

# Service-Learning: Marine Conservation & Restoration (BSC 4310-001:SL)

Biology, College of Sciences 3 Credit Hours

# **Course Syllabus**

Dr. Linda Walters (she/her/hers) Fall 2023 Instructor: Term: Wednesday, Office Location: Room 401C, Biology Building Class Meeting Days: Friday W and F from 12:15 - 2:00 PM as 11 AM - 12:15 Office Hours: Class Meeting Time: possible; by appointment/email PM Office: 407-823-2148 Phone: Biology 212 Class Location: F-2-F Email linda.walters@ucf.edu Course Modality:

# **Course Description and Objectives**

This course will actively engage students in understanding the past, present and future of marine conservation and restoration, with a focus on current efforts around the state of Florida. This will be accomplished first through readings providing local through global context as well as through case studies and conversations with practitioners. All will be enhanced through community engagement. Using proven Service-Learning (SL) strategies, all students in the class will share what they have learned in class with the community as well as young audiences in age-appropriate, engaging ways. These efforts are designed to provide real-world learning experiences and improve each student's science communication skills. All members of the class will participate in the UCF Service-Learning Showcase in November 2023.

# **Student Learning Outcomes**

By the end of the semester, all students in this High-Impact Practice (HIP) Service-Learning class should:

- Be knowledgeable and evaluate the need and potential for success of marine conservation and restoration programs globally, nationally, and locally.
- Have improved scientific communication skills by creatively planning and leading an engaging
  marine-themed experience for young audiences in a K-8 classroom. Communication skills will
  also be enhanced by participating in additional conservation/restoration events in our community.
- Have improved scientific presentation skills by producing and presenting a poster + video at the Fall 2023 UCF Service-Learning Showcase.
- Have job/post-graduate education prospects enhanced and showcased in your curriculum vitae.

# **Enrollment Requirements**

Prerequisite: BSC 3312 (Principles of Marine Biology)

## **Service-Learning Statement for This Class**

This section of BSC 4310 is a UCF sanctioned Service-Learning (SL) class. Students will spend a minimum of 15 hours over the course of the semester on service-learning activities outside of class hours. These activities 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 reflections. Your service-learning efforts will be the core of much of the learning in the course. Therefore your "grade" for service-learning will come from the tangible class-related projects that come out of it (e.g., SL poster) rather than simply from completion of SL hours.

Our service-learning work in this course will involve: 1) leading the presentation of marine biology conservation content at a public school or other venue, and 2) participating in marine conservation/restoration efforts in the community. Dr. Walters will provide teacher contacts, event schedules, and guide you through this process. Dr. Walters must approve all projects and each project will begin with a signed agreement among the students, the agency contact person, and students. If any student has a valid objection to a proposed service-learning project or placement, he or she must let Dr. Walters know during the first week of class so we can discuss options.

#### **Course Activities**

There will be no high-stakes tests in this course. This course will, however, involve a significant number of readings. From these readings, there will be debates, discussions, and quizzes on the readings. Debates will focus on the pros/cons of conservation/restoration of imperiled species. Students will be expected to delve into the current literature (peer-reviewed publications), write summaries of the literature, and discuss in class. Discussions and quizzes will be associated with book readings (see list below). Each Wednesday, there will be a graded short quiz or a debate summary due. For SL, students will work in groups to prepare and lead hands-on activities on a selected marine conservation/restoration topic to diverse audiences (children/families) within grades K-8 by either visiting a public school or similar venue. All students will work either independently or in teams to produce poster presentations on your efforts at the UCF Service-Learning Showcase. Finally, there will be self-reflection assignments associated with the service-learning portion of grade plus project-focused faculty, self and peer evaluations. In addition to this leadership effort, all students will have the opportunity to engage as a participant in a variety of restoration and conservation efforts to reach their 15-hr SL commitment.

Each student in the class should have regular access to the internet and plan on logging into the course at least three times each week, spend 5-10 hours on class-related activities each week outside of structured class hours, and have some flexibility in their schedules to participate in events that occur outside of class hours. If students cannot participate in any service-learning activities scheduled outside of class hours, this must be discussed with Dr. Walters during week 1. Upon agreement, alternate assignments will be provided and there will be no negative impact on student's grade.

# Additional Details of Service-Learning Projects for this Class (as Leader, as Participant):

One of the goals of all high-impact courses is to develop students as leaders. This can be showcased in your curriculum vitae and can impact the rest of your career. The difference between being a leader and a participant is that for the latter, you simply show up and help. As a leader, you brainstorm, guide and contribute to the organization and preparation of the effort as well as post-event synthesis. It is my hope that everyone leads multiple events over the course of this semester and extra credit will be provided for those willing to lead events beyond the required K-8 classroom visit.

As Leader: Community partner #1 will be Canaveral National Seashore where we will be leading their International Coastal Clean-Up Site on September 23, as well as prepare for it ahead of time (especially advertising) and summarize results after the event. Community partner #2 will be a K-8 public school classroom. Our selected community partners want to excite their students with cutting edge science, but do not have the time or background to do this themselves. Dr. Walters has long-standing connections with both groups and will make all initial connections. Student groups will then work directly with community partner by providing children with age-appropriate science. Educators traditionally do not have time or background to include such content in their classes. We will facilitate this opportunity while UCF students additionally act as role models for young audiences.

**As Participant:** Students will receive SL hours for assisting in a variety of efforts that are related to conservation/restoration that include community engagement. These will include our mangrove gardening on campus, making oyster restoration materials on campus, among others.

## **Assessment and Grading Procedures**

Student grades will be a composite of class participation, attendance, quizzes, debate submissions, leading the conservation/restoration presentation for diverse audiences, participation in other conservation/restoration efforts, and poster/presentation at UCF Service-Learning Showcase.

Students are expected to attend and participate in class, and to positively engage in group projects. Time will be provided in class to ensure all team members can interact, prepare, and ask questions. If student is not able to attend class or event due to illness or similar, then an alternative assignment will be provided.

For off-campus events that are outside of class hours, the travel time from UCF round-trip is included in the hour calculation for SL hours. Having a personal vehicle should not be a barrier to participation. By knowing this information, I will help out as much as possible (e.g., department vans, carpooling, etc.). Those willing to drive department van must submit driving form to Gabe in BIO, room 302 at least 48 hr prior to using van for the first time. We also need to reserve vans at least one week prior to events.

Late submissions of assignments will be graded as follows: 10% of score deducted for each 24 hours the assignment is late for up to 5 days, including weekends. On day 5 after assignment due, the grade on the assignment will revert to a 0. The time that assignments are due is the start of each class.

#### **Grading Methods**

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There will be 200 points for this course. Grading will include +- grades using the following percentages: 92.5 - 100 = A, 89.5 - 92.4 = A-; 87.5 - 89.4 = B+, 82.5 - 87.4 = B, 79.5 - 82.4 = B-, 77.5 - 79.4 = C+, 72.5 - 77.4 = C, 69.5 - 72.4 = C-; 67.5 - 69.4 = D+, 62.5 - 67.4 = D, 59.5 - 62.4 = D-; 59.4 or less = F.
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At the end of the semester, any extra credit points will be added to the point total and then this number will be converted into a percentage. Percentages are rounded off as listed above. No grades will be altered after the completion of the course unless there is an error in calculations.

#### 200 points possible. Point totals for each graded effort will be:

- 1) **Attendance:** Not graded but recorded for each class. All attendance points will be associated with class participation. To not lose points for an excused absence, please read section on make-up assignments below.
- 2) **Discussion and class participation:** 30 points (15% of final grade). This will be an aggregate over the semester. Students who actively and positively participate in all class discussions will

- receive most, if not all, points. Students who never participate and/or have unexcused classes will receive few, if any, points.
- 3) **In-class quizzes:** ~9 X 5 points = 45 points (most Wednesdays at start of class and will focus on reading materials)
- 4) **Debate Summaries:** 3 X 5 points = 15 points (remaining Wednesdays)
- 5) Curriculum vita: 20 points. This effort is to help you help yourself. CV will be graded at the start and end of semester (10 pts in September, 10 pts in December).
- 6) Hours of SL outside of class: 15 points (1 point per hour, including travel time)
- 7) Helping prepare for International Coastal Clean-Up Event: 5 points.
- 8) **Leading event for K-8 school:** 40 points (includes literature review; in-class practices; community presentation; reflection; faculty, peer and self-evaluations). This effort is not included in your 15 hr of SL even if it occurs outside of class hours.
- 9) **Service-Learning Showcase poster/presentation:** 30 points (includes writing content for poster; data analysis; poster layout; creating poster showcase display; in-class practice presentations; S-L showcase presentation; reflection).

\*\*If any changes to this grading scheme are made during the semester, the changes will be "in favor" of student success.\*\*

# Make-up Assignments

Per university policy, students must be allowed to turn in make-up work (or an equivalent, alternate assignment) for university-sponsored events, religious observances, or legal obligations (such as jury duty). In these instances, students will be excused from class without penalty. Additionally, the Undergraduate Catalog states, "Reasons for acceptable absences may include illness, serious family emergencies, special curricular requirements (e.g., judging trips, field trips, professional conferences), military obligations, severe weather conditions, and religious holidays."

Please confer with Dr. Walters prior to any absence if you know you must miss a class if it fits into any of the above categories or if it would not traditionally be considered an emergency to determine if the absence will be considered "excused". The make-up policy for missed classes, quizzes and assignments will require the student to submit an excuse in writing on official letterhead from the appropriate organization (doctor, judge, UCF Athletics, etc.). Students have one week to submit their official excuse, with the exception of extraordinary cases. Once received, there will be no negative impact on missed attendance/discussion. For missed quizzes or assignments, a make-up assignment will be provided with a due date. Dr. Walters will work with each student to ensure transparency and equity.

This is a face-to-face class and will not be recorded or presented in a hybrid format.

#### **Participation**

Participation is 15% of your grade in this class. All students need to have a voice in their own learning to promote deep learning. It is important to maximize the impact of the course content as well as to develop critical thinking skills, speak effectively, and real-world problem solving. Regularly asking questions and participation in class discussion of conservation/restoration topics will enable student to receive full credit for participation. If a student has a valid concern with speaking during class discussions, this must be shared with the professor by the end of week 2 of the semester. Appropriate accommodations will then be made.

#### Extra Credit

Extra credit opportunities will be presented equally to all students in the class throughout the semester. In class, there will be extra credit questions on quizzes or other opportunities to engage in meaningful ways. Outside of class hours, there will also be hands-on marine research opportunities for which extra credit will be available. Additionally, SL efforts above 15 hr will also result in extra credit hours as will leading more than required events (double hours if leader). Points available will depend on time involved in each activity and will be evaluated as 1 pt/hr of participation in most cases. Some opportunities will be oncampus, while others will be off-campus. Transportation will be provided for off-campus activities to the extent possible. Selfies with the event organizers will be required if Dr. Walters is not present. Not being accurate in your submitted hours may result in disciplinary action. If a person receives all extra credit available, it will increase their grade by up to 20 points (10% of total grade).

#### **Grade Dissemination**

To ensure prompt feedback and knowledge of progress, and to comply with the <u>Family Educational</u> <u>Rights and Privacy Act (FERPA)</u>, all grades will be provided in Webcourses@UCF following student data classification and security standards.

#### **Course Materials and Resources**

Books to be used in course are all available for no cost as open source electronic through UCF library. Sandy the Science Librarian will come to class on August 25 to go over how to obtain all content from the UCF library.

- 1) Braverman, Irus. (2018). Coral Whisperers: Scientists on the Brink. On Webcourses. ISBN: 978-0-520-29885-9.
- 2) Warne, Kennedy. (2011). Let Them Eat Shrimp, The Tragic Disappearance of the Rainforests of the Sea. On Webcourses. ISBN: 97815997263344. Let Them Eat Shrimp: The Tragic Disappearance of the Rainforests of the Sea | SpringerLink
- 3) Florida Fish and Wildlife Conservation Commission. Florida's State Wildlife Action Plan. (2019) Available online at: https://myfwc.com/conservation/special-initiatives/swap/action-plan/

#### Final Exam

Each person will submit their updated curriculum vitae, SL self-reflection, as well as their self- and peer-evaluations as their final exam deliverables. Deadline is Wednesday, December 6 at 10:00 AM.

### **Policy Statements**

# Academic Integrity

We take academic integrity very seriously at UCF and in this course. Any misconduct will be immediately reported to the Department of Biology and UCF Office of Academic Misconduct. These offices will guide all responsive action. Penalties can include a failing grade on an assignment or in the course, suspension or expulsion from the university, and/or a "Z Designation" on a student's official transcript indicating academic dishonesty, where the final grade for this course will be preceded by the letter Z. For more information about the Z Designation, see <a href="http://goldenrule.sdes.ucf.edu/zgrade">http://goldenrule.sdes.ucf.edu/zgrade</a>. For more information about UCF's Rules of Conduct, see <a href="https://scai.sdes.ucf.edu/">https://scai.sdes.ucf.edu/</a>.

The Center for Academic Integrity (CAI) defines academic integrity as a commitment, even in the face of adversity, to five fundamental values: honesty, trust, fairness, respect, and responsibility. From these values flow principles of behavior that enable academic communities to translate ideals into action.

At UCF, students are expected to live by the UCF Creed: Integrity, scholarship, community, creativity, and excellence are the core values that guide our conduct, performance, and decisions.

- 1. Integrity: I will practice and defend academic and personal honesty.
- 2. Scholarship: I will cherish and honor learning as a fundamental purpose of my membership in the UCF community.
- 3. Community: I will promote an open and supportive campus environment by respecting the rights and contributions of every individual.
- 4. Creativity: I will use my talents to enrich the human experience.
- 5. Excellence: I will strive toward the highest standards of performance in any endeavor I undertake.

Academic integrity extends beyond classroom walls and graded assignments. Being untruthful about the number of SL hours performed is included here.

#### Plagiarism

In an instructional setting, plagiarism occurs when a writer deliberately uses someone else's language, ideas, or other original (not common knowledge) material without acknowledging its source. This definition applies to texts published in print or on-line, to manuscripts, and to the work of other student writers. Plagiarism constitutes academic dishonesty.

# Artificial Intelligence Statement

This class will make use of Artificial Intelligence (AI) in various ways. You are permitted to use AI only in the manner and means described in the assignments. Any attempt to represent AI output inappropriately as your own work will be treated as plagiarism.

#### **Unauthorized Use of Class Materials**

There are many fraudulent websites claiming to offer study aids to students but are actually cheat sites. They encourage students to upload course materials, such as test questions, individual assignments, and examples of graded material. Such materials are the intellectual property of instructors, the university, or publishers and may not be distributed without prior authorization. Students who engage in such activity are in violation of academic conduct standards and may face penalties.

#### **Controversial Comments Policy**

This course will discuss some potentially controversial issues. Part of the purpose of the course is to enable you to understand how reasonable people might disagree about such issues (especially involving ethics and justice). You are not required to *believe* any particular position that we discuss and examine on such issues. You are expected, however, to have an open mind and to try to *understand* the arguments (and to consider the ideas and evidence used in such arguments) for many different positions on these issues, and to critically examine and respectfully discuss such arguments, ideas and evidence.

#### In-Class Recording Policy

Students may, without prior notice, record video or audio of a class lecture for a class in which the student is enrolled for their own personal educational use. A class lecture is defined as a formal or methodical oral presentation as part of a university course intended to present information or teach students about a particular subject. Recording classroom activities other than class lectures, including but not limited to lab sessions, student presentations (whether individually or part of a group), class discussion (except when

incidental to and incorporated within a class lecture), clinical presentations such as patient history, academic exercises involving student participation, test or examination administrations, field trips, and private conversations is prohibited. Recordings may not be used as a substitute for class participation and class attendance, and may not be published or shared without the written consent of the faculty member. Failure to adhere to these requirements may constitute a violation of the University's Student Code of Conduct as described in the Golden Rule.

# **Course Accessibility Statement**

The University of Central Florida is committed to providing access and inclusion for all persons with disabilities. This syllabus is available in alternate formats upon request. Students with disabilities who need specific access in this course, such as accommodations, should contact me as soon as possible to discuss various access options. Students should also connect with <a href="Student Accessibility Services">Student Accessibility Services</a> (Ferrell Commons, 7F, Room 185, <a href="sas@ucf.edu">sas@ucf.edu</a>, phone (407) 823-2371). Through Student Accessibility Services, a Course Accessibility Letter may be created and sent to professors, which informs faculty of potential access and accommodations that might be reasonable.

#### Campus Safety Statement

Emergencies on campus are rare, but if one should arise in our class, we will all need to work together. Everyone should be aware of the surroundings and familiar with some basic safety and security concepts.

- In case of an emergency, dial 911 for assistance.
- Every UCF classroom contains an emergency procedure guide posted on a wall near the door. Please make a note of the guide's physical location and consider reviewing the online version at <a href="http://emergency.ucf.edu/emergency">http://emergency.ucf.edu/emergency</a> guide.html.
- Familiarize yourself with evacuation routes from each of your classrooms and have a plan for finding safety in case of an emergency.
- If there is a medical emergency during class, we may need to access a first aid kit or AED (Automated External Defibrillator). To learn where those items are located in this building, see <a href="https://ehs.ucf.edu/automated-external-defibrillator-aed-locations">https://ehs.ucf.edu/automated-external-defibrillator-aed-locations</a>.
- To stay informed about emergency situations, sign up to receive UCF text alerts by going to <a href="my.ucf.edu">my.ucf.edu</a> and logging in. Click on "Student Self Service" located on the left side of the screen in the tool bar, scroll down to the blue "Personal Information" heading on your Student Center screen, click on "UCF Alert", fill out the information, including your e-mail address, cell phone number, and cell phone provider, click "Apply" to save the changes, and then click "OK."
- If you have a special need related to emergency situations, please speak with me during office hours.
- Consider viewing this video (<a href="https://youtu.be/NIKYajEx4pk">https://youtu.be/NIKYajEx4pk</a>) about how to manage an active shooter situation on campus or elsewhere.

#### **Deployed Active-Duty Military Students**

If you are a deployed active-duty military student and feel that you may need a special accommodation due to that unique status, please contact Dr. Walters to discuss your circumstances.

# **Important Campus Dates**

**Drop Deadline:** Friday, August 25 by 11:59 PM **Add Deadline:** Friday, August 25 by 11:59 PM

Withdrawal deadline: Friday, October 27 by 11:59 PM Veteran's Day: No class on Friday, November 10

Thanksgiving Break: No class on Wednesday, November 23 and Friday, November 25

SL Showcase Application deadline: Monday, November 3

SL Showcase Online Submission deadline: Monday, November 13

Online poster viewing for UCF Service-Learning Showcase: Monday, November 27 – Friday,

December 1

F-2-F UCF Service-Learning Showcase: November 29 in Student Union from 10 AM - noon

Last class of the semester: Friday, December 1

# Course Deliverable Dates (tentative, may be modified)

\*\*All items are due by the start of class (11 AM) to be considered "on time"\*\*

#### **Curriculum vitae:**

Discussed in class: August 25.

Draft due for peer-review in class: August 30.

Final hardcopy submitted to Dr. Walters for grade: September 6.

# **Quizzes/Debate Summaries:**

Every other Wednesday starting September 6.

# Class preparation for International Coastal Clean-Up Day:

Will occur between September 1 - 23.

# **Leading Event for K-8 school:**

Teacher, school, date/time, and topic determined by October 4.

Activities determined at least 2 weeks prior to event.

Graded, in-class practice with Dr. Walters at least 1 week prior to event.

Must be completed by October 31.

#### **Service-Learning Showcase Poster:**

Draft application: November 1 (due to UCF on Monday, November 3).

Draft poster: November 8 (due to UCF on Monday, November 13).

Practice poster presentation in class: November 17.

Virtual showcase: Monday, November 27 – Friday, December 1.

F-2-F Showcase: Wednesday, November 29.

# Dates of Service-Learning Coastal Events Outside of Class Hours that will count toward your required 15 SL hr plus extra credit hours (more dates to be added). Please remember that confirmation of participation is required via selfie with event leader if Dr. Walters is not present. Note that every outside event is "weather permitting". Contact Dr. Walters (or event lead) for more information. One hr of help = 1 hr of SL credit.

<u>Class Leading UCF International Coastal Clean-Up Site in Canaveral National Seashore</u>: Saturday, 9/23/23 from 8 AM – noon on site. Transportation provided if wanted.

<u>Class Leading UCF STEM Day on campus</u>. Friday, October 20 mid-morning to mid-afternoon. Time: TBD. Everyone in class will participate during class hours. Hours beyond class hours will count as SL hours.

# Mangrove gardening behind Biology Field Building (Building #92 on UCF map):

Every Wednesday from 2-4 PM, except 11/15/23 and 11/22/23.

Friday afternoons from 3-5 PM on 9/1/23, 9/29/23, 10/13/23, 10/27/23, 12/1/23.

Friday morning from 9 - 11 AM on 11/10/23.

Oyster restoration cement patty workshops behind Biology Field Building (Building #92 on UCF map): Sunday mornings from 9 AM – noon on 10/8/23, 10/29/23, 11/19/23.

# Additional events that require assistance (rsvp required to work events):

Every Wednesday from 9:00 - 11:30 AM in Biology Field Building from 9/6/23 to 10/25/23 to assist graduate student Katherine Harris with oyster shell processing.

Deploying final breakwaters at Seminole Rest with Dr. Donnelly. Friday, 9/15/23 on site from 9 AM - 11 AM. Need 2-3 people.

Oyster restoration patty making and mangrove planting with clients from The Arc in Indian River County. On site from 9 AM – noon on Monday, 11/6/23. All welcome, needed.

<u>Biology seminars on marine topics on Mondays from 3-4 PM in Biology (f-2-f only)</u>, room 209 on the following dates. Must email 1 paragraph talk summary to Dr. Walters within 7 days of talk.

	28-Aug	Brad Seibel	Professor, University of South Florida	
			Polar Biology, Biology Ocean Acidification	
	11-Sep		Assistant Professor, University of Florida, Whitney Lab	Zebrafish larvae as a model for noxious stimuli sensing
	18-Sen	Mark Martindale	Director, University of Florida, Whitney Lab	Developmental explanation for radical changes in body plan evolution
	25-Sep	Tracey Sutton	Associate Professor, Nova Southeastern University	Pelagic life in the deep Gulf of Mexico: new findings and perspectives
	2-Oct	Robert Lamb	Research Assistant Professor, UF/IFAS Nature Coast Biological Station	Population dynamics/feeding ecology of Galapagos reef fishes
	9-0ct	Robert vanWoesk	Professor, Florida Institute of Technology	Coral reefs in transition: impacts, recovery, and refuges