GEOS 110 Earth and the Environment
Spring Term 2018

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Office Hours: I am available Monday, Wednesday, Thursday, and Friday during the afternoons. If you would like to meet with me, sign up for an appointment on the scheduling sheet that is posted each week on my office door. You also are welcome to drop by my office in the afternoons even if you have not scheduled an appointment.

Class: 10:20-11:20 a.m., MWF, Rm. 222, Julian S&M

Laboratory: 2:00-3:50 p.m., T, Rm. 222, Julian S&M

Textbooks: Essentials of Geology, 5th edition by Stephen Marshak, 2016 with Geotours Workbook, 2nd edition by Scott Wilkerson et al., 2017. W. W. Norton & Company, New York. ISBN 9780393638851.

Course Outline and Tentative Schedule

Week	Topic	Reading Assignment
1/29	Introduction A Brief History of Earth Earth's Interior	pp. 1-9 pp. 10-32 pp. 33-41
2/5	Plate Tectonics	Chapter 2
2/12	Minerals	Chapter 3
2/19	Rock Groups and the Rock Cycle	pp. 102-107; 236-243
	Exam I (1 hour) – Friday, February 23	
2/26	Magma Igneous Rocks (Lab)	Chapter 4
3/5	Volcanoes Sedimentary Rocks (Lab)	Chapter 5 Chapter 6
3/12	Weathering Metamorphic Rocks (Lab)	pp. 170-178 Chapter 7
3/19	Geologic Time	Chapter 10
	Exam II (1 hour) – Wednesday, March 21	
	Spring Break – Saturday, March 24 through Sunday, April 1	
4/2	Earthquakes	Chapter 8
4/9	Energy Resources	pp. 391-417
4/16	Streams	Chapter 14
4/23	**Exam III (1 hour) – Friday, April 27**	
4/30	Groundwater	Chapter 16
5/7	Climate Change	Chapter 19

Final Exam (Comprehensive) – Monday, May 14, 8:30 – 11:30 a.m.

Laboratory Schedule

Lab #	Date		Topic
1	1/30		Introduction to Geotours
2	2/6		Measuring the Earth Using a GPS
3	2/13		Minerals
4	2/20		Minerals
5	2/27		Igneous Rocks
	2/28	(Wednesday)	**LAB QUIZ I**: Minerals
6	3/6		Sedimentary Rocks
7	3/13		Metamorphic Rocks
8	3/20		Geologic Time
9	4/3		Earthquakes
	4/4	(Wednesday)	**LAB QUIZ II**: Rocks
10	4/10		Field Trip to DePauw Nature Park
11	4/17		Field Trip to Shades State Park
12	4/24		Topographic Maps
13	5/1		Topographic Maps
14	5/8		**LAB QUIZ III**: Comprehensive

Course Goals

The goal of this course is to increase your understanding of planet Earth and our environment. You will learn about the materials that make up our planet and the processes that operate upon and within the planet to produce the various rocks, landforms, and geological events that we witness daily. The basic concepts that you learn in this course combined with careful observation and an inquisitive mind will enable you to understand much of what you see in the natural world. Furthermore, in studying geology, I hope that you gain a deeper understanding of science in general. You should be able to differentiate between hypothesis and theory, and facts and interpretations. You should understand the scientific method, learn how science is actually done, and see the many ways that science is relevant to all our lives.

Course Organization

We will meet Monday, Wednesday, and Friday from 10:20-11:20 a.m. for lecture and discussion. Laboratory activities will take place on Tuesday from 2:00-3:50 p.m.

Grading

Your course grade is based on three semester exams, geotours worksheets, laboratory assignments, three laboratory quizzes, and a comprehensive final exam. These components are weighted as follows:

Exam I	15%
Exam II	15%
Exam III	15%
Final Exam	20%
Geotours Worksheets	10%
Lab Quizzes (3)	15%
Lab Assignments (4)	10%

A = ≥ 90%; B = 80-89%; C = 70-79%; D = 60-69%; F = < 60%
(**Note**: I will lower these ranges slightly if warranted by the class grade distribution.)

Q Certification

You must successfully satisfy **both** of the following criteria to receive Q certification:

1. Average 75% on the geotours worksheets, lab assignments, and lab quizzes.
2. Receive a course grade of C- or better.

Class Policies

1. It is the policy and practice of DePauw University to provide reasonable accommodations for students with properly documented disabilities. Written notification from Student Disability Services is required. If you are eligible to receive an accommodation and would like to request it for this course, please contact Student Disability Services. Allow one week advance notice to ensure enough time for reasonable accommodations to be made. Otherwise, it is not guaranteed that the accommodation can be provided on a timely basis. Accommodations are not retroactive. Students who have questions about Student Disability Services or who have, or think they may have, a disability (psychiatric, attentional, learning, vision, hearing, physical, medical, etc.) are invited to contact Student Disability Services for a confidential discussion in Union Building Suite 200 or by phone at 658-6267.
2. Regular and punctual attendance is expected. Poor attendance and poor preparation for class will result in refusal on my part to give you reasonable attention and guidance in make-up work. I realize that an occasional absence is necessary, particularly if you are sick. You also may need to miss class because of an extracurricular activity that contributes to your overall education, career objective, or well-being (e.g., field trip for another class, job interview, professional conference, workshop participation, artistic performance, doctor appointment, student-athlete participating in a sporting event). Please send me an e-mail message either before the missed class or soon after the missed class so that I know your reason for the absence. See the Student Handbook for the University policy on attendance:

   https://www.depauw.edu/handbooks/academic/#Toc459018113

3. Cell phone and computer use during class are not allowed. Use of your cell phone or computer is considered disruptive behavior because it distracts the students around you and it distracts me. Turn your cell phone to vibrate, turn your computer off, and put them both away so that they are out of sight for the entire class period. Placing your cell phone in the opening beneath the table is not considered out of sight. My phone is set to vibrate in the event of an emergency message broadcast from DePauw Public Safety. There may be rare instances where you might expect an important call during class (e.g., illness in the family; potential employer). Alert me before class starts that you are expecting an important call and you may leave class to use your phone.
4. Food is not allowed in the classroom, however you may bring a beverage to class. Please clean up the table and your seating area after class so that the area is clean for the next person to use the seat.
5. Remain in your seat throughout the class session. Use the restroom before you come to class and do not move about the classroom during class. In rare instances, you may need to visit the restroom during class. Please feel free to do so, but don't make it a daily habit.
6. Make-up examinations are normally not given; however, I will consider requests for make-up exams on a case-by-case basis. Students who have legitimate conflicts (e.g., travel for athletic events or other extracurricular activities) should consult with me well in advance.
7. Academic dishonesty is not tolerated. Academic dishonesty includes, but is not limited to, cheating, fabrication, facilitating academic dishonesty by another student (e.g., allowing another student to copy your answers on a test, lab quiz, geotours assignment, or lab assignment), and plagiarism. Use of any electronic device other than a calculator during exams and quizzes is not permitted and is considered cheating. All students should read and understand DePauw University's Academic Integrity policy, which may be found at:

   https://www.depauw.edu/academics/academic-resources/academic-integrity/

   Students are encouraged to work and study together, particularly in the laboratory where collaboration can enhance learning. However, you should submit your work in your own words for grading. Violations will be handled in accordance with established University procedures as described in the Academic Integrity policy.