

GEORGE MASON UNIVERSITY

Department of Geography & Geoinformation Science

Spring Semester 2018 PHYSICAL GEOGRAPHY GGS 102 – 001

Course Syllabus

Instructor: Mike Lewis

Office: Exploratory Hall GGS Dept.

Office Hours: Thursdays 10am-12, 1pm-3pm

Class Location: Robinson Hall A111

Meeting Time: 4:30pm - 7:10pm

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Course Overview:

This introductory course to physical geography will attempt to emphasize the systemic and interconnected nature of multiple processes affecting our planet. Furthermore, it will provide you with a basic understanding of the vocabulary of the science as well as a fundamental background in which further exploration in the field may occur. It is my hope that the student recognizes that no system can be viewed entirely separately and must be analyzed in context with the other systems.

Required Textbook:

Understanding Earth, 7th Edition, by John Grotzinger & Thomas H. Jordan.

Grading:

This course will have multiple components for grading, this dispersal of grading deemphasizes any particular assignment or exam in favor of a continual application of the knowledge gained. This course will cover a broad interdisciplinary set of topics and as such, the student is expected to have a broad generalized understanding of the concepts over a detailed in-depth comprehension. The grading breakdown will be as follows:

Components	Total	Each
Homework	44%	4%
Project	16%	16%
Exams I - III	27%	9%
Final Exam	13%	13%

Homework will be submitted online through the Blackboard website for this class by 11:59PM on Friday, for instance, HW 1 will be due Friday, February 2nd at 11:59PM. Extra credit is not offered. Emergencies will be dealt with on a case basis.

Exams, attendance, etc.:

We will not have quizzes nor will I take attendance, this is your class and I am a reference for you to learn this material, you may do so as you see fit. Exams will be online, mixed format, and will only include material covered up to the class. Exams 2 and 3 are not comprehensive but the final exam is. Exams are open book and available for 3 hours after beginning. They will be available after class for a period of six days. Attendance is required for lessons 13 & 14. The Final Exam is an in class exam and not open book.

Project:

There will be a group project that will be presented at the end of the semester. Each group of five to six students will present for 20-25minutes on their solution to a complex issue assigned to their group at the beginning of the semester. It is up to the team to determine how it is to be presented and if all, or one, or a few, will be physically presenting. Each team will be assigned one of two issues. All teams providing their solution to the same issue will be presented on the same day and ranked by the teams of the alternate issue to determine group grade. Individual grades will be determined as each team member will nominate up to two MVPs for the group (that are not themselves) and explain why their contribution was valuable.

Your fellow students will be ranking you based on:

- 1) How clearly you lay out the issue.
- 2) Your depth of background research.
 - a) Geology and geomorphological considerations
 - b) Hydrology considerations
 - c) Engineering or physics concerns
 - d) Environmental health impacts
 - e) Public policy and industry standards
- 3) The effectiveness with which you addressed the issue.
Did you resolve the issue put forth?
- 4) The reliability of the information.
- 5) The quality of your solution.
Is it novel, simple, elegant?

You will receive a project grade based on 20% feedback and grading to other teams, 30% individual grade, and 50% team grade.

Grading Scale:

The base scale below will be used. If the curve is significantly lower than expected than some or all the breaks may be lowered as appropriate.

Letter	Scale	Break
A	4	92
A-	3.7	90
B+	3.3	87
B	3.00	83
B-	2.70	80
C+	2.3	77
C	2	71
C-	1.7	68
D+	1.3	65
D	1.00	60
D-	0.7	57

Standard Course Policy:

Plagiarizing is not permitted, please see university policy if you need a refresher. When in doubt, always cite. Please turn off/mute your cell phones in class. Just be reasonable and respectful of each other and your position as student and everything will be great.

Course Outline:

Date	Lesson	Topic	Selected text readings:	Due
25-Jan	1	Intro to Physical Geography & Earth structure	(Chapter 1 & 9)	
1-Feb	2	Plate tectonics & The history of the Continents (NO CLASS)	Chapters 2 & 10	HW1
8-Feb	3	Lithographic modification (NO CLASS)	Chapters 3 - 7, pp. 58-64, 74-80, 102-111, 116-123, 150-153.	HW2
15-Feb	4	Earthquakes & volcanoes (NO CLASS)	Chapters 12 & 13	HW3, Exam I
22-Feb	5	Biosphere	Chapter 11, "Biogeography," & "Islands" PDFs	HW4
1-Mar	6	Climate systems	Chapter 15 "Anthropogenic," & "Thermohaline" PDFs	HW5
8-Mar	7	Weathering, erosion, and mass wasting/ Soils	Chapter 16 "Soil Time" PDF	HW6
15-Mar	Spring Break			
22-Mar	8	Hydrology	Chapter 17 & 18	HW7, Exam II
29-Mar	9	Coastlines & oceans	Chapter 20, "Hurricanes" PDF	HW8
5-Apr	10	Winds & deserts	Chapter 19, "Arabia, & "Desertification" PDFs	HW9
12-Apr	11	Cryosphere & Tectonic-Climate interaction	Chapters 21 & 22	HW10
19-Apr	12	Human impact	Chapter 23 "Extinction," & "Marine" PDFs	HW11, Exam III
26-Apr	13	Project Presentations (Issue 1)	Review for Final	
3-May	14	Project Presentations (Issue 2)	Review for Final	
Final Comprehensive Exam (TBD)				