

2015-2016 B.S. Biology – Environmental Biology Concentration

NAME _____ ID# _____

UNIVERSITY CORE

COLLEGE CORE

A. Core Foundations

CORE 101 _____ 3
 CORE 102 _____ 3
 HNRS 103* _____ 3
 CORE 201 _____ 3
 CORE 202 _____ 3

NOTE: Courses listed in multiple areas can only be used to fulfill a single area requirement.

Students can use only one course with their major prefix to fulfill core requirements.

* Honors course – will meet CORE 101 & 102 for those students in the RU honors program

B. Core Skills & Knowledge

Courses must be from different disciplines:
MATHEMATICAL SCIENCES (3SH)
 MATH 119,138, or 151 _____ 3

NATURAL SCIENCES (4 SH)
 CHEM 101 _____ 4

HUMANITIES (3 SH)
 _____ 3
 One of the following: CLSS 110 CCST 110 ENGL 200, HIST 101, 102 PHIL 111, 112, 114 POSC 110; RELN 111, 112, 203, 206

VISUAL & PERFORMING ARTS (3 SH)
 _____ 3
 One of the following: ART 111, 215, 216 CVPA 266 DNCE 111 MUSC 100, 121, 123 THEA 100, 180

SOCIAL/BEHAV. SCIENCES (3 SH)
 _____ 3
 SOCY 110 or 121 recommended
 One of the following: ANSC 101, APST 200 ECON 105, 106, GEOG 101, 102, 103 HIST 111, 112 POSC 120 PSYC 121 RELN 205 SOCY 110, 121

A. National & International Perspectives

Courses must be from different disciplines:
U. S. PERSPECTIVES (3 SH)
 ECON 106/206 recommended _____ 3
 One of the following: APST 200 ECON 101, 105, 106, ENGL 203 GEOG 201, 202, 203 HIST 111, 112 POSC 120, SOCY 110

GLOBAL PERSPECTIVES (3SH)
 GEOG 140 recommended _____ 3
 One of the following: CVPA 266, ENGL 201, 202 FORL 103 GEOG 101, 102, 140, 280 HIST 101, 102 INST 101 ITEC 112 PEAC 200 RELN 112, 205, SOCY 121, THEA 180 WMST 101

B. Supporting Skills & Knowledge

NATURAL SCIENCES OR MATH (3-4 SH)
 STAT 219 _____ 3

HUMANITIES, VISUAL & PERFORMING ARTS, OR FOREIGN LANGUAGES (3-4 SH)
 _____ 3-4
 One of the following: CLSS 110 CCST 110 ENGL 200 HIST 101, 102 PHIL 111, 112, 114 POSC 110; RELN 111, 112, 203, 206 Or ART 100, 215, 216; CVPA 266; DNCE 111 MUSC 100, 121, 123 THEA 100, 180 Or CHNS 101: 102, 201: 202 ARAB 100,200,210 FORL 100, 109, 200, 209, 210, 309, 409; FREN 100, 200:210, 300, 320 GRMN 100, 200: 210, 300 LATN 101, 102, 201, 350; RUSS 100, 200, 210, 300; SPAN 101: 102, 201, 202

SOCIAL/ BEHAV. SCI. OR HEALTH & WELLNESS SOCY 110 or 121 recommended (3SH)
 _____ 3
 One of the following: ANSC 101, APST 200 ECON 105, 106 GEOG 101, 102, 103 HIST 111, 112 POSC 120; PSYC 121 RELN 205 SOCY 110, 121 HLTH 111,200 NURS 111 NUTR 214; RCPT 200

Environmental Biology Concentration

Prerequisites (All BIOL prerequisites require C or better)

BIOL 160* _____ (2)	Introductory Seminar in Biology	F/S	Freshmen only
BIOL 460* _____ (2)	Advanced Seminar in Biology	F/S	BIOL 131, 132, 231, and 232 (232 may be concurrent)
*OR Transfer students or others who do not take BIOL 160 must take 4 hours of BIOL 460 (2:2) or 2 hours BIOL 460 plus one additional 3XX/4XX level BIOL elective (excluding BIOL 310, 311, 322, 334, 491, 492 and 495).			
BIOL 131 _____ (4)	Ecology and Adaptation	F/S	
BIOL 132 _____ (4)	Biology of Cells and Microorganisms	F/S	
BIOL 231 _____ (4)	Genetics, Evolution, and Development	F/S	BIOL 132
BIOL 232 _____ (4)	Organismal Biology	F/S	BIOL 131
BIOL 131, 132, 231 and 232 may only be taken TWICE, and must be completed with C or higher before taking any 3XX or 4XX level BIOL Electives.			
CHEM 101 _____ (4)	General Chemistry	F/S/SU	
CHEM 102 _____ (4)	General Chemistry	S/SU	CHEM 101
STAT 219 _____ (3)	Statistics for Biology	F/S/SU	
MATH 119/138/151 _____ (3)	Math Core Curriculum see above	F/S/SU	
BIOL 390 _____ (3)	Conservation Biology	S	BIOL 231, OR BIOL 103 & (104 or 105)
GEOS 250 _____ (4)	Introduction to GIS	F/S	

3-6 credit hours from any combination of hours in the following:

BIOL 491/492 _____	Directed Research and Study	F/S/SU	2.5 BIOL GPA, 16 credits of lab science, or
BIOL 495 _____	Internship in Biology	F/S/SU	Permission of department chair

One of the courses below: _____ (4)

BIOL 333	Population and Community Ecology	F (odd years)	BIOL 131 and STAT 219
BIOL 476	Forest and Wetland Ecology	F (even years)	BIOL 131 and STAT 219
BIOL 481*	Study abroad courses with significant field biology component*		

One of the courses below: _____ (3-4)

BIOL 392	Environmental Toxicology (4)	TBD	8 credits of BIOL & 8 credits of CHEM
BIOL 481	Ecosystem Ecology (3)	TBD	8 credits of BIOL & 8 credits of CHEM
BIOL TBD	Conservation Physiology (4)	TBD	TBD
BIOL TBD	Microbial Ecology (4)	TBD	TBD
CHEM 215	Environmental Chemistry (3)	TBD	CHEM 102

One of the courses below: _____ (3)

GEOS 241	Environmental Regulation	S	GEOG 140
ECON 375	Environmental Economics	TBD	ECON 106/206
SOCY 370	Environmental Sociology	TBD	SOCY 110 or ANTH/SOCY 121

11-12 credit hours chosen from the below courses: _____ (11-12). Courses taken for requirements listed above may not be counted as electives:

BIOL 215 Plants and Society (4)	BIOL 353 Comparative Behavior (3)	BIOL 425 Evolution (3)	BIOL TBD Microbial Ecology (4)
BIOL 216 General Zoology (4)	BIOL 361 Parasitology (4)	BIOL 462 Invertebrate Zoology (4)	BIOL TBD Conservation Physiology (4)
BIOL 217 Flora of Virginia (4)	BIOL 380 Ornithology (4)	BIOL 464 Vertebrate Zoology (4)	BIOL 481 Study abroad field courses (4)
BIOL 333 Population/Community Ecology (4)	BIOL 392 Environ Toxicology (4)	BIOL 476 Forest & Wetland Ecology (4)	CHEM 215 Environ Chemistry (3)
BIOL 351 Comparative Physiology (4)	BIOL 408 Principles Microbiology (4)	BIOL 481 Ecosystem Ecology (3)	GEOG 474 Hydrogeology (4)
			GEOS 335 Biogeography (3)

B.S. Requirements (8 hours)

CHEM 301	_____ (4)	Organic Chemistry	F	CHEM 102
CHEM 302	_____ (4)	Organic Chemistry	S	CHEM 301

Graduation Requirements: Students must attain a minimum 2.0 in major and overall GPA in order to graduate. Major GPA is calculated using grades received in Biology 131, 132, all Biology courses 200 level or higher, all courses outside of Biology used as electives (including: CHEM 471:472 and Physics if used as elective) and/or any course used as an elective by academic petition. Students are required to complete a minimum of 120 credit hours.