GEOLOGY 18000 Section 001 (1602)

INTRODUCTION TO OCEANOGRAPHY

Tues. and Thurs. 6:40-9:48pm HN Room 1022 SUMMER 2017

Start Date: 06/01/17 End Date: 07/13/17

Instructor: Dr. Faye F. Melas Office: 1032 Hunter North Office hours: By appointment

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Introduction: Even though the oceans cover about 72% of our world, they are still one of the last frontiers available to the human race. The challenge of learning how to use them is now starting to become reality.

Textbook: Keith A. Sverdrup, Alyn C. Duxbury and Alison B. Duxbury, "An Introduction to the World's Oceans", 10th Edition, McGraw Hill. **ISBN:** 978-0073376707. Previous editions of this textbook may be purchased used from Amazon or eBay. This textbook is also available for rent from Amazon, or as a 360 day subscription eTextbook. Also check out www.coursesmart.com and search under the title.

Course Description: Oceanography is the study of the physical, chemical and biological aspects of our oceans. The goal of this course is to make the students understand our oceans and the influence they have on our environment, climate and future. The economic importance and potential environmental damage will also be considered. The course begins with a description of the world's oceans and their evolution. Following that, the chemical and physical properties of sea water are examined. Both large scale circulation (currents, tides) and small scale movement (waves) are discussed, as well as the consequences they have locally and globally. Throughout the course, the role of the oceans on the biosphere, atmosphere and global weather and climate are emphasized.

NON-LAB SCIENCE CREDIT FULFILLS GER STAGE 2E

Course Objectives: Upon successful completion of this course, the students will be able to:

- Understand the origin, evolution and structure of the ocean basins and their relationship to sea-floor spreading and plate tectonics.
- Describe the evolution of sea water, its composition and the chemical reactions it undergoes with the animal and plant life it contains.
- Understand the interactions of the ocean with the atmosphere as it relates to temperature, salinity, density and ocean circulation.
- Appreciate the delicate balance which exists between our quest to retrieve resources from the oceans and the potential environmental damage which may result.

Grading Procedure: The entire course covers chapters two through thirteen. There will be three examinations based on lecture and reading assignments. Each exam counts for 1/3 of the your grade and will cover four chapters, as follows:

Exam 1: Chapters 2-5: Thurs.: June 15 Exam 2: Chapters 6-9: Thurs.: June 29

Exam 3: Chapters 10-13 (Final Exam): Given the last day of classes: Thurs.: July 13

All power points and course information will be posted on Blackboard

Make-up exams will not be given. In the event that one regular exam is missed (not the final), your lowest exam grade will be assigned as the score for the missed exam. The final exam may not be missed. If missing an exam is unavoidable (i.e. for medical reasons) I must be notified prior to the exam.

The University rules concerning grading will be strictly followed. Under no circumstances will a student be allowed to do "extra credit" to improve his/her grade.

Incomplete Work in the Course: When a student FOR VALID REASON does not complete the work assigned in a course (including the final exam, papers, etc.) and in the view of the instructor still has a reasonable chance to pass the course, the student shall be given the grade IN (incomplete). The student must explain the reason to the instructor or, in the absence of the instructor, to the department chair and arrange a schedule for making up the missing course work. These steps must be taken as soon as possible and no later than the end of the second week of the following semester. The student shall then be given the opportunity to complete the course without penalty beyond previously established penalties for lateness. Students averaging "C" or above are eligible to request an incomplete grade.

Classroom Policies: Class attendance is recommended. In addition to information provided in the text, extra material and occasional pertinent films will be shown and discussed in class. Examinations will include questions on all of the above.

The use of mobile telephones is not permitted during class. If you have an emergency, please step out of the room to take care of it.

Hunter College statement on Academic Integrity: Hunter College regards acts of academic dishonesty (e.g., plagiarism, cheating on examinations, obtaining unfair advantage, and falsification of records and official documents) as serious offenses against the values of intellectual honesty. The College is committed to enforcing CUNY Policy on Academic Integrity and will pursue cases of academic dishonesty according to the Hunter College Academic Integrity Procedures. Plagiarism, dishonesty, or cheating in any portion of the work required for this course will be punished to the full extent allowed according to Hunter College regulations.