

Saddleback College

Marine Science 20 (TICKET #21705) January 9 – May 17, 2012

Room SM 105

Lecture: T Th 6:00-8:50AM

Lab: Th 6:00-8:50

Instructor: Dr. Merton Hill

Office SM 138

Office Hours:

Tuesday 7:00-9:30AM; 5:00-6:00PM

Thursday: 8:00-9:30 AM

E-mail: mhill@saddleback.edu

Phone: (949) 582-4735

Web site www.saddleback.edu/faculty/mhill

Lab Materials: Download and put in binder 1st week of class!

Important Dates

First Week of Class Begins:	1/10/2012
First Class Meeting on:	1/10/2012
Drop with Refund by:	2/14/2012
Elect P/NP by:	2/14/2012
Last Day to Drop	4/5/2012
Final:	Tuesday, May 15 @ 5:15-7:15

Learning Objectives

- Describe what science is and apply the scientific approach to problem solving.
- Identify common minerals and rocks based on their physical properties.
- Locate and identify basic features on oceanographic charts.
- Describe the current model of earth's physical and chemical layering, including evidence supporting this model.
- Describe the theory of plate tectonics, including evidence supporting this theory.
- Identify the tectonic processes responsible for creating mountain ranges, ocean basins, oceanic trenches, and other features on the earth's surface.
- Identify the tectonic processes responsible for creating earthquakes and various types of volcanic activity.
- Describe the chemical and physical differences between fresh water and seawater.
- Describe the various types of waves, currents, and tides and their driving mechanisms.
- Describe various marine habitats and their inhabitants.
- Describe various marine resources.
- Understand marine environmental concerns present in the geologic column.

Attendance

- This is a fast-paced class and attendance is mandatory.
- Should you discontinue attending the class, please be aware that dropping the class is your responsibility, not mine. See the Saddleback Catalog for attendance policies.
- If you miss class, email me the reason immediately or I may drop you.
- If you miss 6 hours (2 classes) I may drop you.
- If you elect to drop, notify Admissions and Records, otherwise you may receive an "F".

Lectures

- Read the text prior to each class meeting. All material is subject to testing, including lectures, videos, field trip and class discussions (even questions and comments raised by students).
- You are responsible for taking notes during lecture.
- I do not generally provide my notes to students.
- Advice for adequate note taking: write what I say, not only what I write.
- Practice writing abbreviated notes so you can keep up in lecture. Rewrite your notes in longhand as soon as you have more time (rewriting helps you refresh your memory and recall things you may not have written during lecture).

Labs

- Some labs will be conducted in teams. Team mates will be randomly assigned.
- You must have the lab materials at the beginning of class. Points will be deducted if you come to class without lab materials (including pencil and eraser).
- Lab work must be completed in pencil.
- No make-up labs.

Field Trip

- Mandatory
- See Lab Schedule (last page of this syllabus) or my website www.saddleback.edu/faculty/mhill for times and places (maps of how to get there).
- You supply transportation.
- Check out localities ahead of time.
- We start on time. You will not earn credit if you are late.
- No smoking!

Cell Phones/Other Electronic Devices

- No cell phones. You may not use cell phones for photography, text messaging, calculating or anything during class. If your cell phone rings, or I even see your cell phone, you lose 10 points (per incident).
- A field trip is a class! Once a field trip has begun, cell phone rules apply.
- No electronic devices are allowed in class without prior permission. Misuse of a device (such as but not limited to game playing, "internetting", texting) will cause all students to lose their privileges.

Tests

- Comprehensive, emphasizing most recent material
- Based on text, lecture, lab, class discussions, videos, etc.
- Short-answer essay, true-false, and multiple choice
- Scan Tron 882 scoring sheets (you supply pencil and scoring sheets)
- Pop quizzes may be given at any time
- No make ups, no extra credit, no cheating, no exceptions

Student Project

Presentation during last week of class on any marine science topic I approve. For more details, see "Student Project" under "Lecture Links" on my web page.

LAB SCHEDULE

<u>DAY</u>	<u>TOPIC</u>
1/12	Introduction to Lab Safety / Navigation
1/19	Navigation/Bathymetry
1/26	Minerals
2/2	Rocks
2/9	Rocks/minerals & practice exam and navigation review
2/16	Lab Exam
2/23	Isostasy
3/1	Salinity
3/8	Solar Radiation
3/15	Spring Break
3/22	Water Density
3/29	Plankton
4/3	Field trip 3:00 Dana Wharf, Sum Fun
4/5	Life
4/12	Waves
4/19	Sedimentation/Settling Rates (Stoke's Law)
4/26	Student Presentations / Taxonomy/Invertebrates and marine animals
5/3	Lab Final
5/15	Tuesday, May 15 @ 5:15-7:15