GGS 102-002: Physical Geography Fall Semester 2015

George Mason University

GGS 102 fulfills Mason Core requirement in Natural Science Non lab

Contact details:

Instructor : Maction Komwa, PhD

Office : Exploratory Hall, Room 2210

Office hours : Tuesdays [1:00 pm - 2:30 pm] or by appointment

Tel : 703-993-5646

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Class Meetings

Day/Time : M|W [10:30 AM – 11:45 AM] Location : Exploratory Hall, Room 2310

Credits : 3 hours

Course Format: Lecture, twice a week

Required Textbook: Christopherson Birkeland, 2015. Elemental Geosystems, 9th Edition.

Pearson. [8th Edition will also work for this course]

Catalog description:

This is an introductory course in physical geography, the study of Earth's natural environmental elements and processes. The course will examine the natural characteristics and systems of the earth. You will also be exposed to a great deal of new vocabulary essential to understanding course material. The course will cover a number of topics including the interrelated processes affecting global distribution and character of climate, soils, vegetation, hydrology, landforms and elements of mapping.

Student Learning Objectives:

After successful completion of this course, each student will be able to:

- 1. Understand how scientific inquiry is based on investigation of evidence from the natural world, and that scientific knowledge and understanding:
 - i. evolves based on new evidence
 - ii. differs from personal and cultural beliefs
- 2. Recognize the scope and limits of science.
- 3. Evaluate scientific information (e.g., distinguish primary and secondary sources, assess credibility and validity of information).
- 4. Students learn key events in the history of science
- 5. Identify, evaluate, and properly cite resources appropriate to the field, such as audio/visual/online/print materials, or artifacts.
- 6. Recognize and articulate the relationship between the natural sciences and society (e.g., health, conservation, sustainability, energy, natural disasters, etc.);

Grading and Assignments

There will be three (3) exams in this course. The Exam will consist of MCQs. Final Exam will not be cumulative, however, few key basic concepts discussed in early chapters will be included. All exams will be based on the concepts and themes from class lectures and discussions, book chapters, and any additional readings. Finally, a course project examining a major physical feature characteristic, or relevant concepts/processes that will be covered in class and/or in your textbook will be completed at the end of the semester (details of the project will be posted through the Blackboard). Your final paper must include a bibliography of at least five references.

The following grading criteria will be used to determine your final grade:

Quizzes (x3) and Homework (x3)*	20%
In-class group Activity	5%
Exam 1	20%
Exam 2	20%
Final Exam	25%
Final Project	10%

^{*} Lowest Grade of your quiz or homework will be dropped.

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A >=93 B+86-89 C+76-79
A-90-92 B 83-85 C 70-75
B-80-82 D 68-60 | F < 60
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Letter grades of A, B, C, D, and F will be assigned for completion of this course based on the cumulative score of all evaluated work.

Classroom Expectations and other Miscellaneous:

Students are expected to be on time for class. Regular attendance is strongly recommended.

- 1. Should circumstances arise that make you late, do not disrupt the class as you enter, take the first available seat and do not walk across the room.
- 2. Clean up after yourself. If you pack it in, pack it out; leave your seat better than you found it. Remember, take only notes, and leave only a warm seat.
- 3. In the event of any class cancellation, including inclement weather (e.g. snow), the class will resume where we left off, Adjustments, if necessary, will be made later.

Academic Honesty:

George Mason University operates under an honor system, which is published in the University Catalog and deals specifically with cheating, attempted cheating, plagiarism, lying, and stealing. Please familiarize yourself with the honor code, especially the statement on plagiarism (http://www.gmu.edu/org/honorcouncil/guidelines.htm).

Note: I will respond to acts of academic misconduct according to university policy concerning plagiarism. In such cases Plagiarism will result in a failing grade of the assignment in question and/or for the course. Make sure you check the instructions through the Blackboard on how to write your term papers. If you have questions about when the contributions of others to your work must be acknowledged and appropriate ways to cite those contributions, please talk with the professor.

Electronic Communications & Blackboard

If you are enrolled in this course you will have access to the Blackboard site - available at: [https://mymasonportal.gmu.edu]. You will need to log on using your GMU user name and password. Blackboard will be used to submit your assignments and to check for announcements/critical updates to the syllabus or clarifications of assignments, and supplemental materials. It is the responsibility of the student to check the GMU Blackboard on a daily basis. Additionally, GMU policy requires all students to use their GMU account. Emails sent through Gmail or Yahoo accounts etc. will not be acknowledged.

University Services

George Mason University has a number of academic support and other resources to facilitate your success. Some of these resources are presented below:

- i. Counseling and Psychological Services [http://caps.gmu.edu/]
- ii. Learning Services, University Career Services [http://careers.gmu.edu/]
- iii. The Writing Center [http://writingcenter.gmu.edu/] and other Learning Services within GMU.
- iv. University Catalog: http://catalog.gmu.edu/
- v. University Policies: http://universitypolicy.gmu.edu/

Absences & Accommodations

Students are expected to attend all classes and to complete all assignments on time. Absences may have an adverse effect on grades in a course including failure.

Excused absences: In certain circumstances, absences may be excused. These include:

- **Absence for religious observances**: Students must notify their professors in writing at the beginning of the semester of religious observances that conflict with classes. Students who cannot be accommodated should discuss the matter with a dean. □
- **Absence for athletic travel**: Student-athletes must provide their professors with a travel letter at the beginning of the semester which highlights potential absences. Students who cannot be accommodated for some or all absences should discuss the matter with the relevant Academic Coordinator for Student-Athletes.
- Absence for documented illness: Students who miss multiple classes due to prolonged illness should seek medical care and provide documentation of such to the Dean's Office, which will communicate with the student's professors. A prolonged absence may necessitate the student's withdrawal from the course or from the University for the semester.
- At the discretion of the professor: There may be cases where an absence is undocumented but is, nevertheless, excused by the professor (e.g., absence due to a death in the family). Students should initiate a conversation with their professors about the nature and duration of the absence, in advance of the absence whenever possible.

When absences are excused, students remain responsible for all assigned work, and shall be provided with the opportunity to make up, without penalty, any work that they have missed.

Accommodations: Students with documented and qualifying learning, physical and psychological disabilities should contact the Disability Services (ODC), which arranges for reasonable accommodations in accordance with the Americans with Disabilities Act and University policies. In order to arrange accommodations in each course, the student must

present his/her professors with a letter from the ODC outlining the recommended accommodations at the beginning of the semester. Disability Services (ODC) website: http://ods.gmu.edu/] / Student Union Building I (SUB), Room 2500. Telephone: (703) 993-2474.

Cell phone/social media policy:

Cell phones are to be switched off or in silent mode ONLY if urgent messages are expected from family members; no cell phones shall be answered or calls made, nor text messages sent or received or postings made or read on social media sites. If the student expects/needs to respond to a family emergency or situation, he/she can excuse him/herself from class to respond. This policy is for professional courtesy and respect to the lecturer and fellow students.

Laptops:

Laptops/tablets may be used for note taking. Use of laptops/tablets for any purposes other than note taking or class research purposes will not be permitted. Twitter, Skype, Facebook and other digital/social media auto-notifications and all other instant messaging notifications that would be disruptive to the lecturer, student or fellow classmates are to be switched off.

Tentative Course Schedule

Date	Topic	Assignment & Due Date
8/31	Course introduction and overview	
9/2	Essentials of Geography – Chapter 1	
9/7	Labor Day – Holiday, No class	
9/9	On Science – Chapter 1	
	Theme: The Atmosphere	
9/14	Solar Energy & the Seasons – Chapter 2	Quiz 1
9/16	Earth's Energy Balance – Chapter 3	
9/21	Atmospheric Composition & Structure – Chapter 6	
9/23	Atmospheric Oceanic Circulation – Chapter 6	
9/28	Global Temperatures – Chapter 5	Homework 1
9/30	In-class group activity	In-class group activity 1
10/5	Exam 1	
	Theme: The Hydrosphere	
10/7	Water & Atmospheric Moisture – Chapter 7	
10/12	Columbus Day, No class	
10/13 *	Water Resources – Chapter 9	Quiz 2
	Theme: Weather & Climate	
10/14	Weather – Chapter 8	
10/19	Global Climate Systems – Chapter 10	
10/21	Climate Change – Chapter 11	Homework 2
10/26	In-class group activity	In-class group activity II
10/28	Final Project Research Activity - Library	
11/2	Exam II	

Date	Торіс	Assignment & Due Date
	The Geosphere	
11/4	The Dynamic Earth – Chapter 12	
11/9	Weathering, Karst Landscapes & Mass Movement – Chapter 14	
	Theme: Geomorphology	
11/11	The Geography of Soils – Chapter 18	
11/16	Tectonics, Earthquakes & Volcanism – Chapter 13	
11/18 11/23	The Oceans & Coastal Systems – Chapter 16 The Oceans continued	Quiz 3
11/25-29	Thanksgiving Recess, No class	
11/25-29	Thanksgiving Recess, No class Theme: Cryosphere	
11/25-29 11/30		 Homework 3
	Theme: Cryosphere	 Homework 3
	Theme: Cryosphere Glacial & Periglacial Landscapes Chapter 17	 Homework 3
11/30	Theme: Cryosphere Glacial & Periglacial Landscapes Chapter 17 Theme: The Biosphere	 Homework 3
11/30 12/2	Theme: Cryosphere Glacial & Periglacial Landscapes Chapter 17 Theme: The Biosphere Ecosystem Essentials Chapter 19 Terrestrial Biomes and Anthropogenic Environments	Homework 3
11/30 12/2 12/7	Theme: Cryosphere Glacial & Periglacial Landscapes Chapter 17 Theme: The Biosphere Ecosystem Essentials Chapter 19 Terrestrial Biomes and Anthropogenic Environments Chapter 20	Homework 3

^{*} Monday class meets Tuesday

Important dates: Last day to add classes: Tuesday September 8, 2015 Last day to drop with no tuition penalty: Tuesday September 8, 2015

Syllabus Changes

The course instructor reserves the right to make changes as necessary to the course content and office hours during the course of the term. If these changes are made they will be immediately notified to students through individual emails or the blackboard explaining the nature of the change(s).