Syllabus
OCB 4032 (CRN 17924)
Marine Biodiversity
Lead Instructor: M. Dennis Hanisak
2017 Instructors: Drs. Dennis Hanisak, Joshua Voss, Jim Masterson, Greg O-Corry-Crowe

1. **Course title/number, number of credit hours:** OCB 4032 Marine Biodiversity, 3 credits
2. **Prerequisites:** CHM 2045 Minimum Grade of C-, and CHM 2045L Minimum Grade of C-, and CHM 2046 Minimum Grade of C-, and CHM 2046L Minimum Grade of C-
   Corequisites: OCB4032 and OCB 4032L are corequisites of each other
3. **Course Logistics:**
   a. Term: Spring 2017
   b. Online course status: The course is not offered online.
   c. Class location and time: Room MC 210, Johnson Education Center, Harbor Branch Oceanographic Institute at Florida Atlantic University, Fort Pierce; Mondays and Thursdays 0900-1020 a.m.
4. **Lead Instructor Contact Information:**
   M. Dennis Hanisak, Ph.D.; Room 135, Lab 2 Building, HBOI-FAU
   Office hours: Friday 11 a.m-1pm.; also available in the classroom 15 minutes before and after each class and by appointment
   Phone: (772) 242-2306 E-mail: dhanisak@hboi.fau.edu

   Co-Instructors Contact Information:

Joshua Voss, Ph.D.	Phone: (772) 242-2538	E-mail: jvoss2@hboi.fau.edu
Jim Masterson, Ph.D.	Phone: (772) 242-2417	E-mail: jmaster7@hboi.fau.edu
Greg O-Corry-Crowe, Ph.D.	Phone: (772) 242-2628	E-mail: gocorryc@hboi.fau.edu

5. **TA Contact Information:**
   Danielle Dodge; Room 124, Lab 2 Building, HBOI-FAU
   E-mail: ddodge2015@fau.edu
6. **Course Description:** OCB 4032 is a challenging course that explores the diversity of marine microbes, algae, plants, and animals, with emphasis on the marine biota of Florida.
7. **Course Objectives/Student Learning Outcomes:**
   a. To become familiar with the taxonomy and general classification of marine organisms, with special reference to the marine biota of Florida;
   b. To gain an appreciation for the ecological significance of these organisms;
   c. To gain an appreciation for the factors, both natural and anthropogenic, that affect marine biodiversity.
8. **Course Evaluation Methods:**

   Final grades will be determined by averaging together grades for five activities:

Exam 1	25%
Exam 2	25%
Exam 3 (Final)	25%
Research Written Paper	15%
Quizzes	10%

   Details:
   Exams: There will be 3 exams, each covering about a third of the course material. The exams

will be a mix of objective questions and short answer; there may be some longer essay questions.

Research Written Paper: The topic of the research paper will be a marine biodiversity-related issue, as it relates to a single species (plant, protest, or animal), or a group of related species. In addition to the lecture material, the text by Thorne-Miller is an excellent source of ideas and references. The topic could be one not covered in class at all, or an elaboration of a subject that was covered. The primary literature on the topic should be read, synthesized, and analyzed. During your research, you should use the library resources at HBOI, the library resources available through FAU, and sources on the Internet, all of which should be appropriately cited. Keep in mind that much of the material on the web is "unedited", and you should be careful in selecting these sources. Publications in scientific journals and reports from government agencies are the most accepted and reliable sources. The topic and a brief outline (ca. 1 page, plus at least three key references) should be submitted for approval by **February 1.** Feel free to discuss possible topics at any time. All written papers (10-20 pages, doubled spaced, 12 pt. font, 1-inch margins) are due on **March 3**.

Quizzes: Periodically during the semester, the instructors will be giving short (10 minute) pop quizzes on previous lectures/assigned readings, with the goal of encouraging all students to review previous lecture material and the readings.

9. **Course Grading Scale:**

Percentage Score:	Grade:	Percentage Score:	Grade:
92% - 100%	A	72% - 77%	C
90% - 91%	A-	70% - 71%	C-
88% - 89%	B^+	68% - 69%	D^+
82% - 87%	B	62% - 67%	D
80% - 81%	B-	60% - 61%	D-
78% - 79%	C^+	0% - 59%	F

10. **Policy on Make-up 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:** None.

12. **Classroom Etiquette Policy:** Per the University's policy on the use of electronic devices: "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. **Attendance Policy Statement**

Students are expected to attend all of their scheduled University classes and to satisfy all academic objectives as outlined by the instructor. The effect of absences upon grades is determined by the instructor, and the University reserves the right to deal at any time with

individual cases of non-attendance.

Students are responsible for arranging to make up work missed because of legitimate class absence, such as illness, family emergencies, military obligation, court-imposed legal obligations or participation in University- approved activities. Examples of University-approved reasons for absences include participating on an athletic or scholastic team, musical and theatrical performances and debate activities. It is the student's responsibility to give the instructor notice prior to any anticipated absences and within a reasonable amount of time after an unanticipated absence, ordinarily by the next scheduled class meeting. Instructors must allow each student who is absent for a University-approved reason the opportunity to make up work missed without any reduction in the student's final grade as a direct result of such absence.

14. **Disability Policy Statement**: In compliance with the Americans with Disabilities Act (ADA), students who require reasonable accommodations due to a disability to properly execute coursework must register with the Office of Student Accessibility Services (SAS) and follow all SAS procedures. SAS has offices across three of FAU's campuses- Boca Raton, Davie, and Jupiter, however, disability services are available for students on all campuses.

15. **Code of Academic Integrity Policy Statement:** Students at Florida Atlantic University are expected to maintain the highest ethical standards. Academic dishonesty 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/ctl/4.001_Code_of_Academic_Integrity.pdf.

16. **Recommended Text/Readings:**

Main Textbook: Levinton, J.S. 2008. Marine Biology: Function, Biodiversity, Ecology. Third Edition. Oxford University Press, New York, 640 pp. ISBN13: 9780195326949

Supplementary/Recommended: In some cases, additional readings will be distributed to the class, or placed on reserve at the Harbor Branch Library. All students will have access to the library during the semester. Lectures and other materials will be regularly posted on Blackboard; students are expected to login to Blackboard frequently.

17. Course Topical Outline (Schedule of Classes):

Class Schedule for 2017 will remain the same as 2016, dates to be updated

Semester By The Sea 2016

Class Schedule: Marine Biodiversity (OCB 4032)

Lead Instructor: Dr. Dennis Hanisak, 772-242-2306; e-mail: dhanisak@hboi.fau.edu

Office: Room 135, Lab 2 Building (HBOI)

Lectures: Monday and Thursday 9:00-10:20 (MC 210; West Seminar Room, Johnson Education Center)

Date (2016)	Instructor	Lecture	Homework
1/11	Hanisak	Course Introduction/The Diversity of "Marine Plants"	Dawes: p. 1-15; Woese et al. 1990.
1/14	Hanisak	Cyanobacteria and Eukaryotic Microalgae	Levinton: p. 169-171, 284-285; Dawes: p. 168-191
1/18	**No Class - Martin Luther King Day**		
1/21	Hanisak	Marine Macrophytes: Macroalgae	Levinton:Pp. 309-315; Dawes:p. 113-167
1/25	Hanisak	Marine Macrophytes: Angiosperms	Dawes: p. 236-247, 267-281, 303-316
1/28	Hanisak	Biodiversity Issues: Eutrophication & Harmful Algal Blooms	Levinton: p. 576-580
2/1	Hanisak	Marine Macrophytes: Morphological Characteristics	**Topics (Written Papers & Oral Presentations) Due**
2/4	Hanisak	**Exam 1**	Review all previous lectures and assigned readings
2/8	Voss	Evolution & Systematics	Pechenik: Invertebrate Classification p. 7-36
2/11	Voss	Protostomes vs. Deuterostomes	Levinton: Protozoa p. 284, Pechenik: Protists p.37-78
2/15	Voss	Marine Protozoans & Poriferans	Levinton: Porifera p. 285 Pechenik: Porifera, p. 79-91
2/18	Voss	Cnidarians & Ctenophores	Levinton: Cnidaria p. 286-287, Pechenik p 101-148
2/22	Voss	Marine Mollusca	Pechenik: Mollusca p.215-290, Levinton: Mollusca p.293-297
2/25	Voss	Marine Worms	Levinton: Platy., Annelida, Nermertea p. 288-293
2/29	Voss	Marine Arthropoda	Pechenik: Arthropoda p. 341-421
3/4	Voss	Lophophorates, Echinoderms	Pechenik: Echinoderms, Lophophorates p. 473-528 **Written Papers Due**
3/7 to 3/11		**Spring Break**	
3/14 to 3/18		**No Class – Ocean Exploration Cruise**	
3/21	Voss	Hemichordata, Chordata	Pechenik: Chordata p. 539-554
3/28	Voss	Biodiversity Issues: Coral Reef Ecology and Decline	Papers: Gardner et al. 2003, Ruzicka et al. 2013
3/31	Voss	**Exam 2**	Review all previous lectures and assigned readings for the invertebrate section of the course
4/4	Masterson	Fish 1	Levinton: p 189-201
4/7	Masterson	Fish 2	Moyle and Cech: Ch. 13 (Evolution of Fishes) p. 175-192
4/11	Masterson	Fish 3	Helfman et al.: p 329-338
4/14	Masterson	Biodiversity Issues: Fisheries	van Doorn et al.: Ch. 6 (23 p)
4/18	O'Corry-Crowe	Marine Mammal Biology	Levinton: p. 201-207
4/21	O'Corry-Crowe	Sea Birds	Levinton: p 207-218
4/29	Masterson	**Exam 3 (10-12:30)**	Review all previous lectures and assigned readings for the vertebrate section of the course