

**Marine Biology: BSC 4312C-SL**  
**Spring 2014**

**Lecture:** Tuesday and Thursdays from noon to 1:20 PM in Biology Building, Room 209

**Laboratory:** Saturdays in Biology 209, or off-campus

**Instructor:** Dr. Linda Walters

**Office:** Biology 401C    **Office Phone:** 407-823-2148    **E-mail:** linda.walters@ucf.edu

**Family Cell Phone:** 407-443-6943 (sometimes my husband Paul answers)

**Web Site for Course:** BSC 4312 on Webcourses. Site will house syllabus, course notes, etc.

**Office Hours:** Wednesday 9 AM - noon; Tuesday: 1:15 AM – 2:15 PM; Friday 9 AM – 10 AM; or by appointment. If University business requires me to miss office hours, please contact me and we can schedule to meet.

**Teaching/Research Assistant:** Donna Campbell

**Office:** Biology 410    **Email:** d.campbell@knights.ucf.edu    Phone: 617-947-6615

**Research Assistant/Volunteer Coordinator:** Wei Samantha Yuan

**Office:** Biology 410    **Email:** weiyuan@knights.ucf.edu    Phone: 407-925-5434

**Required Materials:**

- 1) *The Secret Life of Lobsters*. Corson, T. 2004. HarperCollins Publishers. ISBN 0 – 06-055558-0.
- 2) *Let Them Eat Shrimp. The Tragic Disappearance of the Rainforests of the Sea*. Warne, K. 2011. Island Press. ISBN 978-1597266833.
- 3) *Overfishing – What Everyone Needs to Know*. Hilborn, R. and U. Hilborn. 2012. Oxford University Press. ISBN 978-0-19-979814-8.
- 4) *Don't be Such a Scientist*. Olson, R. 2009. Island Press. ISBN 978-1-59726-563-8.
- 5) Access to a digital camera.

**Recommended Materials:**

- 1) *Marine Biology*, 3<sup>rd</sup> or 4<sup>th</sup> edition. Levinton, JS. 2009 or 2014. Oxford Univ. Press, ISBN: 978-0-19-532694-9 or ISBN: 978-0-19-985712-8.
- 2) PowerPoint lecture notes will be available on my web site (see above). Lectures will be available when they are completed. Other materials and announcements will also be posted on this site.

**Additional Good Identification Books:**

- 1) *Seashore Animals of the Southeast*. Ruppert, EE, and Fox, RS. 1988. University of South Carolina Press, ISBN: 0-87249-535-3
- 2) *A Field Guide to the Southeast Coast and Gulf of Mexico*. Proctor, NS and Lynch, PJ. 2011. Yale University Press, ISBN: 978-030011328-0.
- 3) *The Reef Set* – three identification books by P. Humann and N. DeLoach. The books are: *Reef Coral Identification*, *Reef Fish Identification* and *Reef Creature Identification*. ISBN: 1878348333

- 4) *Florida's Living Beaches*. Witherington, B. and Witherington, D. 2007. Pineapple Press, Inc. ISBN: 978-1-56164-386-8.

**Classroom Conduct and Academic Honesty:** Please understand that I expect you to completely abide by the UCF Golden Rule (<http://goldenrule.sdes.ucf.edu>). Breaking the Golden Rule in any way, including cheating or intent to cheat on in-class exams/quizzes, submitting assignments that are not entirely your own work or using materials borrowed from students from past classes, will result in an ZF in the course and your name will be immediately submitted to the UCF Disciplinary Action Committee. No plagiarizing, no copying on reports or other written/photo assignments, no exceptions. Turnitin.com may be used at any time during the semester at my discretion.

**Grading:** There will be a total of 425 points available. 100 of these points are associated with traditional lecture exams, 100 points will be associated with your group project, 100 points associated with Service-Learning project, and 125 points are associated with other assignments. At the end of the semester, your total number of points will be added together and converted to a percentage. Grades for the semester will be awarded using the following +/- scale: A+ (100% or higher), A (92-99%), A- (90-91%), B+ (88-89%), B (82-87%), B- (80-81%), C+ (78-79%), C (72-77%), C- (70-71%), D+ (68-69%), D (62-67%), D- (60-61%), < 60% = F. There will be multiple extra credit opportunities, but no additional curving of grades. If you decide to drop this course, please remember to officially withdrawal from the class before 11:59 PM on Tuesday, March 18, 2014. There are no NC or WP grades in this class. Tests and extra credit quizzes can only be made up if the absence is excused (written documentation required from medical, police, university activity). Grades will be available in class and/or from instructor as soon as possible after exams have been taken or assignments submitted. Late assignments will be graded as follows (Saturdays included, Sundays excluded): deduct 50% for up to 24 hours late from the start of the class in which the assignment was due, and deduct 75% if 24-48 hr late. There will be no credit if submitted more than 48 hr late.

**Class Participation and Attitude:**

It is expected that everyone will regularly participate in this class in a positive way. To encourage participation, I reserve the right to change any person's final grade by up to 10 percentage points (higher or lower) based on participation and attitude. Most people will see no impact on their final grade. Disrupting the class, unexcused lecture absences (see policy on unexcused lab absences below), arriving late to class, rude behavior to the instructor or colleagues, sleeping in class or during labs, cell phones ringing during class or speaking on a phone/texting/working on non-class materials on any electronic device during lecture/lab, or disobeying the class rules will cause you to lose points at my discretion. Additionally, if the disruption is excessive, the Biology Department Chair will be brought in to assist with the situation. Regularly participating in all class activities and joining in meaningful class discussions, offering to drive vans, etc. will enable you to gain points.

**Extra Credit:**

Extra credit opportunities will occur both in lecture and outside of instruction hours. These points will be added on to your point total before calculating the final percentage grade. In lecture, there may be unannounced quizzes. Helping with field research or marine-oriented

community events outside of class time will earn you up to 5 points each time (maximum extra points for semester = 30 points). Going to marine-oriented scheduled seminars in Biology or other related events on campus will get you 2 points on each occurrence. There will be additional unique opportunities from time to time.

**Service-Learning in BSC 4312:**

BSC 4312 is a UCF sanctioned service-learning class. Students will spend a minimum of fifteen hours on our service-learning project – discussing your group research project with a public school class (2<sup>nd</sup> -5<sup>th</sup> graders) in Seminole or Orange Counties. This activity will address a need in our community, support our course objectives, involve a connection between the campus and the world around it, challenge students to be civically engaged, and involve structured student reflection. We will spend time reflecting on our service-learning experience through class conversations and written summaries. If any student has a valid objection to this service-learning project, he or she must state this to prior to the drop/add deadline so we can discuss options.

**Point Values for Exams & Assignments (due dates):**

Please note that all assignments are due at the start of class/lab on the date listed. Late assignments will be graded as described above.

<b>Exam 1</b> (February 6)	30 points
<b>Exam 2</b> (March 13)	30 points
<b>Exam 3/Reflection</b> (April 24)	40 points

<b><u>Group Research Project</u></b> (presented on April 3)	100 points
Abstract due to Office of Undergraduate Research on February 14 by 1 PM (group grade)	
Literature Summary/Citation List (individual grade)	
Poster (group grade)	
Individual Participation from you, the professor and your peers (individual grade)	

<b><u>Group Service-Learning Project</u></b> (presented on April 10)	100 points
Abstract due to Office of Service-Learning on March 28 by 5 PM (group grade)	
PowerPoint for public school (group grade)	
Engagement Activities for public school (group grade)	
Poster (group grade)	
Individual Participation from you, the professor, and your peers (individual grade)	

<b><u>Individual Florida Flora/Fauna Photo Collection</u></b> (need camera)	60 points
March 11: submit first 30 correctly identified species; April 22: submit remaining 30 identified species (20 vertebrates, 20 invertebrates, 20 flora)	

**Book Discussions and Current Events**

<b>Shrimp Book Discussion</b> (January 21)	10 points
<b>Overfishing Book Discussion, Parts A and B</b> (January 30, February 11)	20 points
<b>Don't Be Such a Scientist Book Discussion, Parts A and B</b> (February 27, March 18)	20 points
<b>Lobster Book Discussion</b> (April 17)	10 points

**Current Event/Hot Topic 1-2 Minute Oral Presentation** (multiple dates through February 27; event MUST have occurred within the previous 4 weeks, can have up to 2 PowerPoint slides)  
5 points

**Tentative Lecture Schedule (subject to change):** Chapters listed are loosely correlated to Levinton's *Marine Biology* book. Please note that test dates are firm. Tests will cover information covered in lecture by that time.

January 7: Syllabus

January 9: IACUC training; Introduction to course and research projects; Chapter 1

January 14: Chapter 2; First day for current event/hot topic 1-2 minute presentations

January 16: Chapter 2

January 21: Book Discussion: *Let Them Eat Shrimp*

January 23: Chapters 2/3

January 28: Chapter 3

January 30: Book Discussion: *Overfishing*, Part A (Chapters 1-8)

February 4: Chapter 4

February 6: Exam 1 (Covers content through Feb. 4, including books)

February 11: Book Discussion: *Overfishing*, Part B (Chapters 9-16)

February 13: Chapters 4/5 (SURE Abstracts Due by 2/14/14 by 1 PM)

February 18: Chapter 5

February 20: Chapter 6

February 25: Chapter 7

February 27: Last day for current event/hot topic 1-2 minute presentations;  
Book Discussion: *Don't Be Such a Scientist*, Part A (Chapters 1-2)

March 3-9 – Spring Break! No class!

March 11: Chapter 13 (submit first 30 organism photographs by start of class)

March 13: Exam 2 (All material covered since Exam 1)

March 18: Book Discussion: *Don't Be Such a Scientist*, Part B (Chapters 3-5)

March 20: Practice for Service-Learning public school presentations (1 or 2 groups, remaining groups will practice for class on the Saturday, March 22)

March 25: Chapters 14/15

March 27: Chapter 16 (Service-Learning Abstracts due by 3/28/14 by 5 PM)

April 1: Final preparations for SURE Showcase

April 3: SURE showcase – set-up in AM, showcase from 1 – 5 PM in Pegasus Ballroom

April 8: Final preparations for Service-Learning Showcase

April 10: Service-Learning Showcase, set up in early AM, 10:30 AM – 3:30 PM in Pegasus Ballroom

April 15: Chapters 17/18

April 17: Book Discussion: *Secret Life of Lobsters* (Last Class; final opportunity to hand in extra credit forms)

April 24: Required Final Exam from 10:00 AM – 12:50 PM in Biology 209

**Laboratory:** Your laboratory grade is integrated into your final course grade; it is not a separate grade. Lab starting times and locations are listed for each week. You must arrive on time or it will be considered an unexcused absence. If you miss class, any assignments are still due on the scheduled date at the scheduled time. More than one unexcused lab absence will result in the loss of 10% from your final class grade with each occurrence (e.g. 89% is turned to 79% with second unexcused absence). Closed-toe shoes are required for all wet labs. Please expect to get wet and muddy in the field. Additional materials needed for field labs will be discussed as appropriate. Note that many field trips last longer than the scheduled time on Saturdays. You are encouraged to attend all of these labs. If you cannot, then alternative assignments will be provided.

**Laboratory goals:** While lecture is focused on concepts, lab will focus on Florida marine biodiversity, critical thinking, research and presentation skills, including:  
Preparing oral presentations and public speaking to diverse audiences  
Preparing and presenting poster presentations  
Research experience - both running your own experiments and helping other researchers in the field in a variety of marine habitats  
Learning local marine fishes, invertebrates and flora (photo collections)

**Tentative Laboratory Schedule (subject to change):**

**January 11:** Entire class. Tour of Merritt Island National Wildlife Refuge: Biodiversity, focused on birds. Time: TBA.

**January 18:** Entire class. Field trip to UCF Fellers House Field Station to start projects and work on photo-organism collections. Depart Biology parking lot at 8:00 AM or meet in Canaveral National Seashore at Fellers House at 9:15 AM. Return to campus approximately 2:30 PM.

**January 25:** Chaeto group to meet with Dr. Walters at 9 AM in Biology 410, *Spartina* group to meet with Donna at Biology Field Building Greenhouse (Building 92) at 9 AM. Conch group to meet Dr. Walters at 10:30 AM in Biology 410. Bird group to schedule field time with Donna.

**February 1:** Project time (very good low AM tide).

**February 8:** Project time.

**February 15, 16:** Entire class. Research cruise on R/V Bellows. 7 AM – 6 PM each day. Half the class goes on Saturday, half the class goes on Sunday.

**February 22:** Project time.

**March 1:** Project time.

**March 8:** Spring break.

**March 15:** Project time.

**March 22:** Entire class. Practice for Service-Learning public school presentations. 9 AM in Biology 209.

**March 29:** Project time.

**April 5:** Entire class. Critique of all group's poster drafts for Service-Learning Showcase. 9 AM in Biology 209.

**April 12:** Time to work on photo-organism collections.

**April 19:** Time to work on photo-organism collections.

**Extra Credit Opportunities Currently Scheduled:** You must hand in the signed form to receive credit or check in with Dr. Walters at seminar to receive credit.

#### Seminars

- 1) Dr. Kenneth Lohmann, Biology Department seminar on Monday, February 10 at 3:00 PM in room 209 (2 points)
- 2) Dr. Flavio da Costa Fernandes, Biology Department seminar on Monday, February 17 at 3:00 PM in room 209 (2 points)
- 3) Professor Peggy Layne, University-wide seminar on Improving the Success of Women in STEM on Monday, January 27 at 1:30 PM in Student Union Garden Key Room 221 (2 points)

#### Outreach

- Mangrove planting/Oyster restoration mat making on campus at Biology Field Building – TBA (2 points)
- Ocean Day at UCF Creative School for Children (pre-school on campus). In March, Date TBA (5 points if help prepare for event)

#### Research/Restoration – Marsh Monitoring

- Pre-marsh creation monitoring at Marine Discovery Center in New Smyrna Beach (5 points/day)
- Saturday, February 8 from 8 AM – 1 PM
- Saturday, February 22 from 8 AM – 1 PM

#### Research/Restoration – Oyster Reef Monitoring

- Oyster reef and shoreline restoration days: Meet at Fellers House in Canaveral National Seashore so you need to organize your own carpool (Sam will help as possible). All days have limited space. More opportunities will occur in March/April (5 points/day).
- Sunday, January 12, 11 AM – 5 PM
- Sunday, January 19, 7 AM – noon
- Monday, January 20, 7 AM – noon

Sunday, January 26, 10 AM – 3 PM  
Sunday, February 2, 7 AM – noon  
Sunday, February 23, 8 AM – 2 PM

Local Marine Conferences for Spring 2014

Indian River Lagoon Conference, Thursday February 6 in Fort Piece, Florida (8 AM – 8 PM)

Marine Benthic Ecology Meeting in Jacksonville, FL from March 19 - 22

National Shellfisheries Society Meeting in Jacksonville, FL from March 29 – April 2