

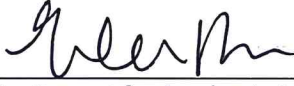
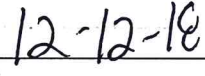
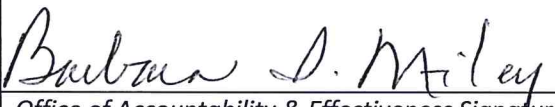
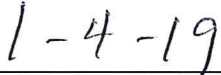


**Curriculum Committee**



**New Course Proposal**

<b>School or Division</b>	School of Pure and Applied Sciences
<b>Program or Certificate</b>	
<b>Proposed by (faculty only)</b>	Dr. Michael Sauer
<b>Presenter (faculty only)</b>	Dr. Michael Sauer
Note that the presenter (faculty) listed above must be present at the Curriculum Committee meeting or the proposal will be returned to the School or Division and must be submitted for a later date.	
<b>Submission date</b>	11/9/2018
<b>Course prefix, number, and title</b>	OCE 1013C Marine Science
All Curriculum proposals require approval of the Curriculum Committee and the Interim Provost for Academic Affairs. Final approval or denial of a proposal is reflected on the completed and signed proposal.	
<input checked="" type="checkbox"/> Approve <span style="margin-left: 200px;"><input type="checkbox"/> Do Not Approve</span>	
 _____ <i>Curriculum Committee Chair Signature</i>	 _____ <i>Date</i>
<input checked="" type="checkbox"/> Approve <span style="margin-left: 200px;"><input type="checkbox"/> Do Not Approve</span>	
 _____ <i>Interim Provost for Academic Affairs Signature</i>	 _____ <i>Date</i>
All Curriculum proposals require review by the Office of Accountability & Effectiveness.	
<input checked="" type="checkbox"/> Reviewed <span style="margin-left: 200px;"><input type="checkbox"/> Not Reviewed</span>	
 _____ <i>Office of Accountability &amp; Effectiveness Signature</i>	 _____ <i>Date</i>

**Section I, Important Dates and Endorsements Required**

**NOTE:** Course and Program changes must be submitted by the dates listed on the published Curriculum Committee Calendar. Exceptions to the published submission deadlines must receive prior approval from the Interim Provost for Academic Affairs' Office.

<b>Term in which approved action will take place</b>	Fall 2019
<b>Provide an explanation below for the requested exception to the effective date.</b>	

<b>Any exceptions to the term start date requires the signatures of the Academic Dean and Interim Provost for Academic Affairs prior to submission to the Dropbox.</b>		
<b>Dean</b>	<b>Signature</b>	<b>Date</b>
<b>Interim Provost for Academic Affairs</b>	<b>Signature</b>	<b>Date</b>
Dr. Eileen DeLuca		

<b>Required Endorsements</b>	<b>Type in Name</b>	<b>Select Date</b>
<b>Department Chair or Program Coordinator/Director</b>	Dr. Peggy Romeo	10/15/2018
<b>Academic Dean or Interim Provost for Academic Affairs</b>	Dr. Martin McClinton	10/15/2018

<b>List all faculty endorsements below. (Note that proposals will be returned to the School or Division if faculty endorsements are not provided).</b>
Dr. Michael Sauer, Dr. Jon MacKenzie, Professor Emily Porter, Dr. Greg Poulakis, Dr. Brandi George, Dr. Peggy Romeo, Dr. Joe Van Gaalen (adjunct geology)

Has the Libraries' Collection Manager been contacted about the new course and discussed potential impacts to the libraries' collections?
No

**Section II, New Course Information (must complete all items)**

<b>List course prerequisite(s) and minimum grade(s) (must include minimum grade if higher than a "D").</b>	SB 1720 Testing Exemption or successful completion of all Developmental courses
<b>Provide justification for the proposed prerequisite(s).</b>	Students need to be able to read & write at the College level, as well as perform scientific calculations; this is the same prerequisite as similar courses
<b>Will students be taking any of the prerequisites listed for this course in different parts of the same term (ex. Term A and Term B)?</b>	No
<b>List course co-requisites.</b>	None
<b>Provide justification for the proposed co-requisite(s).</b>	
<b>Is any co-requisite for this course listed as a co-requisite on its paired course?</b>	No
<b>Course credits or clock hours</b>	3.0
<b>Contact hours (faculty load)</b>	4.0
<b>Are the Contact hours different from the credit/lecture/lab hours?</b>	Yes, 2 hours lecture and 2 hours lab
<b>Select grade mode</b>	Standard Grading (A, B, C, D, F)
<b>Credit type</b>	College Credit
<b>Possible Delivery Types (Online, Blended, On Campus)</b>	On Campus, Online
<b>Course description (provide below)</b>	
This course will investigate the living and non-living components of aquatic ecosystems with a focus on current, local, marine, estuarine, and riverine issues. Students will learn foundational concepts in physical, chemical, geological, and biological oceanography and use them to analyze and discriminate between different open ocean and coastal ecosystems, evaluate the role of freshwater and water quality on coastal food webs, and explain the impact of humans on these systems. This course is intended to provide ample opportunity for laboratory and field trip investigations of the marine, estuarine, and riverine world using contemporary oceanographic instrumentation and technologies.	

<b>General topic outline (type in outline below)</b>
<ul style="list-style-type: none"> <li>• Chemistry of Water and Seawater</li> <li>• Atmospheric and Oceanic Circulation</li> <li>• Tides and Estuarine Circulation</li> <li>• Regional and Seasonal Primary productivity</li> <li>• Coastal Food Webs and Ecosystems</li> <li>• Human impacts on global and coastal ocean ecosystems</li> <li>• Oceanographic measurements, instrumentation, and methods</li> </ul>

**Learning Outcomes:** For information purposes only.

#### **IV. Course Competencies, Learning Outcomes and Objectives**

##### **A. General Education Competencies and Course Outcomes**

##### **1. Integral General Education Competency or competencies: EVALUATE**

- Investigate living and non-living components of coastal aquatic ecosystems
- Justify how physical and chemical properties of seawater are important to marine life
- Analyze aquatic ecosystem function and identify its key components
- Collect oceanographic data using standard methods and technology
- Synthesize the processes and properties responsible for open ocean and estuarine circulation
- Compare and contrast the processes and variations in aquatic primary productivity
- Evaluate the structure and dynamics of marine food webs
- Scrutinize the role of humans on coastal marine ecosystems
- Obtain and interpret water quality data through the use of various technological platforms
- Explain the role of tides and rivers in developing coastal and estuarine dynamics
- Compare different coastal ecosystems and defend their importance to ocean health
- Analyze the role of the ocean in global climate and climate's impacts on coastal resources
- Apply knowledge of aquatic ecosystems to current coastal resource issues in Florida

**Copy and Paste the SCNS Course Profile Description below ([http://scns.fldoe.org/scns/public/pb\\_index.jsp](http://scns.fldoe.org/scns/public/pb_index.jsp)).**

This course will investigate living and non-living components of aquatic ecosystems. Students will learn how aquatic ecosystems function naturally as well as how human activity can alter these ecosystems. The course is built around field trip(s) and lab work during which students will obtain water quality data from a local aquatic environment. Through field trip(s) and lab work, students will gain appreciation for the local relevance of course material. For both majors and non-majors, a key outcome of such experiences will be gaining experience in using inquiry and reasoning through the scientific method and becoming comfortable with data, technology, and instrumentation. Problem-solving, interpretation of data, and class discussions will be key components of this course.

<b>ICS code for this course</b>	ADVANCED AND PROFESSIONAL - 1.11.19 - PHYSICAL SCIENCES
<b>Institutional Reporting Code</b>	11119 PHYSICAL SCIENCE
<b>Degree Attributes</b>	AA - AA COURSE
<b>Degree Attributes (if needed)</b>	Choose an item.
<b>Degree Attributes (if needed)</b>	Choose an item.
<b>Degree Attributes (if needed)</b>	Choose an item.
<b>Should any major restriction(s) be listed on this course? If so, select "yes" and list the appropriate major restriction code(s) or select "no".</b>	No

Revised: 11/11, 6/12, 6/13, 7/14, 8/15, 8/16, 8/17, 5/18, 6/18

Is the course an "International or Diversity Focus" course?	No, not International or Diversity Focus
Is the course a General Education course?	Yes
Is the course a Writing Intensive course?	No
If Replacing a course, combining a Lecture/Lab or splitting a C course – Is there a course equivalency?	
Is the course repeatable*?	No
Do you expect to offer this course three times or less (experimental)?	No

<b>Impact of Course Proposal</b>	
Will this new course proposal impact other courses, programs, departments, or budgets?	No
If the answer to the question above is "yes", list the impact on other courses, programs, or budgets?	
Have you discussed this proposal with anyone (from other departments, programs, or institutions) regarding the impact? Were any agreements made? Provide detail information below. No	

### **Section III, Justification for proposal**

<b>Provide justification (below) for this proposed curriculum action.</b>
<ul style="list-style-type: none"> <li>• Reduce overall course offerings in our area which have been diluted by too many courses resulting in non-capacity classes</li> <li>• Combine similar courses (OCE/OCB) in a manner that emphasizes abiotic and biotic influences on ecosystem function</li> <li>• Add lab back to the lecture course per student expectations for hands-on learning and scientific inquiry, coursework of previous non-lab/lecture was consistent with a lab course – students were not credited for that work</li> <li>• Provide a focus on current marine, estuarine, and local environmental issues against a backdrop of regional marine and riverine issues that will train non-science students on current problems in SW Florida that aren't addressed in other classes</li> </ul>