

CURRICULUM IN ORGANISMAL AND INTEGRATIVE BIOLOGY

YEAR: 2004/2005

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

_____ _____
 (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 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 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
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 247 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 after the required courses have been met. The Dept. Head must approve the category for credit before signing up. 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: 2004/2005
 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 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

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 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: 2004/2005
 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 161 or 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 (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 page 2)

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 **REQUIRED 4 to 8 Hours**

Choose ONE or TWO courses from the following:

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

(1 or 2 courses)

GROUP C: APPLIED, ENVIRONMENTAL, ECOLOGY **REQUIRED 4 to 8 Hours**

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

(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 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: 2004/2005

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