

## SYLLABUS - GEOL 340 THE OCEANS – Fall 2023



[Blue Ice Glacier in Greenland \(NASA\)](#)

### COURSE INFORMATION

#### SECTIONS:

GEOL 340-01 (2053), GEOL 340-02 (2054) and GEOL 340-03 (2055)

#### COURSE DESCRIPTION:

Prerequisites: Completion of GE Areas A1, A2, A3 and B4 with grade C- (CR) or better.

Cross-listed: ENSC 340

Units: 3; G.E./G.R. Area: B6; Sustainability

An exploration of the interaction of oceans with the earth's geosphere, atmosphere, and biosphere. Topics include seafloor morphology, coastlines, seawater chemistry, the role the oceans play in controlling weather and climate, marine ecosystems, human impacts and dependence on the oceans.

#### G.E. AREA OUTCOMES:

Upon completion of the B6 requirement, students will be able to:

1. demonstrate advanced and/or focused science or quantitative content knowledge

in a specific scientific field, using appropriate vocabulary and referencing appropriate concepts (such as models, uncertainties, hypotheses, theories, and technologies).

2. apply advanced quantitative skills (such as statistics, algebraic solutions, interpretation of graphical data) to scientific problems and evaluate scientific claims.

3. demonstrate understanding of the nature of science and scientific inquiry and the experimental and empirical methodologies used in science to investigate a scientific question or issue.

4. apply science content knowledge to contemporary scientific issues (e.g., global warming) and technologies (e.g., cloning), where appropriate.

#### **OVERLAY AREA OUTCOMES:**

After completion of a course designated as fulfilling the Sustainability Overlay requirement, students will be able to:

1. identify the environmental, social, and economic dimensions of sustainability, either in general or in relation to a specific problem.
2. analyze interactions between human activities and natural systems.
3. describe key threats to environmental sustainability.
4. explain how individual and societal choices affect prospects for sustainability at the local, regional, and/or global levels.

## REQUIRED MATERIALS

Reliable Internet access throughout the semester.

### TEXTBOOK REQUIREMENTS:

American Meteorological Society (AMS) Oceans Studies textbook 4th edition. Textbook only!

Title: **AMS Ocean Studies: Introduction to Oceanography** Fourth Edition

**Editors:** Douglas A. Segar, Stacy W. Kish, Elizabeth W. Mills, Kira A. Nugnes, Managing Editor

**ISBN-13 978-1-944970-09-3**

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Make sure you get the Fourth Edition!

You can order the required textbook directly from the AMS bookstore website or the CSUEB campus bookstore. The campus bookstore takes a bit longer.

There are three options: **Online ePub**, **ePub Download**, and **Softcover**

The **Online ePub** is a rental option for an online version of the textbook. The **ePub Download** can be downloaded to your computer, and the **softcover** takes a few days to be delivered. See the AMS textbook order page for more information.

<https://edubooks.ametsoc.org/OCTX-Ed4>

### Additional Internet Access Comments:

For questions about **CSU East Bay Online** go to:

[Canvas Login - CSUEB \(csueastbay.edu\)](https://csueastbay.edu)

For troubleshooting connectivity questions go to:

[Online Student Support and Services \(csueastbay.edu\)](https://csueastbay.edu)

Your pop-up blocker should be turned off.

You may also download **GoogleEarth** (not required). This program is CPU intensive, however, will be very useful for viewing and manipulating images of Earth and the Ocean in 3-D.

<https://earth.google.com/web/>

**Note:** We will be talking about a lot of different places on the planet and in the Ocean, If you have GoogleEarth download on your computer you can “fly” to places which interest you!

## CONTACT INFORMATION

**Instructor:** Dr. Michelle McMahon

This course is completely online including all course work, exams, and assignment submission.

I am generally online Monday – Friday and on some weekends.

The fastest way to contact me is via text or phone, followed by email through the Canvas course page. Campus emails are more likely to get “lost in digital space” or simply buried in my inbox.

**1) Text/Phone:** XXX XXX XXXX

*Please confine phone calls to regular business hours: M-F 8 am – 5 pm.*

**2) Email** via the **Canvas** course page

**3) Weekly Zoom Office Hours** are scheduled for Mondays 7:00 pm Pacific Time.

**Secondary Contact:**

**4) Campus email:** \_\_\_\_\_

My goal is to respond to questions within 24-48 hours.

**IMPORTANT DATES FOR Fall 2023:**  
[IMPORTANT DATES – FALL 2023 CSUEB](#)

## EXAMS AND ASSIGNMENTS

**Exams** (1, 2, and 3) will be available on the dates indicated on the course **Calendar, In Weekly Assignment Summaries in Announcement**, in the course **Syllabus** and on your **To Do** list in **Canvas**. No exam make-ups will be allowed unless the instructor is notified, and arrangements have been made before the last day of the exam period.

**Exams** are online through the **Canvas** website link (see **Exams**). All the exams will be open **Friday, Saturday, and Sunday, midnight to midnight** (i.e., all day, all three days.)

The three exams are open-book and timed (1.25 hours), Students should have no additional access to the Internet during the exam, besides the online AMS textbook. You may use any personal notes and/or course materials. You should have a command of the course content because you will not have time to look up more than a few answers. Students are expected to complete the exam on their own without outside help. Anyone suspected of cheating, including plagiarism, on the exams will be dismissed from the course immediately with a final grade of zero. This includes responses to **extra credit questions!**

***Note:** In all assignments and exams, cutting and pasting answers from the textbook, Instructor's Notes or online, does not demonstrate you understand either the question or the answer. You need to demonstrate your knowledge in your own words.*

**Make-up Exams:** An opportunity to take a makeup examination will be offered to those who make prior contact before the exam due date with the instructor. If an exam is missed without contacting the instructor, it can be made up within 48 hours (two days) of the exam due date, for a maximum score of 80%, no extra credit. As it is unfair to students that completed the exam within the allotted exam period, further extension beyond the 48-hour late window will be made at my discretion base on accommodations, illness, or hardship.

**Internet Problems (IP's)**, and the **Marine Policy Project (MPP)** assignments are due on **or before Saturday nights** before midnight. **IP** and **MPP** assignments can be submitted up to one well late for a **maximum grade of 80%**. Under no circumstances will late **MPP** assignments, or **Internet Problems**, be eligible for credit after one week following the due date unless you contact me for permission before the final late due date, or a student has specific accommodation. All further extensions will be at my discretion.

***Note.** Not being able to access the website on a given day is not an excuse for submitting late work for full credit. My point is, getting the required assignments done earlier in the assignment week avoids the possibility of the website not being available. If you start early, you will have time to revisit the website.*

**Note:** Before you submit any assignment, review your work, and ask yourself if you understand both the questions and the answers, and if you have clearly and concisely articulated your knowledge in your own words.

**EVALUATION:**

**Exams:** 3 during the semester; each exam is worth 20% of the final grade = **60%**

**Internet Problems:** average of 10 IP assignments = **20%**

**Marine Policy Project (MPP):** completed throughout the semester in 4 parts = **20%**

**Extra Credit Opportunities:** will be identified throughout the semester. Also, see **Extra Credit Opportunities** in **Course Information**.

**Ten extra credit points** will raise the final numerical grade **1 full percentage point**. 50 points of extra credit are the maximum possible.

For example, if a student completes the 50 points of extra credit allowed, and their final average of the **Exams, Investigations, and MPP** is 85, their final grade in this class will be 90%, A. **Note:** This extra credit is separate for the exam and MPP extra credit.)

**Note:** your final grade in this class **is not** a straight average of total points.

<b>Your Final Grade is Determined by The Following</b>	<b>Details</b>	<b>Points (if applicable)</b>	<b>% Of Final Grade</b>
Three Exams	Multiple Choice with Extra Credit Essay- Timed -Each Exam is 20% of Final Grade	100 points each + Extra Credit	60
Marine Policy Project (4 Parts Total)	Complete in 4 parts throughout the semester	100 points total + Extra Credit	20
Internet Problem (Average)	Complete 10 Internet Problems Throughout the Semester	Each worth 100 points. Average Grade = 20% FG	20
Extra Credit ( <i>Does not include Exam extra credit</i> )	See: Course Information – Extra Credit Opportunities	Maximum +5 points	
Total:			100%

#### **FINAL SEMESTER GRADE:**

Final grades will be determined by calculating the average of the above assignments. The grading scale is:

<b>Final Letter Grade</b>		<b>Final Average (including EC)</b>
A	=	93+
A-	=	90 – 92
B+	=	88 – 89
B	=	83 - 87
B-	=	80 - 82
C+	=	78 - 79
C	=	73 - 77
C-	=	70 - 72
D+	=	68 - 69
D	=	60-67
F	=	Below 60

**Disclaimer:** Be aware that this online course may have students from other section(s) participating at the same time through course mergers. You might see other students' names from different section(s) and might be able to message or email each other within this course. Contact me if you have any questions or concerns.

<b>CSUEB UNIVERSITY POLICIES</b>
<p><b>ACADEMIC INTEGRITY STATEMENT:</b></p> <p>As a member of the academic community, you are expected to act with integrity and avoid plagiarism and other forms of cheating. By enrolling in this class, you agree to uphold the standards of academic integrity described at <a href="#">CSUEB Academic Dishonesty Policy</a>.</p>
<p><b>STUDENT SERVICES:</b></p> <p>To access student services offered at Cal State East Bay, click on the MY Compass icon to get you to your one-stop online student support hub for information on academic advising, tutoring, financial aid, the library, the health center, technology support, career counseling, campus life, equity programs, and more.</p>
<p><b>ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES:</b></p> <p>For disability and other learning-related needs and accommodations, including if you would need assistance in the event of an emergency evacuation, please communicate with your instructor as soon as possible. Students with disabilities are also encouraged to contact the Accessibility Services office at <a href="#">CSUEB Accessibility Services</a> to meet with a counselor who can advise you on your options, including your rights under Section 504 of the Rehabilitation Act and the Americans with Disabilities Act.</p>
<p><b>PROTECTION AGAINST DISCRIMINATION, HARRASSMENT AND RETALIATION:</b></p> <p>Title IX and CSU policy prohibit discrimination, harassment, and retaliation, including Sex Discrimination, Sexual Harassment or Sexual Violence. CSUEB encourages anyone experiencing such behavior to report their concerns immediately. CSUEB has both confidential and non-confidential resources and reporting options available to you. Non-confidential resources include faculty and staff, who are required to report all incidents and thus cannot promise confidentiality. Faculty and staff must provide the campus Title IX coordinator and or the DHR Administrator with relevant details such as the names of those involved in an incident. For confidential services, contact the Confidential Advocate at 510-885-3700 or go to the Student Health and Counseling Center. For 24-hour crisis services call the BAWAR hotline at</p>



510-845-7273. For more information about policies and resources or reporting options, please visit the following websites.

[Risk Management- Register a Complaint](#)

[CSUEB Title IX Information](#)

**GRADE APPEAL AND ACADEMIC GRIEVANCES:**

If you wish to appeal your course grade at the end of the semester or have other academic concerns related to a course, please visit the [Grade Appeals and Academic Grievances \(GAAG\)](#) section of the catalog, which explains the process. URL:

<https://catalog.csueastbay.edu/content.php?catoid=31&navoid=26604&hl=%22grade+appeal%22&returnto=search>

**EMERGENCY STATEMENT:**

California State University, East Bay is committed to being a safe and caring community. Your appropriate response in the event of an emergency can help save lives. Information on what to do in an emergency situation (earthquake, electrical outage, fire, extreme heat, severe storm, hazardous materials, terrorist attack) may be found at [Risk Management](#). Please be familiar with these procedures. Information on this page is updated as required. Please review the information on a regular basis.

**STUDENT CONDUCT:**

The University is committed to maintaining a safe and healthy living and learning environment for students, faculty, and staff. Each member of the campus community should choose behaviors that contribute toward this end. More information about community expectations for student conduct can be found at [CSUEB Student Conduct](#).

[LAND ACKNOWLEDGMENT \(long version\)](#)

**OUTSIDE READING**

You are encouraged to share with the class any pertinent newspaper or periodical articles. Web-based articles can be posted on in **Discussions**.

## GEOL 340 The Ocean- Fall 2023 Course Schedule



This schedule is solid, but is subject to change due to major weather events, earthquakes etc. If small or larger changes are made, they will be communicated and posted in Canvas **Announcements**. Also, all assignment and exam dates are on the course **Calendar**. Any issues, contact me.

Week Number	Activities and Assignment	Additional Notes
<b>Week 1</b> <b>August</b> <b>22 - 26</b>	<b>Welcome, Introductions, Course Overview and Chapter 1: Ocean and the Earth System</b>	In Canvas See: Modules - Course Information (*Start Here*) and Modules- Unit 1 -Chapter 1  <a href="https://www.csueastbay.edu/online/CanvasLogin/">https://www.csueastbay.edu/online/CanvasLogin/</a>
	<b>The First Day of Class is Tuesday, August 2022</b>	I look forward to working with you!
	Order the required AMS Ocean Studies Textbook 4 <sup>th</sup> edition  <a href="https://edubooks.ametsoc.org/OCTX-Ed4">https://edubooks.ametsoc.org/OCTX-Ed4</a>	The required AMS Ocean Studies Textbook 4 <sup>th</sup> edition can be purchased through the <a href="#">CSUEB Campus Bookstore</a> or directly for the AMS Bookstore Note: <a href="https://edubooks.ametsoc.org/OCTX-Ed4">https://edubooks.ametsoc.org/OCTX-Ed4</a> This is an eBook, hardcopies are available but take a bit longer to get, due to shipping,
	Become familiar with the <b>Canvas</b> course page	Announcement Unit -Modules Discussions Calendar Assignments: IP's and MPP Exams

Week Number	Activities and Assignment	Additional Notes
	<p style="text-align: center;"><b>Read:</b>  <b>Chapter 1 Ocean and the Earth System</b>  and the associated the  <b>Instructor's Notes and/or Presentations*</b></p>	<p style="text-align: center;">Required  In Canvas See: Modules -Unit 1- Chapter 1 to view the  Instructor's Notes and Presentations  (Instructor's Notes are Required, Presentations* are  Optional in place of Instructor's Notes)  *Presentations are more like a traditional classroom  lecture.</p>
	<p><b>Go to:</b> <a href="https://www.mapsofworld.com/world-ocean-map.htm">https://www.mapsofworld.com/world-ocean-map.htm</a> and become familiar with the names and locations of major ocean basins and seas.</p>	<p style="text-align: center;">Optional but Recommended  Are there 4 or 5 major ocean basins?</p>
	<p style="text-align: center;"><b>Participate in Week 1 Discussion</b> - Introductions!</p>	<p style="text-align: center;">Optional but recommended</p>
	<p style="text-align: center;"><b>Complete Course Information and Chapter 1 Surveys</b></p>	<p style="text-align: center;">Optional  The Course Information Survey is Recommended as a  Syllabus Review</p>
<p><b>August 22-28</b>  <b>August 29-September 5</b></p>	<p style="text-align: center;">Add Drop Date without Instructors Permission  Add Period with Instructor's Permission</p>	<p style="text-align: center;">Important Dates</p>
<p style="text-align: center;"><b>Week 2</b>  <b>August 27 – September 2</b></p>	<p style="text-align: center;"><b>Chapter 2: Ocean Basins and Plate Tectonics</b></p>	<p style="text-align: center;">In Canvas See: Modules -Unit 1 - Chapter 2  <a href="https://www.csueastbay.edu/online/CanvasLogin/">https://www.csueastbay.edu/online/CanvasLogin/</a></p>
	<p style="text-align: center;">Read <b>Chapter 2</b> in the <b>AMS Textbook</b> and the associated <b>Instructor's Notes and/or Presentations*</b></p>	<p style="text-align: center;">In Canvas See: Modules -Unit 1 - Chapter 2  (Instructor's Notes or Presentations are required.)</p>
<p style="text-align: center;">Due  Saturday,  September 2</p>	<p style="text-align: center;"><b>Internet Problem 1:</b> Plate Tectonics</p>	<p style="text-align: center;">Required  See: Modules- Internet Problems  or  Modules - Unit 1 - Chapter 2  <i>One of my favorites!</i></p>
	<p style="text-align: center;"><b>Review the Marine Policy Project Overview</b></p>	<p style="text-align: center;">In Canvas See: Modules – Marine Policy Project  MPP Part 1 is due on Saturday, September 16</p>
	<p style="text-align: center;">Participate in <b>Week 2 Discussion</b> - Plate Tectonics</p>	<p style="text-align: center;">Optional</p>
	<p style="text-align: center;"><b>Complete Chapter 2 Survey</b></p>	<p style="text-align: center;">Optional  See: Chapter 2 FAQs to see my responses to former student questions</p>

Week Number	Activities and Assignment	Additional Notes
<b>Week 3</b> <b>September</b> <b>3 - 9</b>	<b>Chapter 3: Properties of Ocean Water</b>	In Canvas See: Modules -Unit 1- Chapter 3 <a href="https://www.csueastbay.edu/online/CanvasLogin/">https://www.csueastbay.edu/online/CanvasLogin/</a>
	Read <b>Chapter 3</b> in the <b>AMS Textbook</b> and the associated <b>Instructor's Notes</b> and/or <b>Presentations</b>	In Canvas See: Modules- Unit 1- Chapter 3 (Instructor's Notes are Required, Presentations* are Optional in place of Instructor's Notes)
	<b>Review the Marine Policy Project Overview</b>	In Canvas See: Modules – Marine Policy Project MPP Part 1 is due next Saturday, September 16
Due Saturday, September 9	<b>Internet Problem 2</b> Ocean Chemistry	Required See: Modules- Internet Problems or Modules – Unit 1- Chapter 3 <i>(this is fun, and a bit easier than IP1)</i>
	Participate in <b>Week 3 Discussion</b> Ocean Acidification	Optional
	<b>Complete Chapter 3 Survey</b>	Optional In Canvas See: Chapter 3 FAQs to see my responses to former student questions
<b>September 5</b>	Drop Deadline (No Permission Required)	Important Date
<b>Week 4</b> <b>September</b> <b>10 - 16</b>	<b>Chapter 4: The Atmosphere and Ocean</b>	In Canvas See: Modules - Unit 1 - Chapter 4 <a href="https://www.csueastbay.edu/online/CanvasLogin/">https://www.csueastbay.edu/online/CanvasLogin/</a>
	Read <b>Chapter 4</b> in the <b>AMS Textbook</b> and the associated <b>Instructor's Notes</b> and/or <b>Presentations</b>	Required In Canvas See: Modules- Unit 1- Chapter 4 (Instructor's Notes are Required, Presentations* are Optional in place of Instructor's Notes)
Due Saturday, September 16	<b>Submit Marine Policy Project Part 1</b>	Required In Canvas See: Modules- Marine Policy Project or Modules – Unit 1- Chapter 4
Due Saturday, September 16	<b>Internet Problem 3</b> Geography, Weather and Climate	Required In Canvas See: Modules- Internet Problems or Modules – Unit 1- Chapter 4
	Participate in <b>Week 4 Discussion</b> Solar Energy and The Ocean	Optional
	<b>Complete Chapter 4 Survey</b>	Optional In Canvas See:: Chapter 4 FAQs to see my responses to former student questions

Week Number	Activities and Assignment	Additional Notes
September 12	Last Day to Change Grade Type	Important Date
Week 5 September 17 - 23	Chapter 5: Ocean Currents	In Canvas See: Modules - Unit 1 - Chapter 5 <a href="https://www.csueastbay.edu/online/CanvasLogin/">https://www.csueastbay.edu/online/CanvasLogin/</a>
	Read <b>Chapter 5</b> in the <b>AMS Textbook</b> and the associated <b>Instructor's Notes</b> and/or <b>Presentations</b>	In Canvas See: Modules - Unit 1 - Chapter 5
Available Friday – Sunday September 22 – 24  (24 hours all three days)	<b>Exam 1 – Over Chapters 1, 2, 3, 4 and 5</b> Check out the optional Exam 1 “Fair Game” Sheet in <b>Content -Exams</b>	<b>Exam 1</b> is timed 1 hour and 15 minutes. It has 50 multiple choice questions with one 10 point “big issue” extra credit question. See: <b>Exams</b> for access and <b>Course Information</b> for more information on Chapter Exams layout and grading.
	Participate in <b>Week 5 and 6 Discussion Tidal and Wave Energy</b>	Optional
	<b>Complete Chapter 5 Survey</b>	In Canvas See: Chapter 5 FAQs to see my responses to former student questions
Week 6 September 24 - 30	Chapter 6: Ocean Waves and Tides	In Canvas See: Modules - Unit 2 - Chapter 6 <a href="https://www.csueastbay.edu/online/CanvasLogin/">https://www.csueastbay.edu/online/CanvasLogin/</a>
	Read <b>Chapter 6</b> in the <b>AMS Textbook</b> and the associated <b>Instructor's Notes</b> and/or <b>Presentations</b>	In Canvas See: Modules - Unit 2 - Chapter 6
Due Saturday, September 30	<b>Internet Problem 4</b> Coastal and Tidal Currents	Required In Canvas See: Modules- Internet Problems or Modules – Unit 2 - Chapter 6
	Participate in <b>Week 5 and 6 Discussion Tidal and Wave Energy</b>	Optional
	<b>Complete Chapter 6 Survey</b>	Optional See: Chapter 6 FAQs to see my responses to former student questions
Week 7 October 1 - 7	Chapter 7: The Dynamic Coastline	In Canvas See: Modules - Unit 2 - Chapter 7 <a href="https://www.csueastbay.edu/online/CanvasLogin/">https://www.csueastbay.edu/online/CanvasLogin/</a>
	Read <b>Chapter 7</b> in the <b>AMS Textbook</b> and the associated <b>Instructor's Notes</b> and/or <b>Presentations</b>	In Canvas See: Modules- Unit 2 - Chapter 7

<b>Week Number</b>	<b>Activities and Assignment</b>	<b>Additional Notes</b>
Due Saturday, October 7	<b>Internet Problem 5</b> Local and Global Tides	Required In Canvas See: Modules- Internet Problems or Modules - Unit 2 - Chapter 7
	Participate in <b>Week 7-9 Discussion the BP Oil Spill in the Gulf of Mexico</b>	Optional
	<b>Complete Chapter 7 Survey</b>	In Canvas See: Chapter 7 FAQs to see my responses to former student questions
<b>Week 8</b> <b>October 8 - 14</b>	<b>Chapter 8: Marine Ecosystems</b>	In Canvas See: Modules - Unit 2 - Chapter 8 <a href="https://www.csueastbay.edu/online/CanvasLogin/">https://www.csueastbay.edu/online/CanvasLogin/</a>
	Read <b>Chapter 8</b> in the <b>AMS Textbook</b> and the associated <b>Instructor's Notes</b> and/or <b>Presentations</b>	In Canvas See: Modules - Unit 2 - Chapter 8
Due Saturday October 14	<b>Marine Policy Project Part 2</b>	Required In Canvas See: Modules- Marine Policy Project or Modules – Unit 2 - Chapter 8
Due Saturday October 14	<b>Internet Problem 6</b> Hurricane Related Coastal Erosion	Required In Canvas See: Modules- Internet Problems or Modules – Unit 2 - Chapter 8
	Participate in <b>Week 7-9 Discussion the BP Oil Spill in the Gulf of Mexico</b>	Optional
	<b>Complete Chapter 8 Survey</b>	Optional In Canvas See: Chapter 8 FAQs to see my responses to former student questions
<b>Week 9</b> <b>October</b> <b>15 - 21</b>	<b>Chapter 9: Life in the Ocean</b>	In Canvas See: Modules - Unit 2 - Chapter 9 <a href="https://www.csueastbay.edu/online/CanvasLogin/">https://www.csueastbay.edu/online/CanvasLogin/</a>
	Read <b>Chapter 9</b> in the <b>AMS Textbook</b> and the associated <b>Instructor's Notes</b> and/or <b>Presentations</b>	In Canvas See: Unit 2 - Chapter 9
Due Saturday, October 21	<b>Internet Problem 7</b> Marine Migration and Global Primary Production	Required In Canvas See: Modules- Internet Problems or Modules – Unit 2 - Chapter 9
	Participate in <b>Week 7-9 Discussion</b> The BP Oil Spill in the Gulf of Mexico	Optional

Week Number	Activities and Assignment	Additional Notes
	<b>Complete Chapter 9 Survey</b>	In Canvas See: Chapter 9 FAQs to see my responses to former student questions
<b>Week 10</b> <b>October</b> <b>22 - 28</b>	<b>Chapter 10: The Ocean Atmosphere and Climate Variables</b>	In Canvas See: Modules - Unit 2 Chapter 10 <a href="https://www.csueastbay.edu/online/CanvasLogin/">https://www.csueastbay.edu/online/CanvasLogin/</a>
	<b>Read Chapter 10</b> in the <b>AMS Textbook</b> and the associated <b>Instructor's Notes</b> and/or <b>Presentations</b>	In Canvas See: Unit 2 - Chapter 10
Available Friday -Sunday October 27 - 29 (24 hours all three days)	<b>Exam 2 – Over Chapters 6, 7, 8, 9 and 10</b> Check out the optional Exam 1 “Fair Game” Sheet in <b>Modules -Exams</b>	<b>Exam 2</b> is timed 1 hour and 15 minutes. It has 50 multiple choice questions with one 10 point “big issue” extra credit question. See: Modules- <b>Exams</b> for access, and <b>Course Information</b> for more information on Exams layout and grading.
Due Saturday October 28	<b>Internet Problem: 8</b> El Nino Southern Oscillation (ENSO)	Required In Canvas See: Modules- Internet Problems or Modules – Unit 2 - Chapter 10
	Participate in <b>Week 10-12 Discussion</b> Carbon Sequestering in the Ocean	Optional
	<b>Complete Chapter 10 Survey</b>	In Canvas See: Chapter 10 FAQs to see my responses to former student questions
<b>Week 11</b> <b>October 29 –</b> <b>November 4</b>	<b>Chapter 11: Ocean Sediments</b>	In Canvas See: Modules - Unit 3 - Chapter 11 <a href="https://www.csueastbay.edu/online/CanvasLogin/">https://www.csueastbay.edu/online/CanvasLogin/</a>
	<b>Read Chapter 11</b> in the <b>AMS Textbook</b> and the associated <b>Instructor's Notes</b> and/or <b>Presentations</b>	In Canvas See: Unit 3 - Chapter 11
Due Saturday November 4	<b>Marine Policy Project Part 3</b>	Required In Canvas See: Modules- Marine Policy Project or Modules – Unit 3- Chapter 11
Due Saturday November 4	<b>Internet Problem 9</b> Ocean Sediments	Required In Canvas See: Modules- Internet Problems or Modules – Unit 3- Chapter 11
	Participate in <b>Week 10-12 Discussion Carbon Sequestering in the Ocean</b>	Optional
	<b>Complete Chapter 11 Survey</b>	Optional

<b>Week Number</b>	<b>Activities and Assignment</b>	<b>Additional Notes</b>
<b>Week 12</b> <b>November</b> <b>5 - 11</b>	<b>Chapter 12: The Ocean and Climate Change</b>	In Canvas See: Modules - Unit 3 - Chapter 12 <a href="https://www.csueastbay.edu/online/CanvasLogin/">https://www.csueastbay.edu/online/CanvasLogin/</a>
	Read <b>Chapter 12</b> in the <b>AMS Textbook</b> and the associated <b>Instructor's Notes</b> and/or <b>Presentations</b>	In Canvas See: Unit 3 - Chapter 12
	Participate in <b>Week 10-12 Discussion Carbon Sequestering in the Ocean</b>	Optional
	<b>Complete Chapter 12 Survey</b>	Optional
FRIDAY NOVEMBER 10	Veterans Day	Campus Closed
<b>Week 13</b> <b>November</b> <b>12 - 18</b>	<b>Chapter 13: Ocean Exploration: Past and Present</b>	In Canvas See: Modules - Unit 3 - Chapter 13 <a href="https://www.csueastbay.edu/online/CanvasLogin/">https://www.csueastbay.edu/online/CanvasLogin/</a>
Monday November 13	Last Day to Withdraw from Class	
	Read <b>Chapter 13</b> in the <b>AMS Textbook</b> and the associated <b>Instructor's Notes</b> and/or <b>Presentations</b>	In Canvas See: Unit 3 - Chapter 13
Due Saturday November 18	<b>Marine Policy Project Part 4</b>	Required In Canvas See: Modules- Marine Policy Project or Modules – Unit 3 - Chapter 13
	Participate in <b>Week 13-15 End of Semester Discussion Climate Change</b>	Optional
	<b>Complete Chapter 13 Survey</b>	Optional
November 20 -24	Fall Recess!	Campus Closed
<b>Week 14</b> <b>November 26</b> <b>- December 2</b>	<b>Chapter 14: Ocean Stewardship</b>	In Canvas See: Modules - Unit 1 - Chapter 14 <a href="https://www.csueastbay.edu/online/CanvasLogin/">https://www.csueastbay.edu/online/CanvasLogin/</a>
	Read <b>Chapter 14</b> in the <b>AMS Textbook</b> and the associated <b>Instructor's Notes</b> and/or <b>Presentations</b>	Required In Canvas See: Modules- Internet Problems or Modules – Unit 3- Chapter 14
Due Saturday, December 2	<b>Internet Problem 10</b> Sea Ice	Required In Canvas See: Modules- Internet Problems or Modules – Unit 3- Chapter 14



Week Number	Activities and Assignment	Additional Notes
	Participate in <b>Week 13-15</b> <b>End of Semester Discussion Climate Change</b>	
<b>Week 15</b> <b>December</b> <b>3 - 9</b>	<b>Chapter 15: Ocean Climate Policy</b>	In Canvas See: Modules - Unit 3 - Chapter 15 <a href="https://www.csueastbay.edu/online/CanvasLogin/">https://www.csueastbay.edu/online/CanvasLogin/</a>
	Read <b>Chapter 15</b> in the <b>AMS Textbook</b> and the associated <b>Instructor's Notes</b>	In Canvas See: Unit 3 - Chapter 15
	Participate in <b>Week 13-15</b> <b>End of Semester Discussion Climate Change</b>	Optional
Available Friday -Sunday December 8- 11  (24 hours, all four days)	<b>Exam 3 – Over Chapters 11, 12, 13, 14 and 15</b> Check out the optional Exam 1 “Fair Game” Sheet in <b>Modules -Exams</b> for access	<b>Exam 3</b> is timed 1 hour and 15 minutes. It has 50 multiple choice questions with one 10 point “big issue” extra credit question. See: Modules- <b>Exams</b> for access, and <b>Course Information</b> for more information on Exams layout and grading.
Tuesday December 12,	<b>Last Day to Submit Extra Credit</b>	Optional Submit online via email through D2L or campus email <a href="mailto:michelle.j.mcmahon@lonestar.edu">michelle.j.mcmahon@lonestar.edu</a>
Thursday, December 14	<b>Final Grades Submitted!</b>	
<b>Tuesday,</b> <b>January 2</b>	<b>Official Grades will be posted at MyCSUEB</b>	