

GEOL – 1401 COURSE SYLLABUS Spring 2019

RICHLAND COLLEGE

Course Description:

Pre-requisite: One of the following must be met: (1) DREA 0093 or (2) English as a Second Language (ESOL) 0044 or (3) have met the Texas Success Initiative (TSI) Reading standard
GEOL-1401-83006 is an introduction to the physical and chemical forces active on Earth, including a survey of minerals, rocks, volcanism, geomorphology and structural geology. Also covered are the agents of weathering, erosion, earthquakes, the earth's interior, glaciation, oceans, rock mobility, metamorphism, sedimentation, water, climate change and the formation of economic mineral deposits.

This course is 4 credit hours

Instructor Information

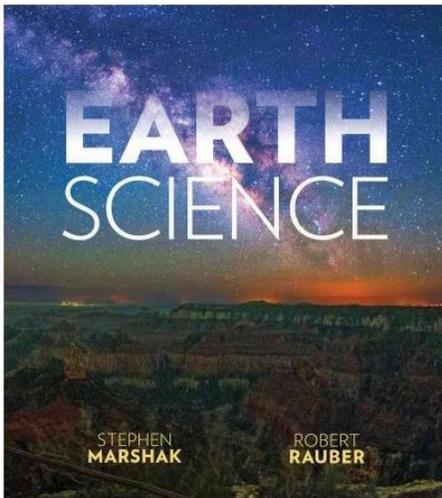
Dr. Eric Tangumonkem, Ph.D.
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Office: A110

Dr. Tangumonkem's Communication Policy

- Email is the quickest way to get hold of me!
- I agree to respond to your inquiries within 24 hours.
- You can call or text me as well.

*If you don't hear from me within 24 hours, assume I didn't receive your message (issues do occur with technology!) **don't hesitate to send multiple messages or call.***

Required Text:



Earth Science

Authors: Stephen Marshak & Robert Rauber

ISBN 13:9780393928136

Publication Date: 2017

COURSE INFORMATION

Room Location: RLWH-WH205

Class Times Lectures: TR 09:30 am – 10:50 am WH149

Class Times Labs: T 11:00 am - 01:50 pm SH253

Start Date: 01/22/2019

Course Withdraw: 04/17/2019

Final Exam: 05/16/2018 09:10 am – 11:20 am WH205

FAQ: What lab manual are we using?

An e-version of the Lab Manual will be provided to you by your instructor for you to print.

For all quizzes you need **Scantron forms (882 series):**



Course Objectives

The goal of this course is to introduce students to the scientific study of the earth, the discipline known as geology. The primary focus will be on the theory of plate tectonics, rock and mineral characterization and formation, the major geologic time scales, processes occurring within the interior, and on the exterior, of the earth, and an overview of earth's energy and mineral resources.

Course Objectives:

- A. Explain and practically apply the principles of the scientific method;
- B. Demonstrate a conceptual understanding of fundamental concepts, principles, and interactions of Earth's systems applicable to the geological sciences;
- C. Demonstrate an understanding of plate tectonics and the Earth's resources;
- D. Apply understanding of the internal and external processes that shape and form the Earth;
- E. Demonstrate an understanding of the rock cycle and identify and describe the basic properties of rocks and minerals;
- F. Demonstrate an understanding of the Earth through the identification and evaluation of minerals;
- G. Demonstrate an understanding of the Earth through the identification and evaluation of igneous, sedimentary and metamorphic rocks;
- H. Demonstrate an understanding of how geological environments are formed, changed and eroded over time;
- I. Demonstrate an ability to communicate complex course concepts effectively in writing and diagrams and apply critical thinking and problem-solving skills to make informed decisions in life;
- J. Demonstrate the ability to read and interpret topographic and geologic maps and answer questions pertaining to geologic processes.

Student Learning Outcomes

- 1. Define and demonstrate an understanding of terms and concepts that are the focus of physical geology including (but not limited to) earth interior, landforms, geomorphology, plate tectonics, weathering, erosion, rocks and minerals, earthquakes, sedimentation, glaciation, and volcanism.
- 2. Interpret, analyze, and evaluate (using a systems approach) the variety of earth's landforms and the processes that created them.
- 3. Describe and analyze rocks and minerals through the various instruments and methods used for the collection and analysis of data.



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4. Construct computer models of landform development based on quantifiable information as well as visual clues.
5. Demonstrate an understanding of the formation of economic mineral deposits and the problems associated with their extraction.

Lessons:

Each student learning objective listed above is addressed in a corresponding lesson outlined below. Each lesson consists of the following elements:

LECTURE

Geology is the study of the earth. Obviously, that covers a lot of material. We focus on Physical Geology in this class, which is the study of the earth's materials and processes. The earth is an amazing and dynamic planet that is always in a state of change - it is geologically alive. That is what this class will focus on. We will explore the HOW and WHY the earth works the way it does and how our lives are affected by geology.

This is a college-level science class, and there will be a new vocabulary to learn, but we will emphasize the processes at work within the earth and on the earth's surface and how they relate to each other. Whether you realize it or not, geology is at work all around you every single day. My hope is that this class will give you a new perspective on this fact.

LAB:

Geology is a field-based science. In this lab, you will learn the basic skills that a geologist must have in order to study geology in the field. We will focus on mineral and rock identification, interpreting geologic structures and maps.

For the lab, we use an in-house lab manual that will be posted on Blackboard. You are required to have the lab manual printed in its entirety by Monday, August 27. Some of the pages need to be printed in color, details will be given the first day of lab. This is a 4-credit course, with 1 unit of lab requirement. You should plan on at least 3 hours for each lab assignment. The lab assignments will provide real-world experience and reinforce lecture topics.

You are expected to attend lab and complete the exercises for the day. There are no makeups for missed lab exercises. You will be able to drop one daily lab exercise grade, but missing multiple labs will have an impact on your grade.

Your lab grade will also be based on 7 quizzes. There are no Makeups for lab quizzes.



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QUIZZES: A multiple-choice quiz will be assigned to each chapter. Students are allowed, and encouraged, to re-take the quiz as often as necessary to obtain a perfect score. Your lowest quiz score will be dropped in computing your average quiz grade.

TEST/EXAM: Each test will consist of multiple choice, T/F, matching and/or short answer questions. The Final Exam will consist of questions taken directly from the chapter quizzes.

Special Materials, Supplies, Equipment, and Fees

LECTURE

There are no special materials needed for the lecture.

Required for lab and exams:

Pencil, colored pencils, scantron 882E (5 or 6 of them).

***All Labs and exams must be completed in pencil. Any other supplies will be provided.

Attendance and Course Makeup Work:

* Class attendance and participation are essential to student success.

* You must attend class to do well. It is important for you to engage with other students and with me. If you are going to be absent for an extended period, please see me. If you decide you aren't coming back, be sure to drop. The instructor will not drop for you. If you do not drop you will probably end the class with an "F." It is important that you be on time. If you are late, it is distracting to other students and me. If you are late to lecture, it is a **2-point** deduction from your overall lecture grade. If you are late to lab, it is a **3 point** overall deduction.

* Attendance will be taken at the beginning of class (lecture and lab). Leaving early or being late to class will result in the student being counted absent for that class. Leaving during class is rude and if such is necessary, please let me know in advance and sit at the back of the classroom to not disrupt the other students. It is the student's sole responsibility to get any material missed while not in class.

Regarding lateness... if you arrive more than **5 minutes** late for lecture class you will be marked tardy. If you arrive more than **30 minutes late** to lecture, you will be marked absent. I understand that occasionally things happen and you may be late to class occasionally. However, if you are continuously late, a solution will have to be found. It is disruptive to your classmates and to me when it happens regularly.



If you miss a quiz because of tardiness or unexcused absence, it cannot be made up.

* A student may not leave the room during a lecture or lab exam or quiz. A student who leaves the room during a quiz or exam is considered finished with the exam/quiz and may not resume testing.

* Generally, there are no make-up exams or quizzes in lecture. However, I understand emergencies can arise. I will consider make-up quizzes on a case-by-case basis. If a lecture make-up quiz is granted, it must be taken the first day back on campus and will most likely be essay/short answer format. If a makeup midterm is granted, the makeup will be taken during final exam week at the end of the semester.

Mobile phones must be completely out of sight during lectures and during all tests and quizzes.

If your phone becomes visible during an exam or quiz, your paper will be taken up, and it will result in a zero grade.

Academic Integrity & Classroom Etiquette:

* Students are expected to adhere to the DCCCD policy on academic dishonesty as stated in the student handbook. Students are expected to maintain a high degree of academic integrity throughout this course. Students caught cheating on tests or other assignments will receive no credit (a zero) for that exam or assignment and will be referred to the appropriate office on campus for academic dishonesty. **No makeup or extra credit opportunity will be allowed to replace the credit lost due to cheating.**

*Pertaining to Lab and Lecture, Be polite and respectful to each other. Talking or other noise at inappropriate times is not acceptable and will not be tolerated.

***No cell phones or music/ electronic devices are allowed out or in use during class. This includes listening to music and or texting.** It is rude and very distracting.

*Texting is not allowed during class, cell phones must be turned off, and no food or drink is allowed in the classroom unless authorized by the instructor. If you must leave class for a phone call, please plan on getting the remainder of the material from a classmate.

* If you are texting you are not “attending” lecture and will be counted absent.



Tentative Schedule

Week of	Lecture Topic	Text Ch.	Lecture Quiz	Lab
Jan 22	Student Orientation Familiarization with Syllabus. Dynamic Earth	1	None	Plate Tectonics
Jan 29	Plate Tectonics	2	Quiz 1	Minerals
Feb 05	Minerals	3	Quiz 2	Minerals Quiz 1
Feb 12	Igneous Rocks	4	Quiz 3	Ig. Rocks,
Feb 19	Sedimentary Rocks	5	Quiz 4	Sed. Ig. Rocks Quiz 2
Feb 26	Metamorphic Rocks	6	Quiz 5	Met Rocks
Mar 05	Deformation & Mountain Building	7	Quiz 6	Met Rocks Folds and Faults
Mar 11	Spring Break Spring Break Mar 11- March 15			
Mar 19	Earthquakes	8	Midterm	Folds and Faults Quiz3
Mar 26	Weathering and Mass Wasting	12	Quiz 7	Meta. Rocks, Quiz4
Apr 02	Surface and Ground Water	13	Quiz 8	Sed. Rocks, Quiz5
Apr 09	Geologic Time	9	Quiz 9	Geologic Maps
Apr 16	Deserts & Glaciers	14	Quiz 10	Geo Maps, Relative dating
Apr 23	Oceans	15	Quiz 11	Geo Quiz 6,
Apr 30	Ocean Basins and Coasts	16	Quiz 12	Topo Maps
May 07	Energy and Mineral Resources	11	Quiz 13	Topographic maps, Quiz7
May 16	Final Exam 05/16/2018 09:30 am – 11:20 am			

**Grading Criteria**

Your final GEOLOGY 1403 course grade will have several components, with lab, weighted 30% of the final grade and lecture 70%. The breakdown of available points is below. The point total for the class is set to **2640 pts.**

Lab Daily Grades 150 pts - Daily lab grades will be 10 pts per lab day. At the end of the semester, the total points will be weighted out of 150 pts. Your total If you arrive more than 10 minutes late to lab, points will be deducted. If you arrive more than 20 minutes late for lab, you will receive a daily grade of zero for that day. Also, if you do not complete the lab work for any reason, points will be deducted. One daily lab grade will be dropped.

Lab Quizzes 490 pts- We will have 7 quizzes worth 70 points each and will vary in length and point value. No quiz grades will be dropped.

Quiz dates will be announced approximately one week in advance. No student is allowed to take a lab quiz after another student has finished the quiz and left the room.

Lecture quizzes 1300 pts- We will have a quiz every week covering material presented during the lecture the previous week. Each quiz will have approximately 20 questions, including multiple choice, true/false and short answer. The quizzes will be posted on backboard and you will have two attempts to take them. There are no makeups for these quizzes, except for excused DCCC absences or extenuating circumstances with documentation and prior approval on a case by case basis. Your lowest quiz grade will be dropped.

Midterm - 350 pts - **The midterm will be on Thursday, March 21.** The exam will be based strongly on Lecture quizzes 1-6. Your study guide is based on the weekly practice questions, no other study guide will be provided. The midterm exam will be posted on blackboard and it will be proctored and you are required to have a laptop or personal computer to take the exam.

Final Exam 350 pts - **The final will be Thursday, May 16** and will be based on Lecture quizzes 7-13. There are no makeups or rescheduling of final exams allowed. Please check the final exam schedule before making travel plans for summer. No one is allowed to begin the final exam after another student has finished and left the room. The final exam will be posted on blackboard and it will be proctored and you are required to have a laptop or personal computer to take the exam.

LECTURE - **MAKE-UP EXAM & QUIZ POLICY** I have no desire to decide whether you really are too ill to take the midterm exam or whether your great-uncle really has passed



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away or whether your significant other really was abducted by aliens during the night :-). If you miss the midterm exam, you will take a make-up exam during final exam week. The exam will be mostly short answer and essay questions. I strongly suggest that you do not miss the midterm unless absolutely necessary. It is difficult to go back and study older material that was presented weeks and weeks earlier at the same time as studying for your final. It is not possible to change the date or time of the final exam. Please check this date and time carefully before you make plans for the end of the semester. There are no makeups for weekly quizzes, unless under extenuating circumstances, with documentation and prior approval on a case by case basis.

LAB - **MAKE-UP QUIZ POLICY** As stated earlier, lab quiz makeups are only given under extenuating circumstances. You must contact me **BEFORE** the scheduled lab quiz in order to arrange a makeup. If you do not contact me before the quiz, no makeup will be allowed.

****EXTRA CREDIT**** **There is no extra credit available in this course.**

Final course grades are assigned based on the following percentages obtained out of **2640 pts**:

Grading scale:

Grading

These are the major assignments in the course and will be the basis for evaluation according to the grading scale shown in the table below.

Course Grade Scale		Evaluation Items & Weights	
90% - 100%	A	Quizzes	30%
80% - 89%	B	Labs	30%
70% - 79%	C	Midterm Exam	20%
60% - 69%	D	Final Exam	20%
59% and below	F	Total	100%

Curving Grades: Please do not expect your grade to be curved. In this class I do not lower my expectations, you will work harder if you want to improve your grades. You will get the grade that you earn. I give you the information you need, it is your responsibility to study and learn the material, it is the only way to improve your grades.

Extra Credit: None

Daily Class Assignments

Come to class, take good notes, stay motivated, do the labs and ask good questions!

**Additional Class Information**

Laptop policy - I am okay with laptops being used in class for note taking purposes. However, we do draw a lot of diagrams. If you are a laptop user, make sure you have a plan for drawing diagrams. All laptop users are required to sit in the first 4 rows of the lecture room. If there is a problem with the computers being used for other reasons and it becomes a distraction to other students, you will lose the privilege and be forced to take notes the old-fashioned way :-). No photos, voice or video recording without prior permission.

Religious Holidays: While I respect all religious holidays, you must inform me of the religious holiday(s) for which you will want an approved absence by the end of our first week of class. Requests for dates of religious holidays not submitted by the end of the first week of class will not be approved. The list of dates for which you are seeking approval will be reviewed, and I will inform you of whether the absence will be considered excused or not.

WITHDRAWAL

If you are unable to complete this course, it is your responsibility to withdraw formally. The withdrawal request must be received in the Registrar's Office by November 15th. Failure to do so will result in your receiving a performance grade, usually an "F." If you drop a class or withdraw from the college before the official drop/withdrawal deadline, you will receive a "W" (Withdraw) in each class dropped. For procedures see the Brookhaven College website and select A-Z for a listing.

STOP BEFORE YOU DROP

For students who enrolled in college-level courses for the first time in the fall of 2007, Texas Education Code 51.907 limits the number of courses a student may drop. You may drop no more than 6 courses during your entire undergraduate career unless the drop qualifies as an exception. Your campus counseling/advising center will give you more information on the allowable exceptions. Remember that once you have accumulated 6 non-exempt drops, you cannot drop any other courses with a "W." Therefore, please exercise caution when dropping courses in any Texas public institution of higher learning, including all seven of the Dallas County Community Colleges. For more information, you may access: <https://www1.dcccd.edu/coursedrops>

ACADEMIC DISHONESTY POLICY

Scholastic dishonesty is a violation of the Code of Student Conduct. Scholastic dishonesty includes, but is not limited to, cheating on a test, plagiarism, and collusion. As a college student, you are considered a responsible adult. Your enrollment indicates acceptance of the Dallas County Community Colleges Code of Student Conduct published in the Richland College Catalog. <http://www1.dcccd.edu/cat0910/ss/code.cfm>



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Additional information is available in the "Student Handbook" and "Code of Student Conduct." This includes: catalog description, of course, prerequisites, core objectives, course objectives, financial aid info, food and drink policy, religious holiday policy, withdrawing from the course and each of the following:

THE AMERICANS WITH DISABILITIES ACT INFORMATION

If you are a student with a disability and/or special needs who require ADA accommodations, please contact your Disability/Special Services call 972-238-6180 or visit the following website

Campus. <http://www.dcccd.edu/Current+Students/Student+Services/Disability+Services/>

OBTAINING FINAL COURSE GRADES: www.econnect.edu.

SIX DROP ISSUE: <https://www1.dcccd.edu/6drop>

THIRD ATTEMPT TO ENROLL IN A COURSE: <http://www.dcccd.edu/thirdcourseattempt/>

Inclement Weather Information: In case of inclement weather, please check the Richland College website at www.richlandcollege.edu or call the Inclement Weather Hotline at 972-238-6196

Campus Emergency Operations: <http://www.rlc.dcccd.edu/emergency>

REPEATING THIS COURSE:

Effective with the Fall 2005 Semester, the Dallas County Community Colleges will charge additional tuition to students registering the third of subsequent time for a course. All third and subsequent attempts of the majority of credit and Continuing Education/Workforce Training courses will result in additional tuition to be charged. Developmental Studies and some other courses will not be charged a higher tuition rate. Third attempts include courses taken at any Dallas County Community Colleges since the Fall 2002 Semester

GENERAL STATEMENT: *The instructor reserves the right to modify any course requirements, grading procedures, and other related policies as circumstances dictate.*