

GLENDALE COMM. COLLEGE: COURSE SYLLABUS SECTION: 14520/14522

GLG 102: Introduction to Geology II: Historical Geology (Lecture) Fall 2009

Credits/Periods: 3 credits/3 periods. Transfers to ASU, UA, and NAU and may be used toward satisfaction of the Natural Science requirement for AA, AAS, and AGS degrees; or the Physical Science requirement of the TGECC degree program. Satisfies Historical Awareness credit at ASU.

Course Description: Outlines the origin and history of the earth with emphasis on North America - its dynamic, geographic, and climatic changes; animals and plants of the past; the evolution of life

Text: Wicander & Monroe - Historical Geology: Evolution of Life Through Time, 5th Ed.; ISBN#0-495-01204-1 [6th Ed. is OK as are other Historical texts by approval]

Time/Place: Tuesday & Thursday, 10:00 to 11:15am; PS-173

Instructor: Pamela Nelson GCC - PS106 Phone: 623.845.3680 (voice mail)

Office Hours: M thru F 9:15-9:45am, M 2:30-4pm, and F 1:30-3pm or
other arrangements made by appointment

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Web page: <http://www.gc.maricopa.edu/appliedscience/pjnweb/PJNTeaching.html>

Welcome to Geology 102! During this semester we will be studying the Earth and how it has changed and evolved over time. We will also be examining organisms that have inhabited our planet during its history and how they have evolved and changed in response to their environment. In many ways, what we will attempt to do in this course is to act as detectives. We will observe the Earth and its processes in order to help us to discern the history of the Earth. We will spend the first few weeks reviewing general rock & mineral identification in order to get us up and running!

Course objectives

After completing this course, you should be able to:

- Describe/Identify important Earth materials.
- Describe important Earth processes (e.g., plate tectonics, etc.).
- Explain the concept of geologic time and the observations that support this concept.
- Explain the geologic basis of organic evolution and describe fossils and their importance in supporting the theories of evolution.
- Describe Earth's setting and history relative to other components of the universe.
- Describe the Earth's history during the Precambrian Eon and the Paleozoic, Mesozoic, and Cenozoic Eras.

Resources and Study Strategies- How to get the most out of this class

Geology is a physical science course. Science courses usually take a bit of work to complete. Because we all learn differently, some people will breeze through parts of the course, while others may stumble a bit. I try to teach this class using as many different educational techniques and teaching tools as possible; however, there are also other resources and study strategies available to you. These resources include:

- **The Lecture** - The lecture and textbook are your primary resources for this course. For most of the topics, I will be lecturing using a variety of formats - including straight lecture, games, question and answer, demonstrations, videos, etc. ***It is very important that you take notes well and ask questions.*** Lecture notes are available to download from the eGCC course folder.
- **The Textbook** - Reading assignments for each course topic are listed in the accompanying course schedule. ***Reading this material will enhance your understanding of the course material; you may chose to read this material either before or after we have discussed the topic in class. Further, the figures in the text support a number of the topics we discuss in class - examine them carefully.*** The chapter summaries and review questions make excellent study guides for potential exam and quiz material as does the student study guide.
- **Review Materials** - Review manuals for your textbook are available from the bookstores and offer one good option available to help you study and review the material we cover in class. I will also be handing out a review sheet for each exam that lists major "topic questions" for each chapter.
- **The Lab** - *GLG104, Historical Geology Laboratory is required in conjunction with GLG102 for full Natural Science credit in most of our degree programs.* The lab is coordinated with the lecture classes as closely as possible, and it is designed to give you "hands-on" experience with many of the rocks, minerals and geologic processes we discuss in lecture.
- **Study Groups** - Get together - help each other! I strongly encourage you to form study groups. Study groups can be a very effective way of learning and can help reduce some of the stress we may feel when "going it alone".

Help on the way!

Many students enter this class with anxiety - "I'm not really a 'scientific' person" or "Science classes have always been difficult for me." Other students may have various disabilities, including test anxiety, which may make traditional classroom environments very difficult. Fear not! Almost all such students preceding you have passed this course - many with very high grades! The success of many of these students, though, was in part because they took advantage of the many programs offered to help! Both Glendale Community College and the Physical Science department provide special programs to address the various needs of our students. These programs include:

- **GeoAssist** - This program, offered by the GCC Physical Science department's Geology Instructors, is a place where you can get tutoring help for any of the introductory geology courses directly from one of the geology instructors, in an informal, easy-going environment. GeoAssist utilizes the office hours of all geology faculty to bring you free tutoring. Hours for the current semester will be posted after the first week of classes. Bring your questions, confusions, & problems - or just use it as time to practice under the supervision of an instructor.

- **GCC Center for Learning** - The CFL provides free support services for all students to assist in improving student learning. These services include: (1) Scheduled and "drop-in", group and one-on-one tutoring in most academic subjects - including geology; (2) Multimedia instructional materials in basic skills areas (English, Reading, Math); and (3) Study Skills Workshops. CFL location and hours are given in your Student Handbook.
- **Disability Service and Resources (DSR)** - The DSR center provides a wide variety of services to students with disabilities which otherwise might impair their ability to function in the typical classroom setting. **If you have a disability that may have some impact on your work in the class and for which you may require accommodations, you need to notify the Disability Service and Resources Office, located in TDS 100. Their phone number is 623-845-3080.**
- **Counseling Center** - The Counseling Center provides students with career counseling, one-on-one counseling, personal counseling, personal development counseling and acts as a "clearinghouse", guiding students to the other services available on campus. Further information on the Counseling Center is provided in your Student Handbook.

General Class Policies

- **Attendance:** Each student will be expected to attend all classes. After three unexcused absences or warnings about disruption of class, the instructor may initiate the withdrawal process. Work missed during officially excused absences may be made up by ***prior arrangement*** with the instructor. It is the student's responsibility to inform the instructor of an officially excused absence as soon as possible! Absences for emergency situations may be excused unofficially by the instructor. **Instructor-excused absences must be obtained prior to the student's absence to ensure ability to make up work missed.** There will be no make-ups for unexcused absences.
- **Tardiness:** Tardiness is generally discouraged; should you be late, be responsible and do not disrupt the class. You will NOT be allowed extra time to make up for the time lost on quizzes or exams. Quizzes or exams missed because of tardiness will be forfeited by the student.
- **Class Disruption:** If a student (or students) disrupts the class or disturbs the learning of the other students, he/she will be issued a warning. If the behavior continues, the instructor may move the student to a different seat in the classroom and may officially withdraw the student from the course if the disruption continues.
- **Withdrawals:** **Students who miss two consecutive weeks of class without notifying me will be withdrawn from the course.** If you need to drop the course, it is your responsibility to complete the appropriate paperwork as prescribed by the Admissions Office.

Last day for student-initiated withdrawal w/o instructor signature, with a grade of "W": 10/.2/09

- **Academic Misconduct and Academic Dishonesty will not be tolerated.** Students engaging in misconduct or dishonest practices on exams or quizzes will be dealt with according to the guidelines established in the Student Handbook. Discipline may include a warning, grade adjustment or failure of the assignment or even failure of the course.
- **Audio/Visual Recording:** Please request permission if you wish to record class lectures. No audio or video recording of the lectures will be permitted without the instructor's permission.

Grading

Grading for this course will be based on a weighted average of homework assignments, quizzes and exams as listed below. Letter grades will be assigned on a straight 10% basis: 90-100% = A; 80-89% = B; 70-79% = C; 60-69% = D; 0-59% = F. Total points may be changed slightly during the semester.

Point Distribution:

Miscellaneous "Check-Off" Assignments =	50 pts.
Quizzes (5 best of 6 @ 20 pts. each) =	100 pts.
Homework Assignments (2 @ 20 pts., 6 @ 10 pts.) =	100 pts.
Exams (3 @ 100 pts.) =	300 pts.
DROP LOWEST OF EITHER 1 EXAM OR HW (-100 pts.)	
Final Exam - Required for all students	
(100 pts new material + 50 pts. cumulative) =	<u>150 pts.</u>
GRAND TOTAL = 600 pts.	

Exam and quiz formats: Exams and quizzes will have multiple choice, matching, true/false, and short answer questions. Quizzes will cover the material covered in class since the last quiz or exam, including the information in the textbook assigned for that section. Extra credit questions will be offered and may cover up-coming material. Quizzes and exams will be taken by each student individually during the assigned class time.

Homework assignments: The **due dates** for each of the Homework Assignments listed in the accompanying packet are listed below. Homework may be turned in at any time BEFORE the due date. However, **NO LATE ASSIGNMENTS WILL BE ACCEPTED.**

The course schedule is shown on the following page. Course content may vary slightly from this outline to meet the needs of this particular group. The instructor reserves the right to alter the schedule via verbal announcements or instructions in class. The student is responsible for noting such changes and acting accordingly - even if the student was absent on the day such announcements were made.

Course Schedule: GLG 102, Historical Geology Day Lecture - Fall 2009

DATE	TOPIC	READING ASSN.	HOMEWORK (See sheet)	QUIZ/EXAM
8/25, 27	Intro. To Geology: Plate Tectonics & the Earth's Interior	Chapter 1 (pp. 1-5, 9-13) Ch. 3 (pp. 45-54)		
9/1, 3	Minerals Igneous Rocks	Ch. 2 (pp. 16-21) & Lab 2 Readings Ch. 2 (pp. 22-26) & Lab 3 Readings		QUIZ #1 (9/3)
9/8, 10	Metamorphic Rocks Start Sedimentary Rocks	Ch. 2 (pp. 29-32) & Lab 3 Readings Ch. 2 (pp. 26-29) & Ch. 6	HW#1 TQ/RQ (9/10)	QUIZ #2 (9/10)
9/15 9/17	Sedimentary Rocks & Depositional Environ. -----	Ch. 2 (pp. 26-29) & Ch. 6 -----	-----	EXAM #1 (9/17)
9/22, 24	Relative Geologic Time & Structural Geology	RGT: Ch. 4 (pp. 60-67) & Ch. 5 (pp. 77-85 & 93-97) SG: Lab 7 Readings	HW #2 CE (9/24)	
9/29, 10/1	Absolute Geologic Time Fossils & Fossil Preservation	Ch. 2 (pp. 29-35) Ch. 5 (pp. 85-93)	HW#3 TQ/RQ (10/1)	QUIZ #3 (9/29)
10/6, 8	Evolution	Chapter 7	Evolution HW #4 (10/8)	
10/13 10/15	----- Solar System Geology	----- Chapter 1 (pp. 6-9)	----- [10/15 Extra Credit for MiniPaper HW with Peer Review]	EXAM #2 (10/13)
10/20, 22	Precambrian Era, Archean Precambrian Era, Proterozoic	Chapter 8 Chapter 9	Orig Life/Ediac HW#5 (10/20)	QUIZ #4 (10/22)
10/27, 29	Precambrian, cont. Paleozoic Geology	Chapters 8 & 9, cont. Chapters 10 & 11	HW #6 TQ/RQ (10/27)	
11/3 11/5	Paleozoic Geology, cont Paleozoic Life	Chapters 10 & 11, cont. Chapters 12 & 13 (parts as time allows)		QUIZ #5 (11/3)
11/10 11/12	----- Mesozoic Geology	----- Chapter 14	-----	EXAM #3 (11/10)
11/17, 19	Mesozoic Geology & Life	Chapter 14 & 15.	HW #7 MiniRes (11/19)	
11/24 11/27	Mesozoic Life NO CLASS - THANKSGIVING	Chapter 15, cont.		QUIZ #6 (11/24)
12/1, 3	Cenozoic Geology	Chapter 16, 17	HW #8 TQ/RQ (12/3)	
12/8, 10	Cenozoic Life	Chapter 18		
	FINAL EXAM - Partially cumulative	Tues, Dec 15 @ 10am		FINAL EXAM