

GEORGIA PERIMETER COLLEGE
A Two-Year Unit of the University System of Georgia
Syllabus for Geology 1122
HISTORICAL GEOLOGY

FALL SEMESTER, 2004

Section No.: GEOL-1122-200

Classroom: ND-1180

Class meets: Monday and Wednesday 12:30 p.m. – 1:45 p.m.

INSTRUCTOR: Dr. John R. Anderson
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Office Hours:	Monday	Tuesday	Wednesday	Thursday	Friday
A.M.	9:00 – 11:30	9:00 – 11:30	9:00 – 11:30	9:00 – 11:30	Meetings
P.M.	Not available	1:00 - 3:00	Not available	1:00 - 3:00	Meetings

PREREQUISITE: Have exited or exemption from Developmental Studies and ESL requirements.

COREQUISITE for GEOL 1122 laboratory: Geology 1122 laboratory must be taken in the same term as Geology 1122 lecture. If you withdraw from Geology 1122 lecture, you will be withdrawn from laboratory; if you withdraw from laboratory you will be withdrawn from lecture.

CATALOG DESCRIPTION: Historical geology is the study of the history of earth and life through time. It provides an overview of evolution, fossils, dinosaurs, geologic time, radiometric dating, origin of the earth, environments, and the geologic history of North America. Optional field trip.

EXPECTED EDUCATIONAL RESULTS:

As a result of completing this course the student will be able to:

1. Understand and apply the major Geological Principles of Historical Geology.
2. Recognize and apply the methods of scientific Problem-solving and critical thinking.
3. Understand and discuss the interrelationships between the physical and biological history of the Earth.
4. Understand and apply the ways in which geologic materials are dated.
5. Understand the Geologic evidence for evolution.
6. Understand and know the classification of the major fossil groups.
7. Understand and apply data related to environments in which sedimentary materials are deposited.
8. Understand and discuss the origin of the Universe, Solar System, and the Earth.
9. Understand and discuss the origin of life and the various evidences from the fossil record the origin of life.

GENERAL EDUCATION OUTCOMES:

- I. This course addresses the general education outcome relating to communications as follows:
 - A. Students develop their reading comprehension skills by reading the textbook and handout materials.
 - B. Students develop their listening skills through lecture and group problem solving. Lecture material is presented that is not included in the textbook or handout material and is included as part of the exams or tests.
 - C. Students develop their writing skills through a variety of homework assignments, tests, and quizzes.
 - D. Students develop their speaking skills through class discussions, by asking questions in class as well as interactions with their peer in and out of class.

- II. This course addresses the general education outcomes of recognition and application of scientific inquiry as follows:
 - A. Students must apply the geological principles to explain various observed natural phenomena that occur on the earth's surface as well as in the interior of the earth.
 - B. Students will develop their observation skill to be able to recognize the various geological features and life that lived on the earth through its history.
 - C. Students will develop the skills of inquiry by use of the scientific method to experience, evaluate, and synthesize data as applied to various geological problems.

- III. This course addresses the general education outcomes of identification and evaluation of basic global, economic, and geographic forces as pertains to geology as well as to analyze how these forces shape the present and future, and possibly the past.
 - A. The study of Historical Geology will address the issues of the interaction of man/life and the earth.
 - B. The interaction of life and the environment as it pertains to earth materials and its history are included in this course.

- IV. This course addresses the general education outcomes of developing effective individual and at times group problem-solving and critical thinking skills as applied to geology.
 - A. A student will develop their ability to problem-solve and critically think by applying their acquired knowledge of geology to various problems that deal with historical geology issues.

COURSE CONTENT:

- I. Introduction
 - A. Fundamental principles of Geology
 - B. Sedimentary Rock Record
 - C. Geologic time
 - D. Evolution
 - E. Life on Earth

- II. Origins
 - A. The Universe
 - B. The Earth
 - C. The Atmosphere
 - D. Life
- III. History
 - A. Precambrian Life & Tectonics
 - B. Paleozoic Life & Tectonics
 - C. Mesozoic Life & Tectonics
 - D. Cenozoic Life & Tectonics

COURSE TEXTBOOK: *The Earth through Time*, 7th Edition, by Levin

REQUIRED MATERIALS:

1. Green Scantron sheets, for Tests. (You will need 5)
2. Calculator, one that adds, subtracts, multiplies, and divides.

GRADING:

Summary of grading	Total Points
Lecture Tests - 3 tests @ 100 points each	300
Class quizzes, homework & Field trip	50
Comprehensive Final	150
Total Course Points	500

A = 500 to 450 points, B = 449 to 400 points, C = 399 to 350 points, D = 349 to 300 points, F = 299 and below.

QUIZZES, HOMEWORK AND FIELD TRIP:

- a. There will be 4 quizzes given during the quarter. Each quiz will be a 10-minute quiz given at the first of the period on the dates listed in the course outline. Three (3) of the quizzes will count for a total of 30 points of the 50 points.
- b. Presently I have 12 homework assignments (Homework assignments will be found on the Internet on my homepage for Historical Geology) possible to be completed during the term. Some need to be revised and may not be possible to be completed. You are required to have completed all of the homework assignments. The best two scores on homework assignments will be counted for 20 points of the 50 points for this category. The due dates for these homework assignments are tentatively given on the course outline.
- c. The field trip (on November 20, 2004) will count for 20 points. The field trip grade can supplant two homework assignment grades.

MAKE-UP WORK: There will be no make-up for tests or quizzes missed. If you know you are going to have to miss a test or quiz you should arrange before that date to make up that test or quiz. After the test or quiz date there will be no make-up.

DUE DATES: It is your responsibility to turn in all assignments on time. All assignments will be turned in at the beginning of the period. If you arrive late to class you will need to quietly place your paper on the front table as you enter the classroom. No assignments will be accepted late, that goes for if you are present in class or not the day the assignment is due.

RETURN OF EXAMS AND OTHER ASSIGNMENTS

It is the policy of your instructor to keep all tests and exams. The exams are available for inspection in my office at any time during the semester. Material from the first three tests that the majority of students miss will be summarized and placed on the internet for students to study for the final exam. You may keep quizzes, homework and work other than tests after they have been returned. Any papers not claimed at the end of the semester will be kept until the end of the following term and then destroyed.

EXTRA CREDIT: This course is an observational and thinking course. The student is expected to master the material presented during the course, and his/her grade will be determined solely on this basis. Therefore, there will be **NO** opportunity for the student to earn extra credit by out-of class papers, book reports/reviews or any other type of project that would be submitted for this purpose.

ATTENDANCE:

Every student is expected to attend every lecture session. You cannot expect to do well in this course if you don't attend class. Attendance will be taken each class at the beginning of the period. It is your responsibility to make sure you are counted present if you arrive late to class. Partial absences are counted if you leave class or arrive to class very late.

Attendance is like showing up to work. In the job setting an employee is given a certain number of sick/personal days. In this class you will be given **3 classes of sick/personal** time away from class, no questions asked. After the 3 class periods missed **you will lose 2%** of your final course grade for every class missed there after. As on the job, there are ways of not being penalized for missing work (i.e. coming in to make-up the time, or working on the weekend) you will have the opportunity of making up the class time missed. **Procedures for making-up time missed** will be:

1. Call or e-mail your instructor to arrange a time with your instructor to come in to make up missed class period during instructor's office hours.
2. A written excuse for why you missed will need to be turned in when you meet with your instructor. (This is not to check up on you. This will document our meeting together.)
3. You will need to print off the lecture notes from the Internet for the topic(s) you missed and bring them with you when you come to speak with your instructor. You will also need to read the chapter(s) in your textbook before coming to this make-up session.
4. This session is for you to ask questions over the material covered and for your instructor to fill in key points that may not be in your textbook. This is not a private lecture session. You will need to be an active participant in this session.
5. You must meet with your instructor prior to the test that covers this material. Statues of

limitation run out the hour the test is given. (This means you will not be able to make-up material missed after the date of the test)

You will lose this privilege if you habitually miss class.

WITHDRAWAL FROM CLASS: It is the student's responsibility to withdraw from this course if they no longer want to remain in this course. Your instructor will not withdraw you for lack of attendance. You will be assigned the grade you have earned if you stop attending class with zeros for all missed tests, quizzes, homework and field trip grades that you miss. In other words you will most likely fail the course if you stop attending class and you don't withdraw yourself.

TAPE RECORDING OF LECTURES: You are permitted to record lectures for your own use as long as they do not disrupt the class to do so.

OTHER ELECTRONIC DEVICES IN CLASS: (pagers/beepers, cellular phones, etc.) I do not mind you having these devices in class as long as they make no noise in class. Please make sure the ringer/beeper is turned off while you are in class. You will be asked to not bring them to class if they disrupt class.

CLASSROOM CONDUCT: In order to maintain a good learning environment, Rude and/or Disruptive behavior will **NOT** be tolerated. You will be asked to leave the class if your behavior is deemed inappropriate. The following are considered rude and disruptive:

- (1) consistently arriving late to class
- (2) private conversations during lectures and discussions
- (3) lack of attention during lectures and discussions.
- (4) habitually leaving and returning to class in one class period

ACADEMIC HONESTY POLICY

It is a part of your education to learn responsibility and self-discipline. The College expects its students to obey all regulations, national, state, local, and those of the college.

Cheating includes any attempt to defraud, deceive, or mislead the instructor in arriving at an honest grade assessment. Plagiarism is a form of cheating that involves presenting as one's own work the ideas or work of another. Copying someone else's homework is considered plagiarism/cheating.

All portions of any test, project, or final exam submitted by you for a grade must be your own work, unless you are instructed to work collaboratively. Specific requirements will be described for collaborative projects, but all work presented must be the work of members of that group. Research materials used must be properly cited.

Violation of the Academic Honesty Policy (cheating) will result in a grade of "0" (zero) for that exercise, test, quiz, project, or exam and the incident will be reported to the Dean of Student Affairs on the Dunwoody Campus. The second offense will result in assignment of a grade of "F" for the course and a formal charge of Academic Dishonesty will be lodged with the Dean of Student Affairs.

Policies have been established by Georgia Perimeter College to insure due process in charges of cheating or plagiarism. A copy of these procedures can be found in the Student

Handbook.

Americans with Disabilities Act Statement

If you are a student who is disabled as defined under the **Americans with Disabilities Act** and require assistance or support services, please seek assistance through the **Center for Disability Services (CDS)**. A CDS Counselor will coordinate those services.

Equal Opportunity Statement

No person shall, on the grounds of race, color, sex, religion, creed, national origin, age, or disability, be excluded from employment or participation in, be denied the benefits of, or otherwise be subjected to discrimination under any program or activity conducted by Georgia Perimeter College.

Affirmative Action Statement

Georgia Perimeter College adheres to affirmative action policies designed to promote diversity and equal opportunity for all faculty and students.

The Regents' Test

The University System of Georgia requires that all students enrolled in undergraduate degree programs in University System institutions (including Georgia Perimeter College) successfully complete all parts of a competency examination in reading and English composition. This competency examination is commonly called "the Regents' Test", and it is free of charge. A student has two attempts to pass this test before accumulating 45 hours of collegiate credit. Please sign up for the Regents' Test the semester after you successfully pass English 1101. Enroll for the Regent's test in time to have two attempts before accumulating 45 credit hours!

Grades at the end of the Semester

Grades will no longer be mailed to students' home addresses at the end of the semester. Reports of student grades are available via Web (http://www.gpc.edu/Banner_Web/).

Historical Geology, GEOL 1122
 Tentative Course Outline
 Fall Semester 2004
 Dr. John R. Anderson

Month	Day	Topic	Reading Assign	Homework Due date	Quiz
August	23	Introduction – Rocks & Minerals	Ch. 2		
	25	Rocks & History of Geology	Ch. 1&2		
	30	Geologic Time	Ch. 1	HW2	
Sept.	1	Sedimentary Rocks	Ch. 3	HW1	
	6	Holiday			
	8	Sedimentary Rocks	Ch. 3		
	13	Fossil Record	Ch. 4	HW3	Q1
	15	Fossil Record	Ch. 4	HW4	
	20	Test 1 (Ch. 1 – 4)			
	22	Earth Structure	Ch. 5		
	27	Plate Tectonics	Ch. 5	HW5	
	29	Hadean History - Origins	Ch. 6		
Oct.	4	Origin of Atmosphere & Life	Ch. 6&7	HW6	
	6	Origin of Life	Ch. 6&7	HW7	
	11	Precambrian Life	Ch. 6&7		Q2
	13	Precambrian Rock history	Ch. 6&7	HW8	
	18	Test 2 (Ch. 5 – 7)			
Midpoint	20	Paleozoic Life	Ch. 10		
	25	Paleozoic Life	Ch. 10		
	27	Paleozoic Tectonics	Ch. 8&9	HW9	
Nov.	1	Evolution of Vertebrates	Ch.10&12	HW10	
	3	Evolution of Vertebrates	Ch.10&12	HW11	Q3
	8	Evolution of Dinosaurs	Ch. 12		
	10	Test 3 (Ch. 8-10, 12)			
	15	Mesozoic Tectonic History	Ch. 11		
	17	K-T boundary, Extinctions	Ch. 12		
	22	Evolution of Plants	Ch.10&12		
Saturday	20	Field trip (All Day)			
	24	No Class			
	29	Evolution of Mammals	Ch.12&14	HW12	
Dec.	1	Cenozoic Life	Ch. 14		
	6	Primate Evolution	Ch. 15		Q4
	8	Pleistocene Glaciation	Ch. 13		
Tues.	14	FINAL EXAM 1:00 p.m. – 3:00 p.m.			