FAU

FLORIDA ATLANTIC UNIVERSITY

COURSE CHANGE REQUEST
Graduate Programs

Department Marine Science and Oceanography

College Science

UGPC Approval _____
UFS Approval _____
SCNS Submittal _____
Confirmed _____
Banner Posted _____
Catalog _____

***Current* Course Prefix and Number**	OCB 6266	***Current* Course Title**	Coral Reef Ecosystems

*Syllabus must be attached for **ANY** changes to current course details. See Guidelines. Please consult and list departments that may be affected by the changes; attach documentation.*
Biology

Change title to:

Change prefix
From: **To:**

Change course number
From: **To:**

Change credits*
From: **To:**

Change grading
From: **To:**

*Review Provost Memorandum

Change description to:

Change prerequisites/minimum grades to:
Permission of instructor

Change corequisites to:

Change registration controls to:

Please list existing and new pre/corequisites, specify AND or OR and include minimum passing grade.

Effective Date *(TERM & YEAR)* Spring 2018

Terminate course
List final active term

Faculty Contact/Email/Phone Joshua Voss; jvoss2@fau.edu; 772-242-2538

Approved by	***Date***
Department Chair	7/10/17
College Curriculum Chair	8/29/2017
College Dean Dr. Charles Roberts	8/29/2017
UGPC Chair	
Graduate College Dean	
UFS President	
Provost	

Email this form and syllabus to UGPC@fau.edu one week before the UGPC meeting.

GRADUATE COLLEGE
AUG 29 2017

FAUchangecourseGR, created August 2016

Course Syllabus for Coral Reef Ecosystems

1. **Course title/number, number of credit hours:**
   Coral Reef Ecosystems – OCB 6266 – 3 credit hours

2. **Course prerequisites**
   a. Permission of instructor

3. **Course logistics**
   a. Term – Spring 2018
   b. Class location and time – Thursdays 1:00-3:50. MC 209.

4. **Instructor contact information**
   a. Instructor's name – Joshua Voss
   b. Office address –Harbor Branch Lab II, Room 121
   c. Office hours – By appointment or immediately after class
   d. Contact telephone number – office (772) 242-2538, fax (772) 468-0757
   e. E-mail address – jvoss2@fau.edu

5. **TA contact information (if applicable)**
   a. TA name: Michael Studivan (Ph.D. Candidate)
   b. Office address –Harbor Branch Lab II, Room 124
   c. Office hours – By appointment or immediately after class
   d. Contact telephone number – office (772) 242-2304, fax (772) 468-0757
   e. E-mail address – mstudiva@fau.edu

6. **Course description**
   Explores the structure, biology, ecology, significance, and current status of coral reef ecosystems though a combination of lectures and discussions.

7. **Course objectives/student learning outcomes**
   Students will be able to:

   a. Identify common coral reef species and understand their ecological roles, with emphasis on Florida and the Caribbean.
   b. Understand fundamental ecological concepts as they apply to coral reefs and reef organisms.
   c. Describe and understand threats to and conservation strategies for coral reef ecosystems.
   d. Understand contemporary field and laboratory methods for investigating coral reef ecosystems.

8. **Course evaluation method**

Two exams, a midterm and a final, will each account for 25% of the student's cumulative performance. Leadership of and participation in discussions will account for 20% of the student's cumulative performance. An independent research paper will account for 15% of the student's cumulative performance. A presentation related to the research paper will account for 15% student's cumulative performance. The overall grade in the course is derived from the cumulative performance according to the following table.

9. Course grading scale (optional)

Cumulative Performance	Grade
>93%	A
>90% - 93%	A-
>87% - 90%	B+
>83% - 87%	B
>80% - 83%	B-
>75% - 80%	C+
>65% - 75%	C
>60% - 65%	C-
>57% - 60%	D+
>53% - 57%	D
>50% - 53%	D-
<50%	F

10. Policy on makeup tests, late work, and incompletes

If a student cannot attend an exam or hand in a homework project on time due to circumstances beyond their control then the instructor may assign appropriate make-up work. Students will not be penalized for absences due to participation in University-approved activities, including athletic or scholastics teams, musical and theatrical performances, and debate activities. These students will be allowed to make up missed work without any reduction in the student's final course grade. Reasonable accommodation will also be made for students participating in a religious observance. Also, note that grades of Incomplete ("I") are reserved for students who are passing a course but have not completed all the required work because of exceptional circumstances. A grade of "I" will only be given under certain conditions and in accordance with the academic policies and regulations put forward in FAU's University Catalog. The student must show exceptional circumstances why requirements cannot be met. A request for an incomplete grade has to be made in writing with supporting documentation, where appropriate.

11. Special course requirements (if applicable)

N/A

12. Classroom etiquette policy (if applicable)

University policy on the use of electronic devices states: "In order to enhance and maintain a productive atmosphere for education, personal communication

devices, such as cellular telephones and pagers, are to be disabled in class sessions."

13. Disability policy statement

In compliance with the Americans with Disabilities Act (ADA), students who require special accommodation due to a disability to properly execute coursework must register with the Office for Student Accessibility Services (SAS) - in Boca Raton, SU 133 (561- 297- 3880) – and follow all SAS procedures

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14. Honor Code policy statement

Students at Florida Atlantic University are expected to maintain the highest ethical standards. Academic dishonesty, including cheating and plagiarism, is considered a serious breach of these ethical standards, because it interferes with the University mission to provide a high quality education in which no student enjoys an unfair advantage over any other. Academic dishonesty is also destructive of the University community, which is grounded in a system of mutual trust and places high value on personal integrity and individual responsibility. Harsh penalties are associated with academic dishonesty. For more information, see University Regulation 4.001 at http://www.fau.edu/regulations/chapter4/Reg_4.001_5-26-10_FINAL.pdf

15. Required texts/readings

Sheppard, C, S. Davy, and G. Pilling. 2009. The Biology of Coral Reefs. Oxford University Press. 352 pp. ISBN-13: 9780198566366

Humann, N, and P. Deloach. 2013. REEF CORAL Identification: Florida, Caribbean, Bahamas, Third Edition. New World Publications, Inc. 276 pp. ISBN-13: 9781878348548

16. Supplementary/recommended readings (optional)

Veron, J.E.N. 2008. A Reef in Time. Harvard University Press. 304 pp. ISBN-13: 9780674034976

Warner, G.F. 2012. Corals of Florida and the Caribbean. University Press of Florida. 224 pp. ISBN-13: 9780813041650

Selected articles to be provided from scientific journals including:

Hughes, Terry P., et al. "Assembly rules of reef corals are flexible along a steep climatic gradient." Current Biology 22.8 (2012): 736-741.

Bourne, David G., et al. "Microbial disease and the coral holobiont." Trends in microbiology 17.12 (2009): 554-562. Lesser, Michael P., Marc Slattery, and

James J. Leichter. "Ecology of mesophotic coral reefs." Journal of Experimental Marine Biology and Ecology 375.1 (2009): 1-8.

Allemand, Denis, et al. "Coral calcification, cells to reefs." Coral reefs: an ecosystem in transition. Springer Netherlands, 2011. 119-150.

Budd, Ann F., et al. "Taxonomic classification of the reef coral family Mussidae (Cnidaria: Anthozoa: Scleractinia)." Zoological Journal of the Linnean Society 166.3 (2012): 465-529.

Ainsworth, Tracy D., Rebecca Vega Thurber, and Ruth D. Gates. "The future of coral reefs: a microbial perspective." Trends in Ecology & Evolution 25.4 (2010): 233-240.

Fabricius, Katharina E. "Effects of terrestrial runoff on the ecology of corals and coral reefs: review and synthesis." Marine pollution bulletin 50.2 (2005): 125-146.

Zimmer, B. "Coral reef restoration: an overview" in Precht, William F., ed. Coral reef restoration handbook. CRC Press (2006): 39-59.

Mumby, Peter J., Alan Hastings, and Helen J. Edwards. "Thresholds and the resilience of Caribbean coral reefs." Nature 450.7166 (2007): 98-101.

17. Course topical outline

Date	Week	Topic	Assigned Readings
11-Jan	1	Course introduction: defining coral reef ecosystems	Sheppard 1-19 (after class)
18-Jan	2	Reef distributions, formations, and zonation	Sheppard 20-32, 66-91, Hughes et al. (pdf)
25-Jan	3	Coral holobiont	Sheppard 33-46, 98-127
1-Feb	4	Coral microbiomes	Bourne et al. (pdf)
8-Feb	5	Calcification, reef structure, and bioerosion	Sheppard 62-65, Allemand (pdf)
15-Feb	6	Caribbean coral identification and systematics	Veron 37-45 (pdf), Budd et al. (pdf)
22-Feb	7	Coral biogeography and reticulate evolution	Veron 150-161 (pdf)
1-Mar	8	Mid Term Exam, Mesophotic and deep coral reefs	Lesser et al. (pdf)
8-Mar	9	No Class, Spring Break	
15-Mar	10	Microbes and their roles in coral reef ecology	Sheppard 130-145, Ainsworth et al. (pdf)
22-Mar	11	Land and sea interactions on coral reefs	Fabricius et al. (pdf)
29-Mar	12	Overexploitation of coral reef resources	Sheppard 278-293
5-Apr	13	Papers Due, Coral reefs in a changing climate	Sheppard 239-253
12-Apr	14	Coral resilience, restoration, and the future of coral reefs	Zimmer et al. (pdf), Mumby et al. (pdf)
19-Apr	15	Student presentations and Final Exam	