

# BIOL 4000 – Marine Biology

## Syllabus

### COURSE INFORMATION:

- a. **Title:** Marine Biology
- b. **Instructor:** Dr. Timothy Henkel ([tphenkel@valdosta.edu](mailto:tphenkel@valdosta.edu))
- c. **Office:** Bailey Science Center 2212
- d. **Office Hours:** MW: 11:00am-12:00 pm and by appointment
- e. **Class Meets:** TR: 2-3:15 pm

**CATALOG DESCRIPTION:** An examination of coastal and oceanic organisms and the factors which structure marine systems. Prerequisites: BIOL 1107 and 1108

### COURSE OBJECTIVES:

During this course, students will:

- a. Describe the physical characteristics and biodiversity of various marine habitats;
- b. Identify key components of marine communities and impact on global biogeochemical cycles;
- c. Predict adaptations of marine organisms based on environmental characteristics ;
- d. Analyze and interpret data examining the factors structuring marine communities;
- e. Effectively organize, communicate and apply their knowledge of marine biology to their everyday lives.

### COURSE MATERIALS:

Textbook: Levinton, J.S. (2009) Marine biology: function, biodiversity, ecology. 3rd Ed. New York, Oxford UP.

Additional readings will be posted to Blazeview throughout the semester.

Readings are to be completed before class in order to be able to participate in class activities.

Homework and exam questions will be based on readings from the text as well as in class material.

**INSTRUCTIONAL ACTIVITIES:** Learning is not a passive activity in which you simply absorb and repeat back facts given by an instructor. Rather, learning requires you to take an active role. To truly understand science you must construct your own personal interpretation of the concepts and store them away in a form that is meaningful to you.

Facts and vocabulary are important to any discipline, though you are expected to go beyond simple memorization of details and interconnect those facts to concepts, applications and problems; to ask meaningful questions; to test well developed hypotheses; to develop a range of intellectual abilities, including critical thinking, logical argument, appropriate uses of evidence and interpretation of varied kinds of information; and to communicate your understanding in writing and orally to multiple audiences.

**GRADING PROCEDURES:** Letter grades will be assigned based on the following tables:

Course Component	% of Course Grade
Exams	50%
Homework	10%
In Class Activities/Quizzes	15%
Final Exam	25%
<b>Total</b>	<b>100%</b>

**Final Letter Grade**

- A: 90 – 100%
- B: 80 – 89%
- C: 70 – 79%
- D: 60 – 69%
- F: < 60%

**Exams:** There are three regular exams scheduled throughout the semester; each will cover the material from the end of the previous exam through the current exam. The first two exams are each worth 15% of your final grade, while the third and final exams are each worth 20 and 25% respectively. The final exam is scheduled during the final exam period of the course and will be cumulative based on all of the material covered in the course.

**Homework:** Out of class coursework will be regularly assigned. Homework must be completed by the due date and all homework is to be submitted within the first 5 minutes of class on the due date.

**In Class Activities and Quizzes:** In-class participation will be scored based on written assignments and quizzes.

**There will be NO UNEXUSED MAKE-UPS and NO EXTRA CREDIT!**

**ATTENDANCE POLICY:** You are expected to attend all scheduled course activities, and active participation is part of your course grade. Because of the nature and structure of the class, attendance is vital to your success in the course. We will strictly adhere to VSU’s policy on attendance which states: “A student who misses more than 20% of the scheduled classes of a course will be subject to receiving a failing grade in the course” (Undergraduate Catalog 2011-2012, p. 89).

**COMMUNICATION:**

**Email:** Email is the simplest way to contact me outside of class and is the quickest way for me to contact you as well. You are required to check and maintain your Valdosta State University email account. I will only communicate with you through this official email account.

**Blazeview:** We will be using Blazeview throughout the semester as a tool for sharing information. I will post course notes after each class to the website, as well as provide additional resources, readings, and homework assignments. All official course information is located on Blazeview and students are expected to regularly access the Blazeview website.

**Notes on emailing your professor:**

In order to get a reply to your emails you must do the following in your email communication:

- Include your course number and section in the subject line of any email.
- Communicate as you would at work and in a professional manner. This includes using proper grammar and spelling, a greeting and salutation, and be sure to include your full name at the end of all emails.

**ACADEMIC HONESTY POLICY:** Cheating, plagiarism (submitting another person's material as one's own, or doing work for another person which will receive academic credit) are all impermissible. This includes the use of unauthorized books, notebooks, or other sources in order to secure or give help during an assignment or exam, the unauthorized copying of examinations, assignments, reports, or term papers, or the presentation of unacknowledged material as if it were your own work. Students are responsible for knowing, understanding and complying with the VSU Student Code of Conduct, in Appendix A of the Student Handbook (<http://www.valdosta.edu/stulife/handbook/> )

If substantial evidence exists for a violation of this policy, *the student(s) involved will receive a grade of 'F' for the course* and an official record will be filed following the Academic Integrity Response along with a letter to the Dean of Students (<http://www.valdosta.edu/academic/AcademicHonestyPoliciesandProcedures.shtml>).

**CLASSROOM CONDUCT:** A classroom policy will be developed by the course during the first class meeting and will be the standard for behavior in the class. The policy will be posted to Blazeview and enforced during class sessions. Violations with the policy will result in removal from the class session, and repeated occurrences may result in grade reduction or permanent removal from the course.

**ACCESS OFFICE:** Students requesting classroom accommodations or modifications due to a documented disability must contact the Access Office for Students with Disabilities located in the Farber Hall. The phone numbers are 245-2498 (V/VP) and 219-1348 (TTY).

**FEDERAL PRIVACY ACT:** It is illegal to release personal information about an individual to others. Therefore grades, averages, and other personal information about any person will not be released to another person or over email.

**STUDENT SUCCESS CENTER:** The Student Success Center (SSC) at Valdosta State University is located in Langdale Residence Hall above the Tech Shop and is available to all students. The SSC provides free peer tutoring in core curriculum courses, including biology, chemistry, math, writing, and foreign languages. The SSC also provides free professional academic advising and on-campus job information in one location. Call 333-7570 to make an appointment, or visit the website: [www.valdosta.edu/ssc](http://www.valdosta.edu/ssc).

## Tentative Topics and Reading Assignments

		Chapter
8-Jan	Course Introduction and Ecology Primer	3
	<b>Life in the Water Column</b>	
	Properties of seawater	2,5
	Oceanography	2,5
	Life in the Plankton	7
	Patterns of Primary Production	9,10
	Zooplankton and Nekton	4,8
	Microbial food web	9
5-Feb	Exam 1	
	<b>Life in Intertidal Habitats</b>	
	Waves, currents, and tides	2,5
	Intertidal Communities	11,12
	The Rocky Intertidal	13,14
	Estuaries	14
	Salt Marshes to Mangroves	14
5-Mar	Exam 2	
	<b>Life in Subtidal Habitats</b>	
	Coral Reefs	15
	Seagrass beds and Kelp Forests	15
	Deep Sea Communities	16
	Chemosynthetic Communities	16
	Polar Seas	16
9-Apr	Exam 3	
	<b>Humans and the Sea</b>	
	Marine Invasions	17
	Marine Reserves	17
	Marine Fisheries	18
	Ocean and Climate Change	19
25-Apr	<b>Bringing it all together</b>	
1-May	FINAL Exam 2:45pm-4:45pm	

**The schedule of topics is tentative and may be changed, however exam dates are set as written**

**Note: Chapt 3 provides a basic primer to ecological terms and concepts. If you have not had BIOL 3250, or it's been a while since thinking ecologically, you should review this chapter.**