**THE MARINE ENVIRONMENT**

**MASC 101/GEOL 103**

(Section 001)

**Spring 2013**

M, W, F 2:00 to 2:50 pm, Phillips 215

Instructor: Justin Ries, 4202G Venable Hall (962-0269), jries@unc.edu
Office Hours: Mon 3:00 to 4:00 p.m.

Teaching Assistant: Jihyuk Kim; jhk@live.unc.edu
Office hours: Fri 11:00-12:00, Venable 3105C
Joseph Morton; jpmorton@email.unc.edu
Office hours: Wed 3:00-4:00, Venable 3105B

Website: https://sakai.unc.edu/portal/site/masc101geol103
Target audience: Anyone wishing to gain an introductory perspective on the ocean environment
Article locator: http://scholar.google.com/

### COURSE OUTLINE

<table>
<thead>
<tr>
<th>Meeting</th>
<th>Date</th>
<th>Topic</th>
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<tr>
<td>W</td>
<td>Jan 9</td>
<td>Introduction</td>
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<tr>
<td>F</td>
<td>Jan 11</td>
<td>Ch. 2 Origins of the Universe, Earth and Life</td>
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<td>M</td>
<td>Jan 14</td>
<td>Ch. 4 Marine Provinces</td>
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<tr>
<td>W</td>
<td>Jan 16</td>
<td>Ch. 3 Plate Tectonics and the Ocean Floor</td>
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<td>F</td>
<td>Jan 18</td>
<td>Student Presentations</td>
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<tr>
<td>M</td>
<td>Jan 21</td>
<td><strong>Holiday – no class</strong></td>
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<tr>
<td>W</td>
<td>Jan 23</td>
<td>Ch. 5 Marine Sediments</td>
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<td>Student Presentations</td>
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<tr>
<td>M</td>
<td>Jan 28</td>
<td>Ch. 6 Water and Seawater</td>
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<tr>
<td>W</td>
<td>Jan 30</td>
<td><strong>Special Topic: Geologic History of Seawater</strong></td>
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<td>Student Presentations</td>
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<tr>
<td>M</td>
<td>Feb 4</td>
<td>Ch. 7 Air-Sea Interaction</td>
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<td>W</td>
<td>Feb 6</td>
<td><strong>Review Day – Bring questions please!</strong></td>
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<td>F</td>
<td>Feb 8</td>
<td><strong>Mid-Term Exam #1</strong></td>
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<td>Ch. 8 Ocean Circulation</td>
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<tr>
<td>W</td>
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<td>Ch. 9 Waves and Water Dynamics</td>
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<td>W</td>
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<td>Ch. 11 The Coast: Beaches and Shoreline Processes</td>
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<td>Ch. 12 Coastal Waters and Marginal Seas</td>
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<td>W</td>
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<td>Ch. 13 The Marine Habitat</td>
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<td>Ch. 14 Biological Productivity and Energy Transfer</td>
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<td>W</td>
<td>Mar 6</td>
<td>Ch. 15 Animals of the Pelagic Environment</td>
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<td>Ch. 16 Animals of the Benthic Environment</td>
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<td>Ch. 17 Marine Resources</td>
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<td>M</td>
<td>Apr 1</td>
<td>Ch. 18 Marine Environmental Concerns</td>
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<td>Special Topic: Oil – Formation, Recovery, Impact on the Oceans &amp; Carbon Sequestration</td>
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<td>Special Topic: Glaciers &amp; Ice Sheets</td>
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<td>W</td>
<td>Apr 10</td>
<td>Special Topic: Global Warming &amp; Sea Level Rise</td>
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<td>M</td>
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<td>Special Topic: Ocean Acidification</td>
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<td>W</td>
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<td>Apr 26</td>
<td>Review Day – Bring questions please!</td>
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<td>Reading Day – No Class</td>
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<td>S</td>
<td>May 4</td>
<td>Final Exam – PHILLIPS 215 – 4 PM - SATURDAY</td>
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### Grading Criteria

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<thead>
<tr>
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<th>Relative Weight Toward Grade (%)</th>
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<tr>
<td>Mid-term exam #1</td>
<td>15</td>
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<tr>
<td>Mid-term exam #2</td>
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<td>Final exam (cumulative)</td>
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<td>Presentation</td>
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<td>Abstract/Bibliography</td>
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<td>Class participation (+ quizzes)</td>
<td>15</td>
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### Class Policies

Attendance during the entire 50 minute class period is mandatory and will be taken each day. Each student is allowed 3 unexcused absences, regardless of cause, before it is counted against their attendance grade. Please do not contact the professor or TAs regarding absences.

Please read the assigned textbook chapters *BEFORE* the associated lectures.

The Power Point presentations will be posted on Sakai before each lecture.

Exams will cover material presented during the lectures and/or in the textbook. Not all material in the textbook will be covered during the lecture, and not all lecture material will be contained within the textbook. Therefore, one must attend all lectures and read all assigned chapters to fully prepare for the exams. The final exam will be cumulative.

Missed exams: To reschedule a missed exam, you must present a letter from your Healthcare Provider or from the Dean of Students that explicitly states that you were unable to attend the exam at the scheduled time. Make-up exams must be taken within 48 hours of the scheduled exam time.

Presentations: 10 minute Powerpoint presentation (10 – 20 slides) on some current scientific event related to the topics discussed in the course. Each presentation will be followed by 3-5 minutes of questions. Presentations MUST be emailed to the professor the day before the presentation is made so that it can be properly uploaded.

Abstract/Bibliography of Presentation: Abstract should be a concise 150-word summary of your presentation. Bibliography should contain at least 10 references used in your presentation. Both are due the day of your presentation.

Quizzes: Pop quizzes will be given throughout the semester and will cover the reading due for that class period. If you miss a quiz due to absence, you will receive a zero for that quiz—no exceptions. However, students are permitted to drop their 2 lowest quiz grades.
ABSOLUTELY NO CELL PHONES or OTHER HANDHELD ELECTRONIC DEVICES ARE ALLOWED IN THE CLASSROOM. ANY STUDENT POSSESSING THESE ITEMS WILL BE ASKED TO LEAVE THE CLASSROOM.

IF YOU USE A LAPTOP IN CLASS, IT MUST BE USED SOLELY FOR COURSE-RELATED ACTIVITIES. ANY STUDENTS CAUGHT SURFING THE WEB, TEXTING, USING SOCIAL MEDIA SITES, OR ENGAGING IN ANY OTHER DISTRACTING OR DISRESPECTFUL BEHAVIOR DURING CLASS TIME WILL BE ASKED TO LEAVE THE CLASS ROOM & SHALL RECEIVE AN ATTENDANCE GRADE OF ZERO FOR THE DAY.

***The professor reserves to right to make changes to the syllabus, including project due dates and test dates (excluding the officially scheduled final examination), when unforeseen circumstances occur. These changes will be announced as early as possible so that students can adjust their schedules accordingly.***

HONOR CODE

“It shall be the responsibility of every student at The University of North Carolina at Chapel Hill to obey and support the enforcement of the Honor Code, which prohibits lying, cheating, or stealing when these actions involve academic processes or University, student or academic personnel acting in an official capacity.”

SPECIFICS*

Pledge: You must make the following pledge on all written work that you submit: “On my honor, I have neither given nor received unauthorized aid on this assignment.” Writing “Pledge” and signing your name on the first page implies that you have conformed to the spirit of the pledge.

Exams: All exams in this class are to be taken without the assistance of books, notes, or other people. You may, however, study with your classmates. In fact, forming study groups is an excellent way to prepare for exams.

Attendance: You are expected to attend class. If you have to miss a class please arrange to find out from a classmate if you missed anything that is not posted on Sakai.

If you have any questions regarding the Honor Code, please contact me.

*Adapted from a “How to Have Honor Prevail in Your Classroom”, a handout prepared by Margaret Barrett, Judicial Programs Officer, UNC Chapel Hill.