Important! Read this syllabus before the next class.
It contains information you need to know!

Instructor: Dr. Chris Barker
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Phone: (936) 468-2340
Office: Rm. 305, Miller Science
Department: Geology
College: Science and Mathematics

Class meeting time: MW, 1 - 2:15 pm
Meeting place: Rm 234, Miller Science

Office Hours: Mon: 9-11 am, 3-5 pm; Tues: 10-11 am, 2-4 pm; Wed: 9-11 am; Thurs: 10-11 am. Come by my office to ask questions, or call or email me to schedule an appointment.


Objective: This course covers the history of planet Earth from its beginning as a ball of lava, through the growth of continents, mountains, oceans, blue skies and shifting plates. We also examine the history of life on Earth, from simple bacteria to giant dinosaurs and, more recently, a species called Homo sapiens.

Studying Earth’s history led to discovery of material resources needed for modern society. Examining changes in life over time—including mass extinctions—gives insight into what is necessary for the continued well being of all plants and animals.

This 3-credit hour course has an associated lab in which you gain hands-on experience with fossils and other topics discussed in the lecture. However, the lab is separate course. Your grade in this lecture course is based solely on your lecture tests.

TESTS

<table>
<thead>
<tr>
<th>EXAM</th>
<th>Date</th>
<th>Time</th>
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<tbody>
<tr>
<td>1</td>
<td>Wed., Sept. 20</td>
<td>1-3 pm</td>
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<tr>
<td>2</td>
<td>Wed., Oct. 18</td>
<td>1-3 pm</td>
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<tr>
<td>3</td>
<td>Wed., Nov. 15</td>
<td>1-3 pm</td>
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<tr>
<td>FINAL</td>
<td>Monday, Dec. 11</td>
<td>1-3 pm</td>
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(The Final is comprehensive!)

Course Topics:
Most of the following topics will be covered, though the order may vary. The approximate time spent on each topic may be adjusted to meet the needs of the class.

<table>
<thead>
<tr>
<th>Topic and Chapters</th>
<th>~ % of the course</th>
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<tbody>
<tr>
<td>Origin of Earth (1)</td>
<td>2</td>
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<tr>
<td>Earliest Life (19)</td>
<td>3</td>
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<tr>
<td>Invertebrate Fossils (21)</td>
<td>8</td>
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<tr>
<td>Geologic Time: Facies (17)</td>
<td>16</td>
</tr>
<tr>
<td>Plants &amp; Vertebrate Animals (21 - 23)</td>
<td>18</td>
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<tr>
<td>Evolution (18)</td>
<td>6</td>
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<tr>
<td>Plate Tectonics and the Super-continent Cycle (2)</td>
<td>10</td>
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<tr>
<td>Faults, Folds and Mountains (10)</td>
<td>12</td>
</tr>
<tr>
<td>A Short History of the World - pC to Present (19 - 23)</td>
<td>17</td>
</tr>
<tr>
<td>Beyond Earth: Stars, Galaxies and Black Holes (1)</td>
<td>8</td>
</tr>
</tbody>
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**NOTE! It is strongly recommended that you have already had (or be concurrently enrolled in) Introductory Physical Geology (GOL 131).** There will not be time to explain basic physical geology terms and concepts in this class. Without that background, you will have to do significant extra reading in order to do well in this course.
**Course Requirements:** You will attend lectures, read the textbook, study your notes and take three exams, plus a comprehensive Final exam. Homeworks, quizzes, writing assignments, etc. may be assigned depending upon your learning needs. I will give notice of any such assignments.

**Grade Distribution:**

**Lecture:** (totals 100%)
- Test 1 = 23.5 %
- Test 2 = 23.5 %
- Test 3 = 23.5 %
- Final Exam = 27.5 %
- Attendance and Participation = 2 %

**Grade Scale:** 90-100 = A; 80-89 = B; 70-79 = C; 60-69 = D; 59 or less = F

If other assignments (such as homeworks, research paper, etc.) are added, the grade elements above will be adjusted to reflect that fact.

**Very important:** No outside or extra work can be done to improve your grade. Your lecture grade is based solely on your test scores.

Therefore, you must prepare yourself well for each test. Do this by attending all lectures, paying attention in class, taking good notes, reading your textbook and studying effectively.

A word of caution: Many professors at SFA divide the semester into 3 tests and a Final. Unfortunately, that means you will have clusters of tests within a few days of each other. During a 'test week' there may not be enough hours in the day and night for adequate study for all tests. As a result, you might be tempted to 'blow off' a test by not studying enough for it.

However, if you bomb a test, you will permanently lower your grade. There is no way to get that grade opportunity back. You will be stuck with that low grade, because, as stated above, "no outside or extra work can be done to improve your grade."

There is only one solution for the test week crunch: study ahead. Study every week for every class—don't wait until just before the test to start studying! Don't spend three weeks chilling and one or two nights frantically cramming. I've tried it. It doesn't work.

**TEST FORMAT.** Exams will be mostly or all multiple choice, possibly with some fill in the blank and short essay questions. You may be asked to reproduce drawings done in the lecture, or answer questions about a drawing.

**NOTE:** Always bring a # 2 pencil and a 50-question Scantron (Form 882) to tests (and be careful that your scantron does not get crumpled or folded—because then it won't scan).

Make-up exams will be given only for documented excused absences. Contact me immediately if you miss a test. Make-up exams must be completed within a week of the original test date.

The Final Exam will be comprehensive, as required by our college. This means you are actually tested twice over most material (once on the hour exam and again on the Final).

When deciding whether to round up a student's grade at the end of the semester, I will consider the following: (1) the trend of your exam grades: were they improving? Was there only one bad exam? (2) Your class attendance, including tardies. (3) Your attitude in class: paying attention, asking questions, not talking or distracting people around you. (4) Attending possible review sessions, etc.

**ELECTRONIC DEVICES.** Laptops and other types of computers, cell phones, iPods, iPads, cameras, camcorders and all other electronic devices CANNOT BE USED IN THIS CLASSROOM and must be turned off and put away. This is because we have had problems with students surfing the web, texting, facebooking, emailing, playing games, watching movies and/or listening to music, etc., during lecture! If you are caught doing any of that, you will be asked to leave for the day and/or I may confiscate the device. If it happens more than once, you will be moved to the front row for the remainder of the semester, and/or dropped from the class.

During TESTS, all electronic devices must be turned off and put away. Failure to observe this rule may result in an automatic F for a test!

**ATTENDANCE POLICY:** In the classroom I will present a significant amount of material that is not in the textbook. My experience is that there is usually a direct correlation between lecture attendance and test performance; therefore, I consider lecture attendance mandatory. I will usually take attendance.
If you have missed a class and have an excused absence or a valid reason for missing, explain it to me after class on the next class day and I will make sure that you don't get counted as absent.

Regarding attendance, some students have wondered, "Why should I come to class if I can get the notes from someone else?" That sounds logical, but if you don't come to class, you miss the context in which the material was presented. You don't hear the emphasis given to certain words, you don't see the professor waving his arms and jumping around to bring home a point, and most important, you don't hear any of the verbal commentary made by the instructor—comments that might be very important in clarifying concepts. The students who were in class remember that contextual information, but someone who just copies the notes misses all of that.

NOTE: Because attendance is so important, if you have more than 4 unexcused absences during the semester your grade may be lowered to the next lower grade! (Example: a C would become a D.) ALSO IMPORTANT: After the first two absences, each additional unexcused absence results in the loss of progressively more of the 2% of your grade labeled "attendance and participation." When you get more than 4 unexcused absences, you lose all of that 2%—plus are potentially subject to having your grade lowered. So—don't miss class!

Remember: someone else's notes are not going to help you that much. (Nonetheless, if you miss a day, you should ALWAYS get the notes from someone because those notes are better than nothing!) The bottom line is that every time you skip a class, you are lowering your own grade!

TARDINESS. When students arrive late it is distracting to everyone in the class. Therefore, please DO NOT HABITUALLY COME LATE TO CLASS. This means you need to anticipate the parking problems that are part of life at SFA (and every other large university).

Leaving the classroom during the lecture, except for illness or restroom emergency, or sleeping during class, counts as one tardy. Talking during class, if it disturbs me or your classmates, counts as a tardy. Two tardies count as one absence! If you come to class late you will also miss the sign-in sheet as it comes by. If that does happens, come to the front at the end of class and sign the sheet and put a large "T" after your name. Remember, if you forget to sign-in, there is nothing I can do later to take that absence off your record!

DISRUPTIVE BEHAVIOR. A studious atmosphere must be maintained in the classroom so that everyone can concentrate on the material being presented. Disruptive behavior, including but not limited to, whispering, talking, laughing, making noises, coming in late, walking around during lecture, or using electronic devices such as cell phones will not be tolerated if it disturbs your classmates or the professor. Here is what the university has to say on this topic:

“Acceptable Student Behavior”:

Classroom behavior should not interfere with the instructor’s ability to conduct the class or the ability of other students to learn from the instructional program (see the Student Conduct Code, policy D-34.1). Unacceptable or disruptive behavior will not be tolerated. Students who disrupt the learning environment may be asked to leave class and may be subject to judicial, academic or other penalties. This prohibition applies to all instructional forums, including electronic, classroom, labs, discussion groups, field trips, etc. The instructor shall have full discretion over what behavior is appropriate / inappropriate in the classroom. Students who do not attend class regularly or who perform poorly on class projects/exams may be referred to the Early Alert (iCare) Program. This program provides students with recommendations for resources or other assistance that is available to help SFA students succeed.

COURSE EVALUATION. At the end of the semester you will be asked to evaluate the course online. Your evaluations are important because they help professors improve their courses. The evaluation period is usually the last couple of weeks of the semester, but it ends BEFORE final exams begin. Important: Students who do not complete the online evaluation may receive an incomplete for the course! I will remind you about evaluations near the end of the semester.

READING THE TEXTBOOK. I strongly suggest that you read assigned chapters or sections from the textbook before that topic is covered in class. Look at the list of "Topics" on the first page of this syllabus to see which chapters to read.

You are not responsible for everything in the text, but you need to assimilate the main points—furthermore, there may be some questions on the tests that come directly from the textbook! Ideally, you should read and highlight your text, and
then skim over it each morning before entering the classroom. Reading the text will also help you prepare for lab, which covers some topics not addressed in the lecture. Primarily, the text should be read because it will improve your understanding of the lecture and lab material. That will help you do better on tests. Reading the textbook probably increases a student's final grade by as much as a letter!

INSTRUCTIONAL METHODS. Most of what I want you to know will be presented during classroom lectures. Please feel free to ask questions at any time. I like students to ask questions because that stimulates discussion and helps clarify concepts for everyone.

FIELD TRIPS. Unlike most upper-level geology courses, there is not a field trip with this course. However, the SFA Geology department offers several field trip mini-courses that are open to all students and which you can take for additional college credit. These courses are conducted over a single weekend and have no test or term paper. Your grade for the field trip will be based on notes you take at different locations of geologic interest—many of which are the most scenic spots in Texas and nearby states. Being able to see geology in the real world—instead of just hearing about it in class—makes learning easier and more fun. Countless students have told us that these weekend field trips were the most enjoyable courses they had at SFA.

The field trips are later in the semester, but if you want to go on one, you have to sign up for them immediately because they fill quickly—and if you wait more than a few days, you will have to pay a late registration fee—if you can get into the course. The Field Trips count as upper level electives and are a great way to get 1 or 2 hours of college credit for a fun weekend outing!

The field trips are listed as various sections of GOL 471—look at the on-line course catalog (under "Geology") or at the flyers in the hall to see which trips are being offered. You can sign up for them on-line by adding them to your current group of classes. (If you have any trouble registering for them, contact Shana Scott in the geology department, phone 3701.) For more information about the field trips, go to: www.geology.sfasu.edu/FieldTrips.html

Tip! The Hill Country Field Trip is our most popular trip and goes to beautiful places like Enchanted Rock and Pedernales Falls State Parks—not to mention Luckenbach (time permitting) and Cooper's Bar-B-Que!

Another Tip! By going on the field trip you will learn more about geology in general and almost certainly do better in this class as a result.

WHAT YOU NEED TO KNOW and HOW TO STUDY. What do I expect you to know? You are responsible for all the material covered in class, and for major concepts and facts in the text. This is a science survey course and for that reason, you will have to learn many new terms and concepts. It is like learning a new language—in this case, the language of geology. The first step is to memorize the new terms and their meanings.

LEARNING AND STUDY TIPS:
• Note Taking: Seasoned students know that the things a professor says about the material are as important as what is written on the board or shown on a slide. Therefore, they try to get lots of those verbal gems of information into their notes.
• Drawings: Drawings convey a great deal of information. You should be able to reproduce any drawing from lecture or answer questions about any drawing. I often put drawings on tests.
• Review Sheets: They are a good idea. But I think you should make them. Doing so is a very effective way to study.
• Studying: Do not wait until the night before a test to start studying! There is usually far too much material to learn effectively in one night. Study on a regular basis. Read the textbook before the corresponding lecture, not the night before the test.

My best tip for effective studying: Form a small study group of 3 to 4 people and meet on a regular basis. Look for classmates who seem serious about learning, exchange contact information, and meet every couple of weeks for 3 or 4 hours to go over the material for a given unit. Studying in a small group is more effective than studying by yourself because when you talk about the material, you use different cognitive processes than when reading. The most effective way to learn anything is to teach it to someone else, and that is essentially what you do when you study in a small group. Furthermore, someone in your group might understand part of the material better than you, or might have written down something the professor said that helps you understand the material better.
Do your group studying in advance of the exam, and then on the night before the test, review the material by yourself. Finally, get a good night's sleep. Don't stay up all night studying! If you do, your brain won't work effectively in the morning.

If you need more help, go to the AARC and ask for suggestions for studying. And of course you can also come by my office to ask questions—or request that I conduct a review session before a test.

A philosophical question: Why study science if you are not going to be a science major? The reason almost every university in the world has a science requirement is because the life-style we live today is based on science. Science explains how the physical world works. Science gives us the ability to harness electricity, find energy resources, grow abundant crops, develop medicines and make cool gadgets like iPhones and hybrid cars. Without a basic understanding of science—both its limitations and potential—you can't really make informed decisions in the work place, the market place or the voting booth.

WHY YOU SHOULD TRY TO MAKE AN "A" IN THIS COURSE. Actually, you should try to get an A in every course you take. Why? Because good grades result in a good GPA—and a good GPA is your ticket to the good life. A high GPA will win you scholarships, it will get you into honors classes, it will later get you into better jobs or a more prestigious graduate school. Each of those in turn are stepping stones to more satisfying—and more lucrative—jobs.

Employers naturally want to hire people who were A and B students in college because that high GPA tells them that this is a person who is smart and works hard. It is a simple fact of life that employers want to hire people who did well in college—that's why you should always try to make a B or better in every course you take.

HOW DO YOU MAKE AN A IN THIS COURSE? Don't miss any classes, take good detailed notes, stay mentally engaged during the lecture (i.e., don't daydream), ask questions, read your textbook in advance of lectures and take advantage of your professor's office hours. For each test, study early, thoroughly and effectively. Form a study group and meet regularly. If you are struggling, ask for help! The students who do all of these things are usually the ones who make an A.

Good luck and have fun learning about the history of the Earth!

The fine print! (No questions will be asked over the following material.)

COLLEGE AND UNIVERSITY POLICIES / GENERAL COURSE INFORMATION:

Academic integrity.
Academic integrity is a responsibility of all university faculty and students. Faculty members promote academic integrity in multiple ways including instruction on the components of academic honesty, as well as abiding by university policy on penalties for cheating and plagiarism.

Definition of Academic Dishonesty
Academic dishonesty includes both cheating and plagiarism. Cheating includes but is not limited to (1) using or attempting to use unauthorized materials to aid in achieving a better grade on a component of a class; (2) the falsification or invention of any information, including citations, on an assigned exercise; and/or (3) helping or attempting to help another in an act of cheating or plagiarism. Plagiarism is presenting the words or ideas of another person as if they were your own. Examples of plagiarism are (1) submitting an assignment as if it were one's own work when, in fact, it is at least partly the work of another; (2) submitting a work that has been purchased or otherwise obtained from an Internet source or another source; and (3) incorporating the words or ideas of an author into one's paper without giving the author due credit.

Please read the complete policy at http://www.sfasu.edu/policies/academic_integrity.asp

Withheld Grades Semester Grades Policy (A-54)
Ordinarily, at the discretion of the instructor of record and with the approval of the academic chair/director, a grade of WH will be assigned only if the student cannot complete the course work because of unavoidable circumstances. Students must complete the work within one calendar year from the end of the semester in which they receive a WH, or the grade automatically becomes an F. If students register for the same course in future terms the WH will automatically become an F and will be counted as a repeated course for the purpose of computing the grade point average.
The circumstances precipitating the request must have occurred after the last day in which a student could withdraw from a course. Students requesting a WH must be passing the course with a minimum projected grade of C.

**Students with Disabilities**
To obtain disability related accommodations, alternate formats and/or auxiliary aids, students with disabilities must contact the Office of Disability Services (ODS), Human Services Building, and Room 325, 468-3004 / 468-1004 (TDD) as early as possible in the semester. Once verified, ODS will notify the course instructor and outline the accommodation and/or auxiliary aids to be provided. Failure to request services in a timely manner may delay your accommodations. For additional information, go to [http://www.sfasu.edu/disabilityservices/](http://www.sfasu.edu/disabilityservices/).

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**Pedagogical Statement for Earth Through Time:**

**Number of Credit Hours:** Four  
**Course Prerequisites and Corequisites:** GOL 131

**Program Learning Outcomes**
This is a general education core curriculum course and no specific program learning outcomes for this major are addressed in this course.

**General Education Core Curriculum Objectives/Outcomes**
1. Understand and apply method and appropriate technology to the study of natural sciences. This assessment will evaluate the ability to understand how equipment is necessary to determine the age of radioactive samples.
2. Recognize scientific and quantitative methods and the differences between these approaches and other methods of inquiry and to communicate findings, analysis, and interpretation both orally and in writing. This assessment will evaluate the ability to determine types of faults and folds using blocks diagrams and discussing them in class.
3. Identify and recognize the differences among competing scientific theories. This assessment will evaluate the ability to understand the difference between the theory of organic evolution and other theories.
4. Demonstrate knowledge of the major issues and problems facing modern science, including issues that touch upon ethics, values, and public policies. This assessment will evaluate the ability to understand how plate tectonic processes are related to distribution of natural resources.
5. Demonstrate knowledge of the interdependence of science and technology and their influence on, and contribution to, modern culture. This assessment will evaluate the ability to understand how building on fault lines can be dangerous and destructive.

**Student Learning Outcomes:**
The student is expected to understand and apply the following concepts:
1. Understand the theories about the origin of the Earth.  
2. Gain an understanding of the development of different lifeforms over geologic time.  
3. Understand how radioactive age dating has made it possible to determine the age of rocks.  
4. Study and understand stratigraphic principals and facies patterns.  
5. Understand the history of plate movements and the development of past supercontinents.