Division of Marine Science & Technology
Department of Marine Sciences
Course Syllabus

**COURSE TITLE**
Introduction to Oceanography

**COURSE NUMBER**
OCE 1001

**PREREQUISITES**
None

**CREDIT HOURS**
3.0

**CONTACT HOURS**
45

**CLASS MEETING TIMES**
MW 9:00 AM-12:30PM in M-322

**CLASS METHOD**
This class blends traditional face-to-face and online learning. Students are expected to attend classroom sessions on (dates and times) as well as participate in online activities as assigned.

**INSTRUCTOR**
Brian DeSanti II, MSc.
Brian.DeSanti@fkcc.edu
Office # C 225

**OFFICE HOURS**
Mondays 4:30-5:30 PM or by appointment

**COURSE DESCRIPTION**
This course is intended for non-science majors and is an introduction to the science of coastline, major ocean circulation patterns and currents, characteristics of deep and shallow water waves and the tides along with interactions of atmosphere with the oceans. Topics include, physics and chemistry of seawater, major ocean basins and features of the coastline, major ocean circulation patterns and currents, characteristics of deep and shallow water waves and the tides along with interactions of atmosphere with the oceans.
**COURSE OBJECTIVES**

Upon completion of the course, the student will be able to demonstrate knowledge—by successfully answering questions on an objective examination—of the following topics:

1. Describe the processes that created the Earth and the world’s oceans.

2. Describe the theory plate tectonic theory and distinguish between types of plate boundaries.

3. Illustrate the features of the sea floor that arise from tectonic activity.

4. Explain how the physical and chemical properties of seawater are important in the ocean.

5. Compare the physical, chemical and biological processes that affect the origin, transport and deposition of sediment.

6. Summarize the role of the ocean in weather and climate.

7. Explain the processes and properties of seawater that create ocean currents.

8. Define ocean waves and identify the forces that generate them.

9. Explain how the ocean determines the shape, features and composition of the coastline.

**REQUIRED TEXTBOOK**

The texts required for the course are contained in the AMS Ocean Studies Student Package Academic Year 2013-2014 and Summer 2014. The ISBN is 978-1-935704-96-6. This includes the textbook, *Ocean Studies: Introduction to Oceanography* (3rd edition) edited by Joseph M. Moran, and the *Ocean Studies Investigations Manual* (9th edition). Both texts are required. Once you have your materials, I encourage you to review the “Welcome” page (page 1) of the *Ocean Studies Investigations Manual*, where you will be introduced to the course website. The link to the site is: [http://www.ametsoc.org/amsedu/login.cfm](http://www.ametsoc.org/amsedu/login.cfm). To access the site you will need to enter the Login ID (*fkcc135*) and password (*l4oceans*).

**PROPOSED COURSE SCHEDULE**

<table>
<thead>
<tr>
<th>Date</th>
<th>Textbook Chapters/Topics</th>
<th>Assignments</th>
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Please note: The course schedule is subject to change to meet the needs of the course and its students. If you miss a class, it is YOUR responsibility to stay current.
<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Additional Information</th>
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<tbody>
<tr>
<td>6/23-6/25</td>
<td>Course Orientation</td>
<td>Read Chapter 1 and 2</td>
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<tr>
<td></td>
<td>The Nature of Science</td>
<td>Quiz and Lab 1 Due</td>
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<td>Earth Orgins</td>
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<td>The Ocean in the Earth System</td>
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<td>6/30-7/2</td>
<td>Ocean Basins and Plate Tectonics</td>
<td>Quiz and Lab 2 Due</td>
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<td>“Drain the Ocean” Video</td>
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<tr>
<td>7/7-7/9</td>
<td>Properties of Ocean Water</td>
<td>Read Chapter 3 and 4</td>
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<td>Marine Sediments</td>
<td>Quiz and Lab 3 Due</td>
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<tr>
<td>7/7-7/9</td>
<td>The Atmosphere and Ocean</td>
<td>Read Chapters 5 and 6 Due</td>
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<td>Ocean Currents</td>
<td>Quiz and Lab 4 and 5</td>
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<td>7/14-7/16</td>
<td>Ocean Waves</td>
<td>Read Chapters 6 and 7</td>
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<td>Tsunamis</td>
<td>Quiz and Lab 6 and 7 Due</td>
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<td>Tides</td>
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<td>The Ocean in Human Affairs</td>
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<td>7/22-7/24</td>
<td>The Dynamic Coast</td>
<td>Read Chapter 8</td>
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<td>Exam Review</td>
<td>Quiz and Lab 8 Due</td>
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<td></td>
<td>Final Exam</td>
<td>Final Exam</td>
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**STUDENT EVALUATION AND COURSE POLICIES**

**Grading**

Your preliminary grade will be calculated based on your performance in three areas including: 1) online quizzes; 2) laboratory investigations; 3) a comprehensive final examination. This will be calculated by averaging your performance on the eight Chapter quizzes (the lowest grade will be dropped), the eight lab investigations (the lowest grade also will be dropped), and final exam. Both the quizzes and laboratory investigations are self-administered and submitted through D2L. These activities are also graded immediately upon submission, so you will know your grade status continually throughout the course.

Once your initial cumulative average is determined (based on your quizzes, labs and final), your “supplemental grades” will be considered. These will include two optional assignments which include a: 1) Term Project and 2) Field Trip. Each of these is worth five points each. (You may also receive up to four additional points for consistence class attendance.) Points earned from assignments and attendance will be added to your preliminary average. So, for example, if someone with a 70% initial cumulative average (based on their quizzes, labs and final exam) earns five points from their Term Project and five points from the field trips (10 points total), then their final cumulative average would be boosted to an 80%, and they’d receive a B rather than a C. Consistent class attendance could earn you an even higher score. Your final letter grade will be based on this cumulative term average and determined based on the following range of percentages. **There will be no grade curve used in this class.**

A: 90-100%
Technical Assistance
If you are having any technical difficulties (e.g., logging in, accessing the discussion board, etc) please contact the Office of Distance Learning via email, with your question, at D2Lhelp@fkcc.edu

Online Quizzes
There are eight end-of-chapter quizzes in the course based on the textbook material. You may complete your quizzes at any time during the course. However, it is suggested that you not attempt the quiz until after you’ve attended the lecture on that chapter, and completed the end-of-chapter review exercise. You may re-take a quiz once, and your lowest score of the eight quizzes will be dropped from the total in determining your final course average. As quiz items are randomized, and drawn from a large inventory, don’t expect to see the same questions if you decide to retake a quiz. All quizzes are due by 11:59 PM of the date indicated in the course schedule. No late submissions will be accepted.

Laboratory Investigations
An important part of most science courses are laboratory activities. In this course, lab activities will come from your AMS Ocean Studies Investigations Manual in conjunction with the AMS Online Ocean Studies website: www.ametsoc.org/amsedu/login.cfm. The Login ID is FKCC135, and the password is !4oceans. You will use this website extensively during your laboratory activities, so I encourage you to become familiar with it as soon as possible.

As with the quizzes, you may complete your Lab Investigation exercises at any time during the course. Each chapter contains two exercises, A and B. You are required to complete either (not both) of these exercises, recording your answers in your Lab Investigations manual. Unlike the quizzes, you may not take the exercise a second time. However, if you are unsatisfied with your initial performance, you may take the second exercise. If you do so, I will record the highest of the two scores as your final grade. As with the quizzes, your lowest score will be dropped from the total in determining your final course average. All lab investigations are due by 11:59 PM of the date indicated in the course schedule. No late submissions will be accepted.

Quiz and Labs Performance
Only your raw score will be released for your quiz and lab performance. You will not be given specific feedback on what items you missed. This is because students will take these assessments are different times, and test security must be maintained. However, I will be happy to review your quizzes and/or labs individually. To do so, please make an office appointment.

Final Exam
The final exam is comprehensive and consists of 50 multiple-choice items drawn from a bank of 100
items. Each person will receive a unique, randomly-selected version of the final. Like the quizzes and labs, this will be administered online but, unlike the quizzes, will be available for only the class hours on the date prescribed in the calendar.

**Academic Honesty and Plagiarism**

Students are expected to respect and uphold the standards of honesty in submitting written work to instructors. Though occurring in many forms, plagiarism in essence involves the presentation of another person’s work as if it were the work of the presenter. Any cheating or plagiarism will result in disciplinary action to be determined by the instructor based on the severity and nature of the offense. It is the student’s responsibility to review the College’s policy on Academic Honesty.

**Participation**

Students earn points for each class they attend and participate in. Arriving late, leaving early, cell phone and non-class computer usage, as well as any other disruption of class will result in loss of points. Please note that the instructor may withdraw a student from a course for excessive absences (see FKCC Policies below). For our purposes, “excessive absences” is defined as 3 or more unexcused absences.

**Extra Credit Assignments**

**Term Project**

The Term Project is a culminating activity due, like all assignments, on the last day of the term. I prefer that the project you select have some experiential component, such as participating in a group or activity related to marine conservation or other ocean-oriented activity. I will post various opportunities that fulfill this requirement as they become available in the “News” section of the D2L site. Projects could include: participating in a coastal clean-up program; a coral, mangrove or seagrass restoration project; attending public hearings on an ocean/conversation-related issue (such as a Sanctuary Advisory Council meeting); or conducting a presentation for the public on an ocean/conversation-related issue (such as an assignment for a speech class or a presentation to an elementary/middle school class). In addition, I will give full credit for a Term Project if you complete any scuba diving certification class during the current semester. Successful completion of the course must be verified by the instructor.

**Field Trips**

One “live” field trips and one “virtual” field trip will be offered during the term. Only one of the two may be submitted for credit. Additional details on the live field trip will be posted on D2L. To prevent you from having a miserable time, and insure that you get the maximum educational value, I strongly suggest that you follow the recommendations below:

1. We will be in the water for a portion of each field trip, and most often there will be a session where we will be snorkeling. So, always wear a bathing suit or other clothing that can get wet. (You are welcome to bring your own snorkeling equipment, but if you don’t have any, it will be provided.)
2. For trips during cooler months of the year, be sure to dress warmly and bring a change of clothes (and a wet suit if you have one). It’s always a good idea to be prepared for rain or for
getting wet in transit to the field site.

3. On sunny days always wear a hat. (It should cover your face, ears and back of neck.)

4. During warmer months, wear a shirt made of light material and color. (If you sunburn easily, or haven’t been outside much lately, it should be long-sleeved.) Also, bring bug repellent, as mosquitoes can be a problem during early morning hours when there’s little or no wind.

5. Always wear shoes or sandals that can get wet. If you wear sandals, make sure they’re the kind that strap firmly to your feet. ABSOLUTELY NO FLIP-FLOPS! They will come off in the mud.

6. Apply sunscreen of SPF 15 or higher (even in winter), and insect repellent for morning summer sessions.

7. Wear a pair of polarized sunglasses.

8. Always bring ample water.

9. Bring a field notebook and pencils (not pens, ink runs when it gets wet).

10. A small backpack will make it easier to carry your stuff.

Students are expected to familiarize themselves with FKCC Policies, which can be found in the current Student Handbook.
Class Contract

The Class Contract assignment is my method of ensuring you know what you should expect from me, and what I expect from you. By returning the Class Contract to me, you are acknowledging that you:

a. Understand the policies detailed in this Syllabus.
b. Understand the expectations and due dates listed in the Course Calendar and Assessment Measures.
c. Understand that you will be held accountable to the standards published in this document.
d. The Class Contract must be submitted to the instructor after reading.

By signing my name I acknowledge the above.

Print Name: ___________________________ Date: __________________

Signature: _____________________________