

## MSL 212: Introduction to Marine Science II Spring 2021

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**Instructor: Dr. Sarah Mincks Hardy**

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**Class meeting times: T TH 11:30 – 1:00**

Location: Online via Zoom  
Office hours: by appointment

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*Prerequisites: MSL 211 or permission of instructor*

### Course Description

This course explores the diversity of marine life, from microbes to mammals, as well as the interactions of marine organisms with each other and with their environment. Topics include primary productivity, biology of marine organisms, marine food webs, physiological adaptations, and ecology of marine habitats from coastal to deep-sea systems. Students will also be introduced to current topics and methods in marine research.

### Goals and Learning Objectives

1. Develop fluency in the vocabulary of marine biology, and learn how marine biological research is conducted and communicated.
2. Understand organization of the invertebrate tree of life, and identify representative organisms from the major marine phyla.
3. Consider the unique environmental constraints on marine organisms in a variety of different habitats, and the adaptations that have arisen to deal with these conditions.
4. Understand how energy and nutrients flow through the marine food web, and how energy flow relates to production of marine resources.
5. Examine how marine organisms interact with each other, and with their environment, and consider how these interactions shape the assemblages of organisms found in different marine habitats.

### Course Logistics and Delivery Mode

We will meet online at the scheduled meeting times for lecture and/or other class activities.

**Zoom connection information:**

[Zoom link](#)

Meeting ID: 845 8568 1043

Passcode: 488333

Lectures will be delivered during regular meeting times whenever possible, but may be pre-recorded in the event that the instructor cannot be present during the normal class period (e.g. due to illness or family demands). You will be notified in advance of any class cancellations or schedule changes using the default email address listed you have provided in your directory information as shown on UAOnline.

You are expected to take your own notes, but copies of Power Point presentations will be posted on the **Google Classroom [site](#)** as pdf documents.

**Text and Reading Assignments:** The required text for this course is ***Marine Biology, 5th Edition, by Jeffrey S. Levinton***. Reading assignments are noted on the lecture schedule. It is recommended that you complete the readings before coming to class on the date for which they are assigned. Additional readings (e.g., scientific papers) may be assigned periodically throughout the semester, and will be posted on the Google Classroom site.

## **Expectations and Assignments**

**Public seminars (20 points each):** You are required to attend two public seminars or thesis defenses of your choosing at any time during the semester. These seminars should cover topics related to the natural sciences, but do not necessarily have to be on marine science in particular.

Most science departments on campus hold weekly seminars at the same time each week; the CFOS seminar series is held every Wednesday at 3:30. You can also find fliers for upcoming special seminars and defenses posted on bulletin boards all around the West Ridge, or on the CFOS home page at [www.uaf.edu/sfos/](http://www.uaf.edu/sfos/). Given the mass shift to virtual modes of delivery for scientific meetings and presentations, it should be possible to find many options that fit your schedule or can be viewed asynchronously.

**To receive credit for public seminars:** Use the form available on the Classroom site to submit a short report to the instructor that includes the title of the presentation, speaker's name, location and date of the event (building, room number), and a paragraph describing the content of the presentation. Reports can be submitted at any time during the semester, but *all reports must be received by 5 pm on the last day our class meets (April 30)*. **NO LATE PAPERS WILL BE ACCEPTED.**

You *may* attend up to *two additional seminars* for extra credit (10 points each). Once you have submitted the two required reports via Classroom, use the same simple form for extra credit seminars, and submit to the instructor via email with the subject heading "Extra Credit Seminar" prior to 5 pm on the day of our last regularly scheduled class period.

**Study Questions (50 points each):** Three sets of study questions will be assigned during the semester. These will require a response in essay format. Questions will provide an opportunity for you to think through concepts covered in lectures, and will help you prepare for exams. Additional instructions and grading criteria will be provided in class. You will have at least one week to answer each set of questions. **LATE PAPERS WILL NOT BE ACCEPTED UNLESS INSTRUCTOR PERMISSION IS GRANTED IN ADVANCE.**

**Quizzes (~5 points each):** Short quizzes will be given periodically throughout the semester as the schedule permits; upcoming quizzes will be announced in class at least one class period in advance. Quiz questions will be very similar to exam questions and will help you to gauge your

level of preparedness for the exams. MAKE-UP QUIZZES WILL NOT BE GIVEN. However, remember that you can attend additional seminars for extra credit.

**Exams (250 points):** **Two midterms** (1.5 hours) and **one final exam** (comprehensive; 2 hours) will be given during the course. Exams may consist of multiple choice and T/F, short answer, or short essay questions. Exam format will be discussed further during class.

Students may make up missed exams in the event of a justifiable absence (e.g., illness, family emergency, required participation in UAF activities such as athletic events); however, it is the student's responsibility to arrange make-up exams with the instructor *in advance* for a planned absence. For unplanned absences during an exam, the student must contact the instructor with a valid excuse within 24 hours of the scheduled exam time, or no make-up exam will be allowed.

**Participation / Attendance Policy:** Lectures will frequently include material that is covered in much less detail—or not at all—in the text. Thus, you are unlikely to be successful in this course if you do not attend lectures. No matter the reason for your absence, it is your responsibility to work through the material you missed—make arrangements with a classmate to get notes if needed. Lectures can also be recorded if requested in advance.

### **Grading**

Grades will be determined based on the absolute points awarded for the following requirements:

|                              |                 |
|------------------------------|-----------------|
| Quizzes (~5 x 5 pts)         | 25              |
| Midterm (2 x 75 pts)         | 150             |
| Final exam                   | 100             |
| Seminars (2 x 20 pts)        | 40              |
| Study Questions (3 x 50 pts) | 150             |
| <b>Total</b>                 | <b>465 pts.</b> |

***Additional assignments and/or quizzes may be added during the semester, which may alter this point total.***

Semester grades will be assigned according to the following scale:

|            |          |           |        |
|------------|----------|-----------|--------|
| A+ 98-100% | A 93-97% | A- 90-92% |        |
| B+ 87-89%  | B 83-86% | B- 80-82% |        |
| C+ 77-79%  | C 73-76% | C- 70-72% |        |
| D+ 67-69%  | D 63-66% | D- 60-62% | F <60% |

A grade of Incomplete (I) will be given only to those students who have obtained permission prior to the last day of regular classes to complete course work after the scheduled date of the final exam. Permission will only be granted in situations where completion of work was made impossible by circumstances beyond the student's control, e.g., extended absence due to

severe illness or injury of the student or family member. Students who do not have permission to take an Incomplete will be given a grade based on the number of points they have earned as of the semester's end. If work is not completed within one year of the scheduled final exam, incompletes will be changed to a grade of F, per UAF policy.

**Plagiarism and Academic Integrity:** Plagiarism and cheating will not be tolerated in any way during this course. All assignments are expected to consist of students' original work. Students are expected to conduct themselves according to the UAF Student Code of Conduct, which can be found in the course catalog. Failure to comply with these guidelines will result in a failing grade, and the student may face consequences at the university level, depending on the severity of the offense.

**Support and Disability Services:** The Office of Disability Services can be reached by phone- (907) 474-5655, or email- [fydso@uaf.edu](mailto:fydso@uaf.edu), and can be located in WHIT 203 on the UAF campus. The Office of Disability Services is available for students with physical or learning disabilities. If you feel that you are differently abled and need these services, please contact the office or ask the instructor to make arrangements.

**Student protections and services statement:** Every qualified student is welcome in this class. I am happy to work with you, disability services, veterans' services, rural student services, etc. to find reasonable accommodations to support your learning and participation. Students at this university are protected against sexual harassment and discrimination (Title IX), and minors have additional protections. As required, if I notice or am informed of certain types of misconduct, I am required to report it to the appropriate authorities. For more information on your rights as a student and the resources available to you to resolve problems, please go to: [www.uaf.edu/handbook/](http://www.uaf.edu/handbook/).

UA is an AA/EO employer and educational institution and prohibits illegal discrimination against any individual: [alaska.edu/nondiscrimination](http://alaska.edu/nondiscrimination).

**COVID Policy:** Students should keep up-to-date on the university's policies, practices, and mandates related to COVID-19 by regularly checking this [website](#). Further, students are expected to adhere to the university's policies, practices, and mandates, and are subject to disciplinary actions if they do not comply.