

ENVIRONMENTAL SCIENCE & POLICY. BA

Academic year 2016-2017

College: Arts and Sciences
Degree: B.A.
Limited Access: NO
Contact: Mr. Tim McGann (advising)
Dr. Jeff Chanton (program information)
Address: Dept. of Earth, Ocean and Atmospheric Science
Tallahassee, FL 32306-4320
McGann 111 CAR
Chanton: 305 OSB
Phone: McGann: (850) 644-8582
Chanton: (850) 644-7493
E-Mail: tmcgann@fsu.edu
jchanton@fsu.edu

Description of Major

Environmental Science is the interdisciplinary study of environmental systems from a scientific perspective. Drawing principally from the areas of oceanography, geology, and meteorology, the Environmental Science program will prepare students in the broader area of geosciences and is an attractive option for students seeking a broader interdisciplinary major with the rigor of mathematics and the physical sciences at its core.

FSU offers both the BS and BA degrees in Environmental Science. The BA degree differs from the BS degree in lower-level mathematics requirements and a greater emphasis on policy. The goals of these programs are to prepare exceptionally well-qualified graduates prepared to work in the interdisciplinary earth sciences, whether in government agencies, NGOs, or the private sector. They also provide a strong basis for graduate study in environmental and interdisciplinary earth sciences.

Prerequisite Coursework: 18 hours

The following are being proposed as common program prerequisites.

MAC X105 (3) College Algebra

MAC X140 (3) Precalculus Algebra or STA X122 (3) Introduction to Applied Statistics

BSC X010,X010L (3,1) Biological Science I, Lab

CHM X045,X045L (3,1) General Chemistry I, Lab

GLY X010C (4) Physical Geology with Lab

BSC 2011, 2011L (3,1) Biological Science II, Lab **or** CHM 1046, 1046L (3.1) General Chemistry II, Lab

Note: State-wide common prerequisites are always under review. For the most current information and for acceptable alternative courses, visit the "Common Prerequisites Manual." This is available from the "College Students" section of <http://FACTS.org/>.

Requirements for graduation in the College of Arts and Sciences include:

The College of Arts and Science requires proficiency in a foreign language through the intermediate (2220 or equivalent) level or sign language through the advanced (2614 or equivalent) level.

Admission/Continuation Requirements to Major Program of Studies

Students should complete the prerequisite coursework for entrance to the major program of study. Students must also have completed a minimum of 52 hours of credit and at least half the required hours in Liberal Studies, including required English composition and Math, or an A.A degree. No required course in which a student has earned a grade below C- may be applied toward the degree in Environmental Science. A student who has received more than five unsatisfactory grades (U, F, D-, D, D+) in science, statistics, or mathematics courses (and their prerequisites) taken at Florida State University or elsewhere, including repeated unsatisfactory grades in the same course, will not be permitted to graduate with a degree in this major.

Mapping

Mapping is FSU's academic advising and monitoring system. Academic progress is monitored each Fall and Spring semester to ensure that students are on course to earn their degree in a timely fashion. Transfer students must meet mapping guidelines to be accepted into their majors. You may view the map for this major at www.academic-guide.fsu.edu.

Major Program of Studies at FSU: 37 hours

A. Basic Environmental Science Courses (13 hours)

MET 1010 (3) Introduction to the Atmosphere or MET 2700 (3) General Meteorology
OCE 4008 (3) Principles of Oceanography
OCE 4017 (3) Current Issues in Environmental Science or GLY 3039 (3) Energy, Resources, and Environment
EVR 4922 (4) Capstone (This course also counts as an upper division writing requirement)

B. Required Policy Courses (choose 6 hours selected from the following)

GEO 4357 (3) Environmental Conflict and Economic Development
GEO 4372 (3) Natural Resources Assessment and Analysis
PHI 2100 (3) Reasoning and Critical Thinking
PHI 2620 (3) Environmental Ethics
PUP 3002 (3) Introduction to Public Policy
PUP 4203 (3) Environmental Politics and Policy
URP 3000 (3) Introduction to Urban and Regional Planning

C. Required Environmental Science courses (choose a total of 15 hours from the lists below)

At least 9 hours must be from List 1. You must satisfy all course pre-requisites prior to enrolling.

List 1

EOC	4631	Marine Pollution (3)
OCB	4631	Estuarine and Coastal Ecology (3)
GLY	2100	Historical Geology (3)
GLY	3200C	Mineralogy and Crystallography (3)
GLY	3310C	Igneous and Metamorphic Petrology (3)
GLY	3400C	Structural Geology (4)
GLY	3610C	Paleontology (4)
GLY	4240	Principles of Geochemistry (3)
GLY	4544C	Sedimentation and Stratigraphy (4)
GLY	4751C	Introduction to Remote Sensing, Air Photo Interpretation and GIS for the Earth Sciences (3)
GLY	4820	Principles of Hydrology (3)
GLY	4884	Environmental Geology I (3)
GLY	4905	Directed Individual Study (Geohazards) (3)
MET	2101	Physical Climatology (3) or MET 3103C Climate Change Science (3) or ISC 2003 Global Change: Its Scientific and Human Dimensions (3)
MET	3220C	Meteorological Computations (3)
MET	3300	Introduction to Atmospheric Dynamics (3)
MET	4159r	Special Topics in Meteorology (1–3)
MET	4400C	Meteorological Instrumentation and Observation (3)
OCB	4631	Estuarine and Coastal Ecology (3)
OCB	4637	Marine Benthic Ecology (3)
OCC	4002	Introduction to Chemical Oceanography (3)
OCC	4060	Environmental Science Modeling (3)
OCE	3555	Environmental Science II: Habitable Planet (3)
OCE	4064	Marine Conservation Biology (3)
OCE	4265	Coral Reef Ecology (3)
OCP	4005	Introduction to Physical Oceanography (3)
OCE	4930r	Studies in Oceanography (1–4) (Topics vary: Biodiversity, Earth Systems, Marine Microbial Ecology, Geomicrobiology, (consent of adviser) , Physics and Flow of Water Bodies, Environmental Toxicology,

List 2 – (6-7 hours may be selected from the following list)

BSC 2011, BSC 2011L	Biological Science II and Lab (3, 1)
CHM 1046, CHM 1046L	General Chemistry II and Lab (3, 1)
CHM 4080	Environmental Chemistry I (3)
HFT 3700	Tourism Management and the Environment (3)

URP	3000	Introduction to Planning and Urban Development (3) If not used as a required policy class
URP	4022	Collective Decision Making (3)
URP	4314	Introduction to Growth Management and Comprehensive Planning (3)
URP	4318	Growth Management and Environmental Planning (3)
URP	4402	Sustainable Development Planning in the Americas (3)
URP	4404	River Basin Management and Planning (3)
URP	4423	Introduction to Environmental Planning and Resource Management (3)
URP	4618	Planning for Developing Regions (3)
URP	4710	Introduction to Transportation Issues and Transportation Planning (3)
URP	4741	Introduction to Issues in Housing and Community Development (3)

Additional Requirements for the Bachelor of Arts Degree. 9 hours

The Bachelor of Arts degree requires nine (9) semester hours in the fields of humanities and/or history in addition to the Liberal Studies and the foreign language requirements.

Minor. At least 12 hours.

A minor is required. While many minors require only 12 hours, others require 18 hours or more. No courses used for satisfying Liberal Studies / general education requirements, the College foreign language requirement, or major requirements may also be counted toward the minor.

Computer Skills Competency: 0 hours beyond other requirements. BSC 2010L (1).

Oral Communication Competency: 0-3 hours.

Students must demonstrate the ability to orally transmit ideas and information clearly. This requirement may be met through appropriate high school speech training or with an approved college-level approved course, such as SPC 1017 or SPC 2608.

Minimum Program Requirements Summary

Total Hrs. Required 120

Liberal Studies 36*

BA Prerequisite Coursework 18*

BA Major Coursework 37*

BA Additional Requirements 9

Minor Coursework 12 or more

Foreign Language 0-12 (depending on placement)

Computer Skills 0 beyond major

Oral Communication Competency 0-3

Electives to bring total hours to 120

*Note: Some coursework required for this major (prerequisite//major) may also be applied to Liberal Studies or minor requirements.

Remarks:

1. A minimum of 45 hours at the 3000 level or above, 30 of which must be taken at this University.
2. Half of the major course semester hours must be completed in residence at this University.
3. The final 30 hours must be completed in residence at this University.
4. The B. A. degree requires 9 additional hours in the fields of history and humanities.

Employment Information

Representative Job Titles Related to this Major: Environmental technician, geoscientist, environmental scientist, hydrologist, general physical scientist, and oceanographer. Some positions may require additional education or training.

Representative Employers: Federal, state, and local governments; NGOs; private employers.

Updated: February, 2017

