



Earth Science Geol 1401 DC
Course syllabus Fall 2023

Northeast Texas Community College exists to provide responsible, exemplary learning opportunities

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Office Hours	Monday	Tuesday	Wednesday	Thursday	Friday
	8:05-8:55	8:05-8:55	8:05-8:55	8:05-8:55	8:05-8:55
	4:00-4:30	4:00-4:30	4:00-4:30	4:00-4:30	4:00-4:30

The information contained in this syllabus is subject to change without notice. Students are expected to be aware of any additional course policies presented by the instructor during the course.

Catalog Course Description (no prerequisites): 4 credit hrs. The objective of this course is to provide students with a better understanding and appreciation of the Earth Sciences and the knowledge of how the earth's systems (geosphere, hydrosphere, biosphere, and atmosphere) work and interact.

This course is the first semester of a two-semester sequence delivered in a traditional face to face classroom.

➤ **The last day to drop with a "W" is Tuesday November 21, 2023**

It is the student's responsibility to withdraw by that date if they are not able to complete the course. Failure to do so WILL result in a grade of "F" for the semester.

Required Textbook(s):

McGraw Hill The Good Earth 5th Ed.
Exploring Environmental Science Miller-Spoolman 2021

College Student Learning Outcomes:

Critical Thinking Skills

CT.1
Students will demonstrate the ability to 1) analyze complex issues, 2) synthesize information, and 3) evaluate the logic, validity, and relevance of data.

Communication Skills

CS.1
Students will effectively develop, interpret, and express ideas through written communication.

Teamwork

TW2. Students will work with others to support and accomplish a shared goal.

Student Learning Outcomes for Geol 1401:

GEOL 1401 Earth Sciences for Non-Science Majors I

Survey of geology, meteorology, oceanography, and astronomy.

Upon successful completion of this course, students will:

- 1.Explain the current theories concerning the origin of the Universe and of the Solar System.
- 2.Explain the place of Earth in the Solar System and its relationships with other objects in the Solar System.
- 3.Relate the origin and evolution of Earth's internal structures to its resulting geologic systems, including Earth materials and plate tectonic activities.
- 4.Explain the operation of Earth's geologic systems and the interactions among the atmosphere, the geosphere, and the hydrosphere, including meteorology and oceanography.
- 5.Explain the history of the Earth including the evolution of earth systems and life forms.
- 6.Classify rocks and minerals based on chemical composition, physical properties, and origin.
- 7.Apply knowledge of topographic maps, diagrams, and/or photographs to identify landforms and explain the processes that created them.
- 8.Differentiate the types of plate boundaries, explain the processes that occur at each and identify associated structural features on maps, block diagrams and cross sections.
- 9.Apply relative and numerical age-dating techniques to construct geologic histories.
- 10.Measure atmospheric processes that affect weather and climate.
- 11.Describe the composition and motion of ocean water and analyze the factors controlling both.
- 12.Compare properties and motions of objects in the solar system.
- 13.Demonstrate the collection, analysis, and reporting of data.

Introductions, Scientific Method, Lab Standards, CER, Lab Safety
Unit 1: The Living World: Ecosystems
Unit 2: The Living World: Biodiversity
Unit 3: Populations
Unit 4: Earth Systems and Resources
Unit 5: Land and Water Use
Unit 6: Energy Resources and Consumption
Unit 7: Atmospheric Pollution
Unit 8: Aquatic and Terrestrial Pollution
Unit 9: Global Change

Evaluation/Grading Policy:

Course Work 25% of final course grade

Tests & Select Labs 75% of final course grade.

HOMEWORK: Homework will be assigned weekly and will be expected on by the due date. **Homework must be turned in on time for full credit (no exceptions).**

QUIZZES: Quizzes will be administered often to check for understanding.

TESTS: At least 8 tests will be taken during the semester. You will be notified when a lab activity is to be counted as a test grade. Tests will cover material presented in the class including textbook readings, homework, discussions, videos, and quizzes. **Tests must be taken by the due date.** Plan to take a test early if you have extracurricular activities that will cause you to miss a test day.

FINAL EXAM:

Final Exam must be taken by the due date, no exceptions.

Other Course Requirements:

This is a face to face Dual Credit course in Earth Science. Lecture, study materials and assignments will be delivered either in class or through Schoology at MPHS or Blackboard Learning Management System at NTCC. Students should ensure that they have the appropriate hardware, software, and technical skills for completing all assignments and tests.

Minimum Technology Requirements:

Laptop or computer with webcam

Access to high-speed daily internet

Microsoft Office 365 (available as a free download for all NTCC students)

Required Computer Literacy Skills:

Ability to use a web browser to access NTCC Blackboard System for course information

Ability to access NTCC student email system and communicate professionally and competently with instructor

Ability to create and complete Word documents, save on your computer and upload into Bb assignment links

Student Responsibilities/Expectations:

Northeast Texas Community College is a “community of scholars.” Please remember that you and all students in this class are pursuing very important goals in your lives. As scholars, I expect every student to be courteous to other students and the instructor in all class experiences. The academic honesty and ethics statements below are crucial to the integrity of any college coursework, particularly in an online setting.

NTCC Academic Honesty/Ethics Statement:

NTCC upholds the highest standards of academic integrity. The college expects all students to engage in their academic pursuits in an honest manner that is beyond reproach using their intellect and resources designated as allowable by the course instructor. Students are responsible for addressing questions about allowable resources with the course instructor. Academic dishonesty such as cheating, plagiarism, and collusion is unacceptable and may result in disciplinary action. This course will follow the NTCC Academic Honesty and Academic Ethics policies stated in the Student Handbook. Refer to the student handbook for more information on these subjects.

Alternate Operations During Campus Closure and/or Alternate Course Delivery Requirements

In the event of an emergency or announced campus closure due to a natural disaster or pandemic, it may be necessary for Northeast Texas Community College to move to altered operations. During this time, Northeast Texas Community College may opt to continue delivery of instruction through methods that include, but are not limited to, online through the Blackboard Learning Management System, online conferencing, email messaging, and/or an alternate schedule. It is the responsibility of the student to monitor NTCC’s website (<http://www.ntcc.edu/>) for instructions about continuing courses remotely, Blackboard for each class for course-specific communication, and NTCC email for important general information.

Additionally, there may be instances where a course may not be able to be continued in the same delivery format as it originates (face-to-face, fully online, live remote, or hybrid). Should this be the case, every effort will be made to continue instruction in an alternative delivery format. Students will be informed of any changes of this nature through email messaging and/or the Blackboard course site.

ADA Statement:

It is the policy of NTCC to provide reasonable accommodations for qualified individuals who are students with disabilities. This College will adhere to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations as required to afford equal educational opportunity. It is the student’s responsibility to request accommodations. An appointment can be made with the Academic Advisor/Coordinator of Special Populations located in Student Services and can be reached at 903-434-8264. For more information and to obtain a copy of the Request for Accommodations, please refer to the special populations page on the NTCC website.

Family Educational Rights and Privacy Act (FERPA):

The Family Educational Rights and Privacy Act (FERPA) is a federal law that protects the privacy of student education records. The law applies to all schools that receive funds under an applicable program of the U.S. Department of Education. FERPA gives parents certain rights with respect to their children's educational records. These rights transfer to the student when he or she attends a school beyond the high school level. Students to whom the rights have transferred are considered "eligible students." In essence, a parent has no legal right to obtain information concerning the child's college records without the written consent of the student. In compliance with FERPA, information classified as "directory information" may be released to the general public without the written consent of the student unless the student makes a request in writing. Directory information is defined as: the student's name, permanent address and/or local address, telephone listing, dates of attendance, most recent previous education institution attended, other information including major, field of study, degrees, awards received, and participation in officially recognized activities/sports.

Tentative Course Timeline (*note* instructor reserves the right to adjust this timeline at any point in the term):

GEOLOGY 1401-INTRODUCTION TO EARTH SCIENCE

ASSIGNMENT SCHEDULE

**Face to Face format will follow the weekly schedule given in class at MPHS.
Labs will be assigned in class.**

Note: The schedule below is for the online format.

WEEK 1

8/24-8/26- Class begins
GO TO THE START HERE FOLDER:
Review syllabus,
8/24 Chapter 1 "Introduction to Science" is now open
Begin Ch1 SmartLesson (read the text and learn as you go - yes, it's for a grade)
8/26 Ch 1 Answer Discussion questions
8/27 Ch 1 Movie Night: "Hutchinson Gas Disaster" (questions due Sun.Aug.29th)
8/29 Ch 1 Discussion Replies Due
8/30 Ch 1 Homework Due

WEEK 2

8/31 Ch 1 Quiz Due & Ch 1 SmartLesson Due
Chapter 2 "Earth in Space" is now open
9/2 Ch 2 Answer Discussion Questions
9/3 Ch 2 Movie Night: "Earth is Born" (questions due by Sun. Sept.5th)
9/5 Ch 2 Discussion Replies Due
9/6 Ch 2 Homework Due

WEEK 3

9/7 Ch 2 Quiz Due & Ch 2 SmartLesson Due
Chapter 3 "Near-Earth Objects" is now open
9/9 Ch 3 Answer Discussion Questions
9/10 Ch 3 Movie Night: "Meteor Strike Russia" (questions due by Sun. Sept. 12th)
9/12 Ch 3 Discussion Replies Due
9/13 Ch 3 Homework Due

WEEK 4

9/14 Ch 3 Quiz due & Ch 3 SmartLesson Due
Chapter 4 "Plate Tectonics" is now open
9/15 - **Test #1** Open: Chapters 1-3 (Using Proctorio - Due by Saturday Sept. 18th)
9/16 Ch 4 Answer Discussion Questions
9/17 Ch 4 Movie Night: "Colliding Continents" (questions due by Sun. Sept. 19th)
9/19 Ch 4 Discussion Replies Due
9/20 Ch 4 Homework due

WEEK 5

9/21 Ch 4 Quiz due & Ch 4 SmartLesson Due
Chapter 5 "Earthquakes" is now open

** Begin Student Group Study of Wegener's Puzzling Evidence Mrs. Tigert will assign student groups to collaborate, observe, analyze, and interpret scientific evidence to formulate a hypothesis and defend their position on continental drift.

9/23 Ch 5 Answer Discussion Questions

9/24 Ch 5 Movie Night: "Megaquake Could hit North America" (questions due by Sunday Sept 26st)
9/26 Ch 5 Discussion Replies Due
9/27 Ch 5 Homework Due

WEEK 6

9/28 Ch 5 Quiz Due & SmartLesson Due
9/29 **TEST #2** OPEN Chapters 4 & 5 (due by Saturday Oct 2nd)
10/2-10/6 Finish work on Group Study of Wegener's Puzzling Evidence.

WEEK 7

10/6 **** DUE**** "Group Study of Wegener's Puzzling Evidence" Submit the group's hypothesis and completed map. List and defend the group's thoughts and reasonings. (There will also be a partner participation survey)

WEEK 8

10/2 Chapter 6 "Volcanoes & Mountains" is now open
10/7 Ch 6 Answer Discussion Questions
10/8 Ch 6 Movie Night "Volcano Under the City" (questions due by Sun. Oct. 10th)
10/10 Ch 6 Discussion Replies Due

WEEK 9

10/11 Ch 6 Homework Due
10/12 Ch 6 Quiz Due & SmartLesson Due
Chapter 7 Sections 1-4 "Scientists, Elements & Atoms, Minerals, and Igneous Rocks" are now open
10/14 Ch 7.1-7.4 Answer Discussion Questions
10/15 Ch 7.1-7.4 Movie Night 1: "Hunting the Elements" PART 1 (questions due Sun. Oct 17th)
10/17 Ch 7.1-7.4 Discussion Replies Due
10/18 Ch 7.1-7.4 Homework Due

WEEK 10

10/19 Ch 7.1-7.4 Quiz Due & SmartLesson Due
Chapter 7 Section 5 "Sedimentary Rock" is now open
10/21 Ch 7.5 Answer Discussion Questions
10/22 Ch 7.5 Movie Night: "Diamond Deception" (questions due by Sun. Oct. 24th)
10/24 Ch 7.5 Discussion Replies Due
10/25 Ch 7.5 Homework Due

WEEK 11

10/26 Ch 7.5 Quiz Due & SmartLesson Due
10/27 Ch 7.6 - 7.7 "Metamorphic Rocks, Rock Cycle & Mineral Resources" is now open
10/27 **TEST #3** Opens - covers Ch 6 and Ch 7 sections 1-5 (Using Proctorio -due by Saturday Oct. 30th)
10/28 Ch 7.6 - 7.7 Answer Discussion Questions
10/29 Ch 7.6 - 7.7 Movie Night "Hunting the Elements" PART 2 (questions due by Sun. Oct. 31st)
10/31 Ch 7.6 - 7.7 Discussion Replies Due
11/1 Ch 7.6 - 7.7 Homework Due

WEEK 12

11/2 Ch 7.6 - 7.7 Quiz Due & SmartLesson Due
Chapter 8 "Geologic Time" is now open...This is the last chapter this semester 😊 you are almost done! Hooray
11/4 Ch 8 Answer Discussion Questions
11/5 Ch 8 Movie Night: "The Grand Canyon" (questions due by Sun. Nov 7th)
11/7 Ch 8 Discussion Replies Due
11/8 Ch 8 homework due

WEEK 14

11/9 Ch 8 Quiz & SmartLesson Due
11/12 Ch 8 Movie Night ?... To be announced (questions due by Sun. Nov. 16th)

WEEK 15

11/10 **TEST #4** OPEN covers Chapter 7.6, 7.7 and Chapter 8 (due by Saturday Nov 20th)

WEEK 16

11/20 - 11/30 Study for Final Exam
12/1 FINAL EXAM opens - Covers chapters 6, 7, 8 (Using Proctorio)
12/7 FINAL CLOSES at Midnight