UC 12305 135

CBM003 ADD/CHANGE FORM

☒ Undergraduate Council	or	☐ Graduate/Professional Studies Council
☐ New Course ☒ Course Change		☐ New Course ☐ Course Change
Core Category: Life/Phys Sci Effective Fall ~~2013~~ 2014		Effective Fall 2013

1. Department: EAS College: NSM
2. Faculty Contact Person: Peter Copeland Telephone: 713-893-1315 Email: geos66@Central.uh.edu
3. Course Information on New/Revised course:
   - Instructional Area / Course Number / Long Course Title:
     GEOL / 1376 / Historical Geology
   - Instructional Area / Course Number / Short Course Title (30 characters max.)
     GEOL / 1376 / HISTORICAL GEOLOGY
   - SCH: 3 Level: FR CIP Code: ____ Lect Hrs: 3 Lab Hrs: 0
     → 40.0601.00 02

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4. Justification for adding/changing course: **To meet core curriculum requirements**
5. Was the proposed/revised course previously offered as a special topics course? ☐ Yes ☒ No
   If Yes, please complete:
   - Instructional Area / Course Number / Long Course Title:
     ____ / ____ / ____
   - Course ID: ____ Effective Date (currently active row): ____
6. Authorized Degree Program(s): ____
   - Does this course affect major/minor requirements in the College/Department? ☐ Yes ☒ No
   - Does this course affect major/minor requirements in other Colleges/Departments? ☐ Yes ☒ No
   - Can the course be repeated for credit? ☐ Yes ☒ No (if yes, include in course description)
7. Grade Option: Letter Instruction Type: Lect. (Note: Lect/Lab info. must match item 3, above.)
8. If this form involves a change to an existing course, please obtain the following information from the course inventory: Instructional Area / Course Number / Long Course Title
   ____ / ____ / ____
   - Course ID: ____ Effective Date (currently active row): ____
9. Proposed Catalog Description: (If there are no prerequisites, type in "none".)
   Cr. 3. (3-0). Prerequisites: GEOL 1330, and credit for, placement out of, or concurrent enrollment in MATH 1310 or MATH 1311. Geologic history of the earth; introduction to the uses of geological principles to interpret earth history.
10. Dean's Signature: _____ Date: _____

    Print/Type Name: Ian Evans

REQUEST FOR COURSES IN THE CORE CURRICULUM

Originating Department or College: Earth and Atmospherc Sci
Person Making Request: Peter Copeland Telephone: 7138931315
Email: Copeland@uh.edu
Dean's Signature: _____ Date: Click here to enter text.

Course Number and Title: GEOL 1376 Historical Geology
Please attach in separate documents:

☐ Completed CBM003 Add/Change Form with Catalog Description
☐ Syllabus

List the student learning outcomes for the course (Statements of what students will know and be able to do as a result of taking this course. See appended hints for constructing these statements):
Upon completion of this course, students will be able to: 1. Understand, at an elementary level, principles of stratigraphy, tectonics and biological evolution, as applied to the history of the earth and of life. 2. Know and use the Geologic Time Scale. 3. Understand how geologists study earth processes in order to understand and reconstruct the past, present, and future. 4. Reason like a scientist, evaluating geological evidence and testing hypotheses. 5. Summarize the major events and conditions during each chapter of earth history, with emphasis on the geological evolution of North America.

Component Area for which the course is being proposed (check one):
***Note:** If you check the Component Area Option, you would need to also check a Foundational Component Area.

☐ Communication
☐ Mathematics
☐ Language, Philosophy, & Culture
☐ Creative Arts
☒ Life & Physical Sciences
☐ American History
☐ Government/Political Science
☐ Social & Behavioral Science
☐ Component Area Option

Competency areas addressed by the course (refer to appended chart for competencies that are required and optional in each component area):

☒ Critical Thinking	☒ Teamwork
☒ Communication Skills	☐ Social Responsibility
☒ Empirical & Quantitative Skills	☐ Personal Responsibility

Because we will be assessing student learning outcomes across multiple core courses, assessments assigned in your course must include assessments of the core competencies. For each competency checked above, indicated the specific course assignment(s) which, when completed by students, will provide evidence of the competency. Provide detailed information, such as copies of the paper or project assignment, copies of individual test items, etc. A single assignment may be used to provide data for multiple competencies.

Critical Thinking:
Tests will be comprised of short answer (half a page) questions that require students to demonstrate understanding of the data and interpretations of historical geology. These questions require a synthesis of information presented in class given in clear and consise prose.

Communication Skills:
See above

Empirical & Quantitative Skills:
See above

Teamwork:
Discusions in class are structured such that students are required to build on comments and interpretations of others. Geologic problems in class are solved by students as a group with only small intervention from the instructor.

Social Responsibility:
Click here to enter text.

Personal Responsibility:
Click here to enter text.

Will the syllabus vary across multiple section of the course? ☐ Yes ☒ No

If yes, list the assignments that will be constant across sections:
This will depend on who is assigned to teach the course. We don't plan these sorts of things out more than one semester at a time.

Inclusion in the core is contingent upon the course being offered and taught at least once every other academic year. Courses will be reviewed for renewal every 5 years.

The department understands that instructors will be expected to provide student work and to participate in university-wide assessments of student work. This could include, but may not be limited to, designing instruments such as rubrics, and scoring work by students in this or other courses. In addition, instructors of core courses may be asked to include brief assessment activities in their course.

Dept. Signature: _____

The following courses have been reviewed and approved by the NSM Curriculum Committee to meet the new core requirements. Given the length of the individual submissions I have elected to submit these requests by electronic means only.

Natural Sciences: Core Courses

BIOL 1309 – Human Genetics and Society

BIOL 1310 – General Biology

BIOL 1320 – General Biology

BIOL 1361 - Introduction to Biological Science I

BIOL 1362 - Introduction to Biological Science II

CHEM 1301 – Foundations of Chemistry

CHEM 1331 – Fundamentals of Chemistry I

CHEM 1332 – Fundamentals of Chemistry II

GEOL 1302 - Introduction to Global Climate Change

GEOL 1330 - Physical Geology

GEOL 1340 - Introduction to Earth Systems

GEOL 1350 - Introduction to Meteorology

GEOL 1360 - Introduction to Oceanography

GEOL 1376 - Historical Geology

PHYS 1301 - Introductory General Physics I

PHYS 1302 - Introductory General Physics II

PHYS 1321 - University Physics I

PHYS 1322 - University Physics II

Mathematics: Core Courses

MATH 1310 – College Algebra

MATH 1311 – Elementary Mathematical Modeling

Math/Reasoning: Core Courses

COSC 1306 – Computer Science and Programming

MATH 1330 - Precalculus

MATH 1431 - Calculus I

MATH 1432 – Calculus II

MATH 2311 – Introduction to Probability and Statistics

Writing in the Disciplines: Core Courses

BCHS Biochemistry Lab II

BIOL 3311 – Genetics Lab

PHYS 3313 – Advanced Lab I

Ian Evans

Associate Dean

4/4/13

Geology 1376 10:00 TR, Spring 2011
TEST 4 - Thursday, April 28

name _____ student # _____

Answer 5 of the following 6 questions. Put and X through the question you do not wish to be graded. Answer the questions in the space provided. There is enough room to give an appropriate answer.

1) What is the most favored explanation for the extinctions at the end of the Cretaceous? What evidence supports this hypothesis?

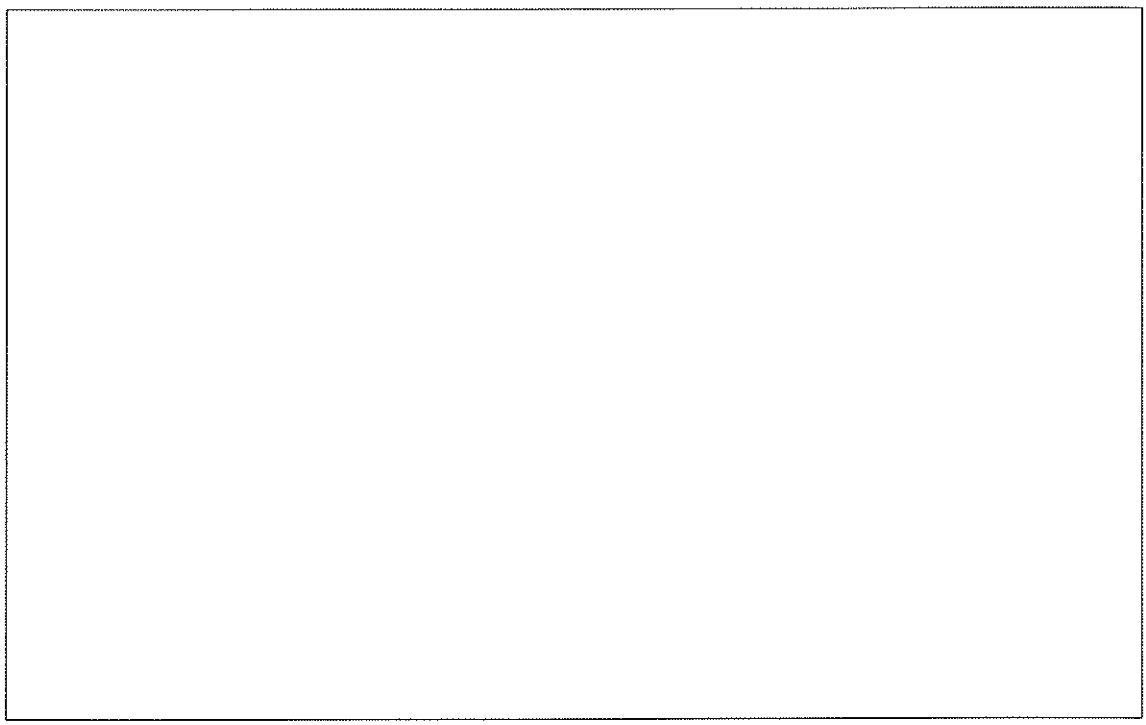
2) Why did the Laramide orogeny have deformation so far away from a plate margin?

3) When did the collision between India and Asia begin? What are the data that support this?

4) Describe the evolution of the San Andreas fault system in California. When? What? Why?

5) What can oxygen isotopes tell us about the Earth's temperature in the past? How does this relate to the glaciations over the past 2 million years?

6) What evolutionary pressure explains why some dinosaurs (*e.g.*, allosorous, ultrasorous)? What does this have to do with the evolution of flowers?



The point of this class is to get students to see geologic history in large scale and to appreciate the various types of evidence and reasoning that geologists use to construct these histories

Geology 1376—16361, Fall 2012; 2:30-3:50pm, MW

Department of Geosciences, Room 110 AH, University of Houston

Dr. Peter Copeland

office: 304 SR1 phone: 713-893-1315 e-mail: copeland@uh.edu office hours: by appt.

Text: *Evolution of the Earth: An introduction to physical geology*, 7th edition by Prothero and Dott, 2004

Welcome to GEOL 1376. In this class we will spend time discussing the planet we live on and how the Earth's lithosphere, atmosphere, and biosphere have and will affect our lives. We will discuss Earth materials and how geoscientists use their knowledge about these materials and Earth processes to find oil, prepare for earthquakes, volcanoes, and floods, understand how mountains are built and find out why the dinosaurs went extinct. My goal for this class is that you come away with better understanding of this planet, how it has evolved and how humans can and are affecting this evolution. I will do my best to help you towards this goal but whether or not you actually learn something will largely depend on you. The students who will have the greatest chance of success will come to class, and will ask questions (either in class or in my office) if they don't understand something. You can expect me to be prepared for class and to treat all students the same, without regard to factors unrelated to class performance.
Class will be conducted using PowerPoint presentations I have developed. Copies of these presentations are available as pdf files for downloading at:
http://vnet.uh.edu/vclass/

To access this site you will need to establish a VNet account. To do this, go to *vnet.uh.edu* and click on "New Account" and follow the directions.

Also available at this web location will be the syllabus, your grades on all previous tests, and videos of my actual presentations in class. These are not pictures of me lecturing but everything that appears on the computer screen as I give the lecture plus audio of me commenting on what you see on the screen. Many students like to watch and listen to these presentations for a second time. You can stop and rewind any portion you want to concentrate on. Keep in mind that these videos are offered as an extra, not a substitute to attending class. If there are any technical difficulties with the computer or recording equipment, I will still give a lecture but it won't be on the web. Don't skip class thinking that you can make it up on the web later. That will sometimes be the case but you shouldn't count on it.

I plan to follow the sequence in the book fairly well but you will need to come to class to know where we are in this sequence. Sometimes we will be covering chapters quickly, sometimes slowly. This will depend on how many questions are asked and what emphasis I want to place on various subjects.

I don't think I can emphasize too much the fact that, for most students, it is very important to ask questions in class. This perhaps the best reason to have a lecture in the first place. You will be more prepared to ask a helpful question if you have already read the chapter under discussion. You will also have an opportunity to get outside class help at the Geoscience Learning Center. This is located in the basement of Old Science. Here you will find at least one faculty member and two graduate students at all times to discuss topics of the class. There are also minerals, models of geologic structures, videos of geologic events and many sample tests to help you study for this class.

More information about the GLC can be found at:
http://www.geosc.uh.edu/undergrad/glc.php

Learning Outcomes:
Upon completion of this course, students will be able to:
1. Understand, at an elementary level, principles of stratigraphy, tectonics and biological evolution, as applied to the history of the earth and of life.
2. Know and use the Geologic Time Scale.
3. Understand how geologists study earth processes in order to understand and reconstruct the past, present, and future.
4. Reason like a scientist, evaluating geological evidence and testing hypotheses.
5. Summarize the major events and conditions during each chapter of earth history, with emphasis on the geological evolution of North America.

TESTS

There will be four tests during the semester, plus class in class group projects. They will be on the following dates:
TEST 1 Wednesday, Sept. 19
TEST 2 Monday, Oct. 15
TEST 3 Wednesday, Nov. 7
TEST 4 Wednesday, Dec. 5
The **FINAL EXAM will be Monday, Dec. 17 at 2 p.m**.
You must bring your student ID, driver's license, or passport to identify yourself at each exam.

Tests 1-4 are mandatory (100 points each) Tests 1-4 will be mostly short answer format (4-5 questions per test). If you are happy with your grade after test 4, you don't have to take the final.

The final exam will be comprehensive and may have a different format from the first four tests. If you take the final, I will substitute your grade on the final for the your test with the lowest of the first four. This will be your way to make up for missing a test. THERE WILL BE NO PROCEDURE FOR MISSING TWO TESTS. IF YOU MISS TWO TESTS, ONE CAN BE MADE UP WITH THE FINAL BUT THE OTHER WILL BE COUNTED AS A ZERO. I suggest you don't miss two tests.

To calculate your grade I will use the following grading scale:

Percentage letter grade
87 – 100 A
83 – 86 A-
80 – 82 B+
77 – 79 B
74 – 76 B-
71 – 73 C+
68 – 70 C
65 – 67 C-
62 – 64 D+
59 – 61 D
56 – 58 D-
0 – 55 F

Some things to consider:
You are responsible for knowing the dates of the any deadlines that will affect your standing in this class. These include the last day to drop without a grade, the last day to drop with a grade, and of course, the date and times of all the tests. The information about tests is on this sheet and on my web site; information about university deadlines and policies are in the class schedule and UH web sites. I don't know when the university deadlines are and I'm not going to look them up. I'm assuming that all the students are here in my class to finish the class. If you decide otherwise, it is your problem to deal with the paperwork.

If you have an emergency that will cause you to miss a test, tell me about it before the test if possible. This will not get you a retest but I will keep this in mind if two truly unforeseeable emergencies befall you in one semester. But: no promises. If, however, you miss one test because you decided to go to a wedding and then miss a second test because you broke your leg in a car crash, your zero on the car-crash test won't be counted but the zero you got by going to the wedding instead of the test will.
When discussing your grade, avoid entreaties such as, "But I worked really hard!" I applaud hard work wherever it occurs, but in assigning your grade, I will be looking at output, not input.
I will strive to make all of your examinations fair. I hope you will keep in mind that this does not oblige me to make every question so easy that nobody gets it wrong. Some questions will be what I consider easy, others will be purposefully challenging. I will have no patience for students who call some test or question "unfair" or "tricky" simply because they failed to understand it. Every question on every test will be regarding some subject that was discussed in class or in your textbook. I find that too many students only work up a passion for their grades after the test is over. If that passion had manifested itself beforehand, through coming to class and asking questions, much trouble could have been avoided.

What's required:
Students often ask if certain things are required in my class (e.g., the book, coming to class). If you want to do well in class it would be a good idea to buy the book, read the book, and come to class. I am, however, not going to keep track of if you do.

The only thing that will be required of you is that, whenyou come to class, you will be courteous to the others present. This means primarily, no distractions. Turn off your phone when you come into class. If you forget to turn it off and it rings, don't answer; they can wait. Some things students do can distract me and when I'm distracted the class isn't getting my best. So, no texting in front of me. If you can't wait to send that message, you need to be somewhere else, not in class. No laptops open. I find mostly folks with laptops open are not taking notes but checking their email, playing games or watching videos. This distracts everybody around the laptop as well as the instructor. So, if you really are taking notes on your computer, you need to be in the front row where I can check it out. If you're somewhere else in the class, either shut down that computer or find some place else to be.