



# PENSACOLA STATE COLLEGE

## SYLLABUS

### Earth Science

### ESC1000-D9112

### Spring 2026, Session A

**Instructor:** Dr. Ophelia George

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

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

**Final Exam Date:** TBD

**Class Meeting Time:** Online (asynchronous)

**Class Location:** Canvas

**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, data analysis, this course will examine the fundamental processes of the earth system, composed of an atmosphere, hydrosphere, lithosphere, biosphere, and exosphere, through time. The course will also explore interactions between these spheres, including critical analysis of scientific theories and emphasize Earth's connections with humans.

**Credit Hours:** 3 credit hours

**Semesters Offered:** Fall, Spring, Summer

**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:**

The Good Earth; McConnell; 5<sup>th</sup> ed.; 2021; 9781260466218, 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. List and/or identify the most common elements, minerals, and rocks of the earth's crust.
2. Diagram the rock cycle and correlate rock types with the environment in which they are formed.

- Understand the actions and interactions of external processes such as wind, weathering, mass wasting, and the general role of water on the earth's crust including streams, ice, and underground water.
- Recognize the internal processes such as earthquakes, plate tectonics, igneous activity, mountain building and geologic structures and the theories related to these processes.
- Discuss the geologic features of the ocean floor and explain the dynamics of the ocean floor.
- Describe the composition and structure of the atmosphere focusing on the elements of weather in relation to earth processes.
- Appreciate earth's place in the universe regarding the general nature of galaxies, stars, and the solar system.

### General Education Student Learning Outcomes:

- 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.
- Scientific and Mathematical Literacy:** The student properly identifies and applies scientific or mathematical principles and methods.
- 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 Final Grade | Duration         | Total points per task group |
| 87% - 89.99%   | B+ | Discussions (10 @ 15 pts each)      | 15%              | Untimed          | 150                         |
| 80% - 86.99%   | B  | Homework (6 @25 pts each)           | 15%              | Untimed          | 150                         |
| 77% - 79.99%   | C+ | Exams* (5 @100 pts each)            | 50%              | 60 minutes       | 500                         |
| 70% - 76.99%   | C  | Chapter quizzes (7) + Syllabus quiz | 20%              | 25 minutes       | 200                         |
| 67% - 69.99%   | D+ | <b>Totals</b>                       | <b>100%</b>      | <b>Total pts</b> | <b>1000</b>                 |
| 60% - 66.99%   | D  |                                     |                  |                  |                             |
| Below 60%      | F  |                                     |                  |                  |                             |

### Instructor Requirements:

- Attendance** will be tracked based on the completion of all assigned tasks each week. After the attendance verification period, you are allowed one unexcused absence. While I generally do not withdraw students from the course due to excessive absences, I strongly encourage you to complete all weekly assignments by their due dates. Staying on top of your work is especially important to avoid late penalties and reduce the risk of receiving an F2 grade, which could negatively affect your future financial aid eligibility.
- Assignments** will include a mix of homework assignments, discussions, and chapter quizzes.
  - 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.
  - You will only have one submission attempt for homework assignments; the assignments are open for a full week, so take the time to review your work before submitting.
  - Discussion deadlines are final.** Your initial post is due by **Thursday at 11:59 PM**. Any initial post submitted after this time will receive a **3-point late deduction**. No new discussion submissions (initial posts or replies) will be accepted after the final deadline at **Sunday 11:59 PM**, as listed in Canvas. There are 12 scheduled discussions in the course, but your two (2) lowest discussion scores will be dropped so, only 10 will count towards your grade.
- 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.
  - 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.

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

### Assignment Due Dates

All assignment deadlines will be clearly listed in Canvas as well as in the tentative schedule below.

Only **homework and quizzes** are eligible for late submission and are subject to a **5% deduction per day** late. A **temporary zero (0)** will be placed for any homework or quiz not submitted by the time I complete grading for that set. This zero will be updated if the student submits before the **final submission allowance**, which is the date of the exam covering the material. After the related exam has passed, late homework or quiz submissions will no longer be accepted and the temporary zero will become permanent.

**Discussions, exams, and practice quizzes** must be submitted by their posted deadlines. These assignments **are not eligible for late submission** and will receive a permanent zero if missed.

### How to do well in this class:

- Read the assigned reading(s) each week and watch the lecture videos.
- Try answering any 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, and potentially an F3 (failing grade due to cheating) in the course**. If you have any questions about the responsible use of AI in this class, please ask before submitting your work.

### Course Outline:

| Week#  | Task                                                                                                                         | Due This Week                                                                                                                        |
|--------|------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| Week 1 | <b>Read:</b> Course Syllabus<br><b>Read:</b> Chapter 1                                                                       | <ul style="list-style-type: none"> <li>Syllabus quiz,</li> <li>Self-reflection survey</li> <li>Discussion topic responses</li> </ul> |
|        | <b>Watch videos:</b> Meet your professor, Introduction to Earth Science/Science lecture videos                               |                                                                                                                                      |
|        | <b>Respond</b> to the discussion topic by this Thursday.<br><b>Reply</b> to at least two classmates' posts by Sunday.        |                                                                                                                                      |
|        | <b>Take</b> Syllabus quiz.                                                                                                   |                                                                                                                                      |
| Week 2 | <b>Read</b> Ch 2: Earth in Space<br><b>Read</b> Ch 3: Near-Earth Objects                                                     | <ul style="list-style-type: none"> <li>Quiz 1 on Earth in Space and NEOs</li> <li>Discussion topic responses</li> </ul>              |
|        | <b>Watch</b> Week 2 videos: Earth in Space and NEOs<br><b>Take quiz 1</b> on chapters 2 and 3                                |                                                                                                                                      |
|        | <b>Respond</b> to the discussion topic by this Thursday.<br><b>Reply</b> to at least two classmates' posts by Sunday.        |                                                                                                                                      |
|        |                                                                                                                              |                                                                                                                                      |
| Week 3 | <b>Read</b> Ch 4: Plate Tectonics                                                                                            | <ul style="list-style-type: none"> <li>HW1: Plate tectonics</li> <li>Discussion topic responses</li> </ul>                           |
|        | <b>Watch</b> the Week 3 videos on Plate Tectonics                                                                            |                                                                                                                                      |
|        | <b>Do</b> HW1: Plate Tectonics exercise                                                                                      |                                                                                                                                      |
|        | <b>Group response</b> to the discussion topic by this Thursday.<br><b>Reply</b> to at least 2 other group's posts by Sunday. |                                                                                                                                      |
|        | <b>Prepare</b> for Exam 1 on Chapters 1 – 4 next week                                                                        |                                                                                                                                      |
|        |                                                                                                                              |                                                                                                                                      |
| Week 4 | <b>Read</b> Ch 5 on earthquakes                                                                                              | <ul style="list-style-type: none"> <li>Exam 1: chapters 1-4</li> <li>HW2: Earthquake exercise</li> </ul>                             |
|        | <b>Watch</b> Week 4 Lecture videos                                                                                           |                                                                                                                                      |
|        | <b>Do</b> HW2: virtual earthquake                                                                                            |                                                                                                                                      |
|        | <b>Take</b> Exam 1 on chapters 1 – 4                                                                                         |                                                                                                                                      |
| Week 5 | <b>Read</b> Chapter 6: Volcanoes and other Mountains                                                                         | <ul style="list-style-type: none"> <li>Quiz 2</li> <li>Discussion topic responses</li> </ul>                                         |
|        | <b>Watch</b> Week 5 Lecture videos                                                                                           |                                                                                                                                      |
|        | <b>Do</b> quiz 2 on Volcanoes and other mountains                                                                            |                                                                                                                                      |
|        | <b>Respond</b> to the discussion topic by this Thursday.<br><b>Reply</b> to at least two classmates' posts by Sunday.        |                                                                                                                                      |
| Week 6 | <b>Read</b> Ch 7: Rocks and Minerals                                                                                         | <ul style="list-style-type: none"> <li>HW3: Rocks exercise</li> <li>Discussion responses</li> </ul>                                  |
|        | <b>Watch</b> the Week 6 lecture videos                                                                                       |                                                                                                                                      |
|        | <b>Do</b> HW3 the Rocks and mineral assignment                                                                               |                                                                                                                                      |
|        | <b>Respond</b> to the discussion topic by Thursday.<br><b>Reply</b> to at least two classmates' posts by Sunday.             |                                                                                                                                      |
|        | <b>Prepare</b> for Exam 2 (Chapters 5 - 7)                                                                                   |                                                                                                                                      |
|        |                                                                                                                              |                                                                                                                                      |
| Week 7 | <b>Take</b> Exam 2 on Chapters 5-7                                                                                           | <ul style="list-style-type: none"> <li>Exam 2 (Chapters 5-7)</li> <li>HW4: Geologic Time</li> </ul>                                  |
|        | <b>Read</b> Ch 8 on Geologic Time                                                                                            |                                                                                                                                      |
|        | <b>Watch</b> Week 7 videos                                                                                                   |                                                                                                                                      |
|        | <b>Do</b> HW 4: Geological time exercise                                                                                     |                                                                                                                                      |
| Week 8 | <b>Read</b> Ch 9 on Weathering and Soils                                                                                     | <ul style="list-style-type: none"> <li>Quiz 3</li> <li>Discussion topic responses</li> </ul>                                         |
|        | <b>Watch</b> Week 8 Lecture videos                                                                                           |                                                                                                                                      |
|        | <b>Take</b> quiz 3 on chapter 9                                                                                              |                                                                                                                                      |
|        | <b>Respond</b> to the discussion topic by this Thursday.<br><b>Reply</b> to at least two classmates' posts by Sunday         |                                                                                                                                      |
| Week 9 | <b>Read</b> Ch 11 on Streams and Floods                                                                                      | <ul style="list-style-type: none"> <li>Quiz 4</li> </ul>                                                                             |
|        | <b>Watch</b> Week 9 Lecture videos                                                                                           |                                                                                                                                      |

| Week#   | Task                                                                                                                    | Due This Week                                                                                                                                                    |
|---------|-------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|         | Take quiz 4 on Chapter 11                                                                                               | <ul style="list-style-type: none"><li>All Discussion responses and replies</li></ul>                                                                             |
|         | Prepare for Exam 3                                                                                                      |                                                                                                                                                                  |
|         | Respond to the discussion topic by this Thursday.<br>Reply to at least two classmates' posts by Sunday.                 |                                                                                                                                                                  |
| Week 10 | Spring Break – Have a good break!!                                                                                      |                                                                                                                                                                  |
| Week 11 | Take Exam 3 (Chapters 8, 9, and 11)                                                                                     | Due this week: <ul style="list-style-type: none"><li>Exam 3</li><li>Quiz 5</li></ul>                                                                             |
|         | Watch Week 11 Lecture videos                                                                                            |                                                                                                                                                                  |
|         | Read Ch 12 on Groundwater and Wetlands                                                                                  |                                                                                                                                                                  |
|         | Take quiz 5 on chapter 12                                                                                               |                                                                                                                                                                  |
| Week 12 | Read Ch 13 on Oceans and Coastlines                                                                                     | <ul style="list-style-type: none"><li>HW 5 on ocean exploration</li><li>Discussion topic responses</li></ul>                                                     |
|         | Watch the week 12 Lecture videos                                                                                        |                                                                                                                                                                  |
|         | Do HW 5: the Ocean exploration Exercise                                                                                 |                                                                                                                                                                  |
|         | Respond to the discussion topic by this Thursday.<br>Reply to at least two classmates' posts by Sunday.                 |                                                                                                                                                                  |
| Week 13 | Read Chapter 14 on The Atmosphere                                                                                       | <ul style="list-style-type: none"><li>Quiz 6 on Chapter 14</li><li>Discussion topic responses</li></ul>                                                          |
|         | Watch the week 13 Lecture videos                                                                                        |                                                                                                                                                                  |
|         | Take quiz 6 on chapter 14                                                                                               |                                                                                                                                                                  |
|         | Respond to the discussion topic by this Thursday.<br>Reply to at least two classmates' posts by Sunday.                 |                                                                                                                                                                  |
|         | Prepare for Exam 4                                                                                                      |                                                                                                                                                                  |
| Week 14 | Take Exam 4 (Chapters 12 – 14)                                                                                          | <ul style="list-style-type: none"><li>Exam 4</li></ul>                                                                                                           |
|         | Read Ch 15 on Weather Systems                                                                                           |                                                                                                                                                                  |
|         | Watch the week 14 Lecture videos                                                                                        |                                                                                                                                                                  |
| Week 15 | Take quiz 7 on chapter 15                                                                                               | <ul style="list-style-type: none"><li>Quiz 7 on Chapter 15</li><li>All weather discussion responses and replies</li></ul>                                        |
|         | Read Ch 16 on Earth's Climate System                                                                                    |                                                                                                                                                                  |
|         | Watch the week 15 Lecture videos                                                                                        |                                                                                                                                                                  |
|         | Respond to the Extreme Weather Discussion prompt by this Thursday.<br>Reply to at least two classmates' posts by Sunday |                                                                                                                                                                  |
| Week 16 | Read Chapter 17 on Global Change                                                                                        | Due by midnight May 4 <sup>th</sup> : <ul style="list-style-type: none"><li>HW 6: Earth's climate system exercise</li><li>Climate discussion responses</li></ul> |
|         | Watch the week 16 Lecture videos                                                                                        |                                                                                                                                                                  |
|         | Do HW 6 on Earth's climate system                                                                                       |                                                                                                                                                                  |
|         | Respond to the discussion topic by this Thursday.<br>Reply to at least two classmates' posts by Sunday.                 |                                                                                                                                                                  |
| Week 17 | Take Exam 5 (chapters 15 – 17)                                                                                          | Exam 5                                                                                                                                                           |

**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.