



Course Syllabus

**GEOL 1403**  
**Physical Geology (lecture and lab)**  
**(4006015403)**

**Course Description:** Introduction to the study of the materials and processes that have modified and shaped the surface and interior of Earth over time. These processes are described by theories based on experimental data and geologic data gathered from field observations. Laboratory activities will cover methods used to collect and analyze earth science data.

**Semester Hours Credit:** 4

**Lecture/Lab Hours:** 3-3

**Prerequisite:** To enroll in any science course, students must demonstrate readiness to perform college level academic coursework in reading and writing according to Coastal Bend College academic skills assessment guidelines. Basic computer skills are also required.

**Textbook(s):** *The Changing Earth, Exploring Geology and Evolution (7<sup>th</sup> edition)* ISBN: 9781285733418

**Student Learning Outcomes:**

Upon successful completion of this course, students will:

1. Describe how the scientific method has led to or current understanding of Earth's structure and processes.
2. Interpret the origin and distribution of minerals, rocks and geologic resources.
3. Describe the theory of plate tectonics and its relationship to the formation and distribution of Earth's crustal features.
4. Quantify the rates of physical and chemical processes acting on Earth and how these processes fit into the context of geologic time.

5. Communicate how surface processes are driven by interactions among Earth's systems (e.g., the geosphere, hydrosphere, biosphere, and atmosphere).
6. Identify and describe the internal structure and dynamics of Earth.
7. Describe the interaction of humans with Earth (e.g., resource development or hazard assessment).
8. Classify rocks and mineral based on chemical composition, physical properties, and origin.
9. Apply knowledge of topographic maps to quantify geometrical aspects of topography.
10. Identify landforms on maps, diagrams, and/or photographs and explain the processes that created them.
11. Differentiate the types of plate boundaries and their associated features on maps and profiles and explain the processes that occur at each type of boundary.
12. Identify basic structural features on maps, block diagrams and cross sections and infer how they were created.
13. Demonstrate the collection, analysis and reporting of data.

**Evaluation Methods:**

Five (5) major exams will be given in the lecture of this course; of these exams, a student may drop one (1) exam if no other exams are missed. Students may not drop the final exam unless they are exempt from taking it. The final exam will be up to 100% comprehensive, depending on the amount of untested material remaining before the final exam. A small portion of any exam (up to 10%) may be material not specifically covered in lecture but which is well presented in the text and listed in the review sheet.

During the semester, points will be assigned for each exam and assignment. All regular exams will be worth 100 points, with the final at 150 points. Homework, quizzes and other assignments may be given during the semester and will be averaged along with the exam grades to determine the number of "total points". The final grade will be determined by the number of points a student earns divided by the total number of possible points and multiplied by 100.

**ADA Statement:** No qualified individual with a disability shall, by reason of such disability, be excluded from participation in or be denied the benefits of the services, programs, or activities of the College District, or be subjected to discrimination by the College District. Nor shall the College District exclude or otherwise deny equal services,

programs, or activities to an individual because of the known disability of an individual with whom the individual is known to have a relationship or association. 42 U.S.C. 12132; 28 CFR 35.130(g).

See at: [GL \(Legal\)](#)

**Special Needs Services:** Students with special needs, including physical and learning disabilities, who wish to request accommodations in this course should contact the Student Development Office as soon as possible to make arrangements; this should occur no later than the second week of class or as soon as the student has the documentation on the disability and requested accommodation per a certified medical or psychological professional. In accordance with federal law, a student requesting accommodations must provide documentation of disability to the Student Development Advisor.

For more information, contact: in Alice at [sdalice@coastalbend.edu](mailto:sdalice@coastalbend.edu); Beeville at [sdbeeville@coastalbend.edu](mailto:sdbeeville@coastalbend.edu); Kingsville at [sdkingsville@coastalbend.edu](mailto:sdkingsville@coastalbend.edu); and Pleasanton at [sdpleasanton@coastalbend.edu](mailto:sdpleasanton@coastalbend.edu).

**Academic Dishonesty:** Each student is charged with notice and knowledge of the contents and provisions of Coastal Bend College's rules and regulations concerning student conduct. All students shall obey the law, show respect for properly constituted authority, and observe correct standards of conduct. Scholastic dishonesty shall constitute a violation of these rules and regulations and is punishable as prescribed by Coastal Bend College Policies FLB (Local) and FM (Local). Scholastic dishonesty shall include, but not be limited to, cheating on a test, plagiarism, and collusion.

See at: [FLB \(Local\)](#) and [FM \(Local\)](#).

See the [Student Handbook](#) for further explanation of Scholastic Dishonesty.

**Copyright Law and Intellectual Property Rights Policy:** Copyright is the right of an author, artist, composer or other creator of a work of authorship to control the use of his or her work by others. Protection extends to literary works, musical works, dramatic works, pantomimes and choreographic works, pictorial and graphic works, sculpture, motion pictures and other audiovisual works, sound recordings and architectural works. Generally speaking, a copyrighted work may not be reproduced by others without the copyright owner's permission. The public display or performance of copyrighted works is similarly restricted. Generally, the unauthorized reproduction, performance or distribution of a copyrighted work is copyright infringement and may subject the infringer to civil and criminal penalties. The Fair Use Doctrine outlines exceptions to this Law and is outlined in Coastal Bend College Policy, [CT \(Legal\)](#).

Coastal Bend College, its faculty, students and employees must comply with Copyright Law. Detailed information on Copyright Law and Intellectual Property Rights is available in Coastal Bend College Policy [CT \(Legal\)](#) and [CT \(Local\)](#).

Coastal Bend College



Questions regarding this information should be directed to the Director of Library Services at: [library@coastalbend.edu](mailto:library@coastalbend.edu) or the Office of Marketing and Public Relations at: [socialmedia@coastalbend.edu](mailto:socialmedia@coastalbend.edu).

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**NOTE:** The College website ([www.coastalbend.edu](http://www.coastalbend.edu)) serves as the main source with the most current version of the Coastal Bend College Board Policies and the Coastal Bend College Catalog.