# **UNDERGRADUATE COUNCIL Request for Change(s)**

Originating unit requesting change	Environmental Science		
Type of Change requested:			
Course number(s)Course titleCourse description	Course prerequisite(s) Drop course(s) Drop program(s)	<ul> <li>Program title</li> <li>Program description</li> <li>Program requirements</li> </ul>	
Semester and year change(s) take effe	ect:	Fall 2020	
Appropriate computer abbreviation if course title is more than 30 spaces:			

Briefly summarize the change requested: Significant changes to prepare our students for solving environmental problems.

Catalog copy

Present catalog copy (paste-up from catalog is acceptable.	Proposed change(s). (Include exact catalog copy as desired. Underline changes)
See attached document	See attached document

### Request for Changes

- 1. What is the justification for the change(s) requested? The current degree requirements do not represent the best that we are now able to offer our students. Adequate solutions to environmental problems require not only scientific reasoning, but also well-informed ethical, political, economic, social, and cultural perspectives, and we want our curriculum to reflect this breadth.
- 2. If applicable, explain how the change(s) will affect the current program outcomes and assessment mechanisms. NA
- 3. **Faculty Resources:** How will the unit provide faculty support for this change and any other impact this change may have on other current departmental listings. This degree program reflects the current expertise and breadth of our department and, as such, will be easier to manage and support than our current degree.
- 4. Educational Resources: Will this change require additional resources not currently available (e.g. space, equipment, library, other)?

- If this change affects other units of the University, include a statement signed by the chairperson(s) of the affected unit(s). NA
- If cross-listed, provide evidence of approval by all curriculum committees appropriate to both the originating and cross-listed units. NA

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Approval signature of chairperson of originating unit

Revised 09/04

# Present catalog copy (paste-up from catalog is acceptable). Environmental Science BS

## Requirements

The program of study requires a minimum of 67 hours, on a 126-hour degree, consisting of:

Contemporary Issue	ore (31-32 sees in Biology	emester hours) 3	
Introductory Biolog	y I	3	
AND Introductory Biolog	y Lab I	1	
Ecology and the En Understanding the I Contemporary Envi Concepts in Environ Scientific Presentati	vironment Earth ronmental Issues nmental Science ions	3 3 3 3 1	
3hrs) From EN Environ Environ	V LEADERSH nmental Stewards nmental Sustainab	IP GROUP: hip Seminar ility	3 3
3hrs) From LA Geomo Soils in	ND SURFACE rphology the Environment	GROUP:	3 3
3hrs) From WA Rivers Physica Water a	ATER GROUP in the Landscape al Hydrology and Wastewater T	echnology	3 3 3
3hrs) From CO Natural Enviror	MPLIANCE G Resources Comp nmental Compliar	ROUP: liance ice	3 3
3hrs) From FIE Field M Wildlif Chemic	ELD RESEARC Methods The Research Projection Control Control Control Control Co	H GROUP: t vironmental Systems	3 3 3
Requirement	s (36-37 sem	ester hours)	
Genera	l Chemistry I		3
Genera	l Chemistry II		3
Genera	l Chemistry II Lal	ooratory	2
Genera	l Physics I with L	aboratory	4
Elemer	tary Statistics		3
Calculu OR	is I		4
Applied	d Calculus		3
	ental Science C Contemporary Issue OR Introductory Biolog AND Introductory Biolog Ecology and the En Understanding the I Contemporary Environ Scientific Presentati (3hrs) From EN Environ (3hrs) From LA Geomo Soils in (3hrs) From WA Rivers Physica Water a (3hrs) From CO Natural Environ (3hrs) From FIE Field M Wildlifi Chemic I Requirements Genera Genera Genera Genera Elemer Calculu OR Applied	ental Science Core (31-32 se Contemporary Issues in Biology OR Introductory Biology I AND Introductory Biology Lab I Ecology and the Environment Understanding the Earth Contemporary Environmental Issues Concepts in Environmental Science Scientific Presentations (3hrs) From ENV LEADERSHI Environmental Stewards Environmental Sustainab (3hrs) From LAND SURFACE Geomorphology Soils in the Environment (3hrs) From WATER GROUP Rivers in the Landscape Physical Hydrology Water and Wastewater T (3hrs) From COMPLIANCE G Natural Resources Comp Environmental Complian (3hrs) From FIELD RESEARC Field Methods Wildlife Research Project Chemical Analysis of En I Requirements (36-37 sem General Chemistry I General Chemistry I General Chemistry I I General Chemistry I I General Chemistry I I Core Applied Calculus	Antil Science Core (31-32 semester hours)         Contemporary Issues in Biology       3         OR       3         Introductory Biology I       3         AND       1         Ecology and the Environment       3         Understanding the Earth       3         Contemporary Environmental Issues       3         Contemporary Environmental Science       3         Scientific Presentations       1         (3hrs) From ENV LEADERSHIP GROUP:       Environmental Stewardship Seminar         Environmental Stewardship Seminar       Environmental Sustainability         (3hrs) From LAND SURFACE GROUP:       Geomorphology         Soils in the Environment       Soils in the Environment         (3hrs) From COMPLIANCE GROUP:       Rivers in the Landscape         Physical Hydrology       Water and Wastewater Technology         (3hrs) From FIELD RESEARCH GROUP:       Natural Resources Compliance         Environmental Compliance       Environmental Systems         (3hrs) From FIELD RESEARCH GROUP:       Field Methods         Wildlife Research Project       Chemical Analysis of Environmental Systems         (3hrs) From FIELD RESEARCH Project       Chemical Analysis of Environmental Systems         (3hrs) From Complexity I General Chemistry I       General Chemistry I

#### 18 additional hours of

Electives selected with regard to the interest of the student as approved by the department with no more than 6 hours outside the College of Science & Engineering.

## Proposed change(s). (Include exact catalog copy as desired. Underline changes) Environmental Science BS

## **Requirements**

The program of study requires a minimum of 69 hours, on a 126-hour degree, consisting of:

### FOUNDATIONS (10 hours)

BIOL 10513	Introductory Biology II	3
BIOL 10511	Introductory Biology Lab II	1
GEOL 10113	Understanding the Earth	3
ENSC 10143	Contemporary Environmental Issues	3

### FUNDAMENTALS (16 hours):

BIOL 30403	Ecology and the Environment	3
GEOL 30443	Earth Materials	3
GEOL 30313	Weather and Climate	3
ENSC 30143	Introduction to Sustainability Science	3
ENSC 40001	Scientific Presentations	1
ENSC elective*		3
* MUST HAVE PRI	IOR APPROVAL OF THE DEPARTMENT	

#### Choose 1 (3hrs) From REGULATORY GROUP:

ENSC 50693	Natural Resources Compliance	3
ENSC 50703	Environmental Compliance	3
ENSC 50713	Phase I and Phase II	3
ENSC 50743	Environmental Impact Statements	3

### Choose 1 (3hrs) From FIELD EXPERIENCE:

ENSC 30113	Sustainable Development in Costa Rica	3
ENSC 30453	Wildlife Research Project	3
ENSC 40013	Environmental Internship	3
ENSC 40603	South African Biodiversity and Human Development	3
ENSC elective*		3

\*MUST BE A FIELD EXPERIENCE AS APPROVED BY THE DEPARTMENT

## Associated Requirements (37 semester hours)

CHEM 10113	General Chemistry I	3
CHEM 10123	General Chemistry II	3
CHEM 10122	General Chemistry II Laboratory	2
PHYS 10154	General Physics I with Laboratory	4
MATH 10043	Elementary Statistics	3
MATH 10054	Precalc with Trig	4

#### 18 additional hours of

Electives selected with regard to the interest of the student as approved by the department with no more than 6 hours outside ENSC, BIOL & GEOL. Other courses from CSE may be approved by the advisor.