

**LOCK HAVEN UNIVERSITY**  
**GEOS120 – Oceanography; Spring 2009**

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**Lecture:** Mon. & Wed. 11:15am -12:05 pm (**Ulmer 101**); **Lab:** Tues 2:10-4:00 pm (Ulmer 106)

**Textbook:** Trujillo, A.P., and Thurman, H.V., 2008, *Essentials of Oceanography*, 9<sup>th</sup> ed., Prentice Hall

**Lab Manual:** Harold V. Thurman and S. M. Savin, 1995, *Laboratory Exercises in Oceanography*, Prentice-Hall.

**Grading:** Three Hour Exams = (15+20+20) = 55%  
Laboratory exercises & quizzes = 30%  
Field Trip to Wallops Island, VA = 15%

Total = 100%

**NOTE:** Hour exams (for lecture) will cover information presented in the class and in the textbook. The format of the exams will be multiple choice questions and short answer questions. If you are unable to attend an exam, you must make arrangements with me prior to the exam - THERE WILL BE NO EXEPTIONS. The lecture and lab materials will be closely tied to each other. In order for you to do well in the lab you will have to know both lecture and lab materials. The lab grade will be based on weekly assignments (lab exercises) and pre-lab quizzes given at the beginning of each lab. Lab exercises will be supplemented by hands-on exercises and Internet research on various topics. You will be **expected** to come prepared (i.e. you will have **to read** the exercise **before** coming to the lab/lecture) to the class. You are **encouraged to ask** questions during lectures and labs. The **field trip to Wallops Island is mandatory (accounts for 15% of total grade)**, and is scheduled for **April 16-19, 2009**. There is a fee (~\$120.00) involved in this trip. There will be no substitute for the field trip. If you are not sure about the attendance in the field trip, then you must drop the course.

<b>Lecture Dates</b>	<b>Lecture Topics &amp; Important Dates (Mondays &amp; Wednesdays)</b>	<b>Textbook Chapter(s)</b>	<b>Lab exercises and numbers (Tuesdays)</b>
<b>Jan 12 &amp; 14</b>	Intro to Oceans: The Water Planet <b>Jan. 14 – Modified Schedule</b>	1	<b>No Labs on Jan. 13</b>
<b>19 &amp; 21</b>	<b>MLK Day on Jan 19 (No Class)</b> The History of Oceanography	1	Applied Skills in Oceanography (handout)
26 & 28	Plate Tectonics	2	#2: Maps, charts
<b>Feb. 2 &amp; 4</b>	The Seafloor	3	#3: Bathymetry and navigation
9 & 11	Marine Sediments <b>Hour Exam 1 (2/11/09)</b>	4	#4: Magnetics & Plate Tectonics
16 & 18	Motion of the Atmosphere	6	#5/6: Submarine topography and marine sediments
	Circulation and Ocean Currents	7	
23 & 25	The Waves	8	#9: Coriolis effect; hands-on
<b>Mar. 2 &amp; 4</b>	<b>Spring Break – No Classes</b>		<b>No Labs</b>
9 & 11	The Waves (cont'd)	<b>8</b>	#10: Surface Ocean Currents
16 & 18	The Tides & Tsunami	8/9	#11/12: Waves
23 & 25	Coasts, Beaches & Estuaries	10/11	#13: Coastal oceanography (on Mar. 25 following Monday's)
<b>30 &amp; Apr. 1</b>	<b>Hour Exam 2 (4/1/09)</b>		#8: Temp-salinity-density
6 & 8	Chemical oceanography: the physical properties and seawater chemistry	14/15	#15: Classification of marine organisms
13 & 15	<b>Scholarship Day on 15<sup>th</sup> (No Class)</b> Chemical oceanography: the physical properties and seawater chemistry <b>Field Trip on 4/16-19/2009</b>	14/15	#16: Food chain & Biological productivity; Hands-on experiment
20 & 22	The Plankton, Nekton, & Benthos Environmental Issues and Concerns	14/15	Work on Field Report Visit exhibits and write a report
<b>April 28</b>	<b>Hour Exam 3, 10:00-11:50 am</b>		<b>Field Trip Report Due by 4/28/09</b>