

# FLORIDA ATLANTIC UNIVERSITY™

UGPC APPROVAL \_\_\_\_\_

UFS APPROVAL \_\_\_\_\_

CATALOG \_\_\_\_\_

## Graduate Programs—PROGRAM CHANGE REQUEST

DEPARTMENT: ENVIRONMENTAL SCIENCE PROGRAM

COLLEGE: SCIENCE

PROGRAM NAME

MS IN ENVIRONMENTAL SCIENCE

**EFFECTIVE DATE**

(PROVIDE TERM/YEAR)

FALL 2014

PLEASE EXPLAIN THE REQUESTED CHANGE(S) AND OFFER RATIONALE BELOW AND/OR ATTACHED:

CHANGED NUMBER OF CREDIT HOURS FOR ELECTIVE AND CORE COURSES WHILE KEEPING TOTAL CREDIT HOUR REQUIREMENTS THE SAME, AND CLARIFIED CATALOG WORDING TO BE CONSISTENT WITH NEW RULES ON ALLOWABLE CREDIT HOURS INSTITUTED BY THE GRADUATE COLLEGE. SEE ATTACHED MEMO.

Faculty contact, email and complete phone number:

Dale Gawlik, [dgawlik@fau.edu](mailto:dgawlik@fau.edu), 561.297.3333

Consult and list departments that might be affected by the change and attach comments.  
None.

Approved by:

Department Chair:

College Curriculum Chair:

College Dean:

UGPC Chair:

Graduate College Dean:

UFS President:

Provost:

Date:

30-Oct-2013

15-Nov-2013

11/19/13

12/4/13

12-6-13



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## Memorandum

**To:** University Program Committee

**From:** Dale Gawlik, Director, Environmental Science Program

**Subject:** Catalog changes for MS in Environmental Science

**Date:** 30 October 2013

This memo requests approval for (1) changing the number of credit hours for core course requirements and electives while keeping unchanged the total number of credit hours required for the M.S. degree in Environmental Science, (2) the removal from the core curriculum of two courses:

(Groundwater Solute Transport Modeling GLY 6828; Environmental Planning and Society URP 6421), and (3) the addition to core curriculum of one existing course that adds to the degree content (Geographic Analysis of Population GEO 5435C). Changes to required and elective credit hours are needed to clarify course requirements.

Proposed changes to the catalog are shown in red below.

Catalog description:

### Thesis Option

A student curriculum consists of a minimum of 36 credits taken in the following four categories:

*Core Subject Areas:* 22-28 credits from the core subject areas and electives with at least one course from four different core subject areas.

*Electives:* No more than 9-6 credits of electives taken outside the core areas will be counted toward the degree, and no more than 6 credits may be 4000-level courses. No more than 3 credits of Directed Independent Study may be counted toward this degree.

*Thesis:* 6-12 credits (EVS 6971).

*Colloquium:* 2 credits or more.

### Non-Thesis Option

A student curriculum consists of a minimum of 36 credits taken in the following three categories:

*Core Subject Areas:* 34-25-31 credits from the core subject areas and electives with at least one course from four different core subject areas.

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Electives and Directed Independent Study. No more than 6 credits of electives taken outside the core areas will be counted toward the degree. Directed Independent Study: 3 credits (EVS 6905) required. Up to 3 additional credits may be taken as electives.

Electives: No more than 6 credits of electives taken outside the core areas will be counted toward the degree.

Colloquium: 2 credits or more.

Colloquium		
Environmental Sciences Colloquium Series (May be taken more than once.)	EVS 6920	1

Core Subject Areas		
<b>Chemistry</b>		
Chemistry for Environmental Scientists	CHS 6611	3
Advanced Environmental Geochemistry	GLY 5243	3
<b>Geographic Information Systems</b>		
Introduction to GIS in Planning	URP 6270	3
Principles of Geographic Information Systems	GIS 5051C	3
Applications in Geographic Information Systems	GIS 5100C	3
Programming in Geographic Information Systems	GIS 5103C	3
Remote Sensing of the Environment	GIS 5038C	3
Digital Image Analysis	GIS 5033C	3
Advanced Remote Sensing	GIS 6039	3
Hyperspectral Remote Sensing	GIS 6127	3
Topics in Geoinformation Science	GIS 6120	3
<b>Modeling</b>		
Groundwater Solute Transport Modeling	GLY 6828	3
Modeling Groundwater Movement	GLY 6836	3
Ecological Modeling	EVR 6070	3
Ecological Theory	PCB 6406	3
<b>Statistics</b>		
Environmental Design and Biometry	PCB 6456	4
<b>Conservation and Ecology</b>		
Biogeography	GEO 5305	3
Plants And People	GEO 6317	3
Environmental Restoration	EVR 6334	3
Flora of South Florida	BOT 5155	2
Flora of South Florida Lab	BOT 5155L	2
Coastal Plant Ecology	BOT 6606	2
Coastal Plant Ecology Lab	BOT 6606L	2

Conservation Biology	PCB 6045	3
Marine Ecology	PCB 6317	3
Advanced Ecology	PCB 6046	3
Marine Ecology Lab and Field Studies	PCB 6317L	2
Scientific Communication	BSC 6846	3
Freshwater Ecology	PCB 6307	3
Freshwater Ecology Lab	PCB 6307L	2
Symbiosis	BSC 6365	3
Environmental Physiology	PCB 6749C	4
Marine Geology	GLY 5736C	3
Advanced Topics in Applied, Coastal and Hydrogeology	GLY 5934	3
Regolith Geology	GLY 6707	3
Coastal Environments	GLY 6737	3
Shore Erosion and Protection	GLY 5575C	3
Global Environmental Change	GLY 6746	3
Environmental Geophysics	GLY 5457	3
Methods in Hydrogeology	GLY 6838	3
Natural History of the Indian River Lagoon	OCB 6810	3
Marine Global Change	OCE 6019	3
Seminar in Ichthyology	ZOO 6459	1-2
Marine Invertebrate Zoology	ZOO 6256	3
Marine Invertebrate Zoology Lab	ZOO 6256L	2
Natural History of Fishes	ZOO 6456	3
Natural History of Fishes Lab	ZOO 6456L	2

The Environmental Science Program Committee approved the proposed program changes on September 20, 2013 and on October 30, 2013 they were submitted for approval to the C.E.S. College of Science and the University.

<u>Director, Environmental Sciences Program</u>	<i>Dale Sandberg</i>	<u>Date 30 Oct 2013</u>
<u>Chair, C.E.S. College of Science Graduate Programs Committee</u>		<u>Date</u>
<u>Dean, C.E.S. College of Science</u>		<u>Date</u>
<u>Chair, University Graduate Programs Committee</u>		<u>Date</u>
<u>Dean, Graduate College</u>		<u>Date</u>
<u>President, University Faculty Senate</u>		<u>Date</u>