

Environmental Science Major Emphasis: Environmental Biology

Required (23)

CHEM I01 General chemistry I (5)
 CHEM I02 General chemistry II (5)
 CHEM 201 Organic chemistry (3)
 PHYS 211 College physics I (5)
 PHYS 212 College physics II (5)

Prerequisite(s)

MATH 101 or concurrent enrollment
 CHEM 101, MATH 101
 CHEM 101, CHEM 102
 MATH 215
 PHYS 211 & concurrent MATH 216

Core (18)

BIOL 121 Molecular & cellular biology (5)
 BIOL 122 Organismal biology (5)
 BIOL 460 Introduction to genetics (3)
 ENVS 415 Environmental seminar (1)
 ENVS 420 Environmental seminar (1)
 BIOL 390 Biostatistics / Statistics (3)

CHEM 101, or concurrent enrollment
 CHEM 101, or concurrent enrollment
 BIOL 121, BIOL 122, CHEM 102, CHEM 201
 BIOL 121, BIOL 122

Electives (Additional courses from list below as necessary to fulfill 50 credit hours in major, and to meet the 40-credit upper-level requirement, including at least 8 credit hours at 400-level in electives)

Focus: Ecology

BIOL 220 Botany
 BIOL 310 Vertebrate zoology (4)
 BIOL 325 History & diversity of organisms (5)
 BIOL 480 Plants of Kansas (5)
 BIOL 330 Principles of ecology (5)
 BIOL 400 Ethnobiology (5)
 BIOL 420 Reptile ecology & behavior (1)
 BIOL 440 Comparative vertebrate anatomy & physiology (5)
 BIOL 470 Animal behavior (3)
 BIOL 465 Research in Animal Behavior (2)
 ENVS 450 Aquatic biology (5)
 BIOL 410 Wildlife ecology

BIOL 101 or equivalent
 BIOL 101 or equivalent
 BIOL 121, BIOL 122
 BIOL 121, BIOL 122
 BIOL 121, BIOL 122
 BIOL 101 or equivalent
 Permission of instructor
 BIOL 121, 122; CHEM 101, PHYS 211
 BIOL 121, 122; Calculus
 BIOL 121, 122; Calculus
 BIOL 121, 122; CHEM 101; **BIOL 330**
 BIOL 330

Focus: Health & Cell Biology

BIOL 250 Human anatomy & physiology (5)
 BIOL 260 Microbiology (5)
 BIOL 345 Nutrition (3) Under Development
 BIOL 380 Ecology of infectious diseases (3)
 ENVS 411 Environmental Toxicology (5)
 CHEM 330 Biochemistry (3)

BIOL 101 or equivalent
 BIOL 101 or equivalent; CHEM 101
BIOL 101 ?
 BIOL 121, 122
 BIOL 121, 122; CHEM 201, 330
 CHEM 101, CHEM 102, CHEM 201

Focus: Natural Resources

NATRS 201 Introduction to soils (4)
 NATRS 215 Introduction to Meteorology (3)
 NATRS 320 Sustainable watersheds (4)
 ENVS 340 Air quality (3)
 SCTEC 210 Introd. to Geographic Information Systems

CHEM 101, ENVS 102 & permission of instructor
 CHEM 101, ENVS 102 & permission of instructor
 CHEM 101, ENVS 102 & permission of instructor
 CHEM 101, SCTEC 120
 SCTEC 120 or equivalent proficiency & MATH 101 or concurrent enrollment

Total credit hours:

Req + Core	41 (includes 18 in biology & 8 upper level)
Electives	32 (at least 26 upper level)
Gen Ed	45
Calculus	<u>3</u>
	121 hours

Gen Ed can be reduced by choosing:
 Ethnobiology (Citizenship) (-5)
 History of Native American Indian Tribes (Citizenship) (-3)
 300 TMGT (Pub Aff, Cpt, UL) (-3)

The following preparatory courses would add to total:
 Math, Intermediate algebra & below
 Physical science

Approved and Effective March 30, 2005

Recommended sequence: Natural Sciences & General Education

Year 1

Semester 1

BIOL 121(5), CHEM I01(5), MATH 101(3)

Semester 2

BIOL 122(5), CHEM I02(5)

Year 2

Semester 1

ENVS 415(1), CHEM 201(3), PHYS 211(5)

Semester 2

BIOL 460(3), PHYS 212(5)

Year 3

Semester 1

BIOL 390(3)

Semester 2

Year 4

Semester 1

Semester 2

ENVS 420(1)