

**GEOL 1102 - Earth Science Laboratory – Rex E Crick**

**Time:** THURSDAY 8 AM TO 10:50 AM  
**Instructor:** Dr. Rex E. Crick  
**Semester:** Fall 2024  
**E-mail** rcric01@TAMUSA.edu  
**Office Hours:** MW from 10 am – 11 am (or by appointment) STEM RM 375 or 311  
**Lab Manual:** **OER Text #1:** *The Story of Earth: An Observational Guide 2e*  
 (<https://uh-ir.tdl.org/items/6c880258-fb74-4480-80ff-fbccb0078be2>)  
**OER Text #2:** *Lab Manual for Introductory Geology*  
<https://oer.galileo.usg.edu/geo-textbooks/1/>

**Description:**

Laboratory activities will introduce methods used by scientists to interpret the history of life and major events in the physical development of Earth from rocks and fossils.

**Learning Objectives:**

At the end of the course, students will be able to:

- Classify and interpret depositional environments using sedimentary rocks and fossils.
- Taxonomically classify samples of geologically important fossil groups and use them to interpret the age of rocks on the Geologic Time Scale.
- Apply relative and numerical age-dating techniques to construct geologic histories including the correlation of stratigraphic sections.
- Reconstruct past continental configurations.
- Integrate multiple types of data to interpret Earth history.

**Instruction:**

Laboratory exercises, Internet assignments, recorded lectures/previews of labs, lab quizzes and exams.

**NOTE: Monday November 11th is the last day to drop the class**

**LAB SCHEDULE**

Wk 1	Aug 29	Lab 1 – Introduction to Latitude & Longitude (Reading included in Lab Assignment)
Wk 2	Sep 5	Lab 2 – Introduction to Relative Geologic Time ( <b>OER Text #2:</b> Pages 1-8)
Wk 3	Sep 12	Lab 3 – Introduction to Plate Tectonics ( <b>OER Text #1:</b> Chapter 2)
Wk 4	Sep 19	Lab 4 – Earthquakes and locating an Epicenter ( <b>OER Text #2:</b> Pages 313-321)
Wk 5	Sep 26	Lab 5 – Interior of Earth ( <b>OER Text #2:</b> Pages 22-25; 28-29); <b>Quiz 1: Labs 1-4 (9/26)</b>
Wk 6	Oct 3	Lab 6 – Climate Change ( <b>OER Text #2:</b> Chapter 6)
Wk 6.5	Oct 10	Lab 6 1/2 – The Metric System
Wk 7	Oct 17	Lab 7 – Hydrologic Cycle & Running Water Processes (Reading included in Lab Assignment)
Wk 8	Oct 24	Lab 8 – Deserts (Reading included in Lab Assignment); <b>Quiz 2: Labs 5-8 (10/24)</b>
Wk 9	Oct 31	Lab 9 – Seasons (Reading included in Lab Assignment)
Wk 10	Nov 7	Lab 10 – Storms (Reading included in Lab Assignment)
Wk 11	Nov 14	Lab 11 – Paleoclimates ( <b>OER Text #1:</b> Chapter 11)
Wk 13	Nov 21	Lab 12 – Review for Lab Final (A graded lab) <b>Quiz 3: Labs 9-12 (11/21)</b>
Wk 14	Nov 28	Thanksgiving Break
Wk 16	Dec 5	<b>Lab Final – Comprehensive</b>

**Evaluation:**

Lab Completion	40 %
Quizzes (10 % each)	30 %
Lab Final Exam	30 %

**Grade Distribution**

A	100 - 90%
B	89 - 80%
C	79 - 70%
D	69 - 60%
F	< 60 %

**University Course Policies****Class Attendance**

This is Face to Face course and students are expected to attend class. Students are expected to complete all assignments by the stated deadline. If a student cannot complete assignments due to one or more of TAMUSA's accepted absence categories, it is his/her responsibility to communicate this information to professors. The professor will decide if the student's excuse is valid. According to university policy, as listed in the Student Handbook, excused absences, which cannot affect a student's grade, include:

- Participation in an authorized university activity at the request of university authorities.
- Death or major illness in a student's immediate family.
- Illness of a dependent family member.
- Participation in legal proceedings or administrative procedures that require a student's presence.
- Religious Holy days/days of obligation.
- A pregnant/parenting student must be granted a leave of absence (LOA) for as long as the student's physician deems the absence medically necessary.
- Illness/injury that is too severe or contagious for the student to attend class.
- Required participation in military assignment and duties.
- Mandatory admission interviews for professional or graduate school, which cannot be rescheduled.

Students are responsible for providing satisfactory evidence to professors within seven calendar days of their absence and are expected to return to participating in lab work. If the absence is excused, the professor will either allow access to lecture recordings (if available), provide students with the opportunity to make up missed work, including exams, or provide a satisfactory alternative to complete the work within 30 calendar days from the date of absence.

Students who miss assignments due to a university-sponsored activity are responsible for identifying their absences to faculty with as much advance notice as possible. Students are responsible for all work assigned during their absence. Whenever possible, students should complete the work either before the absence or immediately afterward.

If an off-campus licensed physician provides evidence of a student's illness, the written excuse, orders, or documentation must contain the date and time of the doctor's appointment, the prognosis of illness, doctor's opinion, and recommendations for the individual student. In addition, the notice should outline whether or not the student is able to attend class. If a physician determines that the student is not ill, the student will not receive an excused absence. If an absence is not an excused absence, the faculty member will decide whether makeup work will be allowed.

In some courses, attendance and in-class participation are ongoing requirements and an integral part of the coursework. In other courses, occasional in-class assessments may occur, sometimes without advance notice. It is the responsibility of the professor to inform each class at the beginning of the semester of the in-class participation expected and the effect absences will have on the student's evaluation of work in the course. It is the student's responsibility to abide by the professor's instructions and rules in the course.

**Leave of Absence (LOA) Rule**

The Student Leave of Absence (LOA) Rule assists and encourages students to return and

graduate after an absence of two or more consecutive long semesters from TAMUSA. Absences during summer sessions are excluded, as continuous enrollment is not affected. Eligible students are encouraged to take advantage of the benefits provided by a LOA, e.g., no need to apply for readmission to university and may participate in their regularly scheduled registration/enrollment period upon return. Please note that re-admission to a college program may be required.

Eligibility Requirements: To be eligible for a LOA, a student must be eligible to register for classes and meet the following criteria:

- a. Be a degree-seeking student.
- b. Be registered during the semester immediately prior to the beginning of the LOA:
  1. A student who was admitted as a new first-time freshman, transfer student, or graduate student but did not attend will not be eligible for a LOA. Instead, the student should contact the Office of Admissions. Graduate students should contact the Graduate School.
  2. A student who was readmitted but did not attend will not be eligible for a LOA. Instead, the student should contact the Office of Admissions. Graduate students should contact the Graduate School.
- c. Be in good academic standing or on academic probation with their college.
- d. Have no holds (e.g., disciplinary, business, testing, etc.), which would restrict registration. Note: Students with Business Office holds may be given consideration for a LOA if authorized by the Bursar's Office.
- e. Have submitted any outstanding high school and/or transfer transcripts if prior admission/readmission and continued enrollment was contingent upon receipt of those transcripts.

Rules and specific processes regarding LOA for undergraduate and graduate students can be found in the Student Handbook.

### **Classroom Behavior**

TAMUSA values academic freedom in the classroom and, thus, classroom discussion and academic debate are encouraged. It is essential that students learn to express and defend their beliefs, but it is also essential that they learn to listen and respond respectfully to others whose beliefs they may not share. The university will accept different or unpopular points of view, but it will not tolerate condescending, insulting, or discriminatory remarks. When students verbally abuse or ridicule and intimidate others whose views they do not agree with, they subvert the free exchange of ideas that should characterize a university classroom. If their actions are deemed by the professor to be disruptive, they will be subject to appropriate disciplinary action (please refer to the Student Handbook for more information) and professors may ask the student to leave the class.

### **TAMUSA Honor Code: Plagiarism and Cheating**

The university is committed to strict enforcement of the Honor Code. Students should conduct themselves ethically in all activities, in and out of the classroom. Ethical behavior also includes reporting violations of the Honor Code to the appropriate office. Please read the Student Handbook to review the university's Honor Code.

There are several violations of the Honor Code that involve plagiarism and cheating.

- 1) Plagiarism: The act of passing off some other person's ideas, words, or works as one's own. It includes, but is not limited to, the appropriating, buying, receiving as a "gift," or obtaining, by any other means, another's work for submission as one's own academic work. Examples include, but are not limited to:
  - a. Failing to credit sources used in a work product in an attempt to present the work as one's own.
  - b. Intentionally, knowingly, or carelessly presenting the work of another as one's own (i.e., without crediting the author or creator).
  - c. Copying test answers or the words or phrases of another without crediting the author or claim credit for the ideas of another.

- d. Borrowing or lending a term paper, handing in as your own work a paper purchased from an individual or off the Internet, or submitting, as one's own any papers or work product from the files of any group, club, or organization.
- e. Submitting the same paper in more than one class without the permission of the instructor.

Students must provide citations for facts, ideas, and opinions that are not their own. If students are unsure about providing proper documentation, they are encouraged to seek advice from professors or the Academic Center of Excellence (ACE). It is the professor's prerogative to ask students to submit work to one of TAMUSA's Plagiarism detection tools: Turnitin or Blackboard's SafeAssign.

Professors must report incidents of plagiarism to the Honor Council. It is the professor's prerogative and/or discretion, to issue an "F" in the course should he/she discover that a student has committed plagiarism. The professor, however, *may* elect to give students, particularly freshmen and sophomore students, a "zero" for the assignment if he/she believes that the student plagiarized out of carelessness and not out of an attempt to deceive the professor to earn an unmerited grade. Serious cases of plagiarism, especially those that involve flagrant incidents of plagiarism by graduate or doctoral students, may lead to suspension or expulsion from the university.

- 2) Cheating: An act of deception in which a student misrepresents that he/she has mastered information related to an academic exercise. Examples include, but are not limited to:
- a. Copying from another student's test, lab report, computer file, data listing, logs, or any other type of report or academic exercise.
  - b. Using unauthorized materials during a test. Consulting a cell phone, text messages, PDAs, programmable calculators with materials that give an advantage over other students during an exam.
  - c. Using crib sheets or other hidden notes in an examination or looking at another student's test paper to copy strategies or answers.
  - d. Having another person supply questions or answers from an examination to be given or in progress.
  - e. Having a person other than oneself (registered for the class) attempt to take or take an examination or any other graded activity. In these cases, all consenting parties to the attempt to gain unfair advantage may be charged with an Honor Pledge violation.
  - f. Deliberately falsifying laboratory results, or submission of samples or findings not legitimately derived in the situation and by the procedures prescribed or allowable.
  - g. Revising and resubmitting a quiz or exam for regrading, without the instructor's knowledge and consent.
  - h. Giving or receiving unauthorized aid on a take-home examination.
  - i. Facilitating academic violation: intentionally or knowingly helping or attempting to help another to violate the Honor Pledge.
  - j. Signing in another student's name on attendance sheets, rosters, Scantrons.
  - k. Submitting in a paper, thesis, lab report, or other academic exercise falsified, invented, or fictitious data or evidence, or deliberate or knowingly concealing or distorting the true nature, origin, or function of such data or evidence.
  - l. Procuring and/or altering without permission from appropriate authority of examinations, papers, lab reports, or other academic exercises, whether discarded or used, and either before or after such materials have been handed in to the appropriate recipient.
  - m. Using, buying, selling, stealing, transporting, soliciting, copying or possessing, the contents of an un-administered test, a required assignment or a past test which has, by the professor, not been allowed to be kept by their students.
  - n. Using generative artificial intelligence (AI) tools such as ChatGPT. Unless allowed by each professor, students are expected to complete each assignment without assistance from others, including automated writing tools.

It is important to note that professors may ask students to work in groups. However, if someone in a group commits

academic misconduct, the entire group could be held responsible for it as well. Members of groups must clearly document who contributes what parts of the joint project and to know what group members are doing and how they are getting the material they provide. Ignorance is no excuse.

It is also important to be aware of group texts or chats. If another student is attempting to violate the Honor Code, it is your ethical responsibility to report him/her to the Honor Council. Again, membership in a group that attempts or engages in cheating may lead to all members of the group being subject to disciplinary action including suspension or expulsion.

Should professors discover that a student has cheated on an exam or quiz or other class project, the student should receive a "zero" for the assignment and not be allowed to make the assignment up. The incident should be reported to the Honor Council. If the cheating is extensive, however, or if the assignment constitutes a major grade for the course (e.g., a final exam), or if the student has cheated in the past, the student should receive an "F" in the course, and the matter should be referred to the Honor Council. Additional penalties, including suspension or expulsion from the university may be imposed. Under no circumstances should a student who deserves an "F" in the course be allowed to withdraw from the course with a "W."

### **Appeals of Academic Dishonesty**

Students have the right to appeal a faculty member's charge of academic dishonesty by notifying the TAMUSA Honor Council of their intent to appeal as long as the notification of appeal comes within 10 business days of the faculty member's e-mail message to the student and/or the Office of Student Conduct and Community Engagement. The Student Handbook provides more details.

### **Use of Work in Two or More Courses**

Students should not submit work completed in one course for a grade in a second course unless you receive explicit permission to do so by the professor of the second course. In general, students should get credit for a work product only once.

### **Disputes over Academic Matters**

Faculty members are responsible for determining course curricula, for developing appropriate methods of evaluating student learning, for evaluating fairly, for upholding academic standards, and for enforcing procedures concerning academic honesty. Decisions made by faculty members regarding the quality or integrity of student work, including decisions about course grades, are presumed to be fair and final (unless the student files a successful grade appeal). In cases of academic violation students may be subject to both grade sanctions and disciplinary action (see Student Violations of Academic Integrity below).

Students who believe that they have grounds for challenging faculty decisions regarding academic issues--excepting those pertaining to matters of academic freedom--may appeal using the procedure outlined below. Faculty members are required to report acts of academic violation to their chair, their Dean, the Provost, the Honor Council (through the Office of Student Conduct and Community Engagement), and the Vice President for Student Success.

Grade sanctions may be imposed only by faculty members. Academic suspension or expulsion may be imposed only by the Provost. As with disputes about course grades, students may appeal grade sanctions imposed for academic violation only by following the procedure outlined below. Students should not attempt to persuade academic administrators to change a grade; they cannot and will not do it unless a student follows the grade appeal policy below and is successful in persuading either the faculty member for the course or an ad-hoc committee of faculty members that a change is warranted.

Student appeals of faculty academic decisions should be completed within 15 University business days after the

student's first meeting with the faculty member to question the faculty member's decision.

1. The student must first meet with the faculty member and discuss the faculty member's decision. This meeting should occur as soon as possible after the decision has been made, normally within one week of the student being notified of the decision. The faculty member is expected to listen to the student, provide an explanation for the decision, and change the grade or decision if the student's argument is persuasive. To change final course grades, a faculty member must submit a "Grade Change Form" and attach an accompanying memorandum justifying the decision to change the grade. The faculty member's department chair and Dean must approve the change.
2. If the faculty member declines to change the decision or grade, the student may then discuss the matter with the faculty member's immediate academic supervisor (hereafter, "chair" will be used to mean either the department chair or the immediate academic supervisor). If the chair believes that the student's position has merit, the chair will discuss the matter with the faculty member.
3. If the student is not satisfied with the chair's assessment of the issue or if the faculty member declines to change the decision after discussing it with the chair, the student may then request that an ad hoc committee of faculty members review the matter. This committee consists of three tenured faculty members within the same discipline or department unless circumstances dictate otherwise. If the chair determines that a tenured faculty member cannot be selected from the same discipline or department, then the chair may add a tenured faculty member from a closely related discipline. From the pool of eligible tenured faculty members designated by the chair, the faculty member, the student, and the chair will each nominate one faculty member to serve on the committee.
4. The ad hoc committee will hear from the student, the faculty member, and the chair and examine relevant documents. If the committee sustains the faculty member's decision, the committee will provide the student with a written statement explaining the reasons for the committee's decision. The student may request in writing that the committee reconsiders its decision and provides reasons for so doing. If the committee refuses to reconsider or if it reaffirms its original recommendation, the faculty member's original decision is final. If the committee finds in favor of the student, the committee will provide the faculty member with a written recommendation explaining the committee's reasons. If the faculty member disagrees with the committee's recommendation, the faculty member may request that the committee reconsiders its recommendation and provides the committee with a rationale for revisiting the recommendation. If after considering the faculty member's rationale the ad hoc committee is still persuaded that the faculty member's original decision should be reversed, the committee will recommend in writing to the chair that the faculty member's decision be overturned. The committee may also make this recommendation to the chair if the faculty member fails to alter the original decision and also fails to respond to the committee's original recommendation. The faculty member will receive a copy of the recommendation to the chair, allowing a final opportunity to revise the original decision. If the faculty member fails to comply, the chair may override the faculty member's original decision, and, as appropriate, revise the student's course grade. In order to certify that the grade dispute process outlined above has been followed appropriately, the Dean of the College or the School and the Provost will review all decisions by chairs to change grades against the will of a faculty member.

### **Incomplete Grades**

Students who are unable to complete a course should withdraw from the course before the final date for withdrawal and receive a "W." To qualify for an "incomplete" and thus have the opportunity to complete the course at a later date, a student must meet the following criteria:

- The student must have completed 90% of the course work assigned before the final date for withdrawing from a course with a "W", and the student must be passing the course; The student cannot complete the course

because an accident, an illness, or a traumatic personal or family event occurred after the final date for withdrawal from a course;

- The student must sign an “Incomplete Grade Contract” and secure signatures of approval from the professor and the college dean.
- The student must agree to complete the missing course work before the end of the next long semester; failure to meet this deadline will cause the “I” to automatically be converted to an “F”; extensions to this deadline may be granted by the dean of the college. This is the general policy regarding the circumstances under which an “incomplete” may be granted, but under exceptional circumstances, a student may receive an incomplete who does not meet all of the criteria above if the faculty member, department chair, and dean recommend it.

### **Student Responsibility for Withdrawing from a Course**

It is the responsibility of the student to drop the course before the final date for withdrawal from a course. Faculty members, in fact, may not drop a student from a course without getting the approval of their department chair and dean.

### **Independent Study Course**

Independent Study (IS) courses are offered only under exceptional circumstances. Required courses intended to build academic skills may not be taken as IS (e.g., clinical supervision and internships). No student will take more than one IS course per semester. Moreover, IS courses are limited to seniors and graduate students. Summer IS course must continue through both summer sessions.

### **Grade Changes & Appeals**

Faculty are authorized to change final grades only when they have committed a computational error or an error in recording a grade, and they must receive the approval of their department chairs and the dean to change the grade. As part of that approval, they must attach a detailed explanation of the reason for the mistake. Only in rare cases would another reason be entertained as legitimate for a grade change. A student who is unhappy with his or her grade on an assignment must discuss the situation with the faculty member teaching the course. If students believe that they have been graded unfairly, they have the right to appeal the grade using the grade appeal process as described in the *Student Handbook* and in the *Faculty Handbook*.

### **Final Examination**

All courses in all colleges must include a comprehensive exam or performance and be given on the date and time specified by the Academic Calendar and the Final Exam schedule published by the Registrar’s Office.

### **Extra-Credit Work**

Professors may not give extra-credit opportunities to individual students. If they choose to give extra credit, professors must make it available to all students in a class. Professors are discouraged from giving extra credit for class attendance and/or attendance at university events. Professors should not give extra-credit opportunities after final grades for the semester are submitted.

### **Copyright Restrictions**

The Copyright Act of 1976 grants copyright owners the exclusive right to reproduce their works and distribute copies of their work. Works that receive copyright protection include published works such as a textbook. Copying a textbook without permission from the owner of the copyright may constitute copyright infringement. Civil and criminal penalties may be assessed for copyright infringement. Civil penalties include damages up to \$100,000; criminal penalties include a fine up to \$250,000 and imprisonment. Copyright laws do not allow students and professors to make photocopies of copyrighted materials, but you may copy a limited portion of a work, such as article from a journal or a chapter from a

book for your own personal academic use or, in the case of a professor, for personal, limited classroom use. In general, the extent of your copying should not suggest that the purpose or the effect of your copying is to avoid paying for the materials. And, of course, you may not sell these copies for a profit. Thus, students who copy textbooks to avoid buying them or professors who provide photocopies of textbooks to enable students to save money are violating the law.

### **Students with Disabilities**

Texas A&M International University seeks to provide reasonable accommodation for all qualified persons with disabilities. This University will adhere to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations as required to afford equal education opportunity. It is the student's responsibility to register with the Office of Student Counseling and Disability Services. This office will contact the faculty members to recommend specific, reasonable accommodation. Faculty are prohibited from making accommodations based solely on communications from students. They may make accommodation only when provided documentation by the Student Counseling and Disability Services office.