

BIOL 5830 – Marine Biology

Spring 2015 - Syllabus

COURSE INFORMATION:

- a. **Title:** Marine Biology
- b. **Instructor:** Dr. Timothy Henkel (tphenkel@valdosta.edu)
- c. **Office:** Bailey Science Center 2212
- d. **Office Hours:** TTH 9:30-10:30 and by appointment
- e. **Class Meets:** TTH 2-3:15 pm Bailey 1025

CATALOG DESCRIPTION: An examination of coastal and oceanic organisms and the factors which structure marine systems.

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.

Supplemental Book: Lalli and Parsons (1997) Biological Oceanography, an introduction. 2nd Edition. The Open University. <http://site.ebrary.com/lib/valdosta/docDetail.action?docID=10251250>

Additional readings from primary literature will be posted to Blazeview throughout the semester. Textbook 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 as well as in class material. The supplemental book is available as a free ebook and an additional resources to aide in your learning.

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 (including final)	60%
Teaching Session	25%
In Class Activities/Quizzes	15%
Total	100%

Final Letter Grade

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

Exams: There are three exams scheduled throughout the semester; each will cover the material from the end of the previous exam through the current exam. Each exam will be worth 15% of your final grade. While exams are not labeled as cumulative, concepts that are connected throughout the course are fair material for exams. The fourth 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.

In Class Activities and Quizzes: Points will be obtained through In-class written assignments and quizzes, each of which are possible during any given class session.

Teaching Session: You will prepare and execute a lesson plan on one of the topics under the Humans and the Sea category. A complete rubric will be provided and will cover creation of learning objectives, lecture, and exam questions for your chosen topic.

There will be NO LATE WORK, 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 D2L 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.

Tentative Topics and Reading Assignments

Topic	Textbook Reading	Supplemental
Course Introduction and Ecology Primer		
Life in the Water Column		
Properties of seawater	Ch 2;pg 18-22	
Life in a Fluid World	Ch 5; Ch 13 pg 297-300	
Oceanography	Ch 2; pg 22-29	L&P Ch 2
Life in the Plankton	Ch 7	L&P Ch 3
Patterns of Primary Production	Ch 9	
Zooplankton and Nutrient Cycles	Ch 10	L&P Ch 4/5
Nekton		Handout
Waves, Currents and Tides	Ch 2; pg 33-37	

Exam 1 - Feb 12

Life in Intertidal Habitats

Intertidal Communities		L&P Ch 8.1
The Rocky Intertidal	Ch 14; pg 309-327 Ch 6; pg 118-138	L&P Ch 8.2
Soft Sediment Communities	Ch 14; pg 327-330 Ch 13; pg 283-295	L&P Ch 8.4
Estuaries	Ch 14; pg 349-355 Ch 2; pg 37-38	L&P Ch 8.5
Salt Marshes	Ch 14 335-343	

Exam 2 - Mar 19

Life in Subtidal Habitats

Coral Reefs	15	L&P Ch 8.6
Seagrass beds and Kelp Forests	15	L&P Ch 8.3
Deep Sea & Chemosynthetic Communities	16	L&P Ch 8.8 - 8.9

Humans and the Sea

Marine Invasions	17	
Marine Reserves	17	
Marine Fisheries	18	
Ocean and Climate Change	19	

Final Exam May 6 @ 2:45 pm

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.