GGS 102: Physical Geography

Spring Semester 2015

GGS 102 fulfills Mason Core requirement in Natural Science Non lab

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Virtual Office Hours: I am available between Sunday at 7 pm through Friday at 7 pm to respond to student inquiries and during this five day period, I will try my very best to respond within 24 hours. An appointment can be scheduled via Skype.

Campus Office Hours: Wednesday between noon and 2 pm at Exploratory Hall, Room 2201.

I highly encourage the students to either meet me via Skype or come to my office.

Honor Code:

"Students members of the George Mason University community pledge not to cheat, plagiarize, steal and/or lie in matters related to academic work."

In this course, you are not to:

- Access sources/information during an on-line exam/quiz
- Give help or information/work to a friend/classmate

Read the Honor Code for a list of definitions and examples

Content: This is an introductory course to physical geography. It introduces the basic concepts and fundamentals of the Earth system. The course will cover earth-sun relations, weather, climate, soils, vegetation, geology, and landforms; and introduce the student to types and uses of maps. Physical characteristics of the earth system will be the focus.

Course Prerequisites: There are no formal prerequisites.

Learning Outcomes: At the end of the course, the 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:

- evolves based on new evidence
- · 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. Identify, evaluate, and properly cite resources appropriate to the field, such as audio/visual/online/print materials, or artifacts.

5. Build a Final Project on a natural disaster which will recognize and articulate the relationship between the natural sciences and society.

Required Textbook: Elemental Geosystems,7th Edition, Christopherson, Prentice Hall I do expect every student to buy the textbook , an essential support of the class

Useful websites

NOAA: www.noaa.gov USGS: www.usgs.gov NPS: www.ups.gov NASA: www.nasa.gov NGA: www.nga.com AAG: www.aag.org Chesapeake restoration: www.chesapeakerestore.org For library resource Video Tutorials Go to : library.gmu.edu/education/students/tutorials.html

Learning Community:

In this online course, each week opens on Tuesday.

Each week is structured as follows: readings in the textbook, video lectures and assignments.

Working online requires dedication and organization. Students must check their GMU email messages on a daily basis and communicate any questions or problems that might arise promptly.

Netiquette

In our online learning community, we must be respectful of one another. Please be aware that innocent remarks can be easily misconstrued. Sarcasm and humor can be easily taken out of

context. When communicating, please be positive and diplomatic. I encourage you to learn more about <u>Netiquette</u>.

Important dates:

Last day to add classes: Tuesday January 27, 2015

Last day to drop with no tuition penalty: Tuesday January 27, 2015

Performance-based Assessments

You will be evaluated by the tasks which appear below.

I expect all students to submit all the assignments on time as this is a no late submission policy distance education course: any missing assignment will be graded as zero.

Course orientation quiz

The course orientation quiz which will be offered as soon as Week 0 and it is due no later than Thursday January 29, 2015 at 11:59 pm.

Please review the syllabus.

The course orientation quiz will last 15 minutes, will display eight questions: each question, worth .25 point, will be multiple choice or True/False.

Test

Three tests are scheduled this Semester.

Each test will last 50 minutes, will display thirty four questions (including two extra credit questions): each question, worth .5 points, will be multiple choice or True/False.

Each of the three tests will open on Friday at 6 am and will close the following Monday no later than 11:59 pm.

Please understand that all materials will be used to generate questions: textbook readings and other items appearing in the reading assignments, video lectures and exercises.

Exercise

5 exercises are scheduled this Semester.

Each exercise will open on Wednesday at 6 am and will close the following Monday at 11:59 pm.

Discussion

Two Discussions are scheduled this Semester.

The discussion will be open on Blackboard on Wednesday at 6 a.m. and it will close the following Monday at 11:59 pm.

There are two mandatory steps to completing the Discussion

Step 1: submit your initial post no later than Friday at 11:59 pm .

Step 2: read your classmates' posts and reply to four of them between Saturday morning and Monday no later than 11:59 pm.

Please note that your initial post and your four replies will be accurate and will range between 50 to 60 words

Final Project

I have selected The "Volcano" theme. I will assign a volcano to each student on Wednesday January 28, 2015. The description of the Final Project can be found in the "Syllabus and Documents". Please read it carefully.

There are four mandatory steps to completing your Final Project.

- 1. Step 1/ Week 7: submit Final Project bibliography (sources from where you will get your information to complete your project).
- 2. Step 2/ Week 11: submit Final Project video.
- 3. Step 3/ Week 13: submit Final Project outline or draft.
- 4. Step 4/ Week 15: submit your Final Project no later than Wednesday May 6 at 11:59 pm

Each of these steps will be graded: Step 1 (1/20), Step 2 (1/20), Step 3 (1/20) and Step 4 (17/20).

Please note that all the times are EST (Eastern Standard Time)

STUDENTS ARE EXPECTED TO PARTICIPATE IN ALL ACTIVITIES.

Grading Percentage

50%	Course orientation Quiz and Tests
20%	Final Project
10%	Discussions
20%	Exercises

Grade cutoffs

- A 90% 100%
- B 80% 89.99%
- C 69% 79.99%
- D 60% 68.99%

F less than 60%

Schedule

Learning Modules	Reading Assignments	Instructional Activities	Tech Tools for Students	Assignment Type
Week0 01/13	Course Introduction in Blackboard	View Course Orientation Video	Blackboard	Course orientation quiz Due on 01:29 at 11:59 pm
Week 1 01/20 Chapter 1	Textbook Page 2 Figure 1.2, Page 5	View Geography Scientific Method	Blackboard	- Introduce yourself - Get familiar with Google Earth

Essentials of Geography	Focus study Page 6 Location and Time on Earth, Page 15 to Page 18 Prime Meridian and Standard Time Page 19 to Page 21			
Week 2	Textbook	View	Blackboard	Exercise 1
01/27 Chapter 1 Essentials of Geography	A spherical Planet Page 13 Maps, Scales and Projections Pages 21 to Page 25 Remote sensing and GIS Page 25 to Page 30 Article GIS Japan	Geographic Tools GIS Demo	Google Earth	due no later than at 02/02 11:59pm Course Orientation Quiz due no later than 01/29 at 11;59 pm
Week 3	Textbook	View	Blackboard	Exercise 2
02/03	Solar System Page 38	Solar System		due no later than 02/09 at 11:59 pm
Chapter 2 Solar energy, seasons and the atmosphere	Solar activity and solar wind Page 39 Incoming energy at the top of the Atmosphere Page 42 to Page 44 Atmospheric composition, temperature and function Page 49 to Page 55 Please meet Curiosity	Energy Essentials		

Week 4	Textbook	View	Blackboard	Test 1
02/10 Chapter 8 The dynamic Planet	Earth's structure and internal energy Page 258 to 262 Geological cycle Page 262 to 268	Pangea Plate Boundaries		due no later 02/16 at 11:59 pm
Week 5	Textbook	View	Blackboard	Discussion 1
02/17 Chapter 9	Crustal Formation Page 286 to Page 289	Earthquakes Volcanoes		Initial post due no later 02/20 at 11:59 pm
Tectonic, earthquakes and volcanoes	Crustal deformation Page 289 to Page 296 Mountain building Page 296 to Page 299			Four replies due no later than 02/23 at 11:59 pm
Week 6	Textbook	View	Blackboard	Exercise 3
02/24 Chapter 11 River systems and landforms	Fluvial processes and landforms Page 356 to Page 363	River Systems Amazing places	Diackboard	due no later than 03/02 at 11:59 pm
Week 7	Textbook	View	Blackboard	Final Project's Bibliography
03/03 Chapter 13 The Oceans, Coastal	Global oceans and seas Page 376 to 378 Coastal system components Page 378 to Page 381	Oceans and Seas Tsunami		due no later than 03/09 at 11:59 pm Exercise 4
Systems, and wind	Coastal system			due no later than 03/09 at 11:59

processes	actions			рт
	Page 381 to 386			Mid-Term Survey
Week 8	Textbook	View	Blackboard	Test 2
03/17 Chapter 3 Atmospheric energy and global temperatures	Albedo Impacts, a Limit on Future Arctic Shipping? Page 71 Solar Energy Applications Pages 82 and 83 Air Temperature and	Temperatures Temperature: explanation		due no later than 03/23 at 11:59 pm
	Human Body Pages			
Week 9	Textbook	View	Blackboard	Discussion 2
03/24	Wind essentials	Wind Essentials		Initial post due no later than 03/27 at 11:59 pm
Chapter 4 Atmospheric and oceanic circulation	Page 106 to 110 Driving forces within the atmosphere Page 110 to Page 114 Oceanic currents Page 126 to Page 132	Local winds		Four replies due no later than 03/30 at 11:59 pm
Week 10	Textbook	View	Blackboard	Exercise 5
03/31	Water's unique properties Page 140	Water Weather Essentials	Google Earth	due no later than 04/06 at 11:59 pm

Chapter 5 Atmospheric water and weather	to Page 144 Humidity Page 144 to Page147 Atmospheric stability Page 147 to Page 150	Hurricane		
Week 11 04/07 Chapter 7 Climate systems and climate changes	Textbook Classifying earth's climates Page 216 to Page 221 Climate change measurements Page 242 to Page 248	View Weather Climate Essentials Mesothermal climates	Blackboard Google Earth	Submit your Final Project video due no later than 04/13 at 11:59 pm
Week 12 04/14	Soils characteristics Page 446 to Page 450 Soil formation factors Page 451 to Page 454 The 12 general soil orders Page 455 Worldwide distribution of the Soil Taxonomy's 12 soil orders Pages456- 457	Soils	Blackboard Google Earth	Test 3 due no later than 04/20 at 11:59 pm
Week 13 04/21	Ecosystem Essentials Page 472 to Page 498	No video	Blackboard	Submit your Final Project Draft Due no later than 04/27 at 11:59 pm
Week14 04/28	Final Project writing week			Submit your Final Project no later than

		Wednesday May 6 at 11:59
		pm

Technology Requirements

Hardware:

You will need access to a Windows or Macintosh computer with at least 2 GB of RAM and to a fast and reliable broadband internet connection (e.g., cable, DSL). A larger screen is recommended for better visibility of course material. You will need speakers or headphones to hear recorded content and a headset with a microphone is recommended for the best experience. For the amount of Hard Disk Space required to take a distance education course consider and allow for:

1. the storage amount needed to install any additional software and

2. space to store work that you will do for the course.

If you are considering the purchase of a new computer, please go to_<u>http://itservices.gmu.edu/services/services-students.cfm</u> to see recommendations.

Software:

This course uses Blackboard as the learning management system. You will need a browser and operating system that are listed compatible or certified with the Blackboard version available on the myMason Portal. See <u>supported browsers and operating systems</u>. Log in to <u>myMason</u> to access this course.

Access to a Computer Workstation with:

Web browser (See Blackboard supported browsers and operating systems)

Adobe Acrobat Reader (free download)

Flash Player (free download)

Windows Media Player (free download)

Microsoft Office Word (purchase)

Note: If you are using an employer-provided computer or corporate office for class attendance, please verify with your systems administrators that you will be able to install the necessary applications and that system or corporate firewalls do not block access to any sites or media types.

Student Expectations

Academic Integrity

Students must be responsible for their own work, and students and faculty must take on the responsibility of dealing explicitly with violations. The tenet must be a foundation of our university culture. [See <u>http://academicintegrity.gmu.edu/distance</u>].

Honor Code

Students must adhere to the guidelines of the George Mason University Honor Code [See <u>http://academicintegrity.gmu.edu/honorcode</u>].

MasonLive/Email (GMU Email)

Students are responsible for the content of university communications sent to their George Mason University email account and are required to activate their account and check it regularly. All communication from the university, college, school, and program will be sent to students solely through their Mason email account. [See <u>https://thanatos.gmu.edu/masonlive/login</u>].

Patriot Pass

Once you sign up for your Patriot Pass, your passwords will be synchronized, and you will use your Patriot Pass username and password to log in to the following systems: Blackboard, University Libraries, MasonLive, myMason, Patriot Web, Virtual Computing Lab, and WEMS. [See https://thanatos.gmu.edu/passwordchange/index.jsp].

Responsible Use of Computing

Students must follow the university policy for Responsible Use of Computing. [See <u>http://universitypolicy.gmu.edu/1301gen.html</u>].

Students with Disabilities

Students with disabilities who seek accommodations in a course must be registered with the George Mason University Office of Disability Services (ODS) and inform their instructor, in writing, at the beginning of the semester [See <u>http://ods.gmu.edu</u>].

Students are expected to follow courteous Internet etiquette

Student Services

University Libraries University Libraries provides resources for distance students. [See http://library.gmu.edu/distance].

Writing Center

The George Mason University Writing Center staff provides a variety of resources and services (e.g., tutoring, workshops, writing guides, handbooks) intended to support students as they work to construct and share knowledge through writing. [See <u>http://writingcenter.gmu.edu</u>]. You can now sign up for an Online Writing Lab (OWL) session just like you sign up for a face-to-face

session in the Writing Center, which means YOU set the date and time of the appointment! Learn more about the <u>Online Writing Lab (OWL)</u> (found under Online Tutoring).

Counseling and Psychological Services

The George Mason University Counseling and Psychological Services (CAPS) staff consists of professional counseling and clinical psychologists, social workers, and counselors who offer a wide range of services (e.g., individual and group counseling, workshops and outreach programs) to enhance students' personal experience and academic performance [See <u>http://caps.gmu.edu</u>].

Family Educational Rights and Privacy Act (FERPA)

The Family Educational Rights and Privacy Act of 1974 (FERPA), also known as the "Buckley Amendment," is a federal law that gives protection to student educational records and provides students with certain rights. [See <u>http://registrar.gmu.edu/privacy</u>].