TEXAS A&M UNIVERSITY

SYLLABUS

Course title and number	OCNG 251 Section 500
Term	Fall 2017
Meeting times and location	Eller O&M (OMB) Room 103, M/W/F, 1:50 pm -2:40 pm

Course Description and Prerequisites

Overview of the ocean environment, interrelation of the sub-disciplines of ocean sciences, importance of the oceans to human beings, human impact on the oceans. Class discussion of current events of relevance to the oceans. No prerequisites.

Course Objectives

- Understand scientific principles and concepts of Oceanography.
- Foster appreciation for the complexity of the Earth and its oceans.
- Develop understanding of the oceans' role in and importance to the Earth's environment.
- Encourage informed action as citizens of the planet responsible to future generations.

Learning Outcomes

At the end of the course, the student will:

- Identify reasons why sustainable practices regarding ocean resources (e.g. fisheries, hydrocarbons) are important and affect students' present and future life and the world economy
- Demonstrate how the oceans are connected to and drive major Earth processes, such as atmospheric and oceanic circulation, climate and weather, plate tectonics, and sustainability of human and marine populations
- Discuss the importance of oceanography in global initiatives and political decisions for the present and future
- Explain the theory of plate tectonics and its relationship to the formation of major features of the seafloor
- Describe the principles involved in the generation of waves and tides and evaluate their effects on coastal processes and marine ecosystems
- Analyze atmospheric and oceanic circulation systems their interconnections and driving forces
- Summarize the major physical and chemical properties of seawater and how each affects marine life
- Explain the relationship between plants and animals in the ocean and how they affect the cycling of carbon among the ocean, atmosphere and sediments
- Identify the consequences of a rise in sea-level on the coastal zone and society and possible mitigation and adaptation strategies

Core Objectives

Students will develop/improve:

- ***Critical thinking skills*** by using the information they gain during the course to draw conclusions and answer questions
- ***Communication skills*** primarily visual through learning how to interpret a wide range of graphics and visualizations
- ***Empirical and quantitative skills*** by solving problems
- ***Teamwork*** through group exercise

Instructor Information

Instructor:	Dr. Colleen Petrik
Telephone number:	979-845-2680 (This is my office number and I do not have voicemail)
Email address:	cpetrik@tamu.edu **Best way to contact me** (Email answered M-F 9 am – 6 pm.)
Office location:	Rm 317A, Eller O&M Building (inner office, enter through lab)
Office hours:	Wed & Fri 3:30 – 4:30 pm or by appointment (arrange via email)

Textbook and/or Resource Material

RECOMMENDED: Trujillo and Thurman, Essentials of Oceanography. 10th or 11th ed. Copies on reserve at the library. Access to "Mastering Oceanography" helpful online material can be purchased with the 11th edition or separately.

REQUIRED: iClicker. Available for purchase at the bookstore. iClicker 1, iClicker 2, and iClicker + are all acceptable. We will not use iClicker-go nor REEF.

RECOMMENDED: While taking the lab (OCNG 252) is not required, it is recommended. Many students report that taking the lab helps them better understand concepts covered in lecture.

Grading Policies

Exams: There will be 4 exams. Each exam will cover all materials and chapters listed in the course outline, however, knowledge of basic concepts covered previously will be assumed. The 4th exam will be given during the first hour of the final exam time. The exams will be weighted so that the highest score will count 30%, the lowest score will count 20%, and the other two will be 25% each. No make-ups will be allowed for unexcused absences. Makeup exams will be allowed for university excused absences. It is your responsibility to contact me if you have a university excused absence. Make up exams will not be the same as what was taken in-class and may be entirely essay exams. Grades are available at all times on eCampus except when the website is down for routine maintenance, therefore you will know your grade throughout the duration of this course. Keep in mind that grades will not reflect the weighting until the 4th has been taken.

iClickers: I will use iClickers to motivate class discussion, and participation will influence your final grade. Please be prepared to use your clicker by the second week of class. Go to https://www.iclicker.com/remote-registration-form-for-classic to register your clicker using your UIN as Student ID. Clicker points will be awarded for participation and for correct answers to questions. "Clicking-in" for someone else will result in no points being awarded for both parties. This is considered academic dishonesty and may be reported. Clicker participation and performance will add a maximum of 5% **bonus** to your final grade.

Grading Scale

A	100 – 90%
B	89.99 – 80%
C	79.99 – 70%
D	69.99 – 60%
F	59.99% and below

There will be no rounding. There will be no curve.

Classroom etiquette

Electronic devices (cell phones, tablets, laptops, etc.) are NOT allowed in class as they have been shown to distract and negatively impact students' learning. If you have an ADA accommodation requiring use of an electronic device, please see me. Cell phones must be turned off or silenced during class. Should you need to use one for emergency purposes, be respectful and excuse yourself from the class. **Students not following classroom etiquette will be asked to leave the classroom.**

Email etiquette

I am a professor with responsibilities beyond teaching this class. I am not tied to my desk, office phone, or computer. Please respect that it may take me several hours to respond to your email, but I will do my best to respond within 24 hours and in the time frame of M-F 9 am – 5 pm. Given that, do not rely on email for last minute questions about exams or appointments before an exam. I prefer to not answer email questions related to course content and recommend discussing them during office hours. I will answer questions about course logistics, but please refer to the syllabus and course website first. Please do not use abbreviations or emoji in emails. Please sign with your full name and address me as Dr. Petrik, Professor Petrik, or Professor.

Other Pertinent Course Information

You must have a TAMU email account (NetID) and know how to access eCampus through the Howdy webpage. I will post important notices concerning the course on eCampus and may also send notices to your TAMU email account. Lecture materials and grades will be posted on eCampus. Short quizzes may be assigned occasionally and will count towards extra credit. To do well in class you should spend 2 hours studying outside of class for every hour of class. I encourage you to see me during my office hours early in the semester if you have any questions about the course. Please do not wait until the end of the semester when much of your grade in the course has been earned.

Americans with Disabilities Act (ADA)

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, in Cain Hall, Room B118, or call 845-1637. For additional information visit http://disability.tamu.edu

Academic Integrity

"An Aggie does not lie, cheat, or steal, or tolerate those who do." For additional information please visit: http://www.tamu.edu/aggiehonor

Copyright Notice

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Plagiarism Statement

As commonly defined, plagiarism consists of passing off as one's own ideas, words, writing, etc., which belong to another. In accordance with this definition, you are committing plagiarism if you copy the work of another person and turn it in as your own, even if you should have the permission of that person. Plagiarism is one of the worst academic crimes, for the plagiarist destroys the trust among colleagues without which research cannot be safely communicated.

Course Topics, Calendar of Activities, Major Assignment Dates
****All dates subject to change**

Week	Monday date	Topics	Exams
Week 1	Aug. 28	Overview; Introduction to Planet Earth (Ch. 1, Appendices I & III) 9/1 NO in-class lecture, watch online lecture	
Week 2	Sept. 4	Plate Tectonics (Ch. 2); Marine Provinces (Ch. 3)	
Week 3	Sept. 11	Marine Provinces (Ch. 3); Marine Sediments (Ch. 4)	
Week 4	Sept. 18	Review; Exam; Water and Sea Water (Ch. 5)	**Exam 1** **Sept. 20** **Ch. 1-4**
Week 5	Sept. 25	Water and Sea Water (Ch. 5); Air-Sea Interaction (Ch. 6)	
Week 6	Oct. 2	Air-Sea Interaction (Ch. 6); The Oceans and Climate Change (Ch. 16)	
Week 7	Oct. 9	Ocean Circulation (Ch. 7)	
Week 8	Oct. 16	Review; Exam; Waves and Water Dynamics (Ch. 8)	**Exam 2** **Oct. 18** **Ch. 5-7,16**
Week 9	Oct. 23	Waves and Water Dynamics (Ch. 8); Tides (Ch. 9)	
Week 10	Oct. 30	Tides (Ch. 9); Beaches and Shoreline Processes (Ch. 10)	
Week 11	Nov. 6	Marine Pollution (Ch. 11); Review	
Week 12	Nov. 13	Exam; Marine Life and the Marine Environment (Ch. 12)	**Exam 3** **Nov 13** **Ch. 8-11**
Week 13	Nov. 20	Biological Productivity (Ch. 13) online lecture 11/22 &11/24 NO CLASSES (Thanksgiving)	
Week 14	Nov. 27	Biological Productivity (Ch. 13); Animals of the Pelagic/Benthic Environment (Ch. 14/15)	
Week 15	Dec. 4	Animals of the Pelagic/Benthic Environment (Ch. 14/15); Review	**Exam 4** **Dec. 12** **Ch. 12-15**