

**University of Arkansas
Department of Geosciences**

**GEOS 1113 – Physical Geology
Summer 2023
MoTuWeThFr 9:15 am-10:45 am GEAR 0017**

Professor: Dr. Adriana Potra
Office: Gearhart Hall 022
Office hours: TuWeTh 11:00 am – 1:00 pm
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Purpose: Survey of geological processes and materials and their relationships to landforms, natural resources, environments, and human beings. Students will understand the principles of physical geology, Earth's internal structure, plate tectonics, and geologic time.

Learning Objectives:

- Recognize and classify major rock types and rock-forming minerals
- Understand geologic time in relation to Earth's history and sequences of geologic events
- Identify how major landforms are related to geologic processes, especially plate tectonics
- Recognize and understand geologic hazards and processes responsible for them
- Interpret 3-D geologic structures from 2-D geologic maps and cross sections
- Understand how basic geologic principles relate to the origin and distribution of natural resources, especially soil and water
- Understand the Scientific Method and how it relates to the Earth Sciences

Evaluation: **Three exams (50% of final grade) and multiple assignments (50% of final grade)** will be given. Letter grades will be assigned based on the percentage of points earned out of the total possible points from the exams and assignments by the following scale: **90-100% A, 80-89% B, 70-79% C, 60-69% D, <60% F.**

Exams: Three in-class, in-person, closed-book examinations will be given. **The first two exams will each be worth 20% of your finals grade, and the third exam will be worth 10% of your final grade.** The exams must be completed within the 90 minute schedule class time. CEA students with additional time for exam accommodations will be allowed the additional time as permitted by their individual accommodation.

Exam questions are a combination of multiple choice, fill in the blanks, true/false, short answer, and matching. The exams are not cumulative.

Arrangements for taking a make-up exam must be made by you as soon as you are aware you will be missing an exam (due to an Excused University Absence – see details below) by contacting me to schedule your make-up exam.

Mastering Geology Assignments: Assignments accessed and submitted through Mastering Geology (details below) will be worth 50% of the final grade and must be completed on time for full credit. Mastering Geology access is provided with the "FirstDay Materials" on Blackboard (details below).

Assignments are open-book and open note, but you must complete them on your own (see Academic Honesty policy below). For each question, you will receive a 25% reduction in points for that question for each wrong

answer. For example, if you select a wrong answer to a question, and then try again and select the correct answer, you would receive 75% of the points for that question.

The assignments are due at 11:59pm on the assigned due date, which will be communicated during lecture. Late submissions will be penalized 30% (i.e., a maximum possible grade of 70%). You may complete late assignments up until the last day of class (August 4, 11:59pm).

No individual assignments or individual extra credit will be provided.

Laboratory GEOS 1111L: Laboratory sections are separate from this class and are independently graded. A separate Geology Laboratory eBook Manual and Mastering Geology access (both available via the UARK First Day Program) is required for Lab class. Check with your academic adviser to determine if the laboratory is required for your degree plan. Even if it is not required, consider the prospect that you may change your major or add a minor. Geology lecture and laboratory are complementary, and some students find the courses more difficult when they are taken in different semesters.

Course Material Delivery via Face-to-Face Lecture and “FirstDay Materials” on Blackboard: Course material is accessed via an interactive electronic textbook (details below), Mastering Geology-based required assignments (details below), and online lecture slides posted on Blackboard (details below).

Blackboard and Mastering Geology: Use of Blackboard and Mastering Geology is required for this course.

Be aware that Google Chrome and Mozilla Firefox are compatible browsers with Blackboard and Mastering Geology.

Safari and Internet Edge/Explorer browsers are not entirely compatible with Blackboard and Mastering Geology. Using Safari or Internet Edge/Explorer to complete assignments may result in points not being recorded in the Blackboard grade center or assignments not working properly.

Blackboard can be accessed by going to learn.uark.edu and then logging in with your university login and password. You can contact the instructor or IT Help Desk at <http://help.uark.edu> or 479-575-2905 if you have any technical issues.

UARK FirstDay Materials automatically provides access to the required Mastering Geology internet-based tutorial and assignment program. The electronic textbook (Pearson eText) can also be found within this program. Your student account will be billed by the bookstore for these materials.

To access, click on “FirstDay Materials” from left hand menu in Blackboard, then choose the green button “Launch Courseware”. Use your Pearson account if you already have one or you may need to register with Pearson and accept Pearson’s End User License Agreement (Note: if you had a Pearson My Math Labs Plus account previously it will not work! You will need to set up a new account using an email address other than your UARK address). You should then be able to access your eText and assignments.

You are not required to purchase a separate, hard copy of the textbook. However, bound and unbound paper copies of the textbook are available for purchase for an additional cost through the Bookstore or other retailers. The textbook for the course is **Earth: An Introduction to Physical Geology** by Tarbuck, Lutgens, Linneman, and Tasa (Pearson Publishers, 13th Edition) and older editions will suffice if you wish to have a paper textbook in addition to the eBook.

Tentative Course Schedule

Dates	Week	Chapter Topics	Chapter Reading
7/3	1	An Introduction to Geology	1
7/4	1	<i>Independence Day Holiday – No Class</i>	
7/5	1	Plate Tectonics	2
7/6	1	Matter and Minerals	3
7/7	1	Igneous Rocks	4
7/10	2	Volcanoes	5
7/11	2	Weathering and Soils	6
7/12	2	Sedimentary Rocks	7
7/13	2	Metamorphic Rocks	8
7/14	2	Geologic Time	9
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Exam 1: Monday, 7/17			
7/18	3	Crustal Deformation	10
7/19	3	Earthquakes	11
7/20	3	Earth's Interior	12
7/21	3	The Ocean Floor	13
7/24	4	Mountain Building	14
7/25	4	Running Water	16
7/26	4	Groundwater	17
7/27	4	Glaciers and Glaciation	18
7/28	4	Deserts and Winds	19
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Exam 2: Monday, 7/31			
8/1	5	Shorelines	20
8/2	5	Earth's Evolution through Geologic Time	22
8/3	5	Energy and Mineral Resources	23
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Exam 3: Friday, 8/4			

POLICIES

STUDENT SUPPORT: U of A Cares offers a supportive and encouraging partnership with students by linking them with appropriate resources that will allow them the opportunities to overcome barriers on their path to success; both personal and educational at uofacares.uark.edu

STUDENTS WITH DISABILITIES: University of Arkansas Academic Policy Series 1520.10 requires that students with disabilities are provided reasonable accommodations to ensure their equal access to course content. Students who have a documented disability and require accommodations must contact the instructor at the beginning of the semester to make arrangements for necessary classroom adjustments or accommodations. Please note, students must first verify eligibility for these through the Center for Educational Access (contact 479-575-3104 or visit <http://cea.uark.edu/> for more information on registration procedures).

EXCUSED UNIVERSITY ABSENCES are: (1) illness of the student, (2) serious illness or death of a member of the student's immediate family or other family crisis, (3) University-sponsored activities for which the student's attendance is required by virtue of scholarship or leadership/participation responsibilities, (4) religious observances, (5) jury duty or subpoena for court appearance, and (6) military duty. The instructor has the right to require that the student provide appropriate documentation for any absence for which the student wishes to be excused.

INCLEMENT WEATHER: If the University is open, class will be in-session. The University's inclement weather policy is available at emergency.uark.edu

ACADEMIC HONESTY STATEMENT: "As a core part of its mission, the University of Arkansas provides students with the opportunity to further their educational goals through programs of study and research in an environment that promotes freedom of inquiry and academic responsibility. Accomplishing this mission is only possible when intellectual honesty and individual integrity prevail. Each University of Arkansas student is required to be familiar with and abide by the University's 'Academic Integrity Policy' which is found at <https://honesty.uark.edu/policy/index.php> Students with questions about how these policies apply to a particular course or assignment should immediately contact their instructor."

Academic Integrity in GEOS 1113: Exams and assignments must be a student's own work. **No cheating or plagiarism will be tolerated. If you are suspected of academic dishonesty, the Academic Integrity process will be utilized to its fullest extent.**

SEXUAL ASSAULT AND DOMESTIC/DATING VIOLENCE: If you are in danger, dial 9-1-1. For confidential help, call the University Victim Advocate at (479) 575-7252. The University of Arkansas prohibits sexual harassment or acts of sexual assault, domestic violence, dating violence and stalking committed against students, employees, campus visitors, and other persons who use University facilities. Sexual assault is any form of sexual activity where consent is not consciously and voluntarily given. Anyone can be a victim of sexual assault. Sexual harassment is prohibited by University policy and is a form of sex discrimination prohibited by Title VII of the Civil Rights Act of 1964 and by Title IX of the Education Amendments of 1972. Sexual assault is a crime, as defined by the Arkansas criminal code. Important sexual assault information and guidance to file a formal report is available at respect.uark.edu.

DIVERSITY AND INCLUSION MISSION STATEMENT: The Department of Geosciences is committed to enhancing diversity and promoting inclusion at all levels of the department. The department is dedicated to maintaining an organizational and educational climate where differing ideas, abilities, backgrounds, and needs are fostered with opportunities for faculty, staff and students from divergent experiences to participate and contribute. The Department of Geosciences recognizes that a wide variety of perspectives, from all its members are important and necessary components of a diverse and inclusive department and of a genuinely wide-ranging contemporary education.

TECHNOLOGY POLICY: The use of cell phones, smart phones, tablets, laptops, etc., for purposes other than note taking or learning physical geology concepts is not allowed during class. You are in class to learn, not socialize with your media! **Flagrant violation of this policy will result in you being dismissed from class for the day!**

EMERGENCY PROCEDURES: Many types of emergencies can occur on campus. Instructions for specific emergencies such as severe weather, an active shooter, or fire can be found on the web at emergency.uark.edu

SEVERE WEATHER (e.g., Tornado Warning):

- Follow the directions of the instructor or emergency personnel.
- Seek shelter in the basement or an interior room or hallway on the lowest floor, putting as many walls as possible between you and the outside.
- In a multi-story building, if you cannot get to the lowest floor, go to a hallway in the center of the building.
- Stay in the center of the room, away from exterior walls, windows, and doors.

VIOLENCE or ACTIVE SHOOTER (C.A.D.D.):

- **CALL.** 9-1-1
- **AVOID.** If possible, evacuate to a safe area outside the building. Follow directions of police officers.
- **DENY.** Barricade the door with desks, chairs, bookcases, or any items. Move to a place inside the room where you are not visible. Turn off the lights and remain quiet. Remain there until told by police it is safe.
- **DEFEND.** Use desks, chairs, cell phones, or whatever is immediately available to distract and/or defend yourself and others from attack.

CONCEALED CARRY ON CAMPUS: Handguns are only allowed on campus (including all classrooms) to the extent specifically authorized by state law. Everyone who lawfully possesses a handgun and an enhanced carry permit is always required to keep the handgun concealed from public view and is responsible for carrying the handgun in a safe manner. If an individual carries a concealed handgun in a personal carrier such as a backpack, purse, or handbag, the carrier must remain within the individual's immediate vicinity (within arm's reach). During this class, you may be required to engage in activities that require you to be physically separate from your belongings and you should plan accordingly. Any student who violates the concealed carry laws while on campus may be subject to criminal prosecution and/or discipline by the University, up to and including dismissal. If you observe someone displaying a handgun or other weapon on campus, it should be reported to the University of Arkansas Police Department (uapd.uark.edu). For more information: safety.uark.edu.