FLORIDA ATLANTIC UNIVERSITY	NEW/CHANGE PROGR Graduate Prog Department Marine Science and Oceane College Science	grams	UGPC Approval UFS Approval Banner Posted Catalog	
Program Name Marine Science a	nd Oceanography	New Program Change Program	Effective Date (TERM & YEAR) Fall 2022	
We request the BSC 6938 Marir	the requested change(s) and offer randdition of two courses to our approved one Science Seminar: The Marine Science only program, we have the support of the	electives: e seminar course is very re	levant to the Marine Science	
OCE 6265 Ocea this program cha	an Optics and Remote Sensing: This is a ange request.	new course which is being	g proposed in conjunction with	
Faculty Contact/ Peter McCarthy, po	Email/Phone mccart5@fau.edu, 6-2632	Consult and list departments that may be affected by the change(s) and attach documentation The Biology department agrees to this change (attached)		
	m Chair Millin Bovid Kulie		Date 1/14/2022 02/07/2022 02/07/22	

Email this form and attachments to $\underline{\text{UGPC@fau.edu}}$ one week before the UGPC meeting so that materials may be viewed on the UGPC website prior to the meeting.

Peter McCarthy

From: Marianne Porter

Sent: Monday, January 10, 2022 1:49 PM

To: Peter McCarthy **Cc:** Sarah Milton

Subject: Re: Adding Marine Science Seminar to MSO program

Hi Peter,

The Marine Science Seminar was originally meant to serve students studying marine sciences in the Department of Biological Sciences. As FAU programs have grown, the Marine Science and Oceanography programs would benefit from having this seminar included in their course list.

Please let me know if you need more information.

marianne

On Jan 5, 2022, at 11:35 AM, Peter McCarthy < PMCCART5@fau.edu > wrote:

Hi Marianne, Happy New Year!

I would like to officially add your spring Marine Science seminar course (BSC 6938) as an elective for the MSO program as many students take it but it is not on our course list. To do that I need to "Consult and list departments that may be affected by the change and attach documentation" to the program change form. Could you please write up a paragraph approving this use of your course? I am copying Sarah as both you and she will have to sign.

Thanks, Peter

Peter J. McCarthy, Ph.D.

Research Professor Marine Biomedical and Biotechnology Research

Associate Director for Education

Harbor Branch Oceanographic Institute Florida Atlantic University 5600 US#1 North Fort Pierce, FL 34946 (772) 242 2632 (772) 468 0757 (Fax) pmccart5@fau.edu

Master of Science with Major in Marine Science and Oceanography

This is an interdisciplinary program designed to provide students with specialized training in Marine Science and Oceanography. It is jointly administered by the Charles E. Schmidt College of Science (CESCS) and the Harbor Branch Oceanographic Institute (HBOI). Participating faculty have appointments at CESCS and HBOI.

Students are required to take most of the coursework spread across the core subject areas listed below. The exact courses taken are to be determined by students and their advisory committees. Application deadline is January 15 for the fall semester and October 15 for the spring semester.

Admission Requirements

In addition to meeting all of the University and College admission requirements for graduate study, each applicant for the M.S. with Major in Marine Science and Oceanography must:

- 1. Have minimum GRE scores of 151 (verbal) and 151 (quantitative). GRE scores more than five years old will not be accepted.
- 2. Have a minimum 3.0 GPA for the last 60 credits of undergraduate work.
- 3. Provide two letters of recommendation.
- 4. Obtain a "sponsor" from within the faculty of this master's program who will then act as the student's advisor until a thesis topic has been chosen.

For sponsor selection suggestions, students should go to the departmental webpages to examine the fields and interests of individual faculty members. Once students find a faculty member in their field of interest, they should contact the faculty member directly. The student's application package must contain a signed sponsor form from the selected faculty member.

Degree Requirements

Students may graduate with a thesis or non-thesis master's degree; both require the successful completion of 37 credits as described below.

Thesis Option

A student curriculum consists of a minimum of 37 graduate credits taken in the following three categories:

Required Courses: Four courses (10 credits) are required for all students in the master's degree program in Marine Science and Oceanography.

Required Courses				
Physical and Geological Oceanography	OCE 6097	3		
Biological Oceanography	OCB 6066	3		
Chemical Oceanography	OCC 6050	3		
Marine Science and Oceanography Colloquium	OCE 6922	1		
Total Research Core				

Electives: 15 to 21 credits from the approved course list. Up to 6 credits designated as "Special Topics" courses may be taken with the approval of the thesis advisor. No more than 6 credits of electives taken outside the approved course list will be counted toward the degree. No courses under the 5000 level may be taken. No more than 3 credits of Marine Science and Oceanography Directed Independent Research (OCE 6908) may be counted toward this degree.

Thesis: 6 to 12 credits (OCE 6972).

Non-Thesis Option

A student curriculum consists of a minimum of 37 credits taken in the following three categories:

Required Courses: Four courses (10 credits) are required for all students in the master's degree program in Marine Science and Oceanography.

Required Courses				
Physical and Geological Oceanography	OCE 6097	3		
Biological Oceanography	OCB 6066	3		
Chemical Oceanography	OCC 6050	3		
Marine Science and Oceanography Colloquium	OCE 6922	1		
Total Research Core				

Electives: A minimum of 24 credits from the approved course list. Up to 6 credits designated as "Special Topics" courses may be taken with the approval of the student's advisor.

No more than 6 credits of electives taken outside the approved course list will be counted toward the degree. No courses under the 5000 level may be taken. No more than 3 credits of Marine Science and Oceanography Directed Independent Research (OCE 6908) may be counted toward this degree.

Approved Course List		
Coastal Plant Ecology	BOT 6606	2
Coastal Plant Ecology Lab	BOT 6606L	2
Advances in Finfish Aquaculture	BSC 6342	3
Introduction to Marine Biotechnology	BSC 6346	3
Scientific Communication	BSC 6846	3
Special Topics (such as Marine Conservation)	BSC 6936	1-4
Marine Science Seminar	BSC 6938	<u>1</u>
Chemistry for Environmental Scientists	CHS 6611	3
Restoration Implementation and Management	EVR 6358	3
Biogeography	GEO 5305	3
Digital Image Analysis	GIS 5033C	3
Remote Sensing of the Environment	GIS 5038C	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
Advanced Remote Sensing	GIS 6039	3
Topics in Geoinformation Science	GIS 6120	3
Hyperspectral Remote Sensing	GIS 6127	3
Environmental Geochemistry	GLY 5243	3
Shore Erosion and Protection	GLY 5575C	3
Marine Geology	GLY 5736C	3
Comparative Carbonate Sedimentology	GLY 6352	3
Beach Morphodynamics of Southeast Florida	GLY 6708C	3
Coastal Environments	GLY 6737	3

Global Environmental Change	GLY 6746	3
Methods in Hydrogeology	GLY 6838	3
Coastal Hazards	GLY 6888	3
Special Topics in Applied Geology	GLY 6934	3
Coral Reef Ecosystems	OCB 6266	3
Coral Reef Ecosystems Lab	OCB 6266L	1
Data Processing and Modeling of Marine Systems	OCB 6673	3
Marine Fisheries Ecology and Management	OCB 6715C	4
Natural History of the Indian River Lagoon	OCB 6810	3
Image and Video Processing and Vision in Marine Environment	OCE 5266	3
Marine Global Change	OCE 6019	3
Dynamics of Marine Biogeochemical Processes	OCE 6096	3
Ocean Optics and Remote Sensing	OCE 6265	<u>3</u>
Underwater Optical Imaging for Marine Scientists	OCE 6267	3
Ocean Monitoring Systems	OCE 6268	3
Marine Optics	OCE 6269	3
Conservation Biology	PCB 6045	3
Advanced Ecology	PCB 6046	3
Marine and Estuarine Community Dynamics	PCB 6316	3
Marine Ecology	PCB 6317	3
Marine Ecology Lab and Field Studies	PCB 6317L	2
Ecological Theory	PCB 6406	3
Experimental Design and Biometry	PCB 6456	3
Advanced Multivariate Biometry	PCB 6457	3
Marine Molecular Biology	PCB 6465	3
Aquatic Animal Health	PCB 6772	3
Physiology of Marine Animals	PCB 6775	3
Sensory Biology and Behavior of Fishes	PCB 6871	3
Marine Invertebrate Zoology	ZOO 6256	3
Marine Invertebrate Zoology Lab	ZOO 6256L	2
The Biology of Sea Turtles	ZOO 6406	3
Biology of Sharks and Their Relatives	ZOO 6409	3
Natural History of Fishes	ZOO 6456	3
Natural History of Fishes Lab	ZOO 6456L	2
Seminar in Ichthyology	ZOO 6459	3