CURRICULUM IN BIOLOGICAL SCIENCES
BIOLOGY EDUCATION CONCENTRATION
2017 - 2018

Date: _____ Student: _____

Advisor: _____ W#_____

BIOLOGY (41) C or Better* (41)

Core Requirements (21 hrs)

*GBIO 151	___3___
*BIOL 152	___1___
*GBIO 153	___3___
*BIOL 154	___1___
*MIC 205 or 223	___3___
*MICL 207 or 224	___1___
*[2]GBIO 200	___3___
*[2]GBIO 312	___3___
*GBIO 241	___1___
*GBIO 341	___1___
*GBIO 441	___1___

Upper-level Courses (20 hrs) page 2

_____

CHEMISTRY (16)

*[2]CHEM 121	___3___
*CLAB 123	___1___
*CHEM 122	___3___
*CLAB 124	___1___
*CHEM 261	___3___
*CLAB 263	___1___
*CHEM 281	___3___
*CHEM 283	___1___

ENGLISH (9)

ENGL 101	___3___
*ENGL 102	___3___
ENGL 230 or 231 or 232	___3___

[1]MATHEMATICS (6)

*[1, 2]MATH 161 (or MATH 151)	___3___
*MATH 162 or 165	___3___

EDUCATION (33)

**EDUC 203	___2___
**EDUC 212	___1___
*EDUC 407	___3___
*EDUC 472	___3___
*EDUC 475	___1___
*EDUC 490	___6___
*EDUC 486	___9___
*EDUC 315	___3___
*EPSY 311	___3___
*SPED 210	___2___

SOCIAL STUDIES (6)

HIST 417	___3___
Social Science	___3___

OTHER (9)

SE 101	___2___
LS 102	___1___
COMM 210	___3___
ART elective (Mus,Art,Dnc,Thea)	___3___

_____

TOTAL HOURS 120

SE 101 is not required for transfer or readmitted Southeastern students with 30 hours or more. These students are required to take two hours of electives.

*A grade of C or better is required in these courses.
**A grade of B or better is required in these courses.
[1]Students with Math ACT score of 19 – 20 take MATH 151 in place of MATH 161. Students with Math ACT score of ≥ 21 take MATH 161.
[2]CHEM 121 and MATH 151 or 161 are prerequisites for GBIO 200, and GBIO 200 is a prerequisite for GBIO 312.

I. Core Courses (page 1): 21 CREDIT HOURS

II. Upper-level Courses for the Biology Education Concentration

20 CREDIT HOURS from the following courses with approval of the Biology Education Advisor

*A grade of C or better is required in these courses

GROUP A – required courses (12 hrs)

*GBIO 395 General Ecology 3 hrs
*GBIO 397 General Ecology Laboratory 2 hrs
*GBIO 405 Evolutionary Biology 4 hrs
*GBIO 498 Biological Science for Teachers 3 hrs

GROUP B: Electives (8 hrs)

*ZOO 302 Comparative Anatomy 4 hrs
*ZOO 392 Animal Physiology 4 hrs
*PHYS 191 General Physics 3 hrs
*PLAB 193 General Physics Laboratory 1 hr
*PHYS 192 General Physics 3 hrs
*PLAB 194 General Physics Laboratory 1 hr

CURRICULUM IN BIOLOGICAL SCIENCES
BUSINESS CONCENTRATION

YEAR: 2017 / 2018 YEAR ENTERED SLU:_____

NAME:_____ W#_____

MAJOR HOURS (41) C or Better[2]
Core Requirements (21 hrs)
GBIO 151 3
BIOL 152 1
GBIO 153 3
BIOL 154 1
MIC 205 3
MICL 207 1
[2]GBIO 200 3
[2]GBIO 312 3
GBIO 241 1
GBIO 341 1
GBIO 441** 1

Upper-level Courses (20 hrs) page 2
_____ _____ _____
_____ _____ _____
_____ _____ _____
_____ _____ _____
_____ _____ _____

CHEMISTRY (16)
[2]CHEM 121 3
CLAB 123 1
CHEM 122 3
CLAB 124 1
[3]CHEM 261 3
[3]CLAB 263 1
[3]CHEM 281 3
[3]CLAB 283 1

MATHEMATICS (9)
[1,2]MATH 161 3
MATH 162 3
MATH 163 3

or [1]MATH 165 and 200 (8 hrs)
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 (6)
_____101 3
_____102 3

CONCENT. COURSES (9)
[2]ACCT 200 (3)
[2]FIN 381 (3)
[2]MRKT 303 or MGMT 351 (3)

[4]SOCIAL SCIENCES (6)
(Anth, Econ,Geog, Psyc, Poli, Soc)
__ECON 201 3
__ECON 202 3

PHYSICS (8)
PHYS 191 3
PLAB 193 1
PHYS 192 3
PLAB 194 1

ELECTIVE (1)
_____(1)

OTHER (12)
ART ELECTIVE (Mus,Art,Dnc,Thea)
_____ _____3
LS 102 _____1
COMM211 3
HIST_____ 3
SE 101 _____2
SE 101 is not required of transfer or readmitted students with 30 hours or more. These students are required to take two additional hours of electives (i.e., 12 hrs instead of 10 hrs)

TOTAL HOURS 120

NOTES: [1]Students with Math ACT <21 take MATH 151 in place of MATH 161. Students who are eligible may take MATH 165 and 200 (8 credit hours) in place of MATH 161, 162, and 163 (9 credit hours). Students who take MATH 165 and 200 are required to take one additional hour of electives (i.e., 11 hrs instead of 10 hrs).
[2]Grade of "C" or better in CHEM 121, MATH 151/161, ACCT 200, FIN 381, and MRKT 303 or MGMT 351, and all Biology courses is required. CHEM 121 and MATH 151/161 are prerequisites for GBIO 200, and GBIO 200 is a prerequisite for GBIO 312.
[3]Students planning on attending medical, dental, or other professional or graduate schools, and students pursuing a minor in Chemistry, should take CHEM 265/267 and CHEM 266/268. Also, CHEM 265/267 can NOT be used as prerequisites for CHEM 281/283.
[4]Students in the Business Concentration should take ECON 201 and ECON 202 for the Social Sciences requirement.
**GBIO 441 fulfills requirement for computer literacy

ADDITIONAL COURSES:
_____
_____
_____
_____
_____

	AVERAGES			
	HA	HE	QP	Average
CUM:				
(Adj)				
MAJOR				
(Adj)				
SLU:				
(Adj)				

BUSINESS CONCENTRATION

I. Core Courses (page 1): 21 CREDIT HOURS (Grade of "C" or better required in all courses)

II. Upper-level Courses: 20 CREDIT HOURS from the following courses with approval of advisor (Grade of "C" or better required in all courses)

GBIO 377 is required for the Business Concentration

GBIO 377 Applied Biostatistics 4 hrs

GROUP A – minimum one required – Ecology or Evolution

Ecology – GBIO 395 General Ecology 3 hrs and GBIO 397 General Ecology Laboratory 2 hrs

Evolution – GBIO 405 Evolutionary Biology 4 hrs

GROUP B – Electives

BOT 205 Introduction to Botany 4 hrs
BOT 347 Vascular Plant Systematics 4 hrs
BOT 401 Plant Pathology 4 hrs
BOT 426 Plant Physiology 4 hrs
BOT 427 Plant Stress Ecophysiology 4 hrs
BOT 429 Native Plants of Louisiana 4 hrs
BOT 481 Plant Ecology 4 hrs
BOT 482 Plant Anatomy 4 hrs
GBIO 281 Environmental Awareness 3 hrs
GBIO 314 Genetics Laboratory 2 hrs
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 407 Forensic Biology 4 hrs
GBIO 410 Introduction to Population Genetics 4 hrs
GBIO 418 Community Ecology 4 hrs
GBIO 439 Introduction to Fresh Water & Estuarine Biology 4 hrs
GBIO 434 Molecular Biology and Biotechnology 4 hrs
GBIO 481 Biogeography 3 hrs
GBIO 485 Conservation Biology 4 hrs
GBIO 492 History of Biology 3 hrs
GBIO 495 Biological Electron Microscopy 4 hrs
HORT 301 Introductory Soils 4 hrs
HORT 315 Plant Materials I 3 hrs
HORT 320 Plant Materials II 4 hrs
HORT 328 Plant Propagation 3 hrs
HORT 412 Turf Management 3 hrs
HORT 424 Arboriculture 3 hrs
HORT 426 Coastal Plant Production 3 hrs
HORT 428 Organic Gardening 3 hrs
MIC 313 Microbial Ecology 3 hrs
MIC 325 Advanced General Microbiology 4 hrs
MIC 423 Environmental Microbiology 4 hrs
MIC 436 Pathogenic Bacteria 4 hrs
MIC 457 Dairy & Food Microbiology 4 hrs
MIC 460 Immunology 4 hrs
MIC 461 Bacterial Metabolism 4 hrs
MIC 463 Virology 4 hrs
MIC 465 Recombinant DNA Techniques 4 hrs
ZOO 301 Invertebrate Zoology 4 hrs
ZOO 302 Comparative Anatomy 4 hrs
ZOO 332 Animal Histology 4 hrs
ZOO 352 Field Zoology 4 hrs
ZOO 392 Animal Physiology 4 hrs
ZOO 409 General Entomology 4 hrs
ZOO 453 Ecological Parasitology 4 hrs
ZOO 455 Medical Parasitology 4 hrs
ZOO 456 Ichthyology 4 hrs
ZOO 457 Invertebrate Ecology 4 hrs
ZOO 458 Fisheries Ecology and Management 4 hrs
ZOO 465 Animal Development 4 hrs
ZOO 471 Comparative Endocrinology 4 hrs
ZOO 475 Animal Behavior 4 hrs
ZOO 488 Cytology 3 hrs
ZOO 499 Neurobiology 4 hrs

(NOTE: * these electives require PRIOR approval of student's advisor and Department Head.)

*GBIO 409 Internship – Variable credits, 1 to 3 hours (Max 3 hours total)
*GBIO 450 Research Problems – Variable credits, 1 to 4 hours (Max 4 hours total)
*GBIO 493 Special Topics in Biology – Variable credits, 2 to 4 hours

Maximum of four credit hours of Biochemistry may be used for concentration elective requirements. NOTE: If CHEM 281 and CLAB 283 are taken to fulfill Chemistry requirements, they may not be used for elective requirements.

CHEM 281 Survey of Biochemistry 3 hrs
CLAB 283 Survey of Biochemistry Laboratory 1 hr
CHEM 481 Biochemistry I 3 hrs
CLAB 485 Biochemistry I Laboratory 1 hr
CHEM 482 Biochemistry II 3 hrs
CLAB 486 Biochemistry II Laboratory 1 hr

CURRICULUM IN BIOLOGICAL SCIENCES
ECOLOGY, ENVIRONMENTAL, and EVOLUTIONARY BIOLOGY CONCENTRATION

YEAR: 2017 / 2018 YEAR ENTERED SLU:_____

NAME:_____ W#_____

MAJOR HOURS (41) C or Better[2]
Core Requirements (21 hrs)
GBIO 151 ___3___
BIOL 152___1___
GBIO 153 ___3___
BIOL 154 ___1___
MIC 205 ___3___
MICL 207 ___1___
[2]GBIO 200___3___
[2]GBIO 312 ___3___
GBIO 241 ___1___
GBIO 341___1___
GBIO 441**___1___

Upper-level Courses (20 hrs) page 2
_____ ___ ___
_____ ___ ___
_____ ___ ___
_____ ___ ___
_____ ___ ___

CHEMISTRY (16)
[2]CHEM 121 ___3___
CLAB 123 ___1___
CHEM 122 ___3___
CLAB 124 ___1___
[3]CHEM 261 ___3___
[3]CLAB 263 ___1___
[3]CHEM 281 ___3___
[3]CLAB 283 ___1___

MATHEMATICS (9)
[1,2]MATH 161 ___3___
MATH 162___3___
MATH 163___3___

or [1]MATH 165 and 200 (8)
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 (6)
___101 ___3___
___102 ___3___

ELECTIVES (10)
_____
_____
_____
_____

SOCIAL SCIENCES (6)
(Anth, Econ,Geog, Psyc, Poli, Soc)
_____3_____
_____3_____

PHYSICS (8)
PHYS 191___3___
PLAB 193___1___
PHYS 192___3___
PLAB 194 ___1___

OTHER (12)
ART ELECTIVE (Mus,Art,Dnc,Thea)
_____ ___3___
LS 102 ___1___
COMM211 ___3___
HIST___ ___3___
SE 101 ___2___
SE 101 is not required of transfer or readmitted students with 30 hrs or more. These students are required to take two additional hrs of electvies (i.e., 12 hrs instead of 10 hrs).

TOTAL HOURS 120

NOTES: [1]Students with Math ACT <21 take MATH 151 in place of MATH 161. Students who are eligible may take MATH 165 and 200 (8 credit hours) in place of MATH 161, 162, and 163 (9 credit hours). Students who take MATH 165 and 200 are required to take one additional hour of electives (i.e., 11 hrs instead of 10 hrs).
[2]Grade of "C" or better in CHEM 121, MATH 151 or 161, and all Biology courses is required. Also, CHEM 121 and MATH 151 or 161 are prerequisites for GBIO 200, and GBIO 200 is a prerequisite for GBIO 312.
[3]Students planning on attending medical, dental, or other professional or graduate schools, and students pursuing a minor in Chemistry, should take CHEM 265/267 and CHEM 266/268. Also, CHEM 265/267 can NOT be used as prerequisites for CHEM 281/283.
**GBIO 441 fulfills requirement for computer literacy

ADDITIONAL COURSES:
_____
_____
_____
_____
_____
_____

	AVERAGES HA	HE	QP	Average
CUM:				
(Adj)				
MAJOR				
(Adj)				
SLU:				
(Adj)				

ECOLOGY, ENVIRONMENTAL, and EVOLUTIONARY BIOLOGY CONCENTRATION

I. Core Courses (page 1): 21 CREDIT HOURS (Grade of "C" or better required in all courses)

II. Upper-level courses for the Ecology, Environmental, Evolutionary Biology Concentration: 20 CREDIT HOURS from the following courses with approval of advisor (Grade of "C" or better required in all courses)

Group A: Fundamental Courses – total 13 hrs – the following four courses are required

GBIO 377 Biostatistics 4 hrs
GBIO 395 General Ecology 3 hrs
GBIO 397 General Ecology Laboratory 2 hrs
GBIO 405 Evolutionary Biology 4 hrs

Group B: Electives – minimum 7 hrs from these electives. Only one 200 level course may be selected.

BOT 205 Introduction to Botany 4 hrs
BOT 347 Vascular Plant Systematics 4 hrs
BOT 426 Plant Physiology 4 hrs
BOT 427 Plant Stress Ecophysiology 4 hrs
BOT 429 Native Plants of Louisiana 4 hrs
BOT 481 Plant Ecology 4 hrs
BOT 482 Plant Anatomy 4 hrs
GBIO 281 Environmental Awareness 3 hrs
GBIO 404 Ecological Methods 3 hrs
GBIO 406 Wetlands Ecology 4 hrs
GBIO 410 Introduction to Population Genetics 4 hrs
GBIO 418 Community Ecology 4 hrs
GBIO 434 Molecular Biology and Biotechnology 4 hrs
GBIO 439 Freshwater & Estuary Biology 4 hrs
GBIO 442 Marine Biology 4 hrs
GBIO 481 Biogeography 3 hrs
GBIO 485 Conservation Biology 4 hrs
ZOO 301 Invertebrate Zoology 4 hrs
ZOO 302 Comparative Anatomy of the Vertebrates 4 hrs
ZOO 392 Animal Physiology 4 hrs
ZOO 352 Field Zoology 4 hrs
ZOO 409 General Entomology 4 hrs
ZOO 456 Ichthyology 4 hrs
ZOO 458 Fisheries Ecology & Mgmt 4 hrs
ZOO 457 Invertebrate Ecology 4 hrs
ZOO 470 Ornithology 4 hrs
ZOO 465 Animal Development 4 hrs
ZOO 475 Animal Behavior 4 hrs
MIC 313 Microbial Ecology 3 hrs
MIC 438 Soil Microbiology 4 hrs
MIC 423 Environmental Microbiology 4 hrs

(NOTE: * these electives require PRIOR approval of student's advisor and Department Head.)

*GBIO 409 Internship – Variable credits, 1 to 3 hours (Max 3 hours total)
*GBIO 450 Research Problems – Variable credits, 1 to 4 hours (Max 4 hours total)
*GBIO 493 Special Topics in Biology – Variable credits, 2 to 4 hours

Maximum four credit hours from these courses may be applied to concentration elective requirements.

CMPS 450 Spatial Database & Applications 3 hrs
GEOG 495 Introduction to GIS 3 hrs
POLI 446 Politics & the Environment 3 hrs
SOC 360 Environmental Sociology 3 hrs

CURRICULUM IN BIOLOGICAL SCIENCES
INTEGRATIVE BIOLOGY CONCENTRATION

YEAR: 2017 / 2018 YEAR ENTERED SLU:_____

NAME:_____ W#_____

MAJOR HOURS (41) C or Better[2]
Core Requirements (21 hrs)
GBIO 151 3
BIOL 152 1
GBIO 153 3
BIOL 154 1
MIC 205 3
MICL 207 1
[2]GBIO 200 3
[2]GBIO 312 3
GBIO 241 1
GBIO 341 1
GBIO 441** 1

Upper-level Courses (20 hrs) page 2
_____ _____ _____
_____ _____ _____
_____ _____ _____
_____ _____ _____
_____ _____ _____

CHEMISTRY (16)
[2]CHEM 121 3
CLAB 123 1
CHEM 122 3
CLAB 124 1
[3]CHEM 261 3
[3]CLAB 263 1
[3]CHEM 281 3
[3]CLAB 283 1

MATHEMATICS (9)
[1,2]MATH 161 3
MATH 162 3
MATH 163 3

or [1]MATH 165 and 200 (8 hrs)
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 (6)
_____101 3
_____102 3

[4]ELECTIVES (10)
_____
_____
_____
_____

[4]SOCIAL SCIENCES (6)
(Anth, Econ,Geog, Psyc, Poli, Soc)
_____3_____
_____3_____

PHYSICS (8)
PHYS 191 3
PLAB 193 1
PHYS 192 3
PLAB 194 1

OTHER (12)
ART ELECTIVE (Mus,Art,Dnc,Thea)
_____ _____3_____
LS 102 _____1_____
COMM211 3
HIST_____ 3
SE 101 _____2_____
SE 101 is not required of transfer or readmitted students with 30 hours or more. These students are required to take two additional hours of electives (i.e., 12 hrs instead of 10 hrs)

TOTAL HOURS 120

NOTES: [1]Students with Math ACT <21 take MATH 151 in place of MATH 161. Students who are eligible may take MATH 165 and 200 (8 credit hours) in place of MATH 161, 162, and 163 (9 credit hours). Students who take MATH 165 and 200 are required to take one additional hour of electives (i.e., 11 hrs instead of 10 hrs).
[2]Grade of "C" or better in CHEM 121, MATH 151 or 161, and all Biology courses is required. Also, CHEM 121 and MATH 151 or 161 are prerequisites for GBIO 200, and GBIO 200 is a prerequisite for GBIO 312.
[3]Students planning on attending medical, dental, or other professional or graduate schools, and students pursuing a minor in Chemistry, should take CHEM 265/267 and CHEM 266/268. Also, CHEM 265/267 can NOT be used as prequisites for CHEM 281/283.
[4]Students planning to apply to the Master of Business Administration (MBA) program at SELU should take ECON 201 and 202 for the Social Sciences requirement, must take ACCT 200 and FIN 381 and should also take MRKT 303 or MGMT 351 as Electives, and must take GBIO 377 as an upper-level Biology elective.
**GBIO 441 fulfills requirement for computer literacy

ADDITIONAL COURSES:
_____
_____
_____
_____
_____

AVERAGES

	HA	HE	QP	Average
CUM:				
(Adj)				
MAJOR				
(Adj)				
SLU:				
(Adj)				

INTEGRATIVE BIOLOGY CONCENTRATION

I. Core Courses (page 1): 21 CREDIT HOURS (Grade of "C" or better required in all courses)

II. Upper-level Courses for the Integrative Biology Concentration.

20 CREDIT HOURS from the following courses with approval of advisor (Grade of "C" or better required in all courses)

GROUP A – minimum one required – Ecology or Evolution

Ecology – GBIO 395 General Ecology 3 hrs and GBIO 397 General Ecology Laboratory 2 hrs

Evolution – GBIO 405 Evolutionary Biology 4 hrs

[4] **GROUP B –** Electives

BOT 205 Introduction to Botany 4 hrs
BOT 347 Vascular Plant Systematics 4 hrs
BOT 401 Plant Pathology 4 hrs
BOT 426 Plant Physiology 4 hrs
BOT 427 Plant Stress Ecophysiology 4 hrs
BOT 429 Native Plants of Louisiana 4 hrs
BOT 481 Plant Ecology 4 hrs
BOT 482 Plant Anatomy 4 hrs
GBIO 281 Environmental Awareness 3 hrs
GBIO 314 Genetics Laboratory 2 hrs
GBIO 377 Applied Biostatistics 4 hrs
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 407 Forensic Biology 4 hrs
GBIO 410 Introduction to Population Genetics 4 hrs
GBIO 418 Community Ecology 4 hrs
GBIO 434 Molecular Biology and Biotechnology 4 hrs
GBIO 439 Introduction to Fresh Water & Estuarine Biology 4 hrs
GBIO 481 Biogeography 3 hrs
GBIO 485 Conservation Biology 4 hrs
GBIO 492 History of Biology 3 hrs
GBIO 495 Biological Electron Microscopy 4 hrs
HORT 301 Introductory Soils 4 hrs
HORT 315 Plant Materials I 3 hrs
HORT 320 Plant Materials II 4 hrs
HORT 328 Plant Propagation 3 hrs
HORT 412 Turf Management 3 hrs
HORT 424 Arboriculture 3 hrs
HORT 426 Coastal Plant Production 3 hrs
HORT 428 Organic Gardening 3 hrs
MIC 313 Microbial Ecology 3 hrs
MIC 325 Advanced General Microbiology 4 hrs
MIC 423 Environmental Microbiology 4 hrs
MIC 436 Pathogenic Bacteria 4 hrs
MIC 457 Dairy & Food Microbiology 4 hrs
MIC 460 Immunology 4 hrs
MIC 461 Bacterial Metabolism 4 hrs
MIC 463 Virology 4 hrs
MIC 465 Recombinant DNA Techniques 4 hrs
ZOO 301 Invertebrate Zoology 4 hrs
ZOO 302 Comparative Anatomy 4 hrs
ZOO 332 Animal Histology 4 hrs
ZOO 352 Field Zoology 4 hrs
ZOO 392 Animal Physiology 4 hrs
ZOO 409 General Entomology 4 hrs
ZOO 453 Ecological Parasitology 4 hrs
ZOO 455 Medical Parasitology 4 hrs
ZOO 456 Ichthyology 4 hrs
ZOO 457 Invertebrate Ecology 4 hrs
ZOO 458 Fisheries Ecology and Management 4 hrs
ZOO 465 Animal Development 4 hrs
ZOO 471 Comparative Endocrinology 4 hrs
ZOO 475 Animal Behavior 4 hrs
ZOO 488 Cytology 3 hrs
ZOO 499 Neurobiology 4 hrs

(NOTE: * these electives require PRIOR approval of student's advisor and Department Head.)

*GBIO 409 Internship – Variable credits, 1 to 3 hours (Max 3 hours total)
*GBIO 450 Research Problems – Variable credits, 1 to 4 hours (Max 4 hours total)
*GBIO 493 Special Topics in Biology – Variable credits, 2 to 4 hours

Maximum of four credit hours of Biochemistry may be used for concentration elective requirements. NOTE: If CHEM 281 and CLAB 283 are taken to fulfill Chemistry requirements, they may not be used for elective requirements.

CHEM 281 Survey of Biochemistry 3 hrs
CLAB 283 Survey of Biochemistry Laboratory 1 hr
CHEM 481 Biochemistry I 3 hrs
CLAB 485 Biochemistry I Laboratory 1 hr
CHEM 482 Biochemistry II 3 hrs
CLAB 486 Biochemistry II Laboratory 1 hr

CURRICULUM IN BIOLOGICAL SCIENCES
MICROBIOLOGY / MOLECULAR BIOLOGY CONCENTRATION

YEAR: 2017 / 2018

YEAR ENTERED SLU:_____

NAME:_____

W#_____

MAJOR HOURS (41) C or Better[2]
Core Requirements (21 hrs)
GBIO 151 ____3____
BIOL 152____1____
GBIO 153 ____3____
BIOL 154 ____1____
MIC 205 ____3____
MICL 207 ____1____
[2]GBIO 200____3____
[2]GBIO 312 ____3____
GBIO 241 ____ 1____
GBIO 341____1____
GBIO 441**____1____

Upper-level Courses (20 hrs) page 2
_____ ____ ____
_____ ____ ____
_____ ____ ____
_____ ____ ____
_____ ____ ____

CHEMISTRY (20)
[2]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 (9)
[1,2]MATH 161 ___3____
MATH 162____3____
MATH 163____3____

or [1]MATH 165 and 200 (8)
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 (6)
_____101 ___3____
_____102 ___3____

ELECTIVES (6)
_____
_____
_____
_____

SOCIAL SCIENCES (6)
(Anth, Econ,Geog, Psyc, Poli, Soc)
_____3_____
_____3_____

PHYSICS (8)
PHYS 191____3____
PLAB 193____1____
PHYS 192____3____
PLAB 194 ____1____

OTHER (12)
ART ELECTIVE (Mus,Art,Dnc,Thea)
_____ ____3____
LS 102 _____1____
COMM211 ____3____
HIST_____ ___3____
SE 101 _____2____
SE 101 is not required for transfer or readmitted students with 30 hrs or more. These students are required to take two additional hrs of electives (i.e., 8 hrs instead of 6 hrs)

TOTAL HOURS 120

NOTES: [1]Students with Math ACT <21 take MATH 151 in place of MATH 161. Students who are eligible may take MATH 165 and 200 (8 credit hours) in place of MATH 161, 162, and 163 (9 credit hours). Students who take MATH 165 and 200 are required to take one additional hour of electives (i.e., 7 hrs instead of 6 hrs).
[2]Grade of "C" or better in CHEM 121, MATH 151 or 161, and all Biology courses is required. Also, CHEM 121 and MATH 151 or 161 are prerequisites for GBIO 200, and GBIO 200 is a prerequisite for GBIO 312.
**GBIO 441 fulfills requirement for computer literacy

ADDITIONAL COURSES:
_____
_____
_____
_____
_____
_____

	AVERAGES HA	HE	QP	Average
CUM:				
(Adj)				
MAJOR				
(Adj)				
SLU:				
(Adj)				

MICROBIOLOGY / MOLECULAR BIOLOGY CONCENTRATION

I. Core Courses (page 1): 21 CREDIT HOURS (Grade of "C" or better required in all courses)
II. Upper-level courses for the Microbiology and Molecular Biology Concentration.
20 CREDIT HOURS from the following courses with approval of advisor (Grade of "C" or better required in all courses)

GROUP A: Fundamental courses – total 8 hrs – the following two courses are required
MIC 325 Advanced General Microbiology 4 hrs
MIC 461 Bacterial Metabolism 4 hrs

GROUP B: Electives – minimum 12 hrs
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
MIC 460 Immunology 4 hrs
MIC 463 Virology 4 hrs
MIC 465 Recombinant DNA Techniques 4 hrs
CHEM 482 Biochemistry II 3 hrs
CLAB 486 Biochemistry II Laboratory 1 hr
BOT 401 Plant Pathology 4 hrs
BOT 426 Plant Physiology 4hrs
GBIO 314 Genetics Laboratory 2 hrs
GBIO 377 Applied Biostatistics 4hrs
GBIO 434 Molecular Biology and Biotechnology 4 hrs
GBIO 495 Electron Microscopy 4 hrs
ZOO 392 Animal Physiology 4 hrs
ZOO 455 Medical Parasitology 4hrs
ZOO 465 Animal Development 4 hrs
ZOO 471 Comparative Endocrinology 4hrs
ZOO 499 Neurobiology 4 hrs
(NOTE: * these electives require PRIOR approval of student's advisor and Department Head.)
*GBIO 409 Internship – Variable credits, 1 to 3 hours (Max 3 hours total)
*GBIO 450 Research Problems – Variable credits, 1 to 4 hours (Max 4 hours total)
*GBIO 493 Special Topics in Biology – Variable credits, 2 to 4 hours

CURRICULUM IN BIOLOGICAL SCIENCES
PLANT SCIENCE CONCENTRATION

YEAR: 2017 / 2018 YEAR ENTERED SLU:_____

NAME:_____ W#_____

MAJOR HOURS (41) C or Better[2]
Core Requirements (21 hrs)
GBIO 151 3
BIOL 152 1
GBIO 153 3
BIOL 154 1
MIC 205 3
MICL 207 1
[2]GBIO 200 3
[2]GBIO 312 3
GBIO 241 1
GBIO 341 1
GBIO 441** 1

Upper-level Courses (20 hrs) page 2
_____ _____ _____
_____ _____ _____
_____ _____ _____
_____ _____ _____
_____ _____ _____

CHEMISTRY (16)
[2]CHEM 121 3
CLAB 123 1
CHEM 122 3
CLAB 124 1
[3]CHEM 261 3
[3]CLAB 263 1
[3]CHEM 281 3
[3]CLAB 283 1

MATHEMATICS (9)
[1,2]MATH 161 3
MATH 162 3
MATH 163 3

or [1]MATH 165 and 200 (8 hrs)
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 (6)
_____101 3
_____102 3

ELECTIVES (10)
_____
_____
_____
_____

SOCIAL SCIENCES (6)
(Anth, Econ,Geog, Psyc, Poli, Soc)
_____3_____
_____3_____

PHYSICS (8)
PHYS 191 3
PLAB 193 1
PHYS 192 3
PLAB 194 1

OTHER (12)
ART ELECTIVE (Mus,Art,Dnc,Thea)
_____ 3
LS 102 1
COMM211 3
HIST_____ 3
SE 101 2
SE 101 is not required of transfer or readmitted students with 30 hours or more. These students are required to take two additional hours of electives (i.e., 12 hrs instead of 10 hrs).

TOTAL HOURS 120

NOTES: [1]Students with Math ACT <21 take MATH 151 in place of MATH 161. Students who are eligible may take MATH 165 and 200 (8 credit hours) in place of MATH 161, 162, and 163 (9 credit hours). Students who take MATH 165 and 200 are required to take one additional hour of electives (i.e., 11 hrs instead of 10 hrs).
[2]Grade of "C" or better in CHEM 121, MATH 151 or 161, and all Biology courses is required. Also, CHEM 121 and MATH 151 or 161 are prerequisites for GBIO 200, and GBIO 200 is a prerequisite for GBIO 312.
[3]Students planning on attending medical, dental, or other professional or graduate schools, and students pursuing a minor in Chemistry, should take CHEM 265/267 and CHEM 266/268. Also, CHEM 265/267 can NOT be used as prequisites for CHEM 281/283.
**GBIO 441 fulfills requirement for computer literacy

ADDITIONAL COURSES:
_____
_____
_____
_____
_____
_____

AVERAGES	HA	HE	QP	Average
CUM:				
(Adj)				
MAJOR				
(Adj)				
SLU:				
(Adj)				

PLANT SCIENCE CONCENTRATION

I. Core Courses (page 1): 21 CREDIT HOURS (Grade of "C" or better required in all courses)
II. Upper-level Courses for Plant Science Concentration.
20 CREDIT HOURS from the following courses with approval of advisor (Grade of "C" or better required in all courses)

Electives – 20 hrs

BOT 205 Introduction to Botany 4 hrs
BOT 347 Vascular Plant Systematics 4 hrs
BOT 401 Plant Pathology 4 hrs
BOT 426 Plant Physiology 4 hrs
BOT 427 Plant Stress Ecophysiology 4 hrs
BOT 429 Native Plants of Louisiana 4 hrs
BOT 481 Plant Ecology 4 hrs
BOT 482 Plant Anatomy 4 hrs
GBIO 377 Applied Biostatistics 4 hrs
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 418 Community Ecology 4 hrs
GBIO 434 Molecular Biology and Biotechnology 4 hrs
GBIO 485 Conservation Biology 4 hrs
HORT 301 Introductory Soils 4 hrs
HORT 315 Plant Materials I 3 hrs
HORT 320 Plant Materials II 4 hrs
HORT 328 Plant Propagation 3 hrs
HORT 412 Turf Management 3 hrs
HORT 424 Arboriculture 3 hrs
HORT 426 Coastal Plant Production 3 hrs
HORT 428 Organic Gardening 3 hrs
HORT 490 Survey of the Horticulture Industry 4 hrs
ZOO 409 General Entomology 4 hrs
(NOTE: * these electives require PRIOR approval of student's advisor and Department Head.)
*GBIO 409 Internship – Variable credits, 1 to 3 hours (Max 3 hours total)
*GBIO 450 Research Problems – Variable credits, 1 to 4 hours (Max 4 hours total)
*GBIO 493 Special Topics in Biology – Variable credits, 2 to 4 hours
*HORT 495 Seminar – 1 hour