 4 hrs

GROUP C: APPLIED, ENVIRONMENTAL, ECOLOGY

REQUIRED 4 to 8 Hours

Choose ONE or TWO courses from the following:

(1 or 2 courses)

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

GROUP D: SPECIAL TOPICS AND RESEARCH PROBLEMS

These courses may be counted toward the above categories with approval of the Department Head. GBIO 409 - Internship - Credits are variable, 1- 3 hrs (Max 3 hrs).

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 HORTICULTURE

YEAR: 2006/2007

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 _____
 MIC205/105 _____ 3 _____
 MICL207/107 _____ 1 _____
 GBIO 153 _____ 3 _____
 BIOL 154 _____ 1 _____
 ZOO 309 _____ 4 _____

CHEMISTRY (12)

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

ENGLISH (9)

ENGL 101 _____ 3 _____
 ENGL 102 _____ 3 _____
 ENGL 230/231/
 or 232 _____ 3 _____

BUSINESS (9)

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

ORNT 101 _____ 1 _____

SOCIAL SCIENCES (6)

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

_____ 3 _____
 _____ 3 _____

MATHEMATICS (9)

MATH 161 _____ 3 _____
 MATH 162 _____ 3 _____
 MATH 241 or
 MGMT261 _____ 3 _____

OTHER (9)

ARTS ELEC(Mus,Art,Dnc,Thea)

_____ 3 _____
 COMM211 _____ 3 _____
 HIST 201/
 202 _____ 3 _____

ELECTIVES (9)

TOTAL HOURS: 123 – 124 (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