FLORIDA CT UNIVER	TLA SIT	<u>NTIC</u> Y™	UGPC APPROVAL UFS APPROVAL
Graduate Programs—PROGRAM	I CHA	NGE REQUEST	CATALOG
DEPARTMENT: ENVIRONMENTAL SCIENCE PROGRAM		College: Science	
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Faculty contact, email and complete phone number: Co No Dale Gawlik, <u>dgawlik@fau.edu</u> , 561.297.3333	onsult and li one.	st departments that might be a	ffected by the change and attach comments.
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Approved by: Dole Davlip   Department Chair: Dole Davlip   College Curriculum Chair: Provide Davlip   College Dean: Provide Davlip   UGPC Chair: Provide Davlip   Graduate College Dean: Provide Davlip	al Z	Danth Danth Ocp	Date:

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## Environmental Restoration Certificate

The Environmental Sciences Program offers the Environmental Restoration certificate for graduate students who wish to pursue an environmental restoration position upon graduation or for professionals looking to increase their knowledge base, advance professionally or change careers. The certificate is interdisciplinary, drawing on courses from environmental sciences, geosciences, biology, urban and regional planning and civil engineering. The certificate also includes considerable opportunity for experiential learning in the form of course field trips to actual restoration projects; internship opportunities with local, state and federal agencies conducting restoration; and primary research experiences with future, ongoing and recent environmental restoration projects in South Florida. These opportunities also provide the prospect of meeting, networking and interacting with professionals from public and private environmental restoration organizations.

The certificate consists of a minimum of 21 credits, including <u>four three</u> core courses, one internship or DIS <u>resulting in</u>, the completion of a restoration-related project, with a <u>completion</u> of a manuscript of publishable <u>quality paper</u> and <u>colloquium</u> presentation <u>based on the</u> <u>internship/DIS project</u>, and <u>two three</u> electives <u>each</u> chosen from <u>two of the three the two</u> elective foci (both elective foci must be represented). All courses must be completed with a grade of "C" or better to be counted toward the certificate.

Core Courses		
Environmental Systems and Processes	ENV-6668	3
Environmental Restoration	EVR 6334	3
Restoration Implementation and Management	EVR 6358	3
Conservation Biology	PCB 6045	3

Other Requirements

1. One internship with a public or private restoration organization or DIS focused on environmental restoration research. Internship (preferred) or DIS should be taken under Directed Independent Study (EVS 6905 or GEO 6908) for 3 credits.

2. <u>A final draft of a formal scientific journal style manuscript of publishable quality based upon</u> the restoration-related project completed under the internship or DIS.

<u>3.</u> Present the Internship/DIS-based paper in a 15-minute presentation during <u>the Environmental</u> Science <u>Colloquium</u> (EVS 6920) <del>or Geoscience (GEO 6920) Colloquium</del> courses.

Successful fulfillment of the manuscript and formal presentation will be assessed by a minimum of two of the members of the Restoration Certificate Committee of the Environmental Sciences Program Committee, or their designees.

Elective Foci (Choose a total of two-three electives, each from different focione from one elective focus area and two from the other focus area)

Ecology Electives		
Flora of South Florida and Flora of South Florida Laboratory	BOT 5155 and BOT 5155L	4
Coastal Plant Ecology and Coastal Plant Ecology Lab	BOT 6606 and BOT 6606L	4
Biogeography	GEO 5305	3
Coastal Environments	GLY 6737	3
Advanced Ecology	PCB 6046	3
Freshwater Ecology and Freshwater Ecology Laboratory and Field Studies	PCB 6307 and PCB 6307L	5
Marine Ecology and Marine Ecology Laboratory and Field Studies	PCB 6317 and PCB 6317L	5
Ecological Theory	PCB 6406	3
Environmental Physiology	PCB 6749C	4

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Policy and Planning Electives		
Urban Environmental Politics	PUP 6208	3
Environmental Planning and Society	URP 6421	3
Environmental Analysis in Planning	URP 6425	3
Environmental Policy and Programs	URP 6429	3

Planning and Engineering Electives		
Environmental Analysis in Planning	<u>URP 6425</u>	<u>3</u>
Environmental Policy and Programs	<u>URP 6429</u>	<u>3</u>
Soil Stabilization and Geosynthetics	CEG 6124	3
Open-Channel Hydraulics	CWR 6235	3
River Mechanics and Sediment Transport	CWR 6236	3
Stream, Lake and Estuarine Pollution	EES 6357	3
Contamination of Aquatic Sediment	ENV 6441	3
Shore Erosion and Protection	GLY 5575C	3