

GGS 307: Sustainable Development (Spring 2015)
Department of Geography and GeoInformation Science
College of Science
George Mason University

Syllabus

Instructor: Maction Komwa

Email: mkomwa@gmu.edu

Office Hours: Monday [2:00 pm – 3:30 pm] or by appointment (through email) ---any changes to my office hours will be communicated to all students in class or through email

Office: Exploratory Hall, Room 2210: Tel: 703-993-5646

Co-Instructor: Joseph Mbuh

Email: mmbuh@masonlive.gmu.edu

Office Hours: Wednesdays 10:00 am – 12:00 pm (appointment preferred)

Office: Exploratory Hall, Room 1102, Cubicle 102-U

Credit Hours: 3

Meeting Days & Time: Monday, Wednesday & Friday 9:30 AM – 10:20 AM

Meeting Room: Aquia Building, Rm 219

Website: Blackboard

The **Prerequisites** for this course is 60 hours of coursework; GGS 112 and GGS 302 or permission from the instructor.

Course Description

This course will explore the concepts, applications, and tools for analysis and decision making in support of environmentally sustainable, socially responsible and economically prosperous development. Case studies and problem-solving exercises will be used to stimulate learning and provide practical experience in addressing sustainable development issues.

Learning Objectives:

Upon completion of this course, students should be able to:

1. Articulate key theories and concepts of sustainable development.
2. Articulate the major issues affecting sustainable development.
3. Identify and apply methods for assessing the achievement of sustainable development, how do we measure progress? What are the tools used for decision-making.

Texts: There is no required text for this course. Reading materials will be posted on the class website.

Instructor's Expectations:

1. **Attendance at class is required.** Students are to notify the instructor prior to absence from class by phone, in person, or in writing. After 3 absences, the instructor will deduct 5 percentage points from the participation portion of your grade and will deduct additional points for continued absences. Arriving 15 minutes after the start of class is considered an absence.
2. **During class.** The class will include many discussions and debates, it is therefore expected that we will respect each other's opinions, especially those we disagree with and not interrupt others while speaking.
3. **Electronics:** The use of cell phones and pagers are prohibited, they should be **off** at times during class (not on silent or vibrate). Please be respectful of your peers and your instructor in the use of all electronics (including laptops). Do not engage in activities that are unrelated to class. Such disruptions show a lack of professionalism and may affect your participation grade.
4. **Complete the assigned readings BEFORE you arrive in class.** Participation is a part of your grade.
5. **All assignments should be of the highest quality and be free from errors.** The GMU Writing Center provides free services to assist with writing (<http://writingcenter.gmu.edu/index.php>).
6. **Communicate** your ideas, frustrations, and enthusiasms about GGS 307 with me. I want to know what's working and not working for you in GGS 307.
7. **Aiding and abetting dishonesty, cheating, and plagiarism are forbidden.** See university Honor Code.

Requirements and Grading:

Leading Class Discussion	5%
Participation	5%
Assignments [On-line Quizzes, Weekly Forum contribution from the readings	10%
Topic description [1 page]	5%
Literature Review/methodology for semester project	5%
Mid-Term Exam	30%
Presentation of Final Research Paper	10%
Final Research Paper	30%

GRADING

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. Rather than assign individual letter grades for each project listed above, they will be evaluated on a percent basis from which the final, total, score will be determined.

A+ 98 - 100
A = 97-93
A- =92-90

B+= 89-86
B = 85-83
B - =82-80

C+=79-76
C=75-71
C-= 70-69

D=68-60
F < 60

Graded Components

1. Participation

Your participation will be assessed on the following criteria

- (1) Absent (without prior notification and instructor-agreed make-up)
- (2) Attend but do not contribute to discussion
- (3) Attend and participate (contribute substantively and actively, display evidence of preparation and knowledge of subject areas)

2. Leading and facilitating class discussion of peer-reviewed journal article

Each week one student leads and facilitates class discussion of a peer reviewed journal article relevant to topics covered in this course. The articles or the citation including reference to resources available through Mason's library **must** be circulated to the class one week prior to the discussion i.e., the Friday before you lead.

3. Final Research Paper and Presentation

Your final research papers should be **10-15 pages double spaced, font size 12 points (not including references)**. All materials used should be appropriately cited and must be credible (journal articles, books etc.). Choose a reference style (e.g. APA, MLA) and be consistent. Using more than 1 style will result in deductions. Zotero, the GMU approved end note system is recommended (<https://www.zotero.org/>).

You will be expected to present your papers towards the end of the semester.

Your papers and presentations will be graded based on content (clear ideas and opinions supported by evidence), design (organization, coherent, readability) and mechanics (grammar, spelling, punctuation, use active and not passive verbs, be concise, etc.), delivery etc. Rubrics will be provided. *[Details to be discussed and posted through the BB]*

4. Examination

There will be one mid-term exam which will include a combination of short answer, short essays and multiple choices or fill in the blanks questions. **There will be no final exam** 😊.

Academic Integrity

The GMU Honor Code (below) which we all pledged to adhere to as members of the Mason community, will be enforced at all times.

"Members of the George Mason University community pledge not to cheat, plagiarize, steal, or lie in matters related to academic work." (<http://oai.gmu.edu/the-mason-honor-code/>).

Disability Accommodations

If you are a student with a disability and you need academic accommodations, please communicate this to me at the beginning of the course and contact the Office of Disability

Services (ODS) at 703.993.2474. All academic accommodations must be arranged through that office (<http://ods.gmu.edu/>)

Email Policy

GMU faculty and staff may only correspond with students through the students' GMU assigned email accounts. Emails sent from other accounts will not necessarily be answered. Course information will be shared via email. Please notify me if you would like your email to remain private and not shared with your classmates.

Diversity

George Mason University promotes a living and learning environment for outstanding growth and productivity among its students, faculty and staff. Through its curriculum, programs, policies, procedures, services and resources, Mason strives to maintain a quality environment for work, study and personal growth.

Class Schedule¹

Week	Topic
Week 1	- Course introduction and overview
Week 2	- Introduction to the concept of Sustainable Development (SD) - what is SD and sustainability; - Is there a difference between sustainable development and sustainability? - The SD timeline (World Commission on Environment & Development, 1987; United Nations Conference on Environment & Development, 1992 and Agenda 21; World Summit on Sustainable Development, 2002; Rio +20). - Major SD Conferences and Agreements - <u>Discuss Final Paper and Presentation</u> - REQUIRED READING:TBD - Student Led Discussion:
Week 3	- The environmental, economic, social and political dimensions of SD. We will assess what the main issues and challenges affecting SD at the local, regional and global levels are? We will discuss "how things got to be this way"/why did we need SD? The issues will also be examined within the context of the Millennium Development Goals (MDGs). - Conservation and Sustainable Development - Student Led Discussion:

¹ This is a tentative schedule and may change during the course of the semester.

Week	Topic
Week 4	<ul style="list-style-type: none"> - Bringing all the issues together. Layers of SD – local (campus, city), national, regional and global levels. Case studies on sustainable development in practice. What are some of the programs, projects and other initiatives being practiced? What are the approaches being used? Who are the stakeholders and what are their roles? What are the issues and challenges? Are the approaches and methods practical, transferable or replicable? - We will try and have presentations from representatives of local level (GMU and Fairfax County) SD initiatives. - Student Led Discussion:
Week 5	<ul style="list-style-type: none"> - SD at the regional, national and global level continued - What are the priorities for SD in the US - SD in developing countries - Student Led Discussion:
Week 6	<ul style="list-style-type: none"> - SD at the local, national, regional and global level continued - Case studies: National level SD Practice - SD at the organizational level - the Business Case for Sustainability; Sustainability at Mason and other sustainable communities - The Boundaries of Sustainable Development - Required Readings TBA - Final Paper Topic Submission - Student Led Discussion:
Week 7	<ul style="list-style-type: none"> - Review for mid-term - Mid-term
	- SPRING BREAK
Week 8, 9 & 10	<ul style="list-style-type: none"> - Selected SD challenges in depth (Climate and Global Change, Energy, Water Resources, Population, Economic Development, etc.). This will be adjusted based on the interest of the students and priority issues identified and agreed on by the class. - Student Led Discussion: - Literature Review and Methodology for Final Paper due week 10
Week 11, 12	<ul style="list-style-type: none"> - Problem-solving, metrics, and tools for sustainable development – e.g. life cycle analysis; sustainability indices and rating systems; Carbon, water and ecological foot printing; GHG Inventory; Environmental Performance indicators; UN Millennium Development Goals; Environmental Management Systems. We will examine the techniques and methods and use case studies to see their application [Tools, Systems and Innovation for Sustainability] - Student Led Discussion: - Discuss final papers and presentations
Week 13, 14	<ul style="list-style-type: none"> - Communication and Learning for Sustainability - Leading the Sustainability Process
Week 15 -16	<ul style="list-style-type: none"> - Make up classes as needed - Final Presentations Final papers due on [05/6]