BACHELOR OF SCIENCE

Environmental Science integrates natural and social sciences to study the interrelationships between people and nature. Using an interdisciplinary approach that incorporates academic fields like ecology, hydrology, earth and soil sciences, natural resource management, ethics, as well as environmental policy and law, the Environmental Science program empowers students to analyze complex environmental issues across multiple perspectives. In doing so, Environmental Science students learn to assess causes of environmental problems and apply their knowledge to develop solutions to these problems.

About this Program

- **College:** Agricultural and Life Sciences (http://catalog.ufl.edu/UGRD/colleges-schools/UGAGL/)
- **School:** Natural Resources and Environment (http://catalog.ufl.edu/UGRD/colleges-schools/UGNTR/)
- **Degrees:** Bachelor of Arts (http://catalog.ufl.edu/UGRD/colleges-schools/UGNTR/EVS_BA_BS/EVS_BA/) | Bachelor of Science (p. 1)
- **Credits for Degree:** 120
- **More Info**

To graduate with this major, students must complete all university, college, and major requirements.

School Information

The School of Natural Resources and Environment (SNRE) offers campus-wide, interdisciplinary degree programs at both the undergraduate and graduate levels. SNRE is governed by the SNRE Advisory Board and advised by the SNRE Faculty Advisory Council.
Website (http://snre.ifas.ufl.edu/)

CONTACT

Email (tracy.moorman@ufl.edu) | 352.392.9230

P.O. Box 116455
2035 McCarty Hall D
GAINESVILLE FL 32611-6455

Curriculum

- Combination Degrees
- Environmental Science
- Environmental Science Minor

The School of Natural Resources and Environment's environmental science degrees approach complex environmental issues with multidisciplinary academic knowledge and interdisciplinary perspectives to prepare graduates for jobs in environmental consulting companies, government environmental offices, land and water management agencies, or non-government organizations. SNRE's environmental science degrees are campus-wide programs, allowing students to learn from experts in multiple academic units at the University of Florida. Multiple course options are available to meet most degree requirements, giving students a large degree of flexibility in customizing their program of study to suit their individual interests with the assistance of the advising staff.

About half of Environmental Science students advance to graduate or professional degree programs. The combination of the school's broad undergraduate degree with a subsequent graduate or professional degree is highly marketable.

The school also offers a combination degree program that pairs a bachelor's degree in environmental science with a Master of Science in interdisciplinary ecology.

Requirements and Differences Between BA and BS Degrees

Both Bachelor of Science and Bachelor of Arts degrees prepare students for a wide range of careers in environmental science. The BS places greater emphasis on the natural sciences, whereas the BA is more focused on the social sciences and their application to economics, policy, and management.

BS students interested in seeking admission to a medical, veterinary, or similar professional school after graduation may pursue a Pre-Health track (subject to permission by the undergraduate coordinator). Students in either degree interested in advancing to law school after graduation are encouraged to review UF's pre-Law resources.
More Info (https://www.advising.ufl.edu/pre-law/)

Subject to permission by the undergraduate coordinator, BS students interested in seeking admission to a medical, veterinary, or similar professional school after graduation may pursue a Pre-Health track. Students in either degree interested in advancing to law school after graduation are encouraged to review Pre-Law resources.

More Info (https://www.advising.ufl.edu/pre-law/)

The freshmen and sophomore years lay a foundation of coursework through critical-tracking courses for building later expertise. Students need to know the natural sciences of physics, chemistry, and biology. Study of microeconomics and macroeconomics is required to understand the human economy. Introductory statistics empowers students to independently evaluate quantitative data. College algebra (BA) and an introduction to calculus (BS) enable students to work with rates of change, the heart of ecological science.

Critical-Tracking Requirement	BA	BS
Biological Sciences	BSC 2010/L & BSC 2011/L (8 credits)	BSC 2010/L & BSC 2011/L (8 credits)
General Chemistry	CHM 2045/L (4 credits)	CHM 2045/L & CHM 2046/L (8 credits)
Economics	ECO 2013 & ECO 2023 (8 credits)	AEB 3103 (4 credits) or both ECO 2013 & ECO 2023 (8 credits)
Mathematics	MAC 1147 (4 credits)	MAC 2311 (4 credits) or MAC 2233 (3 credits)
Physics	PHY 2004 (3 credits) or PHY 2020 (3 credits)	PHY 2004/L (4 credits) or PHY 2048/L (4 credits) or PHY 2053/L (5 credits)
Statistics	STA 2023 (3 credits)	STA 2023 (3 credits)
Public Speaking	AEC 3030C (3 credits) or SPC 2608 (3 credits)	N/A
Total	**33 credits**	**30-36 credits**

In addition to the critical tracking requirements, students admitted as freshmen are responsible for completing State Core General Education as well as the university's General Education, Quest, and Writing Requirements.

Certain critical tracking and core courses simultaneously fulfill General Education and Writing Requirements, and students should seek to maximize the number of overlapping courses for efficiency. For most students, all but 15 credits of the General Education requirement are met through the BA and BS curriculum. Incoming credit (e.g. AP, AICE, IB, CLEP, etc.) may further reduce the number of General Education courses students need to complete.

Students should work closely with their academic advisor to ensure satisfactory progress towards degree completion throughout their academic career.

After General Education and most critical-tracking coursework is complete, students begin to take the degree's core courses (41-46 credits for the BA, 41-47 credits for the BS), providing a base of common knowledge and experience in subjects essential to Environmental Science. During the fourth year, students enroll in SNRE's capstone course that further develops and assesses critical thinking skills by confronting conflicts of ecological and economic paradigms, synthesizing across physical, biological, and social systems, and engaging diverse knowledge and views to help resolve key environmental problems.

Core Requirement	BA	BS
Foundation Courses	11 credits	11 credits
General Ecology	3-4 credits	3-4 credits
Ecology of Specific Systems	N/A	3 credits
Earth and Soil Science	3-4 credits	3-4 credits
Global and Hydrologic Systems	3-4 credits	3-4 credits
Methods and Technology	N/A	3-4 credits
Organic Chemistry	N/A	3 credits
Natural Resource Management	3-4 credits	3-4 credits
Resource Economics	3-4 credits	N/A
Environmental Ethics	3 credits	3 credits
Environmental Policy and Law	6 credits	3-4 credits
Social Science Perspectives	3 credits	N/A
Capstone Course	3 credits	3 credits
Total[1]	**41-47 credits**	**41-47 credits**

[1] Students should select a combination of core courses not to exceed 44 credits.

Beyond the core requirements, each student selects additional credits from a wide list of approved electives according to individual interest, allowing them to broaden their skillset or specialize in a particular aspect of environmental science.

Elective Requirement	BA	BS
Communication & Leadership	3-6 credits	N/A
Additional Skills and Concepts	6-15 credits	6-15 credits
Biological Sciences	3-12 credits	6-15 credits
Physical Sciences	N/A	3-15 credits
Human Dimensions	6-15 credits	3-9 credits
Total[1]	**28-31 credits**	**28-31 credits**

1 A minimum of 28 approved elective credits are required. Additional elective credits may be needed to reach 120 credit hours for degree completion.

Critical Tracking

Critical Tracking records each student's progress in courses that are required for progress toward each major. Please note the critical-tracking requirements below on a per-semester basis.

Equivalent critical-tracking courses as determined by the State of Florida Common Course Prerequisites (https://cpm.flvc.org/advance-search/) may be used for transfer students.

SEMESTER 1

- Complete 2 of 8 or 9 critical-tracking courses, excluding labs: BSC 2010/BSC 2010L, BSC 2011/BSC 2011L, CHM 2045/CHM 2045L, CHM 2046/CHM 2046L, ECO 2013 and ECO 2023 or AEB 3103, MAC 2233 or MAC 2311, PHY 2004/PHY 2004L or PHY 2048/PHY 2048L or PHY 2053/PHY 2053L, STA 2023
- 2.5 GPA required for all critical-tracking courses
- 2.0 UF GPA required

SEMESTER 2

- Complete 2 additional critical-tracking courses
- 2.5 GPA required for all critical-tracking courses
- 2.0 UF GPA required

SEMESTER 3

- Complete 2 additional critical-tracking courses
- 2.5 GPA required for all critical-tracking courses
- 2.0 UF GPA required

SEMESTER 4

- Complete 2-3 additional critical-tracking courses
- Complete at least 1 core course
- 2.5 GPA required for all critical-tracking courses
- 2.0 UF GPA required

SEMESTER 5

- Complete all 9 critical-tracking courses
- Complete at least 2 core courses
- 2.5 GPA required for all critical-tracking courses
- 2.0 upper division GPA required
- 2.0 UF GPA required

SEMESTER 6

- Complete at least 2 core courses
- 2.0 upper division GPA required
- 2.0 UF GPA required

SEMESTER 7

- Complete at least 2 core courses
- 2.0 upper division GPA required
- 2.0 UF GPA required

SEMESTER 8

- Complete EVS 4021 (capstone) and the remaining courses for the degree
- 2.0 upper division GPA required
- 2.0 UF GPA required

Model Semester Plan

To remain on track, students must complete the appropriate critical-tracking courses, which appear in bold. These courses must be completed by the terms as listed above in the Critical Tracking criteria.

This semester plan represents an example progression through the major. Actual courses and course order may be different depending on the student's academic record and scheduling availability of courses. Prerequisites still apply.

Course	Title	Credits
Semester One		
Quest 1 (Gen Ed Humanities) [1]		3
BSC 2010 & 2010L	Integrated Principles of Biology 1 and Integrated Principles of Biology Laboratory (**Critical Tracking**; State Core Gen Ed Biological and Physical Sciences)	4
EVS 1010	First Year Environmental Science [2]	1
Select one:		3-4
MAC 2233	Survey of Calculus 1 (**Critical Tracking**; State Core Gen Ed Mathematics)	
MAC 2311	Analytic Geometry and Calculus 1	
Gen Ed Composition (according to placement)		3
	Credits	**14-15**
Semester Two		
BSC 2011 & 2011L	Integrated Principles of Biology 2 and Integrated Principles of Biology Laboratory 2 (**Critical Tracking**; State Core Gen Ed Biological and Physical Sciences)	4
CHM 2045 & 2045L	General Chemistry 1 and General Chemistry Laboratory (**Critical Tracking**; State Core Gen Ed Biological and Physical Sciences)	4
Civic Literacy Requirement (recommended: POS 2041)		3
State Core Gen Ed Humanities (http://catalog.ufl.edu/UGRD/academic-programs/general-education/#genedcoursestext)		3
	Credits	**14**
Semester Three		
Quest 2 (Gen Ed Social & Behavioral Sciences or Gen Ed Biological Sciences and Physical Sciences)		3
CHM 2046 & 2046L	General Chemistry 2 and General Chemistry 2 Laboratory (**Critical Tracking**; Gen Ed Physical Sciences)	4
ENC 2256	Writing in the Disciplines (Writing in Environmental Science; Gen Ed Composition)	3
STA 2023	Introduction to Statistics 1 (**Critical Tracking**; Gen Ed Mathematics)	3
Earth and Soil Science Core course		3-4
	Credits	**16-17**
Semester Four		
Select one:		4
ECO 2013	Principles of Macroeconomics (**Critical Tracking**; Gen Ed Social and Behavioral Sciences)	
AEB 3103	Principles of Food and Resource Economics (Gen Ed Social and Behavioral Sciences)	
EVS 3000 & 3000L	Environmental Science 1 and Environmental Science Laboratory	4
Select one:		4-5
PHY 2004 & 2004L	Applied Physics 1 and Laboratory for Physics 2004 (**Critical Tracking**; Gen Ed Physical Sciences)	
PHY 2048 & 2048L	Physics with Calculus 1 and Laboratory for PHY 2048 (**Critical Tracking**; Gen Ed Physical Sciences)	
PHY 2053 & 2053L	Physics 1 and Laboratory for PHY 2053 (**Critical Tracking**; Gen Ed Physical Sciences)	

Organic Chemistry Core course		3
	Credits	**15-16**
Semester Five		
EVS 3500	Environmental Science 2	3
Select one:		3-4
ECO 2023	Principles of Microeconomics (**Critical Tracking**; Gen Ed Social and Behavioral Sciences)	
Elective for the major if AEB 3103 was used to satisfy the economics critical tracking requirement [3]		
Environmental Ethics Core course		3
General Ecology Core course		3-4
Global and Hydrologic Systems Core course		3-4
	Credits	**15-18**
Semester Six		
Ecology of Specific Systems Core course		3
Environmental Policy & Law Core course		3-4
Methods and Technology Core course		3-4
Natural Resource Management Core course		3-4
Elective for the major [3]		3
	Credits	**15-18**
Semester Seven		
Electives for the major [3]		16
	Credits	**16**
Semester Eight		
EVS 4021	Critical Thinking in Environmental Science (**Critical Tracking**)	3
Electives for the major (as needed) [3]		6-15
	Credits	**9-18**
	Total Credits	**120**

1 One of the courses selected to meet the Quest 1, Quest 2, and State Core Humanities requirements should be chosen to simultaneously meet the International requirement.

2 Required for all Summer B and Fall freshman admits, including HSAA students admitted as freshmen. Transfer students should enroll in ALS 4932 instead. PaCE and all other students should contact their academic advisor or undergraduate coordinator for alternate options.

3 A minimum of 28 elective credit hours are required from the Approved Electives list or by approval from the undergraduate coordinator. Additional elective credit may be needed to reach 120 credit hours for degree completion.

Core Requirements

BACHELOR OF SCIENCE

The Bachelor of Science degree in environmental science emphasizes the applied sciences and the basic sciences from which they derive. The track is designed to prepare for employment or for graduate or professional school.

Core Requirements for the Bachelor of Science

Students should select a combination of core courses not to exceed 44 credit hours.

Code	Title	Credits
Required Foundation Courses		
ENC 2256	Writing in the Disciplines (Writing in Environmental Science; Gen Ed Composition; 6000 words)	3
EVS 1010	First Year Environmental Science [1]	1
EVS 3000 & 3000L	Environmental Science 1 and Environmental Science Laboratory	4
EVS 3500	Environmental Science 2	3
Environmental Ethics		**3**
Select one:		
AEB 4126	Agricultural and Natural Resource Ethics (6000 words)	
AEC 3322	Moral Leadership in Agriculture and Natural Resources	
ANT 4403	Environment and Cultural Behavior	
EVR 3004	Eco-Civic Engagement	
PSY 3626	Psychology of Sustainability	
REL 2104	Environmental Ethics (Gen Ed Humanities; 2000 words)	

General Ecology		**3-4**
Select one:		3-4
PCB 4043C	General Ecology	
WIS 3404	Natural Resource Ecology	
Ecology of Specific Systems		**3**
Select one:		
ALS 3153	Agricultural Ecology	
ENY 4201	Insect Ecology	
ENY 4208	Ecology and Conservation of Pollinators	
FAS 4274	Freshwater Ecology	
FNR 3500C	Forest Ecology (Gen Ed Biological Science)	
FNR 4010	Ecology and Restoration of Longleaf Pine Ecosystems	
SWS 4303C	Soil Microbial Ecology	
WIS 4501	Introduction to Wildlife Population Ecology	
Organic Chemistry		**3**
Select one:		
BCH 3023	Elementary Organic and Biological Chemistry	
CHM 2200	Fundamentals of Organic Chemistry	
CHM 2210	Organic Chemistry 1	
Earth and Soil Science		**3-4**
Select one:		
GEO 2200 & 2200L	Dynamic Planet Earth and Dynamic Planet Earth Laboratory (Gen Ed Physical Sciences)	
GLY 2010C	Physical Geology (Gen Ed Physical Sciences, BS only)	
GLY 2030C	Environmental and Engineering Geology (Gen Ed Physical Sciences)	
SWS 3022 & 3022L	Introduction to Soils in the Environment and Introduction to Soils in the Environment Laboratory (Gen Ed Physical Sciences)	
Global and Hydrologic Systems		**3-4**
Select one:		
AOM 4643	Environmental Hydrology: Principles and Issues	
BSC 3307C	Climate Change Biology	
FNR 4343C	Forest Water Resources	
GLY 3882C	Hydrogeology and Human Affairs (Gen Ed Physical Science)	
GEO 3250	Climatology	
GLY 3074	Oceans and Global Climate Change	
GLY 3882C	Hydrogeology and Human Affairs (Gen Ed Physical Science)	
OCE 1001	Introduction to Oceanography (Gen Ed Physical Science)	
SWS 4223	Environmental Biogeochemistry	
SWS 4244	Wetlands	
Environmental Policy and Law		**3-4**
Select one:		
AEB 4123	Agricultural and Natural Resource Law	
AEB 4282	International Humanitarian Assistance	
AEB 4283	International Development Policy	
ECP 3302	Environmental Economics and Resource Policy	
FNR 4660	Natural Resource Policy and Economics	
Natural Resource Management		**3-4**
Select one:		
ALS 3133	Agricultural and Environmental Quality	
EVR 3323	Introduction to Ecosystem Restoration	
FAS 4305C	Introduction to Freshwater Fishery Science	
FNR 4080	Sustainable Ecotourism Development	
FNR 4624C	Field Operations for Management of Ecosystems	
GEO 3372	Conservation of Resources	
IPM 3022	Fundamentals of Pest Management	
SWS 4116	Environmental Nutrient Management	
SWS 4233	Soil and Water Conservation	
SWS 4245	Water Resource Sustainability	
WIS 4523	Human Dimensions of Natural Resource Conservation	
Methods and Technology		**3-4**
Select one:		
Introductory GIS Courses [2]		

GIS 3043	Foundations of Geographic Information Systems	
GIS 3072C	Geographic Information Systems	
SWS 4720C	GIS in Soil and Water Science	
URP 4273	Survey of Planning Information Systems	
Introductory Artificial Intelligence Courses		
ALS 3200C	AI in Agricultural and Life Sciences	
EEL 3872	Artificial Intelligence Fundamentals	
Programming and Modeling Courses		
ABE 4641	Modeling Coupled Natural-Human Systems	
BSC 2891	Python Programming for Biology	
GIS 4102C	GIS Programming	
STA 3100	Programming With Data in R	
Quantitative Analysis Courses		
GEO 3162C	Introduction to Quantitative Analysis for Geographers	
SWS 4180	Earth System Analysis	
WIS 4601C	Quantitative Wildlife Ecology	
Environmental Sampling and Monitoring Courses		
SWS 4800	Environmental Soil and Water Monitoring Techniques	
Environmental Technology Courses		
ABE 4655C	Bio-Based Products from Renewable Resources	
AGG 4502	Nanotechnology in Food, Agriculture, and Environment	
AOM 4521	Introduction to Biofuels	
HOS 3281C	Organic and Sustainable Crop Production	
Required Capstone Course		
EVS 4021	Critical Thinking in Environmental Science	3
Total Credits		**44-51**

1 Required for all Summer B and Fall freshman admits, including HSAA students admitted as freshmen. Transfer students should enroll in ALS 4932 instead. PaCE and all other students should contact their academic advisor or undergraduate coordinator for alternate options.

2 Students should not enroll in more than one of the following courses: FNR 3400C, GIS 3043, GIS 3072C, URP 4273, SWS 4720C.

Approved Electives

Beyond the core requirements, each student selects additional credits from a wide list of approved electives according to individual interest, allowing students to broaden their skillset or specialize in a particular aspect of environmental science.

Elective Requirement

- Additional Skills and Concepts 6-15 credits
- Biological Sciences 6-15 credits
- Physical Sciences 3-15 credits
- Human Dimensions 3-9 credits

A minimum of 28 approved elective credits are required. Additional elective credit may be needed to reach 120 credit hours for degree completion.

Students interested in taking courses not on the master list, including requirements for pre-Veterinary and pre-Medical students, must contact the undergraduate coordinator for approval.

Students can substitute appropriate graduate courses for electives, with approval of the undergraduate coordinator and permission of the instructor. To substitute a 5000-level course or higher, the student must have senior standing and a minimum junior/senior-level GPA of 3.0.

MASTER LIST

Code	Title	Credits
Physical Sciences		
Select 3-15 credits		
Any courses listed under Earth and Soil Science Core not counted towards the core requirement, as well as:		
EES 3008	Energy and Environment	
EES 4203	Phase Partitioning in the Environment	
GEO 2242	Extreme Weather (Gen Ed Physical Science)	
GEO 4281	River Forms and Processes	
GLY 2100C	Historical Geology	
GLY 3083C	Fundamentals of Marine Sciences	

GLY 3105C	Evolution of Earth and Life	
GLY 4155C	Geology of Florida	
GLY 4700	Geomorphology	
GLY 4734	Coastal Morphology and Processes	
GLY 4822	Groundwater Geology	
MET 3503	Weather and Forecasting	
PHY 2005 & 2005L	Applied Physics 2 and Applied Physics 2 Lab (Gen Ed Physical Science)	
PHY 2049 & 2049L	Physics with Calculus 2 and Laboratory for PHY 2049 (Gen Ed Physical Science)	
PHY 2054 & 2054L	Physics 2 and Laboratory for PHY 2054	
SWS 4204	Urban Soil and Water Systems	
SWS 4504	Aquatic Toxicology: Science and Applications	
SWS 4504	Aquatic Toxicology: Science and Applications (Environmental Pedology)	
Biological Sciences		
Select 6-15 credits		
Any courses listed under Ecology of Specific Systems Core not counted towards the core requirement, as well as		
AGR 3303	Genetics (Gen Ed Biological Science)	3
ALS 4162	Consequences of Biological Invasions	3
ANT 3514C	Introduction to Biological Anthropology (Gen Ed Biological Science)	4
BOT 2011C	Plant Diversity (Gen Ed Biological Science)	4
BOT 2710C	Practical Plant Taxonomy	3
BOT 3151C	Local Flora of North Florida	3
BSC 4821C	Evolutionary Biogeography	3
EES 4102	Wastewater Microbiology	2
ENY 3005 & 3005L	Principles of Entomology and Principles of Entomology Laboratory (Gen Ed Biological Science)	4
ENY 4161	Insect Classification (Gen Ed Biological Science)	3
ENY 4202	Ecology of Vector-Borne Disease	3
ENY 4210	Insects and Wildlife	3
ENY 4455C	Social Insects	3
ENY 4571	Honey Bee Biology	3
FAS 4105C	Field Ecology of Aquatic Organisms	3
FAS 4175	Algae Biology and Ecology	3
FAS 4270	Marine Ecological Processes	3
FAS 4271C	Invasion Ecology of Aquatic Animals	3
FAS 4364	Marine Adaptations: Environmental Physiology	3
FNR 3131C	Dendrology/Forest Plants	3
FNR 3133C	Tree Biology	3
FNR 3622 & 3622L	Fire Ecology and Management and Fire Ecology and Management Laboratory	3
GEO 4300	Environmental Biogeography	3
MCB 2000 & 2000L	Microbiology and Microbiology Laboratory	4
MCB 3020 & 3020L	Basic Biology of Microorganisms and Laboratory for Basic Biology of Microorganisms	4
PCB 2441	Biological Invaders (Gen Ed Biological Science)	3
PCB 3063	Genetics	4
PCB 3402	Disease Ecology and Evolution	3
PCB 3601C	Plant Ecology	3
PCB 4553	Population Genetics	4
PCB 4674	Evolution	4
PLP 3002C	Fundamentals of Plant Pathology	4
PLP 4653C	Basic Fungal Biology	4
PLS 3004C	Principles of Plant Science	3
PLS 4613	Aquatic Weed Control	3
SWS 4307	Ecology of Waterborne Pathogens	3
VME 4013	Aquatic Wildlife Health Issues	3
VME 4016	Manatee Health and Conservation	3
WIS 3401	Wildlife Ecology and Management	3

WIS 3402 & 3402L	Wildlife of Florida and Wildlife of Florida Laboratory	4
WIS 3410	The Ecology of Climate Change	3
WIS 3553C	Introduction to Conservation Genetics	4
WIS 4203C	Landscape Ecology and Conservation	3
WIS 4424	Large Mammal Ecology and Management	3
WIS 4454	Ecology of Bird Introductions and Invasions	3
WIS 4554	Conservation Biology	3
ZOO 4050	Animal Behavior	3
ZOO 4205C	Invertebrate Biodiversity	4
ZOO 4307C	Vertebrate Biodiversity	4
ZOO 4403C	Marine Biology	4
ZOO 4405	Sea Turtle Biology and Conservation	3
ZOO 4472C	Avian Biology	4
Human Dimensions		
Select 3-9 credits		
Any courses listed under Natural Resource Management Core, Environmental Ethics Core, and Environmental Policy & Law Core not counted towards the core requirement, as well as:		
ALS 3940	Challenge 2050: the Experience	3
AEC 3073	Intercultural Communication	3
AMH 3630	American Environmental History	3
ANT 2402	Anthropology of Sustainability	3
BCN 1582	International Sustainable Development	3
BSC 3402	Theory and Practice in the Biological Sciences	2
BSC 4055	Climate Change and Human Systems	3
CLA 2521	Classical Antiquity and Sustainability	3
DCP 3210	Sustainable Solutions for the Built Environment	3
DCP 3220	Social and Cultural Sustainability and the Built Environment	3
ENV 4601	Environmental Resources Management	3
FNR 3602	Society and Natural Resources	3
FNR 4304C	Urban Forestry	3
FYC 3401	Introduction to Social and Economic Perspectives on the Community (Gen Ed Social and Behavioral Science)	3
FYC 3521	Community Food Systems	3
GEA 2270	Geography of Florida	3
GEA 2601	Geography of Africa (Gen Ed Social and Behavioral Science and International; 6000 Words)	3
GEA 3500	Geography of Europe (Gen Ed Social and Behavioral Science and International)	3
GEA 4465	Amazonia	3
GEO 2006	Natural Hazards Geography (Gen Ed Social and Behavioral Science and International)	3
GEO 2315	Hungry Planet: Global Geographies of Food (Gen Ed Biological Science)	3
GEO 2500	Global and Regional Economies (Gen Ed Social and Behavioral Science, 6000 Words)	3
GEO 3352	The Human Footprint on Landscape	3
GEO 3430	Population Geography (Gen Ed Social and Behavioral Science)	3
GEO 3502	Economic Geography (Gen Ed Social and Behavioral Science; 6000 Words)	3
GEO 4033	Climate Change and Health	3
GEO 4034	Weather, Climate, and Society	3
HIS 3465	The Scientific Revolution	3
PHC 4320	Environmental Concepts in Public Health	3
PHI 3400	Philosophy of Natural Science	3
PSY 4625	The Psychology of Pseudoscience	3
SWS 4231C	Soil, Water and Land Use	3
SWS 4550	Soils, Water and Public Health	3
SYA 4930	Special Study (Climate Change & Society)	3
SYA 4930	Special Study (Environmental Change and Environmental Justice)	3
SYA 4930	Special Study (Introduction to Conservation Criminology)	3
SYD 3395	Sociology of Globalization	3
SYD 4020	Population	3
SYO 4530	Social Inequality	3
WIS 4551	Diverse Perspectives in Conservation	3
WOH 3404	Global History of Energy	3
WST 3610	Gender, Race and Science	3
WST 4002	Data Feminisms	3

WST 4349	Ecofeminism (4000 Words)	3
Additional Skills and Concepts		
Select 6-15 credits		
Any courses listed under Global and Hydrologic Systems Core and Methods and Technology Core not counted towards the core requirement[1], as well as:		
AEC 3030C	Effective Oral Communication	3
AGR 4212	Alternative Cropping Systems	3
ALS 3415	Challenge 2050: Developing Tools for Changing the World	3
BSC 4452	Computational Tools for Research in Biology	3
CHM 2200L	Fundamentals of Organic Chemistry Laboratory	1
CHM 2211 & 2211L	Organic Chemistry 2 and Organic Chemistry Laboratory	5
EES 4201	Water Chemistry	3
ENV 3040C	Computational Methods in Environmental Engineering	3
ENV 4041C	Environmental Analysis	4
EVS 4905	Individual Study in Environmental Science	1-3
EVS 4911	Supervised Research in Environmental Science	0-3
EVS 4915	Honors Thesis Research in Environmental Science	0-3
EVS 4932	Special Topics in Environmental Science	1-3
EVS 4949	Environmental Science Internship	1-3
FAS 4363	Marine Protected Areas	3
FNR 3410C	Natural Resource Sampling	3
FNR 3400C	Forest Resources Information Systems	3
GIS 2114	The World & Big Data	3
GIS 3001C	Geovisualization and Map Design	4
GIS 4037	Digital Image Processing	4
GIS 4021C	Aerial Photo Interpretation	3
GIS 4324	GIS Analysis of Hazard Vulnerability	3
MAC 2312	Analytic Geometry and Calculus 2	4
MAC 2313	Analytic Geometry and Calculus 3	4
MAC 2234	Survey of Calculus 2	3
MAP 2302	Elementary Differential Equations	3
MET 4750	Spatial Analysis of Atmospheric Data using GIS	3
PLS 4613	Aquatic Weed Control	3
SPC 2608	Introduction to Public Speaking	3
STA 3024	Introduction to Statistics 2	3
STA 4210	Regression Analysis	3
STA 4211	Design of Experiments	3
SUR 4380	Remote Sensing	3
SYA 4300	Methods of Social Research	4
URP 4000	Preview of Urban and Regional Planning	3

1 Students should not enroll in more than one of the following courses: FNR 3400C, GIS 3043, GIS 3072C, URP 4273, SWS 4720C.

2 No more than six credit hours from any combination of these courses (or equivalents) may be counted towards the degree.

3 Not all classes offered under this course number may be eligible for Additional Skills and Concepts credit. Check with your advisor or undergraduate coordinator.

Academic Learning Compact

Environmental Science is the science of humanity's role in natural systems, the basis of our economy. This program accesses courses university-wide and provides numerous opportunities for international study. Students will acquire reliable knowledge and interdisciplinary perspectives of complex environmental issues, gaining the full range of knowledge relevant to a professional understanding of complex environmental problems in the biological and physical sciences, ethics, economics, policy, and law.

Before Graduating Students Must

- Complete at least one course in each of the foundation areas.
- Complete requirements for the baccalaureate degree, as determined by faculty.

Students in the Major will Learn To

Student Learning Outcomes | SLOs

Content

1. Apply acquired knowledge of basic terminology, concepts, methodologies, and theories in the physical and biological sciences that describe environmental systems.
2. Apply acquired knowledge of essential concepts in the social sciences that describe human activity in the environment.

Critical Thinking

3. Develop reasoned solutions to environmental problems through application of the scientific method.

Communication

4. Communicate knowledge, ideas, and reasoning clearly, effectively, and objectively in both written and oral forms.

Curriculum Map

I = Introduced; R = Reinforced; A = Assessed

Courses	SLO 1	SLO 2	SLO 3	SLO 4
ENC 3254				I
EVS 3500	R	R	R	R
EVS 3000 and EVS 3000L	I	I	I	R
EVS 4021	A	A	A	A
Earth and Soil Sciences	R			
General Ecology	R		R	
Ecology of Specific Systems	R	R	R	
Environmental Ethics		R		R
Environmental Policy & Law		R		R
Global and Hydrologic Systems	R		R	
Natural Resource Management	R	R	R	
Methods & Technology	R		R	
Electives	R	R	R	R

ASSESSMENT TYPES

- Oral presentation or written essay