Introduction to geologic time; relative and absolute dating methods; stratigraphic principles; origin of the universe, solar system, atmosphere, oceans, life; changes on the earth's surface and development of organisms through geologic time.

CLASS MEETING: 10:00-11:20 MW in CB 303; Lab: 1:00-3:50 W in CB 303

I. INSTRUCTOR
Name: Mr. Roger Steinberg
Office: CB-332 (Coles Building)
Office Hours: TBA
Office Phone: 698-1665 (My office, with voice mail if I’m not there)
698-1240 or 698-1229 (Science Dept. offices in St. Clair Science Bldg.)
email: rsteinb@delmar.edu

II. TEXTBOOK

III. LAB MANUAL
There is no Lab Manual required for this course.
Fossils by Rhodes, Zim, and Shaffer will be used for fossil study.

IV. OTHER CLASS MATERIALS
This course may also utilize materials on Reserve in the library, bulletin board displays, and Internet information via assigned websites or through MyDMC.

V. GOALS OF CLASS
- By the end of the class you should have a good understanding of science in general, the requirements and limitations of scientific theories, and what is perhaps Geology's greatest contribution to human knowledge--the realization and full appreciation of the true magnitude of geologic time.
- In this class you will learn how the science of Geology has been applied in the study of the rock record to determine the history of the Earth, including the history of life on Earth as revealed by fossils.
- As in any other history course, you will learn the major events and important milestones in the history of the Earth and its biota. (*What* happened and *when* it happened.)
- You will also consider the Earth and its history in the larger context of planetary processes within our solar system.
- Skills that you will utilize include reading, writing, drawing, speaking, working with computers, cooperative learning, and critical thinking.

VI. LECTURE EXAMS
A. Exams (Exams 1-4)
1. There will be 4 regular lecture exams, given during 1st hour of Lab in CB 306, worth at least 100 points.
2. Only 3 of these will be counted toward your final grade; the exam with the lowest score will be dropped.
3. THERE ARE NO MAKEUP EXAMS. If you miss an exam *for any reason* (illness, you're out-of-town, not prepared, etc.), it will automatically count as your dropped exam. PLEASE DO NOT ASK ME TO ALLOW YOU TO MAKE UP AN EXAM, THE ANSWER WILL BE NO! *This is the purpose for not counting one of the 4 exams -- you will not have the pressure of trying to "catch up."*
4. Exams may utilize multiple choice, fill-in-the-blank, True/False, short answer, or discussion questions.
5. You will not be permitted to leave the room during tests except for emergencies.
6. The *date of all exams will be announced at least one week in advance. (Tentative dates are on Page 4.) You will be expected to take Exams with your scheduled lab class.*

B. Final Exam (Exam 5)
1. The Final Exam will be comprehensive.
2. To earn an "A" for the course, you must pass the Final Exam! ("Pass" means you must score at least a 60.)
3. Everyone must take the Final Exam. If you don't take the Final Exam, your grade will be based on your cumulative point total for the course without the benefit of the potential points you could earn from the Final Exam, unless you have made arrangements to receive an "I" grade (see procedure below).
4. You will be expected to take the Final Exam with your class unless you have prior permission to take it at a different time or you have a last-minute emergency.
5. *Final Exam for your class for Spring, 2008 is scheduled for Monday, May 5 at 10:45 a.m. (CB 326)*
VII. GRADING
A. Your overall course grade will be based on the total number of points you have earned from lecture and lab added together, plus any extra credit you may have received.
B. Lab is a requirement of this course, and considered to be essential for fully understanding course content.
C. Often, students who do poorly in the course are those who have poor lab attendance or who don't complete laboratory exercises.
D. Grading summary:

<table>
<thead>
<tr>
<th>Points</th>
<th>Description</th>
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<tr>
<td>400</td>
<td>Points from 4 Lecture Exams (Includes the Final Exam plus three of four Regular Exams)</td>
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<tr>
<td>150</td>
<td>Points from Laboratory (Approximately 1/4 of the total points available)</td>
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<tr>
<td>550</td>
<td>Total Points (Does not include extra credit. There will be several extra credit opportunities.)</td>
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</table>

E. If your point total is very close to the next higher grade, your final course grade will be dependent on completion of assignments, attendance, and class participation!

VIII. INCOMPLETE ("I") GRADE (See 2007-2008 catalog for DMC policy.)
A. Incomplete ("I") grades can be given for this Geology class only if you essentially complete the course but miss the Final Exam.
B. For an "I" grade, DMC policy requires a mutual written agreement between the student and instructor.
C. Students have only one semester after receiving an "I" grade to complete the necessary requirements to remove the Incomplete. If the "I" grade change is not completed at the end of the next semester, the grade will automatically change to an "F," or failing grade.

IX. ATTENDANCE AND ABSENCES
A. Attendance:
   1. Roll will be taken each class. You will be marked absent if you are not in attendance when roll is taken, although I do not penalize absences or drop students for nonattendance.
   2. Attendance is necessary to do well in the class.
   3. Class will begin on time. Late arrivals are disruptive, so be on time, also!
B. Absences:
   Missed Notes and Handouts:
   1. If you miss a class, you should get the notes from a classmate and then see me if you still have questions or need more information. (I can not be your source of missed notes; I have too many students!)
   2. It is your responsibility to get missed handouts. Handouts will be available from me for only 1 class period after they are first distributed--after that you will have to rely on your classmates for assistance!

Missed Assignments:
1. Any lecture assignments must be completed on time. Late work may be penalized points.
2. Late or makeup work will not be accepted after the particular assignment or exercise has been graded and returned to the other students in your class, which will usually be at the next class meeting.
3. I will not accept multi-page work that isn't stapled together!

Missed Lecture Exams:
THERE ARE NO MAKEUP LECTURE EXAMS! PLEASE DON'T ASK!
IF YOU MISS AN EXAM, IT WILL AUTOMATICALLY COUNT AS YOUR DROPPED EXAM.
X. WITHDRAWAL FROM CLASS
   A. I DO NOT DROP STUDENTS FROM CLASS FOR NONATTENDANCE!

   B. If, for any reason, you can no longer continue to attend class, be sure you officially drop the class through the Registrar's office. IF A STUDENT STOPS ATTENDING CLASS BUT DOES NOT OFFICIALLY DROP, SO THAT THEIR NAME IS STILL ON MY ROLL AT THE END OF THE TERM (AND THEY DON'T HAVE ENOUGH POINTS TO PASS), DMC POLICY REQUIRES THAT THE STUDENT RECEIVE AN AUTOMATIC "F"

   C. IMPORTANT DATES!!
   February 29 -- Deadline to apply for graduation for May, 2008.
   April 14-May 20 -- Advising and registration for Summer and Fall, 2008. 
   April 21 -- Last day to drop the course. Students who drop will receive a "W" for the course. After this date, your name cannot be removed from the final roll I must use to record grades for the Registrar’s office, and you will therefore receive a letter grade for the course.

XI. STUDENTS WITH A DISABILITY
   STUDENTS REQUESTING DISABILITY ACCOMMODATIONS OR INFORMATION ARE ENCOURAGED TO CONTACT THE OFFICE OF SPECIAL SERVICES, HARVIN CENTER, RM 188 (698-1298).
I will gladly accommodate any special needs you may have as determined by this office.

XII. OVERNIGHT FIELD TRIP
   An optional, overnight field trip to the Texas Hill country and Llano Uplift is tentatively scheduled for late in the semester. More details later.

XIII. MISCELLANEOUS
   A. Cell phones can be very disruptive to the flow of the course. Please turn phones off or set to vibrate.
   B. Please don't exit and reenter the classroom during class. This has become extremely disruptive lately. Use the restroom before you come to class!
   C. If you need to talk to me for any reason, it will have to be after class--there is usually not enough time before class when I'm organizing class materials and setting up equipment.
   D. Please don't bring your children, friends, or guests to class without getting an OK from me first.

XIV. STUDENT CONDUCT
   Students will be expected to follow the Standards of Student Conduct as listed and discussed in the DMC Catalog.

XV. EXEMPLARY EDUCATIONAL OBJECTIVES--NATURAL SCIENCES
   Geology 1404, Earth History, is one of the core curriculum courses in the Department of Natural Sciences. The objective of the study of a natural sciences component of a core curriculum is to enable the student to understand, construct, and evaluate relationships in the natural sciences, and to enable the student to understand the bases for building and testing theories. More specifically, this course includes the following objectives:

   1. To identify and recognize the differences among competing scientific theories
   2. To demonstrate knowledge of the major issues and problems facing modern science, including issues that touch upon ethics, values, and public policies.
   3. To demonstrate knowledge of the interdependence of science and technology and their influence on, and contribution to, modern culture.

XVI. MISSION OF THE COLLEGE
   Del Mar College is dedicated to providing educational opportunities for students to achieve their dreams.

XVII. STATEMENT OF PURPOSE--DEL MAR COLLEGE
   Del Mar College is dedicated to providing access to educational opportunities for all persons without regard to race, color, sex, age, religion, national origin, or disability. The College affirms that student learning is its highest priority. By encouraging and supporting continuing excellence in instruction and institutional support services at reasonable student cost, the College will fulfill its mission within the limitations of its physical and financial resources.
### COURSE CONTENT

#### UNIT TOPICS

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<td>Geologic Time and Geologic Principles</td>
<td>Ch. 17</td>
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<td>Relative Age-dating</td>
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<td></td>
<td>Actual (Absolute) Age-dating</td>
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<td>EXAM 1 (Tentative date: February 13)</td>
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<td>II.</td>
<td>Origin of the Universe, Galaxy, Solar System, and Planets</td>
<td>Ch. 1 (11-15)</td>
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<td>Asteroids, Meteors, Meteorites, and Comets</td>
<td>Ch. 1 (16-18)</td>
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<td></td>
<td>Structure and Composition of the Earth</td>
<td>Ch. 8 (221-228)</td>
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<td>Origin of the Atmosphere and Oceans</td>
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<td>EXAM 2 (Tentative date: March 5)</td>
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<td>III.</td>
<td>Plate Tectonics and Continental Drift</td>
<td>Ch. 2</td>
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<td>The Precambrian</td>
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<td>The Origin of and Early Life on Earth</td>
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<td>EXAM 3 (Tentative date: April 2)</td>
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<td>IV.</td>
<td>The Paleozoic Era</td>
<td>Ch. 20</td>
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<td>Mountain-building</td>
<td>Ch. 10 (276-286)</td>
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<td>Life of the Paleozoic</td>
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<td>Evolution and Extinction</td>
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<td>EXAM 4 (Tentative date: April 23)</td>
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<td>V.</td>
<td>The Mesozoic Era and Life of the Mesozoic (Dinosaurs!)</td>
<td>Ch. 22</td>
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<td>The Cenozoic Era and Life of the Cenozoic (Mammals)</td>
<td>Ch. 23</td>
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<td>The Pleistocene &quot;Ice Age&quot;</td>
<td>Ch. 14 (406-408) \ Ch. 23 (692-699)</td>
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<td></td>
<td>EXAM 5 (FINAL EXAM) SCHEDULED FOR MONDAY, MAY 5 AT 10:45 a.m. (CB 326)</td>
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<td>THE FINAL EXAM WILL BE COMPREHENSIVE, AND INCLUDE UNITS I. -- V. You will be tested on Unit V. only on the Final Exam. Unit V. will count for 25-30% of the Final Exam, since there is no separate Unit V. Exam.</td>
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* SUGGESTED READING

2. Plus other assigned reading from articles in the library or Internet sites, including MyDMC.