

GEORGE MASON UNIVERSITY
COLLEGE OF SCIENCE

GGG 122 – Dynamic Geosphere/Ecosphere
Distance Education Class
Spring – 2020

Syllabus

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Instructor:

Name: Dr. Paul R. Houser

Email: phouser@gmu.edu (preferred method of communication)

Phone: (301) 613-3782

Office Hours: **In Person:** Exploratory 2209; Mondays 4-6pm (appointment preferred)

Virtual: Email, Phone, Skype (prhouser),

I am generally available Monday at 9 am to Friday at 5 pm for student inquiries. During this 5 day period, I will respond to student inquiries within 24 hours.

Course Description:

This natural science lab course is a systematic study of biogeography and soils, viewed from a geographic, or spatial, perspective. We will study the spatial distribution and relationships of Earth's biomes and soils systems to other Earth systems, and the processes driving them, including energy, climate, nutrients, chemistry, and moisture. This course a natural follow-on to GGS 121 (Dynamic Atmosphere and Hydrosphere), but there are no course prerequisites, and this course is open to any student.

Laboratory:

This class has a mandatory laboratory session, where students will complete a series of laboratory workbook-type assignments often using Google Earth or an online GIS. One combined grade will be assigned for the lab and course.

Course Prerequisites:

None.

Course Overview:

The class is entirely online and asynchronous. Students are responsible for keeping up with course assignments and due dates. Assigned materials are generally due on Friday at midnight. The course grade is determined based on homework, discussion participation, session quizzes, and laboratory workbooks. Each point you earn is worth 1% of your final grade. There will be some limited opportunities for extra credit, and there is no final exam. The course has no formal lectures and makes extensive use of Pearson MasteringGeography online materials – which will be accessed through the mymason.gmu.edu blackboard account. The course covers materials from the second half of the Elemental Geosystems textbook, so eText and Lab chapter numbering may be unexpected.

Course Expectations:

1. Working online requires dedication and organization. Proper preparation is expected every week. You are expected to log in to the course on a **daily** basis and complete the assignments and activities on or before the due dates.
2. Students must check their GMU email messages on a **daily** basis for course announcements, which may include reminders, revisions, and updates.
3. It is expected that you will familiarize yourself with and adhere to the [Honor Code](#). Student members of the George Mason University community pledge not to cheat, plagiarize, steal, and/or lie in matters related to academic work.
4. It is essential to communicate any questions or problems to me promptly.

Online Learning Community:

This online course is taught via Blackboard Courses (Log into <http://mymason.gmu.edu>, select the Courses Tab, and the course can be found in the Course List).

This course is offered completely online, and is asynchronous (meaning there are no live sessions). Each week begins on Monday and ends on Friday. The laboratory is a major part of this course, requiring weekly work sessions.

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 [Netiquette](#).

Technology Requirements:

The technology requirements for this online course are listed below:

Hardware:

You will need access to a Windows or Macintosh computer with at least 2 GB of RAM and to a fast, reliable broadband Internet connection (e.g., cable, DSL, 4G). For optimum visibility of course material, the recommended computer monitor and laptop screen size is 13-inches or larger. You will need computer speakers or headphones to listen to recorded content. A headset microphone is recommended for recording your project presentations. For the amount of computer hard disk space required to take an online course, consider and allow for the space needed to: 1) install the required and recommended software and, 2) save your course assignments.

For hardware and software purchases, visit [Patriot Computers](#).

Software:

Web browser (See [Blackboard Support](#) for supported web browsers)

Blackboard Courses (Log into <http://mymason.gmu.edu>, select the Courses Tab)

Adobe Acrobat Reader ([free download](#))

Flash Player ([free download](#))

Microsoft Office ([purchase](#))

Google Earth (free download)

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.

Learning Outcomes:

At the end of this course, students will be able to:

- LECTURE:

- Understand how scientific inquiry is based on investigation of evidence from the natural world.
- Recognize the scope and limits of science.
- Recognize and articulate the relationship between the natural sciences and society (e.g. sustainability, global warming).
- Evaluate scientific information (e.g., distinguish primary and secondary sources, assess credibility and validity of information)
- LAB:
 - Participate in scientific inquiry and communicate the elements of the process, including:
 - Making careful and systematic observations
 - Developing and testing a hypothesis
 - Analyzing evidence
 - Interpreting results

Required TextBook: Elemental Geosystems, 9e, Christopherson and Birkeland

****get a eTEXT version with MasteringGeography access – this is best done through blackboard (\$78.95):**

- a. Enter your Blackboard course.
- b. Click Tools in the left navigation bar.
- c. Click Pearson's MyLab and Mastering on the Tools page. The Pearson's MyLab and Mastering page is now displayed. The top area of the page lists the links into the MyLab and Mastering course. The lower area displays the course's Support Tools.
- d. Click any course link in the top area of the page. The End-User License Agreement and Privacy Policy is displayed.
- e. Continue with the procedure in 2. Register and pay for your Pearson course.

NOTE: you can get temporary access for 14 days.
Course ID is available on blackboard

Required LabBook: Applied Physical Geography: Geosystems in the Laboratory, 10e

Thomsen and Christopherson

Labs will be printed and scanned to turn in on Blackboard.

NOTE: GGS121 covers the first half of these texts, and GGS122 covers the second half.

Performance-based Assessments:

1. On-line Discussions:

There are two on-line class discussions, and the general knowledge café discussion. Discussions will open on Blackboard on Sunday at 6 a.m. EST. Submit your initial posts no later than Tuesday before midnight EST. Read your classmates' posts and reply to two of them between Tuesday and Thursday before midnight EST. 1 point for each "quality post" that adds information and thought to the discussion. Discussions will be done in *Blackboard*.

2. Session Quizzes:

Session quizzes will assess student progress toward learning objectives. At the end of each eText chapter, students will be presented with random questions (selected from a larger database of questions), and will have 10min to present their answers. Students are expected to do their own work. Quizzes will be done in *MasteringGeography*.

3. Activities:

Three homework activities will be assigned during the course to hone student skills. Homework will be done in *MasteringGeography*.

4. Lab Assignments:

Laboratories will be assigned on a session basis to hone student skills. Assignments will be submitted in PDF format on *Blackboard*.

5. Extra Credit:

Limited extra credit will be offered throughout the semester – usually involving seminar reviews. Extra credit will be submitted in PDF format on *Blackboard*.

Grading:

Students will be evaluated in the following areas:

- **Discussions** (10 POINTS)
 - Discussion 1 – 5 points (1 point for each thoughtful/useful post)
 - Discussion 2 – 5 points (1 point for each thoughtful/useful post)
- **Homework** (15 POINTS)
 - 3 homework assignments at 5 points each
- **Quizzes** (27 POINTS)
 - 9 quizzes at 3 points each
- **Laboratories** (48 POINTS)
 - 12 laboratories at 4 points each

Grades are assigned using a ten point scale BASED ON NUMBER OF POINTS (+/- grades)

determined at instructor discretion):

A= 90 – 100 B = 80 – 90 C= 70 – 80 D= 60 – 70 F= 0 – 60

Example: Due to extra credit opportunities, some students earn more than 100 points. If this happens, the +/- distribution may be >100=A+, 95-100=A, 90-95=A-

A combined course-lab grade will be assessed.

Late Work Policy: Late work will not be accepted unless arrangements are made with the instructor(s).

Learning Module	Readings	eMaterials	Assessments (due at session end)
Session1: Jan 21-24 <ul style="list-style-type: none"> • Course Welcome • Plate Tectonics 	<ul style="list-style-type: none"> • Course Welcome in Blackboard About the Instructor and Getting Started • TextBook: Ch 9 • LabBook: Ch 19 	<ul style="list-style-type: none"> • Orientation • eText • Videos/PPT • Pearson Mastering 	<ul style="list-style-type: none"> • <i>Contact instructor if you are experiencing any difficulties in accessing course content</i> • Student Intro: Submit Blog Post • Quiz • Lab
Session2: Jan 27-31 <ul style="list-style-type: none"> • Faults and Volcanoes 	<ul style="list-style-type: none"> • Textbook: Ch 10 • LabBook: Ch 20 	<ul style="list-style-type: none"> • Videos/PPT • eText • Pearson Mastering 	<ul style="list-style-type: none"> • Lab • Quiz
Session3: Feb 3-7 <ul style="list-style-type: none"> • Rocks 	<ul style="list-style-type: none"> • LabBook: Ch 21 	<ul style="list-style-type: none"> • Videos/PPT • eText • Pearson Mastering 	<ul style="list-style-type: none"> • Lab • Homework
Session4: Feb 10-14 <ul style="list-style-type: none"> • Weathering 	<ul style="list-style-type: none"> • Textbook:Ch 11 	<ul style="list-style-type: none"> • Videos/PPT • eText • Pearson Mastering 	<ul style="list-style-type: none"> • Quiz • Discussion
Session 5: Feb 17-21 <ul style="list-style-type: none"> • Rivers 	<ul style="list-style-type: none"> • Textbook:Ch 12 • LabBook: Ch 22 	<ul style="list-style-type: none"> • Videos/PPT • eText • Pearson Mastering 	<ul style="list-style-type: none"> • Lab • Quiz
Session6: Feb 24 - 28 <ul style="list-style-type: none"> • Topography 	<ul style="list-style-type: none"> • LabBook: Ch 23 	<ul style="list-style-type: none"> • Videos/PPT • eText • Pearson Mastering 	<ul style="list-style-type: none"> • Lab
Session7: Mar 2 - 6 <ul style="list-style-type: none"> • Fluvial Geomorphology 	<ul style="list-style-type: none"> • Textbook: Ch 13 • LabBook: Ch 24 	<ul style="list-style-type: none"> • Videos/PPT • eText • Pearson Mastering 	<ul style="list-style-type: none"> • Quiz • Lab
Session8: Mar 16 - 20 <ul style="list-style-type: none"> • Glacial Geomorphology 	<ul style="list-style-type: none"> • Textbook: Ch 14 • LabBook: Ch 25 	<ul style="list-style-type: none"> • Videos/PPT • eText • Pearson Mastering 	<ul style="list-style-type: none"> • Lab • Quiz • Homework
Session9: Mar 23 – 27 <ul style="list-style-type: none"> • Coastal/Arid Geomorphology 	<ul style="list-style-type: none"> • LabBook: Ch 26 	<ul style="list-style-type: none"> • Videos/PPT • eText • Pearson Mastering 	<ul style="list-style-type: none"> • Lab • Discussion
Session10: March 30 – Apr 3 <ul style="list-style-type: none"> • Karst 	<ul style="list-style-type: none"> • LabBook: Ch 27 	<ul style="list-style-type: none"> • Videos/PPT • eText • Pearson Mastering 	<ul style="list-style-type: none"> • Lab
Session11: Apr 6 - 10 <ul style="list-style-type: none"> • Soils 	<ul style="list-style-type: none"> • Textbook: Ch 15 • LabBook: Ch 28 	<ul style="list-style-type: none"> • Videos/PPT • eText • Pearson Mastering 	<ul style="list-style-type: none"> • Quiz • Lab
Session12: Apr 13 - 17 <ul style="list-style-type: none"> • Ecosystems 	<ul style="list-style-type: none"> • Textbook: Ch 16 	<ul style="list-style-type: none"> • Videos/PPT • eText • Pearson Mastering 	<ul style="list-style-type: none"> • Quiz • Homework
Session13: Apr 20 - 24 <ul style="list-style-type: none"> • Biomes 	<ul style="list-style-type: none"> • Textbook: Ch 17 • LabBook: Ch 29 	<ul style="list-style-type: none"> • Videos/PPT • eText • Pearson Mastering 	<ul style="list-style-type: none"> • Quiz • Lab
Session14: Apr 27 – May 1 <ul style="list-style-type: none"> • GIS 	<ul style="list-style-type: none"> • Labbook: Ch 30 	<ul style="list-style-type: none"> • Videos/PPT • eText • Pearson Mastering 	<ul style="list-style-type: none"> • Lab

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 <http://academicintegrity.gmu.edu/distance/>].

Honor Code

Students must adhere to the guidelines of the George Mason University Honor Code [See <http://oai.gmu.edu/honor-code/masons-honor-code/>].

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 <https://thanatos.gmu.edu/masonlive/login/>].

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>].

University Policies

Students must follow the university policies. [See <http://universitypolicy.gmu.edu>].

Responsible Use of Computing

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

University Calendar

Students must follow the university policies. [See <http://catalog.gmu.edu>].

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 <http://ods.gmu.edu>].

Religious Holidays

A list of religious holidays is available on the University Life Calendar page (<http://ulife.gmu.edu/calendar/religious-holiday-calendar/>). Any student whose religious observance

conflicts with a scheduled course activity must contact the Instructor at least 2 weeks in advance of the conflict date in order to make alternative arrangements.

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 <http://writingcenter.gmu.edu>]. 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 [Online Writing Lab \(OWL\)](#) (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 <http://caps.gmu.edu>].

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 <http://registrar.gmu.edu/privacy>].