



University of Puerto Rico
Mayagüez Campus
College of Arts and Sciences
Department of Geology

GEOL3027
Sec.-050, 3 crdt
M-W-F: 11:30-12:20pm
Location: FC

Asst. Prof. Vionette De Choudens Sanchez
F-404, (787) 832-4040 Ext. 3587
Office Hours:
M & W: 3:30-5:00pm T: 2:00-5:00pm
e-mail: vionette1@gmail.com

Text Book: **Environmental Geology, 10th Ed.**
Author: Carla W. Montgomery
Editorial House: McGrawHill

Course Syllabus

Course Description: This course will present a survey of important geological concepts relevant to current environmental issues. Emphasis is placed on geologic principles underlying problems related to water resources, pollution, natural hazards, waste disposal, energy and mineral resources, and on the scientific bases for current strategies proposed to limit adverse consequences of our impact on environmental systems.

Course Objectives:

Students will:

- Gain an understanding of the fundamental principles of environmental geology with emphasis placed on the interaction of geologic processes and the Earth as a dynamic system.
- Appreciate the occurrence, magnitude, frequency, driving forces, and risk of natural hazards.
- Be able to discuss the interactions and impact of individuals, society, and culture with the natural environment, including natural hazards, mineral, energy, and water resources, and geologic processes.
- Become aware of earth system science and the issue of global change through discussions of air pollution, global warming, environmental evaluation and environmental law.

Pre/Co-requisites: None

Requirements:

All students are expected to:

- (1) Attend class all the time and on time.

- (2) Be prepared to participate in class.
- (3) Complete all assigned readings and homework to prepare for weekly quizzes.
- (4) **Sign up** and create an account with **Top Hat**. Top Hat will be use to keep attendance, take quizzes, complete assignments, keep track of class participation and posting class power point slides.
- (5) Pass all tests to receive credit for the course.

Tentative Course Time Frame and Thematic Outline

Week	Date	Topic	Reading/Reference
1	M: 15 Aug W: 17 Aug F: 19 Aug	Syllabus/Introduction Introduction Geologic Time	Chapter 1 Chapter 1 Appendix A
2	M: 22 Aug W: 24 Aug F: 26 Aug	Maps Plate Tectonics Plate Tectonics	Web Resource Chapter 3 Chapter 3
3	M: 29 Aug W: 31 Aug F: 2 Sep	Plate Tectonics Earthquakes Earthquakes	Chapter 3 Chapter 4 Chapter 4
4	M: 5 Sep W: 7 Sep F: 9 Sep	No Classes – Holiday/Labor Day Tsunamis (http://redsismica.uprm.edu/Spanish/tsunami/educacion.php) Volcanoes	Web Page Chapter 5
5	M: 12 Sep W: 14 Sep F: 16 Sep	Volcanoes Exam #1 ----- Climate & Geology	Chapter 5 Exam Chapters (1, 3-5 + Web Sites) Chapter 10
6	M: 19 Sep W: 21 Sep <u>Th: 22 Sep</u> F: 23 Sep	Climate & Geology Climate & Geology <u>Mineral & Rock Resources (Friday Classes Meet)</u> No Classes – RUM Anniversary	Chapter 10 Chapter 10 <u>Chapter 13</u>
7	M: 26 Sep W: 28 Sep F: 30 Sep	Mineral & Rock Resources Soil as a Resource Streams and Flooding	Chapter 13 Chapter 12 Chapter 6
8	M: 3 Oct W: 5 Oct F: 7 Oct	Streams and Flooding Mass Movements Mass Movements	Chapter 6 Chapter 8 Chapter 8
9	M: 10 Oct W: 12 Oct F: 14 Oct	No Classes – Dia de la Raza Coastal Zones and Processes Coastal Zones and Processes	Chapter 7 Chapter 7
10	M: 17 Oct W: 19 Oct <u>Th: 20 Oct</u> F: 21 Oct	Coastal Zones and Processes Exam #2 ----- <u>Reefs http://geology.uprm.edu/MorelockSite/morelockonline/reefgeol.htm</u> No Classes – Academic Recess	Chapter 7 Exam Chapters (6,7,8, 10, 12, 13 + website) <u>WebPage/Documentary</u>

11	M: 24 Oct W: 26 Oct F: 28 Oct	Water - Water as a Resource Water - Water as a Resource Water Pollution	Chapter 11 Chapter 11 Chapter 17
12	M: 31 Oct W: 2 Nov F: 4 Nov	Water Pollution Energy Resources/Fossil Fuels Energy Resources/Fossil Fuels	Chapter 17 Chapter 14 Chapter 14
13	M: 7 Nov W: 9 Nov F: 11 Nov	No Classes - Election Energy Resources - Movie and Written Assignment No Classes – Veterans Day	
14	M: 14 Nov W: 16 Nov F: 18 Nov	Energy Resources/ Alternative Sources (<i>Nov 15 – último día para bajas parciales</i>) Waste Disposal Waste Disposal	Chapter 15 Chapter 16 Chapter 16
15	M: 21 Nov W: 23 Nov F: 25 Nov	Air Pollution Air Pollution No Classes – Thanks Giving	Chapter 18 Chapter 18
16	M: 28 Nov W: 30 Nov F: 2 Dec	Environmental Law and Policy Exam #3----- Environmental Law and Policy	Chapter 19 Exam Chapters (11, 14, 15, 16, 17 & 18 + movie) Chapter 19
17	M: 5 Dec W: 7 Dec F: 9 Dec	Land Use Planning & Engineering Geology Land Use Planning & Engineering Geology Review Period	Chapter 20 Chapter 20
18	8-16 Dec	Final Exam	

***The professor may be absent some days but another professor or a graduate student will be present to cover the material or show a movie related with the discussion topic. Attendance will be taken and the students will be responsible for the material.**

***En ocasiones el Profesor estará ausente, pero habrá clase con otro profesor o estudiante graduado. Se pasará lista y los estudiantes del curso serán responsables del material y de prestar atención a la/s película/s.**

9. Grading System

Quantifiable (letters)

Standard Curve:	100 – 90	A
	89 – 80	B
	79 – 65	C
	64 – 55	D
	54 –	F

10. Evaluation Strategies (Tentative)

<u>Grades</u>	<u>Points</u>
Three exams*	300
Final exam	100
Weekly Quizzes & Assignments**	<u>100</u>

Total (No extra credit) **500**

**Exams will be given during class hours.*

***Only the top 10 Quizzes will count towards the grade. Quizzes and assignments will be given using **Top Hat**. There will be no make-up quizzes or assignments*

11. Tentative Examination Schedule:

Exam #1	Wednesday, September 14 th
Exam #2	Wednesday, October 19 th
Exam #3	Wednesday, Nov 30 th
Final	To be announced

12. Bibliography

Required text: Environmental Geology, 10th Edition (by Carla W. Montgomery)

Class notes:

- Lectures will be given in Spanish and English
- Lectures will be available in the web page of the Department of Geology **one week before** the test.
 - Go to web site of the Dept. of Geology, inside Faculty & Staff – Vionette De Choudens Sanchez.
- When the power point presentations are posted, they will be at: **Class Site in Top Hat**

13. Regulations and Policies:

- **Class attendance** is compulsory. The University of Puerto Rico, Mayagüez Campus, reserves the right to deal at any time with individual cases of non-attendance. Professors are expected to record the absences of their students. Frequent absences affect the final grade, and may even result in total loss of credits. Arranging to make up work missed because of legitimate class absence is the responsibility of the student and should be done with time (Bulletin of Information Undergraduate Studies).

- **Absence from examinations:** Students are required to attend all examinations. If a student is absent from an examination for a justifiable reason the student needs to contact the professor immediately in order to make the proper arrangements to make-up the missing examination. Otherwise, he or she will receive a grade of zero or "F" in the missed examination. Please refer to the Bulletin of Information Undergraduate Studies.

- **Excuses from class or examinations:** ONLY WRITTEN EXCUSES WILL BE ACCEPTED

- **Make-Up Test Policy:** If a student is absent from an examination, he/she will have the opportunity to take a make-up test only when he/she provides an acceptable written excuse. The **make-up test will take place during the final exam period**. This means the students will take both the Final and the make-up test on the same day. There will be *no make-up quizzes or assignments*. **There will be no exceptions to this policy.**

- **Policies on electronic devices:** Tape recorders or other audio equipment are not permitted in the classroom. Cell phones should be in silent mode during classes, Students are not allowed to talk or send messages with cell phones or another electronic device during class.

- **Cheating:** Cooperative work is not permitted on the quizzes or examinations. Cheating will be dealt with harshly. *All instances of cheating on examinations will be immediately reported to the Dean of Arts and Sciences for review.* There will be no exceptions to this policy.

* **Advice from the professor:** Please come to class each time. The three hours per week in this class are less than 2% of your time. No matter what you do in life, this class will help you understand the world around you. You need to buy the book. You need to read the book. You need to ask questions, talk to your classmates.

14. According to Law 51

Students with disabilities will identify themselves with the Institution and the instructor of the course for purposes of assessment (exams) accommodations. For more information, please call the Student with Disabilities Office, which is part of the Dean of Students office (Chemistry Building, room 019) at (787)265-3862 or (787)832-4040 extensions 3250 or 3258.