

<h1 style="margin: 0;">FLORIDA ATLANTIC UNIVERSITY</h1> <h2 style="margin: 0;">Graduate Programs—NEW COURSE PROPOSAL¹</h2>	UGPC APPROVAL _____ UFS APPROVAL _____ SCNS SUBMITTAL _____ CONFIRMED _____ BANNER POSTED _____ CATALOG _____
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DEPARTMENT: BIOLOGICAL SCIENCES	COLLEGE: COLLEGE OF SCIENCE
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RECOMMENDED COURSE IDENTIFICATION: PREFIX <u>ZOO</u> COURSE NUMBER <u>6406</u> LAB CODE (L or C) _____ (TO OBTAIN A COURSE NUMBER, CONTACT M.JENNING@FAU.EDU) COMPLETE COURSE TITLE: THE BIOLOGY OF Sea Turtles	EFFECTIVE DATE (Must have online MSIS by October) SUMMER 2014
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CREDITS ² : 3	TEXTBOOK INFORMATION: <i>The Biology of Sea Turtles</i> Vol.2 (2003) & 3 (2013). (CRC Press, P. A. Lutz et al., eds, Wyneken et al. eds.) Lectures, laboratories and field trips will expose students to sea turtles, their environment and the integrative nature of their biology. Assigned readings from key literature will span ~ 1980-present.
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GRADING (SELECT ONLY ONE GRADING OPTION): REGULAR SATISFACTORY/UNSATISFACTORY _____

COURSE DESCRIPTION, NO MORE THAN THREE LINES: This upper-level lecture, lab and field course introduces the behavioral, ecological, and evolutionary adaptations of sea turtles and conservation related topics. Major topics include species identification, functional anatomy, reproduction, migration, navigation, feeding ecology, physiology, development, nests and hatchlings, threats to survival and conservation strategies.

PREREQUISITES*: <u>Graduate Status and</u> _____ Permission of the instructor	COREQUISITES*:	REGISTRATION CONTROLS (MAJOR, COLLEGE, LEVEL)*:
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* PREREQUISITES, COREQUISITES AND REGISTRATION CONTROLS WILL BE ENFORCED FOR ALL COURSE SECTIONS.

MINIMUM QUALIFICATIONS NEEDED TO TEACH THIS COURSE: **PH.D. IN THE RELEVANT FIELD**

Faculty contact, email and complete phone number: Jeanette Wyneken jwyneken@fau.edu (661) 297-0146	Please consult and list departments that might be affected by the new course and attach comments. ³
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Approved by: Department Chair: _____ College Curriculum Chair: _____ College Dean: _____ UGPC Chair: _____ Graduate College Dean: _____ UFS President: _____ Provost: _____	Date: 10.03.11.14 <u>03.12.14</u> <u>3/13/14</u> <u>3/24/14</u> <u>3/24/14</u>	1. Syllabus must be attached; see guidelines for requirements: www.fau.edu/provost/files/course_syllabus.2011.pdf 2. Review Provost Memorandum: Definition of a Credit Hour www.fau.edu/provost/files/Definition_Credit_Hour_Memo_2012.pdf 3. Consent from affected departments (attach if necessary)
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Email this form and syllabus to UGPC@fau.edu one week before the University Graduate Programs Committee meeting so that materials may be viewed on the UGPC website prior to the meeting.

Course Syllabus for The Biology of Sea Turtles

1. Course title/number, number of credit hours

The Biology of Sea Turtles, ZOO 6406 , 3 credit hours

2. Course prerequisites

- a. Graduate status and permission of the instructor

3. Course logistics

- a. Term – Summer 2014
- b. Notation if online course – N/A
- c. Class location and time (if classroom-based course) – To be determined

4. Instructor contact information

- a. Instructor's name – Jeanette Wyneken
- b. Office address – SC 266
- c. Office hours – To be determined
- d. Contact telephone number – office (561) 297-0146, fax (561) 297-2449
- e. E-mail address – jwyneken@fau.edu

5. TA contact information (if applicable)

Boris Tezak – BTezak@fau.edu

6. Course description

This upper-level lecture, lab and field course introduces the behavioral, ecological, and evolutionary adaptations of sea turtles and conservation related topics. Major topics include species identification, functional anatomy, reproduction, migration, navigation, feeding ecology, physiology, development, nests and hatchlings, threats to survival and conservation strategies.

7. Course objectives/student learning outcomes

This intensive two-week course consists of lectures, assigned readings from the text and primary literature, discussions of assigned readings, analysis and write-up of data collected in lab exercises, 2 quizzes, and a paper based on library research.

8. Course evaluation method

Discussions You are expected to read the papers assigned in class and be prepared to discuss them. You should know the topic and the major significance of assigned readings, be able to express an opinion, answer the questions of your peers, and or supply thoughtful criticism of the studies or view-points described in the papers. Discussions are each graded on a 10 point system. If you speak about the paper at all during a discussion you get 1-3 points. If it is clear that you have read the paper and are familiar with the details (you can ask questions or clarify points), 4-7 points are awarded. If your discussion indicates you have a clear understanding of the papers, depending upon your level of understanding, you get

8-10 points. *If you are silent you get no points.* NOTE: It doesn't matter how hard you worked on the discussion readings; if you don't verbally express yourself, you will not do well. We can't read your mind.

Lab Reports should be 1-3 pages typed (12 pt, double spaced). Lab 3 must include 4 labeled sections: 1. Statement of the lab's questions, 2. A summary of the data and your analysis, and 3. Discussion of your results, 4. References cited where needed.

Review Paper. Each student will write a 7-8 page (12 pt, double spaced) review paper on a topic of importance in sea turtle biology. The paper will consist of an abstract (< 1 page), introduction, discussion, and literature cited sections. Literature cited should come from professional (peer-reviewed) journals and technical reports. (i.e., Not Wikipedia, New York Times, Miami Herald, or tabloid citations). Lecture materials can be referenced as pers. comm. and textbook citations may be used but should **not** make up the majority of your references.

Grades will be based upon class participation, lab write-ups, and final papers. Late papers and reports will be penalized 20 pts/hr. Points will be awarded based upon the following scale:

Lab write-ups (20 pts each)	40
Discussion participation (20 pts each)	40
Quizzes (50 pts each)	100
Paper	<u>100</u>
Total points possible	280

9. Course grading scale (optional)

Grading scale

A = 280-252

B = 251-224

C = 223-196

D = 195-168

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. This course is taught in a concentrated, "immersion" format so that the class meets every day for two weeks. Reasonable accommodation will be made for students participating in a religious observance. 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 be given only 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 must be made in writing with supporting documentation, where appropriate.

11. Special course requirements (if applicable)

This course requires fulltime attention for two weeks. Each day of class is equivalent to a week of class during a normal academic semester. Students cannot expect to maintain outside work or dedicate time to another course while taking this course with its immersion format.

12. Classroom etiquette policy (if applicable)

In order to enhance and maintain a productive atmosphere for education, personal communication devices, such as cell phones are to be disabled in class sessions. If you are using a laptop or notebook computer, turn off your email, messaging, video, etc. during class.

E-mail communication – If you contact your professor by e-mail, be sure to use proper salutations (Dr. or Prof.) and phrases. “Texting” abbreviations should not be part of your professional e-mails. Be sure to put the subject in the subject line.

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 Students with Disabilities (OSD) -- in Boca Raton, SU 133 (561-297-3880); in Davie, MOD 1 (954-236-1222); in Jupiter, SR 117 (561-799-8585); or at the Treasure Coast, CO 128 (772-873-3305) – and follow all OSD procedures.

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/chapter4/4.001_Honor_Code.pdf.

Adherence to the Honor Code for academic honesty is expected of all students. ANY act of dishonesty that violates the honor code and misrepresents your efforts or ability may be grounds for immediate failure of a course, or may result in dismissal from the University. Academic irregularities will not be tolerated.

15. Required texts/readings

The Biology of Sea Turtles Vol.2 (2003) & 3 (2013). (CRC Press, P. A. Lutz et al., eds, Wyneken et al. eds.) Lectures, laboratories and field trips will

expose students to sea turtles, their environment and the integrative nature of their biology. Assigned readings from key literature will span ~ 1980-present.

16. Supplementary/recommended readings (optional)

Biology of Sea Turtles Vol 1.CRC Press, P. A. Lutz et al., eds.,

Biology and Conservation of Sea Turtles, 2nd ed., Smithsonian Institution Press

17. Course topical outline

Tentative Lecture and Discussion Schedule. Order of topics may change.

Topic	Assignment	
I. Introduction to the Course		12May
Facilities Briefing		
Sea Turtle Phylogeny, History and Morphology	Chap. 1 Vol. 3 Chap. 2 Vol. 2 Lab I (Part 1)	12 May
Species, Species ID	Lab I (Part 1) handouts	12 May
II. Ecology of Sea Turtles.		
A. Complex Life Histories & Life History Specializations	Chap. 7 Vol. 3 Chap 9 Vol 2	13 May
Anatomy & Necropsy	(Lab 1 part 2) Marine Mammal Necropsy Lab (1 PM)	13 May
B. Migratory Behavior	Chap 5-6, Vol 3; Chap 8 Vol. 2	13 May
C. Feeding Ecology and Behavior	Chap. 8.1 - 8.4 Vol 1 (in lab), Chap 10 Vol. 2	14 May
D. Developmental Habitats	Chap. 3.1-3.2.3 Vol. 1 Chap 9 Vol. 2	14 May
All day IRL FIELD TRIP	May 18 (9 AM) LAB 2	15 May
E. Reproduction & Behavior Nest Sites, Site Fidelity	Chap. 3, Chap 12.1-12.4, 12.7.1 Vol. 1 (in lab) Chap. 5 Vol 2	16 May
Discussion 1	Hildebrand (1980) Am. Zool. Bowen, Karl, Pritchard) Black turtle (1999) (11:30 AM)	17 May
Quiz 1 (10 AM)	Classroom	May 17
Review Paper organization	Classroom & Library	May 18
Catch up / work on papers	Optional trip to LMC Noon-3	May 18
LAB 2 Write-up Due May 19	10 AM	May 19
III. Physiology & Development		May 19
A. General Development	Chapter 3 Vol 2 (Dr. Milton)	May 19
A Physical factors and nest success/ Gas exchange	Chapter 4 Vol. 1 (library)	May 19
A. General Development	Chapter 3 Vol 2	May 19
IV. Adaptations for marine life /diving adaptations	Chapter 13 vol. 1 (Dr. Milton)	May 20

Gas exchange during swimming and diving	Chapter 10 Vol. 2	May 20
Discussion 2	Hochscheid et al. (Surfacers do not dive... 2010)	May 20
B. Environmental Sex Determination	Chap 4, Vol. 2	May 21
V. Orientation and Navigation		
A. Orientation & Navigation	Chap 5 Vol 3	May 21
Group Nesting (Arribadas) Ridley Conservation	Dr. Thane Wibbels	May 21 or 22
B. Distributions and movements	LAB 3 Prep, Nesting Behavior, Night 1, 8 PM – 3 AM	MAY 22
C. Urban Beaches: Effects on nesting behavior & hatchling behavior		May 22
V. Diseases and Health/Threats		
Sea turtle health and disease	Chap 15. Vol. 2	May 22
Data Organization	Lab 3	May 22
	LAB 3 Nesting Behavior, Night 2, 8 PM- 3 AM	May 22
Review Papers Due May 23	2 PM	May 23
VII. Conservation, Threats to Survival		
A. Habitat Destruction		May 23
B. Incidental Capture		May 23
C. Recovery Plans/Legislation		May 24
D. Conservation Methods	DISC 2: Chap. 13 Vol. 2 (Frazer) Half-way Technology	May 24
E. Sea Turtles as International Organisms	Chap. 12 Vol.2, Global Priorities (Hamann et al. 2010)	May 24
Quiz 2	10 AM	May 25