

GEOLOGY 102: OCEANOGRAPHY
Schedule of Lectures, Readings, and Exams
Spring Semester 2013
(subject to change!)

Instructor: Dr. Kent M. Syverson, 145 Phillips Hall, 836-3676, E-mail *SYVERSKM*

Office Hours: M 1:00-1:50 p.m.
W 10:00-10:50 a.m.
F 11:00-11:50 a.m.
or by appointment (Please note: Appointments not needed for regular office hour periods listed above!)

Text: Sverdrup and Armbrust, 2009, *An Introduction to the World's Oceans*, Tenth Edition: McGraw-Hill Companies, Inc.

PART I: HISTORY OF OCEANOGRAPHY AND ORIGIN OF THE OCEAN BASINS

WEEK 1 Jan. 23 (W) Reading: Ch. 1 -- History of Oceanography
Introduction and history of oceanography, origin of the earth, geologic time

WEEK 2 Jan. 28 Reading: Ch. 2 -- The Water Planet
Geologic time

WEEK 3 Feb. 4 Reading: Ch. 3 -- Plate Tectonics
Geologic time, plate tectonics

WEEK 4 Feb. 11
Plate tectonics, volcanism

WEEK 5 Feb. 18
Plate tectonics, volcanism

**PART II: WATER AND OCEAN CURRENTS, WAVES,
AND COASTAL PROCESSES**

WEEK 6 Feb. 25 Reading: Ch. 4 -- The Sea Floor and Its Sediments
Plate tectonics, bathymetry

EXAM I: FRIDAY MARCH 1

WEEK 7 March 4 Readings: Ch. 5 and 6 -- Properties of fresh and salt water
Chemistry of water

GEOLOGY 102 (continued)

WEEK 8 March 11 Readings: Ch. 7 & 8 -- Atmospheric and oceanic structure/circulation
Chemistry, radiation balance of the earth, atmospheric circulation, Coriolis effect

SPRING BREAK MARCH 16-24, NO CLASS

WEEK 9 March 25 Reading: Ch. 9 – Surficial ocean currents
Atmospheric circulation, ocean currents

WEEK 10 April 1 Reading:
Ocean currents

WEEK 11 April 8 Reading: Ch. 10 & 12 – Waves; Coasts and beaches
Ocean currents, waves

EXAM II: FRIDAY APRIL 12

PART III: WAVES, TIDES, AND MARINE BIOLOGY

****Assigned readings for this unit: Marine biology is covered in chapters 14-18 of your textbook. Numerous videos will be used to illustrate life in the oceans, and you will be tested on this material.****

WEEK 12 April 15 Reading: Ch. 11 -- Tides
Waves, tides

WEEK 13 April 22 Readings: Ch. 14-18 – Marine biology
Tides, marine biology

WEEK 14 April 29 Readings: Ch. 14-18 – Marine biology
Marine biology

WEEK 15 May 6 Readings: Ch. 4.4, 13, 17.1, 18.7
Marine biology, pollution

FINAL EXAM: Finals week -- TBA. Students cannot take final exam early!