

Phil Garwood
 FALL 2016
 GEL113 D1,
 Office: S-406
 OFFICE HOURS
 M/T/W 9-10a.m
 T/Th 5-6p.m.

Telephone: 362-7111
pgarwood@cfcc.edu
 A hard copy of this
 syllabus will be
 provided upon request

CFCC General Education Competencies will incorporate all or some of the following:

✓	Computer Skills	✓	Quantitative Skills
✓	Critical Thinking	✓	Written Communication
✓	Global Awareness	✓	Understanding Scientific Concepts & Applications
✓	Oral Communication		

TEXTBOOK: Historical Geology, 6th Edition (Wicander & Monroe)

LAB MANUAL: Laboratory Studies in Earth History (Brice, Levin, Smith)

COURSE DESCRIPTION: This course covers the geologic history of the Earth, including information concerning the nature, time and occurrence of important geologic events. Emphasis is placed on the study of geologic time, rock strata and fossil groups. The evolution of man from the earliest primate will be discussed.

CLASS HOURS PER WEEK: 3 hrs. lecture & 2 hrs. lab/week. **SEMESTER HOURS CREDIT:** 4 credit hours

PREREQUISITES: None.

COURSE OBJECTIVES:

This course is designed to help each student have a better understanding of past Earth events and how to search for their causes. It is important that the student understand scientific search methods. GEL-113 is designed as a follow up to GEL-120 and to prepare students for further Earth science studies.

Measurable Student Learning Outcomes (based on Critical Thinking Goals):

- Discuss and explain the scientific method as it applies to geology.
- Convert and calculate values within the metric system.
- Describe and explain the Big Bang Theory and formation of the solar system, Earth, and Moon.
- Discuss the development of Plate Tectonic Theory from the Continental Drift Hypothesis and explain the evidence supporting the changes.
- Discuss the classification system of minerals, molecular bonding, and mineral properties.
- Explore the three types of rocks and how each type forms.
- Explain the formation of volcanoes, faults, mountains, and other geologic structures by tectonic forces.
- Diagram, reconstruct, and evaluate stratigraphic sequences and summarize their formation.
- Recall absolute and relative age dating techniques.
- Describe and review river, glacial, and arid environmental processes and how they shape our planet.
- Describe the principle of uniformitarianism.
- Demonstrate how each mineral has a definite chemical composition and atomic structure.
- Illustrate the basic processes of rock formation and the relationships between the three rock types.
- Compare and evaluate different approaches to estimating Earth's age.
- Categorize and analyze the types of plate boundaries and their respective motions.
- Judge and critique the evidence for global climate change.
- Identify the factors that contribute to geologic classification systems.

GRADING SCALE:

(92-100)	(0-67)	A = 4.00
(91-84)		B = 3.00
(76-83)		C = 2.00
(68-75)		D = 1.00

F = 0.00

WP =
(not
compu
ted in
grade
point
averag
e)

WF =
(comp
uted as
an "F")

I =
Incomp
lete
(paper
work
require
d)

There will be no individual extra credit given in this class.

COURSE REQUIREMENTS:

There will be four off campus field trips during the semester. Also each student will be required to write a short term-paper. Topics will be discussed during the first class. Two or three unannounced pop-quizzes will occur during the semester.

There will be a mid-term and a final exam.

Students are advised to keep a neat, comprehensive note book.

TESTING:

The final grading scale is:

- A. 92 – 100
- B. 84 – 91
- C. 76 – 83
- D. 68 – 75
- F. 0 – 67

The final average will consist of tests, labs and a final comprehensive exam. The labs will count for 40% of the final grade, class work and tests will count for 40%, and the final exam will be 20%. The lowest grade on labs or term work will be dropped. There will be no make-up work for labs. Students are required to attend all labs. If more than 16 hours of class time is missed, the student will fail. Three late arrivals will be considered one absence.

THERE ARE NO MAKE UP TESTS, EXAMS or FIELD TRIPS UNLESS ARRANGED PREVIOUSLY!

PAPER/PROJECTS:

Each student is responsible for their own term papers and field reports unless a group effort is required.

ATTENDANCE & PARTICIPATION:

According to CFCC policy, a student must attend 80% of the total scheduled class hours in order to receive credit for the course. Since Gel 120 is an 80 hour course, if you miss more than 16 hours you will receive an F. **These hours include both lecture and lab hours.**

Attendance will be taken at the beginning of every lecture and lab. Failure to acknowledge your presence will result in an absence. Three late's are equal to one missed hour. Under no circumstances can you state attendance for another student. If a student leaves at any time and fails to come back in a timely fashion, then they will be subject to the attendance policy stated. If outside schedules, family issues, health issues prevent you from attending class on a regular basis, a withdrawal is highly recommended.

MAKE-UP POLICY:

There will be no make-up tests or labs. The mid-term and final exams may not be made up or retaken.

WITHDRAWAL POLICY:

You are responsibility for noting the deadlines for a course withdrawal. It is not the instructors' job to turn in forms to the Registrars' office. Please familiarize yourself with the criteria and deadline dates in the CFCC CATALOG and STUDENT HANDBOOK.

COURSE STRUCTURE/SYLLABUS:

1. The Metric System/Review of Scientific Notation
2. The Nine Charts/Preview of Major Course Topics
3. Geologic Time
 - a. Lab 1 – Completion of Lab # 7 in Lab Manual
4. Review of Physical Geology (Text Chapters 2 – 7)
 - a. Lab 2 – Completion of Lab # 4 in Lab Manual
5. The Pre-Cambrian
 - a. Lab 3 – Completion of Lab # 9 in Lab Manual
6. The Proterozoic
 - a. Lab 4 – Completion of Lab # 12 in Lab Manual
7. The Paleozoic
 - a. Lab 5 – Completion of Lab # 13 in Lab Manual
8. The Mesozoic
 - a. Lab 6 – Completion of Lab # 10 or # 11 in Lab Manual
9. The Cenozoic

ACCOMMODATION OF SPECIAL NEEDS BASED ON DISABILITY:

Any student who requests classroom accommodations because of a disability must present documentation to verify his/her disability. This documentation must be furnished to the Disabilities Service Coordinator and this should be provided prior to requesting accommodation by the instructor. On a confidential basis, the student, disabilities services and the instructor will determine the appropriate accommodations following documentation. Accommodations will be provided in a manner that is consistent with the objectives, outcomes, and academic standards of the course. Absences must not exceed class attendance policy.

ACADEMIC HONESTY:

Any dishonest behavior, unethical intent or action as specified by CFCC will result in an "F" for the course. Again, please refer to the section on "Cheating" in the CFCC catalog and handbook.

Plagiarism is, using as your own, the words or ideas of others, whether written or oral. You must quote or paraphrase accurately and properly the source of the material. Plagiarism includes word for word copying without indicating that you are quoting, inaccurate quoting and paraphrasing, and incomplete or missing documentation. You may not purchase a paper and then use it as your own creation. **Any** misrepresentation of the source of in your paper will constitute a form of plagiarism. Intentional or unintentional, plagiarism is not acceptable and will result in a grade of "0" for the assignment and/or the course, at the instructors discretion.

Student Accounts:

Your myCFCC account is a single username and password for all your CFCC network accounts: email, Web-Advisor, Blackboard, campus computer access, and more. The email account provided to you (yourusername@mail.cfcc.edu) is used for all official communication with CFCC instructors and staff. Some information will ONLY be sent by email and not by postal mail, so it is very important that you check this account. This account may also be used for personal mail, but it is subject to the CFCC Acceptable Use Policy. Be sure to logout of your account in each service you may have opened (email, Blackboard, etc.) when you leave a shared computer, otherwise it is possible for the next user of the computer to access your information. There is a link to the portal near the top of the CFCC.edu website. Login and click the "Email" link. Your username is part of your email address: user@mail.cfcc.edu. (Note if you've had a CFCC email address in the past, this one differs because we've changed 'email' to 'mail' in the address.) This email account is provided to you as long as you are enrolled in classes (you can take the summer off), and may be used for personal email as well as academic email. The class websites linked from the portal is automatically created for every class - it is up to the instructors to decide whether and how to use them. Even if they are not used, you can send an email to your instructor by clicking the "Send Email" link on your class homepage.

RELIGIOUS OBSERVANCES:

Students will be allowed two days of excused absence each academic year for religious observances required by the faith of the student. These excused absences will be included in the twenty (20%) percent of allowable clock hour absences. Students are required to provide written notice of the request for an excused absence by completing the Religious Observance Absence form available in Student Development. The completed form must be submitted to the Vice President of Student Development or his/her designee a minimum of ten (10) school days prior to the religious observance. The Vice President of Student Development or his/her designee will notify the instructor within three (3) school days of receiving the request. Students will be given the opportunity to make up any tests or other work missed due to the excused absence and should work with their instructors in advance of the excused absence to delineate how to make up the missed coursework (N.C.G.S. 115D-5).

CONTINGENCY PLAN:

If there is an emergency and the instructor or an appropriate substitute does not meet with the class, wait fifteen minutes. Then, everyone in the class should sign a roll sheet and designate someone to take it to the Department Chair or Secretary.

THIS COURSE EMPHASIZES THE FOLLOWING GENERAL EDUCATION COMPETENCY:

SCIENTIFIC REASONING: Students engage in scientific reasoning when they use fundamental scientific concepts and theories to analyze problems, observations, and/or experiments in the life and physical sciences. Students demonstrate scientific reasoning when they:

- Apply appropriate scientific concepts, theories, and language to problems, observations, or experiments
- Utilize scientific data to analyze problems, observations, or experiments
- Apply scientific observations, calculations, and/or measurements to problems or experiments
- Articulate conclusions about problems, observations, or experiments using appropriate scientific concepts and data

THIS COURSE EMPHASIZES THE FOLLOWING GENERAL EDUCATION COMPETENCY:

CRITICAL THINKING: Critical thinking is the deliberate process of questioning, evaluating, and responding to problems, scenarios, and arguments in order to reach sound decisions, solutions, decisions, and positions. Students demonstrate critical thinking when they:

- Ask a pertinent question that clarifies and focus a problem, scenario, or argument
- Evaluate the quantity, quality, and usefulness of information
- Articulate a sound solution, decision, or position based on appropriate standards of reasoning
- Monitor and reflect upon the quality and fairness of their reasoning

Tobacco use is prohibited on all CFCC property. The first offense is a warning and the second offense may result in disciplinary action.

****The instructor reserves the right, acting within the policies and procedures of Cape Fear Community College, to make changes, adjustments, additions and deletions in course content, first day handout, or instructional technique, without notice or obligations.*