



# PENSACOLA STATE COLLEGE

## SYLLABUS

### Oceanography

### OCE1001-P1025

### Spring 2026, Session A

**Instructor:** Dr. Ophelia George

**Office:** Pensacola Campus, Building 17, Room 1744

**Phone:** 850-484-1544

**Email:** [ogearge@pensacolastate.edu](mailto:ogearge@pensacolastate.edu)

**Office Hours:** TBA

**Department Head:** Dr. Vasanth Ramachandran

**Department Head Office:** 1760-A

**Department Head Phone:** (850)484-1106

**Department Head Email:** [vramachandran@pensacolastate.edu](mailto:vramachandran@pensacolastate.edu)

**Last Date of Drop/Add:** January 15, 2026

**Last Date for Student to Withdraw:** April 6, 2026

**Final Exam Date:** TBD

**Class Meeting Time:** Monday, Wednesday | 11:00 AM - 12:15 PM

**Class Location:** Pensacola Campus, Building 17, Room 1777

**Prerequisites:** Placement at the college level or completion of the appropriate exit-level developmental course(s) with a grade of C or better.

**Course Description:** Using the scientific method, critical thinking skills, and data analysis, the student will examine the fundamental processes of the ocean system, composed of an atmosphere, hydrosphere, lithosphere, and biosphere, through time. The course will also explore interactions between these spheres, including critical analysis of scientific theories and emphasize oceanic connections with humanity.

**Credit Hours:** 3 credit hours

**Semesters Offered:** Fall, Spring

**Course Designations:** **College Transfer.** Meets AA General Education Core, Natural Sciences (Physical Sciences) requirement.

**General Education Core Course Standard:** Per Florida Statute 1007.25, "Natural science courses must afford students the ability to critically examine and evaluate the principles of the scientific method, model construction, and use the scientific method to explain natural experiences and phenomena."

**Required Textbooks and Instructional Materials:** Investigating Oceanography; Sverdrup & Kudela, 4<sup>th</sup> ed.; 2024; 9781264091171, McGraw Hill Publishing

The educational materials used in this course, including textbooks and ancillary materials, are intended for educational purposes only. All opinions represent those of the author(s) and not necessarily those of Pensacola State College, or the instructor.

### Course Learning Outcomes:

1. Use critical thinking to recognize the rigorous standards of scientific theories.
2. Analyze and synthesize oceanographic data to draw scientifically valid conclusions.
3. Recognize the different time scales associated with different ocean processes.

4. Describe interactions between humans and the ocean realm.
5. Apply their understanding of oceanographic principles to various marine issues.
6. Describe the magnitude of the role of the ocean on our lives and relate our dependence on a healthy ocean.
7. Relate the historical, geological, physical, chemical, and biological characteristics of oceans.
8. Participate in environmental discussions, based on the content of the course. Make informed decisions as global citizens about the future of the planet.

#### General Education Student Learning Outcomes:

- 1. Critical Thinking:** The student analyzes, evaluates, and, if necessary, challenges the validity of ideas, principles, or data in order to develop informed opinions, probable predictions, or defensible conclusions.
- 2. Scientific and Mathematical Literacy:** The student properly identifies and applies scientific or mathematical principles and methods.
- 3. Information Literacy:** The student effectively locates, evaluates, and applies information from a variety of sources.

**Methods of Evaluation:** At minimum, the instructor will cover content which aligns with statewide and institutional learning outcomes for the course. The instructor will measure student performance using the following:

Grading Scale:		Grading Calculation			
90% - 100%	A	Assignment/Assessment	% of Total Grade	Duration	Total points per task group
87% - 89.99%	B+	Class activity (8 @ 15 pts each)	12%	Untimed	120
80% - 86.99%	B	Attendance	3%	Untimed	30
77% - 79.99%	C+	Homework (6 @ 25 pts each)	15%	Untimed	150
70% - 76.99%	C	Exams* (5 @ 100 pts each)	50%	60 minutes	500
67% - 69.99%	D+	Chapter quizzes (7) + Syllabus quiz	20%	25 minutes	200
60% - 66.99%	D	<b>Totals</b>	<b>100%</b>	<b>Total pts</b>	<b>1000</b>
Below 60%	F				

#### Instructor Requirements:

**Assignments** will include a mix of homework assignments, in-class activities, and chapter quizzes.

- o You will have three attempts for both the syllabus and chapter quizzes, with Canvas keeping your highest score. However, all attempts must be completed by the assignment deadline to avoid late submission penalties.
- o You will only have one submission attempt for homework assignments.

**Exams** will cover material from assigned readings, lectures, and any handouts, and will consist of multiple choice, matching, fill-in-the-blank, and short-answer questions.

- o Only one attempt is allowed for each exam. Ensure you complete the exam by the listed deadline, as there will be **no makeup exams** under any circumstances since Exam 5 can serve as a replacement for a missed or low exam score.
- o **Note:** While there are **5 exams** in the course, **only 4** will be required to satisfy the **exam portion of your grade**. Your **lowest test score** will be replaced by **your highest score**, **PROVIDING THAT THERE HAS BEEN NO CHEATING ON ANY OF THE EXAMS**. This allows you to use Exam 5 to replace a missed exam score. Alternatively, you can skip Exam 5 entirely, in which case it becomes your lowest exam score and will be replaced with the highest grade from one of the 4 earlier exams. At the end of the semester, your final exam scores will include your **highest exam score counted twice** and any extra credit applied to your second lowest exam score.
- o **Important:** Exams are **not open-book or open notes**. During the exam, you may **not use textbooks, notes, outside websites, or any resources other than your memory**. Any unauthorized use of materials will be considered cheating and result in penalties as outlined in the academic integrity policy.
- o **Exam 5 will be proctored using Proctorio software**, which works best with Google Chrome. If you are unable to use Proctorio, you must arrange in advance to take a paper copy of the exam at your nearest Campus testing site.

In general, I aim to post completed grades within a week of the assignment deadline.

## Assignment Due Dates

All assignments deadlines will be clearly listed in Canvas as well as in the tentative schedule below. Late assignment submissions are strongly discouraged as there will be a 5% deduction for each day that the assignment is late. A **temporary 0 (zero)** will be placed for assignments that have not been submitted by the time that I have completed the grading for that set of assignments; this will be **changed** if the student submits their assignment before the final submission allowance. The final submission allowance is determined by the Exam related to that assignment. If the **exam where the material in the assignment is being tested has passed**, then the assignment will no longer be accepted, and the student will receive a permanent 0 on the assignment. With the 5% late penalty, your score on the exam will also be zero after 20 days past the due date regardless of the number of days left until the “available until date” arrives.

## Lecture attendance:

I strongly recommend attending every lecture. If you miss a class, it is your responsibility to obtain notes and any handouts from a fellow student. Your first two absences will not affect the attendance portion of your grade. However, if an absence occurs on a day when we complete an in-class activity, you will forfeit the grade for that assignment, as makeups are not permitted. While I may not formally withdraw you from the course, class participation and attendance account 15% of your overall grade, so missing multiple classes will impact your final course grade. Please be considerate by arriving on time and silencing all cellphones during class.

## How to do well in this class:

- Read the assigned reading before attending the lecture in which that material is covered.
- Answer the review questions posed throughout the chapter.
- Do a thorough job preparing your study guide and reviewing for exams.
- **Time Expectations:** Students enrolled in this 3-credit course can expect to spend 6 hours/ week engaged in preparation (reading) and “doing” (exercises, quizzes). Of course, the amount of time varies from individual to individual.

## Responsible Use of Artificial Intelligence (AI)

Artificial Intelligence (AI) tools, such as ChatGPT, Grammarly, and other writing assistants, can be useful for brainstorming ideas, refining writing, and improving clarity. However, **AI SHOULD NOT** replace your own critical thinking, analysis, or effort. Submitting AI-generated responses **without** meaningful engagement or modification is considered **academic dishonesty** and will be treated as plagiarism.

Whether or not you plan to pursue science in the future, college is about strengthening your ability to think, reason, and communicate effectively. Like any muscle, your brain becomes stronger when you actively use it. Learning happens through the process of formulating ideas, making mistakes, and refining your understanding—not through blindly copying content.

If you choose to use AI, you must:

- Use it to **enhance** your work, not replace it.
- Critically evaluate AI-generated content for accuracy and relevance.
- Ensure that all submissions reflect **your own thinking and understanding**.
- **Cite AI-generated content** when appropriate, just as you would with any external source.

Failure to adhere to these guidelines may result in a **zero on the assignment, a report to the Office of Student Conduct**.

## Course Outline:

Week#	Task	Due This Week
Week 1	Read: Course Syllabus	<ul style="list-style-type: none"><li>• Syllabus quiz</li></ul>
	Read: Chapter 1 – The Water Planet	
	Take Syllabus quiz	
Week 2	Martin Luther King Day – No Class	<ul style="list-style-type: none"><li>• HW 1: Plate Tectonics</li></ul>
	Read Chapter 2: Earth Structure & Plate tectonics	
	Do HW 1: Plate tectonics exercise	
Week 3	Read Ch 3: The Seafloor and its Sediments	<ul style="list-style-type: none"><li>• Quiz 1: Chapter 3</li></ul>
	Review for Exam 1 on Chapters 1 – 3	

	Take quiz 1 on chapter 3	
Week 4	Exam 1 on Chapters 1 – 3	<ul style="list-style-type: none"><li>• Exam 1</li><li>• HW2</li></ul>
	Read Ch 4 on Physical Properties of water	
	Do HW2: Physical Properties of Water	
Week 5	Read Ch 5 on Chemistry of Seawater	<ul style="list-style-type: none"><li>• HW3: Seawater Chemistry</li></ul>
	Do HW 3 on Seawater Chemistry	
Week 6	Read Chapter 6: The Atmosphere and Oceans	<ul style="list-style-type: none"><li>• Quiz 2</li></ul>
	Do quiz 2 on Chapter 6	
Week 7	Read Ch 7 on Ocean Structure and Circulation	<ul style="list-style-type: none"><li>• Quiz 3</li></ul>
	Take Quiz 3 on Chapter 7	
	Review for Exam 2 on Chapters 4 – 7	
Week 8	Exam 2 on Chapters 4-7	<ul style="list-style-type: none"><li>• Exam 2 (Chs. 4-7)</li><li>• Quiz 4: Chapter 8</li></ul>
	Read Ch 8 on Waves	
	Take quiz 4 on Chapter 8	
Week 9	Read Ch 9 on Tides	<ul style="list-style-type: none"><li>• HW 4: Tides</li></ul>
	Do HW 4	
Week 10	Spring Break – Have a good break!	
Week 11	Read Ch 10 on Coasts, Beaches, and Estuaries	<ul style="list-style-type: none"><li>• HW 5: Coasts</li></ul>
	Do HW 5 on chapter 10	
	Review for Exam 3 (Chapters 8 – 10)	
Week 12	Exam 3 (Chapters 8 - 10)	<ul style="list-style-type: none"><li>• Exam 3</li><li>• Quiz 5</li></ul>
	Read Ch 11 on The Living Ocean	
	Take quiz 5 on Chapter 11	
Week 13	Read Ch 12 on Food webs and productivity	<ul style="list-style-type: none"><li>• Quiz 6 on Chapter 12</li></ul>
	Take quiz 6 on chapter 12	
Week 14	Read Ch 13 on Nekton	<ul style="list-style-type: none"><li>• HW 6: Ocean creatures</li></ul>
	Do HW 6 on organisms of the ocean	
	Review for Exam 4 (Chapters 11 – 14)	
Week 15	Exam 4 (Chapters 11 – 14)	<ul style="list-style-type: none"><li>• Exam 4</li></ul>
	Read Chapter 15 on Environmental issues	
Week 16	Read Chapter 16 on Oceans & Climate disruption	<ul style="list-style-type: none"><li>• Quiz 7 on Chapters 15 &amp; 16</li></ul>
	Review for Exam 5 (Chapters 15 & 16)	
	Take quiz 7 on Chapter 15 & 16	
Week 17	Take Exam 5 (Chapters 15 & 16) in Canvas	Exam 5 due

**Student Expectations:** Students enrolled in this course can expect the following:

1. Clearly identified course objectives;
2. Productive class meetings;
3. A positive learning environment;
4. Opportunities for appropriate student participation;
5. Effective instruction;
6. Positive and appropriate interactions;
7. Assistance with meeting course objectives during and beyond class hours;
8. Evaluation of student performance and appropriate and timely feedback; and

9. Clear and well-organized instruction.

**Academic Dishonesty Statement:** Pensacola State College is committed to upholding the highest standards of academic conduct. All forms of academic dishonesty, to include plagiarism and cheating, are prohibited. Penalties for academic dishonesty include but are not limited to one or more of the following: the awarding of no credit on the assignment, a reduction in the course grade, or the assignment of a final course grade of F and removal from the course. See the College Catalog for more details: [Academic Integrity](#)

**ADA Statement:** Students with a disability that falls under the Americans with Disability Act Amendments Act of 2008 or Section 504 of the Rehabilitation Act should contact the Student Resource Center for ADA Services to discuss academic accommodations. Appropriate academic accommodations are determined on an individual basis with careful consideration of the course learning outcomes and the documentation of the disability. For more information, students should visit the Student Resource Center for ADA Services on the Pensacola campus in building 6, room 603; call 850-484-1637; email [ADAservices@pensacolastate.edu](mailto:ADAservices@pensacolastate.edu); or complete the online intake form in the ADA Services app within the MyPSC apps dashboard.

**Emergency Statement:** In the case of severe weather or other emergency, the College administration maintains communication with appropriate state and local agencies and makes a determination regarding the cancellation of classes. Notices of cancellation will be made through the College's PSC Alert system and on the College's website.

**Flexibility Statement:** It is the intention of the instructor to accomplish the objectives specified in the course syllabus. However, circumstances may arise which prohibit the fulfilling of this endeavor. Therefore, this syllabus is subject to change. When possible, students will be notified of any change in advance of its occurrence.

**Non-Discrimination Statement:** Pensacola State College does not discriminate against any person on the basis of race, color, ethnicity, religion, sex (as defined by applicable federal and state law), national origin, age, disability, genetic information, pregnancy, or marital status in its educational programs, activities, or employment. For inquiries regarding the College's nondiscrimination policies, contact the Civil Rights Compliance Officer at (850) 484-1759, Pensacola State College, 1000 College Blvd., Pensacola, Florida 32504.

**Security Statement:** Pensacola State College is committed to encouraging all members of the College community to be proactive in personal safety measures. In case of emergency, students should ensure that they are aware of the building exit closest to each of their classrooms, as well as all alternative building exits in case circumstances require using a different route.

**Student Email Accounts:** Pensacola State College provides an institutional email account to all students enrolled in courses for credit. PirateMail is the official method of communication, and students must use PirateMail when communicating with the College. In cases where companion software is used for a particular class, email may be exchanged between instructor and student using the companion software.