Earth Science GEOL 1401 Syllabus
Mountain View College

Instructor Information
Name: Dr. Lynn D. Millwood
DCCCD Email: millwoodrocks@dcccd.edu
Office Phone: 214-860-3652
Office Location: W-04
Office Hours: MW 12:30-1:30 pm; TR 2-3 pm
Division Office and Phone: W-120; 214-860-8649

Students are responsible to read and follow the course syllabus.

All students are responsible for the material covered in every class session, both lecture and lab.

Course Information
Course Title: Earth Science
Course Number: GEOL 1401
Section Number: 63001
Semester/Year: Spring, 2020
Credit Hours: four credit hours

Class Meeting Time/Location: TR LAB 9:30-10:50 a.m. OR 11:00-12:20 p.m. Room W02
TR LECTURE 12:30-1:50 p.m. in Room W-32B

Certification Date: February 3, 2020
Last Day to Withdraw: April 16, 2020

Course Prerequisites
Developmental Reading 0093 or English as a Second Language (ESOL) 0044 or have met the Texas Success Initiative (TSI) standard in Reading.

Course Description
This course is for the non-science major. It covers the interaction of the earth sciences and the physical world. Geology, astronomy, meteorology, and space science are included. Selected principles and concepts of the applied sciences are explored.

Student Learning Outcomes
Student Learning Outcomes
Lecture Learning Outcomes for Earth Science, GEOL 1401
Upon successful completion of this course, students will:

- Explain the current theories concerning the origin of the Universe and of the Solar System.
- Explain the place of Earth in the Solar System and its relationships with other objects in the Solar System.
- Relate the origin and evolution of Earth’s internal structures to its resulting geologic systems, including Earth materials and plate tectonic activities.
- Explain the operation of Earth’s geologic systems and the interactions among the atmosphere, the geosphere, and the hydrosphere, including meteorology and oceanography.
- Explain the history of the Earth including the evolution of earth systems and life forms.

Lab Learning Outcomes for Earth Science, GEOL 1401
Upon successful completion of this course, students will:

- Classify rocks and minerals based on chemical composition, physical properties, and origin.
- Apply knowledge of topographic maps, diagrams, and/or photographs to identify landforms and explain the processes that created them.
- Differentiate the types of plate boundaries, explain the processes that occur at each and identify associated structural features on maps, block diagrams and cross sections.
- Apply relative and numerical age-dating techniques to construct geologic histories.
- Measure atmospheric processes that affect weather and climate.
- Describe the composition and motion of ocean water and analyze the factors controlling both.
- Compare properties and motions of objects in the solar system.
- Demonstrate the collection, analysis, and reporting of data.

Texas Core Objectives
The College defines essential knowledge and skills that students need to develop during their college experience. These general education competencies parallel the Texas Core Objectives for Student Learning. In this course, the activities you engage in will give you the opportunity to practice two or more of the following core competencies:

1. **Critical Thinking Skills** - to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
2. **Communication Skills** - to include effective development, interpretation, and expression of ideas through written, oral, and visual communication
3. **Empirical and Quantitative Skills** - to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
4. **Teamwork** - to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
5. **Personal Responsibility** - to include the ability to connect choices, actions, and consequences to ethical decision-making
6. **Social Responsibility** - to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
Required Course Materials


**ONLY BUY A NEW COPY OF THIS LAB MANUAL!!!**

Recommended Optional Texts:

<table>
<thead>
<tr>
<th>Extra materials needed:</th>
<th>Come prepared — Bring all to lab</th>
</tr>
</thead>
<tbody>
<tr>
<td>colored pencils</td>
<td>protractor</td>
</tr>
<tr>
<td>magnifying glass</td>
<td>plastic knife</td>
</tr>
<tr>
<td>metric ruler</td>
<td>simple calculator</td>
</tr>
<tr>
<td>No. 2 pencils</td>
<td>eraser</td>
</tr>
<tr>
<td>at least 2 pkgs. Scantrons, 882-E</td>
<td>(One scantron per lecture exam + lab exercises)</td>
</tr>
</tbody>
</table>

Note: A student of this institution is not under any obligation to purchase a textbook from a university-affiliated bookstore. The same textbook may also be available from an independent retailer, including an online retailer.

Graded Work

The tables below provide a summary of the graded work in this course and an explanation of how your final course grade will be calculated. All student grades will be calculated using the chart above. Each student is responsible to self-monitor his/her own progress in the course. Grade information used to calculate grades should be collected from eCampus/BlackBoard, returned papers (such as quizzes and lab work), and the grade template form. BlackBoard generates total scores that are NOT calculated by the official grade formula in this syllabus above, and therefore do NOT reflect the true and accurate grade for any student. After the grade average of every student is calculated in preparation for the final grade in the class, each student will have an “honesty factor” applied to his/her score. There are two possible scores for the honesty factor. If the student has done his/her own work and has not cheated on any test or assignment, then the honesty factor has a value of “one”; if the student has cheated, plagiarized, turned in any work that was a result of collusion or any other dishonest activity, then the honesty factor has a value of “zero”.

Summary of Graded Work

<table>
<thead>
<tr>
<th>Assignments</th>
<th>Points</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit Lecture Exams</td>
<td>4 @ 100 points each</td>
<td>400 points</td>
</tr>
<tr>
<td>Daily Lab Exercises, Quizzes &amp; Activities</td>
<td>Earned percentage x 150</td>
<td>150 points</td>
</tr>
<tr>
<td>Lab Exams</td>
<td>3 @ 100 points each</td>
<td>300 points</td>
</tr>
</tbody>
</table>
Assignments | Points | Totals
---|---|---
Lecture Final Exam (comprehensive) | 1 @ 200 points | 200 points

**TOTAL: 1,050 points**

**Final Grade**

<table>
<thead>
<tr>
<th>Points</th>
<th>Percentages</th>
<th>Letter Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>945-1,050</td>
<td>90-100%</td>
<td>A</td>
</tr>
<tr>
<td>840-944</td>
<td>80-89%</td>
<td>B</td>
</tr>
<tr>
<td>735-839</td>
<td>70-79%</td>
<td>C</td>
</tr>
<tr>
<td>630-734</td>
<td>60-69%</td>
<td>D</td>
</tr>
<tr>
<td>0-629</td>
<td>0-59%</td>
<td>F</td>
</tr>
</tbody>
</table>

**Description of Graded Work**

- There will be four Unit Lecture Exams each covering four chapters from the Lecture Text. **ALL LECTURE EXAMS ARE CLOSED BOOK EXAMS.** These four exams will be taken in the MVC Testing Center. You will need one scantron form, #882-E.
- The Daily Lab Exercises, Quizzes and Activities scores will be averaged and the average multiplied by 150. Lab Quizzes will be taken in the Testing Center.
- The three lab exams will cover different material. Lab Exam One will be a practical identification test for mineral and rock specimens. Lab Exam Two will cover the “book work” assigned in the Lab Manual (TLT) for the first half of the semester. Lab Exam Three will cover the “book work” assigned in the Lab Manual (TLT) for the second half of the semester and any other assigned lab activities (such as the Playdough Lab). The Mineral and Rock Exam are open notes exams (no books). Lab Exams Two (Lab Midterm) and Three (Lab Final) are open book, open notes, NO INTERNET exams. You will need one scantron form for each of Lab Exams Two and Three, #882-E.
- The Lecture Final Exam is comprehensive and covers the all 24 chapters in Tarbuck & Lutgens (the lecture textbook). It is a closed book exam. You will need one scantron form, #882-E.

**Attendance and Your Final Grade**

**Attendance is required. In contrast with the High School experience of many students, good attendance does not ensure a passing grade for the class.** Students are expected to learn the material assigned for this class, and the demonstration that this learning has taken place (or not) is the basis for grades. Students
who do not regularly attend both lecture and lab generally do not pass this class. Students are expected to be present during both lecture lab for the ENTIRE class time!!! Students who miss more than 20 minutes of a class or lab session will be counted absent for the whole class. Students are responsible for material presented in class even if they are absent. Leaving early or arriving late will adversely affect your grades due to missed material covered in class. Come to class prepared – DO YOUR HOMEWORK!! Please come to every class with your books and materials, and mentally prepared to get your work done. Attendance will be recorded for both lecture and for lab.

**Students are expected to attend all classes Lecture and Lab.** Students have the responsibility to attend class and to consult with the instructor when an absence occurs. If for some reason you must leave class early, you should inform the instructor prior to the start of class of your reason for leaving early. If you know that you are going to miss a class session (for a legitimate reason such as a work-related trip), BE SURE TO CONSULT THE INSTRUCTOR IN ADVANCE IF YOU KNOW THAT YOU WILL HAVE TO MISS CLASS.

**Students must begin attendance in all classes of enrollment. No exceptions. Financial Aid will not be granted to students who have been certified as not attending, by the certification date. For this lecture course, your physical participation in class, on or before the certification date will allow you to receive credit for FA purposes. For certification dates, see the schedule above. Students, who are not certified as beginning class, are responsible for any payments due as a result of non-certification, to include the dropping of courses.**

**Late Work Policy**

**Late Work Policy:** BlackBoard chapter tests/quizzes for lecture or for lab will not be administered late since a window of time is available for each test/quiz. Late lab papers MAY be accepted. If the graded lab exercise has been returned, late papers will NOT be accepted. Students are urged to keep up with their reading and lab assignments. Catch-up in a science or math class is very difficult and takes significantly more effort than coming to class and keeping up with the work in a steady pattern. Normally, make-up exams are not given. Under unusual circumstances, make-up exams MIGHT be given at the discretion of the instructor. Documentation will be required to substantiate the student’s claims – receipts for doctor visits, obituaries, police accident reports, etc. Makeup exams will be considerably more DIFFICULT than regular exams taken at their scheduled times. Any make-up exams will be essay-only exams. It is greatly to your benefit to take exams at their scheduled times.

**Other Course Policies**

**Study Recommendations:**
As is customary in standard university courses, students should plan to spend at least 3 hours studying outside of class for each hour spent in the classroom. College students are expected to read their textbooks and complete homework assignments on time such
as lab exercises and chapter review questions as a regular part of their learning. Students are required to take responsibility for ensuring their own mastery of the course material. The Instructional Support Lab and the Inkspot are available here on MVC campus (at no additional cost to you) to provide opportunities to upgrade and improve basic skills such as reading, writing, math and general study methods. Honing these skills will greatly improve your efforts toward success in college and later at the university (not to mention life & career). **Students are EXPECTED to read the lecture text material PRIOR to the class session it is to be discussed. Students are also expected to answer the Chapter Review questions for the lecture text (T&L).**

**College Sponsored Events:** Students who miss class for College Sponsored Events are responsible for the material covered in the missed class. Students are encouraged to get notes from classmates and to consult with Dr. Millwood in advance if a college-sponsored event scheduled during class time requires their presence.

**Electronic Devices:** **NO COMPUTERS, iPADS, iPODS OR CELL PHONES WILL BE ALLOWED IN CLASS!!** Violations of this rule will result in immediate confiscation of the device and a two letter-grade reduction (—20%) for the lecture exam closest in calendar date to the offence. All cell phones must be turned off and placed on a designated table at the front of the room during class time (both lecture and lab).

**Academic Dishonesty:**
Students that caught plagiarizing an assignment or cheating on a test will be subject to an “F” in the course and possible expulsion from the college. ANY violation of the Student Code of Conduct (as stated in the Mountain View College Catalog and the Dallas County Community College Catalog will be penalized accordingly. All forms of academic dishonesty (including cheating, plagiarism, collusion, fabrication, facilitating academic dishonesty, and/or falsifying signatures, etc.) will result in a failing grade for the course. All violations will be forwarded to the proper college authorities for review. The college may in addition impose additional penalties on the student including academic probation, suspension, or expulsion.

Scholastic dishonesty includes, but is not limited to cheating on a test, plagiarism, and collusion. **Cheating** includes looking at or copying from another student’s exam; orally communicating or receiving answers during an exam; having another person take an exam or complete a lab or other assignment; using unauthorized notes, texts, or other materials for an exam; and obtaining or distributing an unauthorized copy of an exam or any part of an exam. **Plagiarism** means presenting the written work of another person as one’s own writing WITHOUT giving proper credit to the true source by documenting sources. Plagiarism includes submitting a paper, lab report or project that someone else has prepared, in whole or in part. **Collusion** is inappropriate collaboration on assignments that are designed to be completed independently. These are not exhaustive definitions. See the DCCC Board Policy manual for a more detailed description of cheating, plagiarism and other unethical behaviors.
Academic honesty is expected, and integrity is valued in the Dallas County Community Colleges. 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.

Disclaimer for students taking the wrong test in the Testing Center: There are several different geology courses offered most semesters. It is the responsibility of the student to READ the red cover sheet at the time the test is presented to him/her in order to be sure that he/she has received the correct exam. Students who take the wrong exam in the Testing Center will receive the earned grade for the actual exam which they take. (Translation: Students will not be allowed another opportunity to re-take the right exam.) READ AND PAY ATTENTION!!!

<table>
<thead>
<tr>
<th>Testing Center Hours and Contact Information</th>
<th>Instructional Support Lab Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telephone 214-860-8571 214-860-8504</td>
<td>Telephone 214-860-8538</td>
</tr>
<tr>
<td>Room/Location S2101 (Student Services Building, second floor)</td>
<td>Room/Location W-139 (across from the library)</td>
</tr>
<tr>
<td>E-Mail <a href="mailto:mmartinez1@dcccd.edu">mmartinez1@dcccd.edu</a></td>
<td></td>
</tr>
<tr>
<td>Monday through Thursday 8:00 a.m. – 9:00 p.m. Friday 8:00 a.m. – 5:00 p.m.</td>
<td>Monday-Thursday 8:00 a.m. – 9:00 p.m. Friday 8:00 a.m. – 4:00 p.m.</td>
</tr>
<tr>
<td>Saturday, Sunday CLOSED</td>
<td>Saturday 8:00 a.m. – 4:00 p.m.</td>
</tr>
<tr>
<td>Last instructional exam given 30 minutes before closing.</td>
<td>Sunday CLOSED</td>
</tr>
</tbody>
</table>

Campus closure
If MVC campus is closed for any reason during the semester and classes are cancelled, students are required to check eCampus/BlackBoard and your email messages for instructions and assignments. Be sure the email account that you use is the one that you have listed officially in the college records. Students who do not check their officially listed email account are still responsible for the content of the messages.

Bring your books and lab manual to class every day. Lab manuals and materials are subject to “surprise” inspection at any time during an open book exam.

Academic Center for Writing (The INKspot):
The Writing Center offers one-on-one help to students with writing assignments. This lab is located in W-114 and is available with or without appointments. We also offer online help. The student can send the paper as a word attachment to MVCwritingCenter@dcccd.edu. A specialist will review the paper and send it back with
marginal comments and an overall review at the end with their name. The “turn-around”
time on this will be 48 regular working hours. For instance, if the paper is received on
Friday, the student will get it back by Tuesday. For more information, contact Luke
Story: (214) 860-8748  lstory@dcccd.edu

Writing Center Hours are:   M-R 7:30am-9pm  Friday & Saturday 7:30 am-4pm

Students who elect to purchase or rent electronic textbooks MUST inform the instructor
via email before the first exam. Students who fail to notify the professor will not have
access to a textbook during open book lab tests since electronic devices are NOT
allowed during open book lab tests.

**Teaching Philosophy:**
College is **not** another version of High School; **College is a privilege**, and **High
School is a right**. College students are treated as adults, and this instructor will not
"nag" you to get your work done. Due dates for lab assignments will be honored, even if
the instructor is distracted on the due date and neglects to remind you that the time has
arrived. Another aspect of college science classes about which students
sometimes express surprise is the fact that critical thinking is a required component of the work.
This means that the answer to every question is not always buried in the textbook
somewhere. You will never be asked to answer a question that you do not have the
pieces available to discover the answer. Students often experience critical thinking
training as an initially somewhat painful experience; however learning this skill is a real
advantage in life (part of the reason that science classes are required for all). PLEASE
bring your good attitude and (conscious) brain with you to class.

Students who arrive late for any face-to-face exam will not be allowed extra time to
complete the exam. Students will not be allowed to enter a room or lab while students
from another class or section are taking an exam. No exams can be dropped. Final
grades will not be rounded up.

**Institutional Policies**
Institutional Policies relating to this course can be accessed using the link below. These
policies include information about tutoring, Disabilities Services, class drop and repeat
options, Title IX, and more.
[Mountain View Institutional Policies](http://www.mountainviewcollege.edu/syllabipolicies)
Course Schedule

Course Outline: (Please note that these chapters will not all be studied in the same order as the chapter numbers in the textbook. For details, see the Course Calendar below.)

- Introduction and Earth Materials - Unit One, Chapters 1-3
- Sculpting Earth’s Surface - Unit Three, Chapters 8-10
- Forces Within Earth - Unit Two, Chapters 4-7
- Deciphering Earth History - Unit Four, Chapters 11-12
- Earth’s Dynamic Atmosphere - Unit Six, Chapters 16-20
- The Global Ocean - Unit Five, Chapters 13-15
- Earth’s Place in the Universe - Unit Seven, Chapters 21-24

Course Calendar (Tentative Lecture Schedule)

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Chapter in T &amp; L text</th>
<th>Lab Manual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week One</td>
<td>Introduction, Earth Materials</td>
<td>Unit 1 (Chapters 1-3)</td>
<td>Part 1 (some)</td>
</tr>
<tr>
<td></td>
<td>Sculpturing the Earth’s surface</td>
<td>Unit 2 (Chapters 4-6)</td>
<td>Part 5</td>
</tr>
<tr>
<td>TBA</td>
<td>In Class</td>
<td>First Exam</td>
<td>Covers text chapters 1-6 &amp; related lecture material</td>
</tr>
<tr>
<td>Week Five</td>
<td>Forces Within</td>
<td>Unit 3 (Chapters 7-10)</td>
<td>Part 1 (continued)</td>
</tr>
<tr>
<td></td>
<td>Deciphering Earth History</td>
<td>Unit 4 (Chapters 11-12)</td>
<td>Ex. 6</td>
</tr>
<tr>
<td>TBA</td>
<td>In Class</td>
<td>Second Exam</td>
<td>Covers text chapters 7-12 &amp; related lecture material</td>
</tr>
<tr>
<td>TBA</td>
<td>First Lab Exam Rocks and Minerals</td>
<td>Lab time W-02</td>
<td>Open notes &amp; keys</td>
</tr>
<tr>
<td>Week Nine</td>
<td>Earth’s Dynamic Atmosphere</td>
<td>Unit 6 (Chapters 16-20)</td>
<td>Part 3</td>
</tr>
<tr>
<td>Mid-Term TBA</td>
<td>Mid-Term Lab Exam, W02</td>
<td>Lab time W-02</td>
<td>Lab work to date (no rock ID)</td>
</tr>
<tr>
<td>April 16</td>
<td>Drop Date</td>
<td>Last day to drop with a grade of &quot;W&quot;</td>
<td></td>
</tr>
<tr>
<td>TBA</td>
<td>In Class</td>
<td>Third Exam</td>
<td>Covers text chapters 16-20 &amp; related lecture material</td>
</tr>
<tr>
<td>Week 13</td>
<td>The Global Ocean</td>
<td>Unit 5 (Chapters 13-15)</td>
<td>Part 2</td>
</tr>
<tr>
<td></td>
<td>Earth’s Place in the Universe</td>
<td>Unit 7 (Chapters 21-24)</td>
<td>Part 4</td>
</tr>
<tr>
<td>May 7</td>
<td>Final Lab Exam, W02</td>
<td>Lab work since Second Lab Exam (no rock ID)</td>
<td>Lab Time W-02</td>
</tr>
<tr>
<td>May 5</td>
<td>In Class</td>
<td>Fourth Exam</td>
<td>Covers text chapters 13-15, 21-24 &amp; related lecture material</td>
</tr>
<tr>
<td>May 11-14</td>
<td>Final Lecture Exam — 12:30-2:20 p.m.</td>
<td>W-32B</td>
<td>Comprehensive, covers all lecture material, chaps. 1-24</td>
</tr>
</tbody>
</table>

PLEASE DO NOT EAT, DRINK, OR BE DISRUPTIVE IN CLASS. PLEASE DISARM ALL PAGERS AND CELL PHONES WHILE IN CLASS. STUDENTS WHO VIOLATE
THIS REQUIREMENT WILL HAVE FIVE POINTS DEDUCTED FROM THEIR FINAL GRADE FOR EACH INFRACTION.

ANY FORM OF DISRUPTIVE BEHAVIOR WILL NOT BE TOLERATED!!!
Any student who is asked to stop talking and refuses to do so, will be expected to leave the room immediately when asked to do so. A student who chooses this behavior will be referred to the campus authorities. Failure to stop talking and leave the room when asked to do so will also result in a full letter grade reduction for the course grade OR possible permanent expulsion from the class.

Syllabus Updates
The latest version of this syllabus will be posted on eCampus. Students will be notified of new editions of the syllabus via email or in class as they are posted on eCampus/BlackBoard. Please learn how to access this information; basic computer skills have become a necessary part of an educated person's world (i.e., a person who earns more money). Learning this as a student is far less painful than finding out that you really needed this skill in order to get a good job after you graduate. Students will complete at least one writing assignment and a project (details forthcoming and will be posted on eCampus/BlackBoard).

This class will have an assigned seat for each student after the first day.

The instructor reserves the right to change or adjust the syllabus as needed. The latest edition of the syllabus will be available on eCampus. Students are responsible to read and follow the assignment directions and deadlines listed in the latest edition of the syllabus.