BIOL 3830 – Marine Biology
<u>**Summer 2018 - Syllabus**</u>

COURSE INFORMATION:

Title:	Marine Biology
Instructor:	Dr. Theresa Grove (tjgrove@valdosta.edu)
Office:	Bailey Science Center 1036
Office Hours:	*MTWR 11:00-12:00 and by appointment.
Class Meets:	M-F 8-10:50 am Bailey 2202

*There are a few days during Maymester when I have other obligations during office hours, and office hours will be moved or cancelled.

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

COURSE MATERIALS:

Textbook: Levinton, J.S. (2018) Marine biology: function, biodiversity, ecology. 5th Ed. New York, Oxford UP.
Lalli and Parsons (1997) Biological Oceanography, an introduction. 2nd Edition. The Open University. http://goo.gl/NcXGt6

Earlier editions of Levinton's Marine Biology textbook will work, though pay attention to chapter names. Lalli and Parsons is available as a free ebook and is an additional resource to aide in your learning. Additional readings from primary literature may 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. Exam questions will be based on readings 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.

Final Grade: Undergraduates: Your final grade will be calculated based on the average of the 4 exams (3 regular exams, 1 final exam). Graduate students: your final grade will be determined by averaging grades earned on the 4 exams and a 5-page paper (100 pts). This paper will be due June 28 (although you can turn it in sooner); more details will be provided on Tuesday, May 21.

Letter grades will be based on the following scale:

A: 89.5 – 100%
B: 79.5 – 89.4%
C: 69.5 – 79.4%
D: 59.5 – 69.4%
F: < 59.5%

Exams: There are three exams scheduled throughout the term (Thursday, May 23; Thursday, May 30 and Wednesday, June 5). Each will cover the material from the end of the previous exam through the current exam. While exams are not labeled as cumulative, concepts that are connected throughout the course are fair material for exams. The final exam is scheduled during the final exam period of the course (June 7), and it is not optional. All exams are worth 100 points and will be multiple choice. If you miss an exam, the make-up exam will be essay and short answer questions. No exam grades are dropped.

ATTENDANCE POLICY: You are expected to attend all scheduled classes. Attendance and participation will be recorded and used in final grade determination of borderline grades (e.g. a student with a final grade of 79.4 who has attended every class will earn a 'B' in the class).

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. Please write emails in a professional manner.

Blazeview: We will be using Blazeview D2L throughout the term as a tool for sharing information. I will post slides as soon as possible.

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 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).

ACCESS OFFICE: Students with disabilities who are experiencing barriers in this course may contact the Access Office for assistance in determining and implementing reasonable accommodations. The access Office is located in Farbar Hall. The phone numbers are 229-245-2498 (V), 229-375-5871. For more information, please visit VSU's Access Office or email: access@valdosta.edu.

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 over the phone.

TITLE IX STATEMENT: Valdosta State University (VSU) is committed to creating a diverse and inclusive work and learning environment free from discrimination and harassment. VSU is dedicated to creating an environment where all campus community members feel valued, respected, and included. Valdosta State University prohibits discrimination on the basis of race, color, ethnicity, national origin, sex (including sexual harassment and sexual violence), sexual orientation, gender identity, religion, age, disability, genetic information, or veteran status, in the University's programs and activities as required by applicable laws and regulations such as Title IX. The individual designated with responsibility for coordination of compliance efforts and receipt of inquiries concerning nondiscrimination policies is the University's Title IX Coordinator: the Director of the Office of Social Equity, titleix@valdosta.edu, 1208 N. Patterson St., Valdosta State University, Valdosta, Georgia 31698, 229-333-5463.

Tentative Schedule of Topics

Introduction to Marine Biology (Chapter 1)
The Ocean Environment (Chapter 2)
Life in a Fluid Medium (Chapter 6)
The Chemical and Physical (Chapter 5)
Reproduction, Dispersal, and Migration (Chapter 7)
Plankton (Chapter 8)
Marine Vertebrates and Other Nekton (Chapter 9)
The Open Sea: Distributions and Adaptations (Chapter 10)
Processes in the Water Column (Chapter 11)
Productivity, Food Webs and Global Climate Change (Chapter 12)
Benthic Microorganisms, Seaweeds, and Sea Grasses (Chapter 13)
The Diversity of Benthic Marine Invertebrates (Chapter 14)
Benthic Life Habits (Chapter 15)
The Tidelands (Chapter 16)
The Shallow Coastal Subtidal (Chapter 17)
Benthos from the Continental Shelf to the Deep Sea (Chapter 18)
Polar Marine Biology (Chapter 19)
Biodiversity and Conservation of the Ocean (Chapter 20)
Fisheries and Food from the Sea (Chapter 21)
Climate Oscillations and Climate Change (Chapter 3)
Environmental Impacts of Industrial Activities and Human Populations (Chapter 22)