



GGS 303-002

Geography of Resource Conservation

Fall 2017

Instructor: Sharon Spradling, Adjunct Professor
Department of Geography and GeoInformation Science (GGS)
sspradli@masonlive.gmu.edu
Office in room 2219 of Exploratory Hall
Office hours by appointment (preferably Tuesdays right after class)

Lectures: Tuesdays 10:30 AM – 1:10 PM in room 2310 of Exploratory Hall

Textbook: **OPTIONAL – this textbook is not required but may be helpful:**
Natural Resources Conservation; Management for a Sustainable Future (10th Edition).
Daniel D. Chiras, John P. Reganold
ISBN-13: 978-0132251389 ISBN-10: 0132251388 Edition: 10th
Available at the George Mason University (GMU) Bookstore or on Amazon

Prerequisites: At least 30 total credit hours, completion or concurrent enrollment in all university general education courses or permission of instructor.

Course Description:

This course provides an in-depth look at the distribution, use and conservation of the world's resources. Studies will center on the concept of sustainability, which is defined as meeting the needs of the present human population without compromising the ability of future generations to meet their needs. Four major and interrelated issues threatening sustainability will be examined in detail:

1. A human population experiencing exponential growth
2. Overconsumption and depletion of natural resources
3. Environmental pollution
4. Climate change

As a GMU **Synthesis course**, this course will require students to synthesize the knowledge, skills and values gained from the Mason Core curriculum and expand their ability to master new content, think critically, and develop life-long learning skills across the physical and social sciences. Upon completing this synthesis course, students will achieve learning outcomes enabling them to:

1. Communicate effectively in both oral and written forms, applying appropriate rhetorical standards (e.g., audience adaptation, language, argument, organization, evidence, etc.)
2. Using perspectives from two or more disciplines, connect issues in a given field to wider intellectual, community or societal concerns
3. Apply critical thinking skills to evaluate the quality, credibility and limitations of an argument or a solution using appropriate evidence or resources.

This course is also a GMU **Green Leaf Sustainability-related course**. Completion of this course will provide students with in-depth knowledge of a particular aspect or dimension of sustainability (natural resources) or by providing a focus area (such as renewable energy) for a student's sustainability studies.

Honor Code

Students are expected to follow the George Mason University rules of student conduct as noted in the catalog. Honor code violations such as cheating or plagiarizing will be reported to the Office of Academic Integrity.



GMU Email Accounts & Blackboard

Students must use and regularly check their GMU email accounts and Blackboard to receive information for this class. Please do not send emails to your instructor from non-GMU accounts.

Office of Disability Services

If you require academic accommodations due to a permanent or temporary disability, please contact the Office of Disability Services (ODS) at (703)993-2474, <http://ods.gmu.edu>. ODS will then contact your instructor to arrange appropriate accommodations.

Communications Policy

Please turn cell phone sounds off and refrain from texting during class. Please turn the desktop computer monitors off when not in use for a class exercise. If you use your own laptop for note taking, please do not conduct other business on your computer during class as this is very distracting for your classmates.

Please treat everyone in the classroom as a fellow team member, and maintain a respectful attitude even when expressing disagreement and providing presentation critiques.

Learning Outcomes:

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

1. Understand the importance, distribution, current use and limits of the world's natural resources
2. Evaluate and analyze the impact of resource exploitation
3. Understand and describe the balance between ecology, technology and the economy
4. Understand the concepts of sustainability and conservation planning
5. Prepare and execute an effective classroom presentation on a natural resources topic
6. Critically review and analyze assigned readings on natural resources and sustainability

Grading Policy:

There will be one in-class examination, one individual presentation on an assigned topic, and homework assignments consisting of short papers based on assigned readings or other exercises. In the absence of a submission for any of the above activities, the student's grade is a zero. Missed exams and presentations may not be made up except in extreme circumstances.

<u>Activity</u>	<u>% of Final Grade</u>	<u>Points</u>
Assignments/Quizzes/Final Essay (take-home)	40%	400
Individual Presentation	20%	200
Exam (Nov 14th)	20%	200
Attendance	10%	200
Classroom Participation	10%	200
	100%	Total = 1000

Homework assignments must be submitted on Blackboard and will not be accepted late.

Attendance and class participation are a critical part of this class, and will account for a combined 20% of your final grade. This will be calculated as follows (for a maximum of 200 points):

- Class participation in discussions: 100 points
- Attendance: Students begin with 100 free points and lose 10 points for each missed class regardless of reason. If you miss one class, your attendance grade will be a 90%, and if you miss 3 classes your attendance grade will be a 70%. In case of prolonged illness, please notify instructor.



Course Schedule

Class	Dates	Topics	Due by start of class	Presentations
1 st	Aug 29	Introduction, Course Overview, Presentation Topic Selections, Natural Resource Conservation & Discussion on Presentations		
2 nd	Sep 5	World Population	Assignment #1 (In-class questionnaire and selfie)	
3 rd	Sep 12	World Food and Agriculture	Assignment #2 (Population data lab)	
4 th	Sep 19	Economics & Sustainability	Assignment #3 (Organizations feeding the world)	
5 th	Sep 26	Ecology & Biodiversity	Assignment #4 (Reading and paper on E&T species)	
6 th	Oct 3	Water Resources Assignment #5 (In-class quiz)	Assignment #5 (In-class quiz)	
	Oct 10	NO CLASS – Monday classes meet on Tuesday of this week		
7 th	Oct 17	Fisheries Conservation	Assignment #6 (Global Fishing Watch)	
8 th	Oct 24	Mining	Assignment #7 (Discuss your assigned mineral)	
9 th	Oct 31	Energy from Fossil Fuels	Assignment #8 (Petroleum products used)	
10 th	Nov 7	Nuclear Energy		
11 th	Nov 14	Exam		
12 th	Nov 21	Alternative Energy Sources	Assignment #9 (State energy profiles)	
13 th	Nov 28	Pollution	Assignment #10 (Timeline)	
14 th	Dec 5	Climate Change		
	Dec 19	FINAL EXAM	Class does not meet – final exam is a take-home essay due to Blackboard on this day (12/19)	

This syllabus is subject to change during the semester as conditions dictate.