

Environment and You Issues for the 21st Century

EVPP 201 – Spring 2020 (DE Sections)

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Lecturers: Dr. J. Neil Ransom & Dr. Robert Jonas
Classroom: None (online)

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Course description

This course is an introduction to broad aspects of (anthropocentric) environmental issues or problems in the contemporary world. The academic approach to this information is intended to be that of an environmentally aware citizen and not that of an advocate for any position. The central focus of the course is an inquiry into the influence of human activities on the environment and the methodologies used to ameliorate those impacts. This course will cover topics as diverse as global population and wastewater treatment, environmental law, and genetic engineering. As a class, we will attempt to rank order some of the threats posed by various environmental problems. However, a major goal of the course is for each student, individually, to develop their scale for ranking these issues.

The information developed during this course will be of immediate and practical value to you in decision-making in your personal life. Only through detailed knowledge of these topics will we achieve these goals. By the end of the course, successful students will reach a level of awareness about technical, environmental issues and environmental policies such that they are confident in their own ability to investigate, understand, and critically evaluate the broad range of environmental concerns. Also, you will become an expert in one aspect of an environmental issue through the completion of a course project.

This course is listed as 100% online, and all lectures, discussion, student presentations, and exams will be done online through Blackboard and Blackboard tools. Four exams will be administered through Blackboard using Respondus Lockdown Browser and your webcam.

Course Objectives

By the end of the semester students will be able to/become:

- 1) **Assess environmental risk** through their ability to understand the basics of environmental science, identify environmental risks, and understand technical issues and methods for risk assessment.
- 2) **Make personal decisions** based on their ability to investigate, understand, and critically evaluate their environmental concerns and make personal choices based on those understandings.
- 3) **Become relatively expert** in one environmental issue and demonstrate their knowledge through research and presentation.

Gen. Ed. Requirements and Learning Outcomes

Learning Outcomes: The general education natural sciences courses engage students in scientific exploration; foster their curiosity; enhance their enthusiasm for science; and enable them to apply scientific knowledge and reasoning to personal, professional and public decision-making. Lab courses must meet all five learning outcomes. Non-lab courses must meet learning outcomes 1 through 4.

To achieve these goals, students will:

1. Understand how scientific inquiry is based on investigation of evidence from the natural world, and that scientific knowledge and understanding:
 - a. Evolves based on new evidence
 - b. Differs from personal and cultural beliefs
2. Recognize the scope and limits of science.
3. Recognize and articulate the relationship between the natural sciences and society and the application of science to societal challenges (e.g., health, conservation, sustainability, energy, natural disasters, etc.).
4. Evaluate scientific information (e.g., distinguish primary and secondary sources, assess credibility and validity of information).
5. Participate in scientific inquiry and communicate the elements of the process, including:
 - a. Making careful and systematic observations
 - b. Developing and testing a hypothesis
 - c. Analyzing evidence
 - d. Interpreting results

Course requirements & student expectations

Textbook and Reading requirements

There is no required textbook for this course. All reading material for lessons or assignments will be made available on Blackboard with a link to the text and instructions in the lesson introduction. If you are interested in purchasing a supplementary textbook, I recommend Botkin and Keller's book, *Environmental Science: Earth as a Living Planet*, published by John Wiley & Sons. Any edition will suffice.

Grading

Students are assessed in four graded areas that include: class participation, unit quizzes, exams, and an environmental issue report. The following chart shows

percentage allocation by course activity or requirement. Due dates for each graded item will be listed throughout the course and can be found by clicking the "Schedule" tab on the Blackboard navigation menu.

- 25% Class participation**
Lesson activities & assignments
- 25% Unit Quizzes**
5 quizzes
- 25% Exams**
Exam 1 (Unit 1)
Exam 2 (Unit 2)
Exam 3 (Unit 3)
Exam 4 (Unit 4 & 5)
- 25% Issue Report**
Final Issue Report
Peer-review activity

Grading and Grade Scale

Formula used to calculate your final grade: $(\% \text{ total participation grade} \times 25) + (\% \text{ total quiz scores} \times 25) + (\% \text{ total exam grades} \times 25) + (\% \text{ total issue report grades} \times 25) = \text{final grade score}/100$

A (93-100); A- (90-92); B+ (87-89); B (83-86); B- (80-82); C+ (77-79); C (70-76); D+ (60-69); and F (0-59)

Class participation

Class participation points are awarded for completion of lessons activities and assignments. On average, each lesson will have 1 or 2 activities, discussions, or assignments scored between 10 and 15 points for that week. If you complete the requirements for each activity on time (by the end of the final week of the Unit), you will receive full marks. Failure to complete a lesson activity or assignment within two weeks of the end of the Unit will result in 50% late penalty for each late assignment and 0% grade if submitted after the last day of classes (before final exams week).

Unit quizzes

Each Unit ends with a unit quiz. These quizzes are intended to prepare you for the course exams and will mimic question style and content on the exams. You can take each quiz multiple times, and your highest score will count as your final grade. Feedback displays when a question is answered incorrectly directing you to the topic and lecture location for further study. After the due date, I record your quiz score, and the answers become available so you can use them to study for the exams.

Exams

Four exams are administered online using Respondus Lockdown Browser and your computer's webcam to prevent cheating. Exam instructions require you to use a webcam to film your testing location and you as you take the exam. Failure to comply with the guidelines or to attempt to obfuscate or manipulate the video recordings will result in an F grade for the exam for cheating, and I may report you to the Honor Code office for further discipline. A two-day window will be provided to take each exam

(except the final which is three days), and it is up to each student to ensure they schedule time during that window to take the exam. The first three exams will cover one Unit per exam. The final exam will cover Unit 4 & 5. Exams are not comprehensive; however, some subject matter builds upon information in previous sections. Exams will not be offered at any other time except the times listed in the course schedule. Exam questions are similar in style and subject matter to the quiz questions. All exam questions will come directly from lecture material.

Environmental Issue Report

The goals of the issue report are to help you develop detailed knowledge on an environmental problem and gain experience sharing that knowledge. You must select a subject relevant to this class that interests (excites) you and probe that matter deeply – become an “expert” on that subject. The issue report is a multi-step assignment that will take some time to complete. To be successful, you will need to work on the report throughout the semester. A full list of the requirements, detailed instructions, due dates, and resources are in the “Projects” section of the course in Blackboard. The format and length of the report are up to you as long, as long all the questions and criteria are addressed.

Course schedule and due dates

One of the main challenges to successfully completing an online course is maintaining a sufficient pace to finish all requirements before the end of the semester. To ensure students are able to complete the course a weekly schedule has been developed to sufficiently pace students. The schedule can be found in the “Schedule” tab in Blackboard. Lesson and Unit due dates must be followed closely for students to be successful in this course. Students may work ahead.

- **Exams:** are only offered for a limited time period...no makeups allowed. If you have not completed Units or Lessons at the time of an exam, you’re still required to take the exam and will not be able to reschedule it.
- **Lessons:** do not have individual due dates but must be completed by the end of their Unit.
- **Units:** must be completed by 11:59pm midnight on the day listed in the schedule and before the next unit begins. This will be enforced by Unit quizzes closing at that time.
- **Course Project:** assignments will be accepted late, however, they will receive a reduction in points commensurate to how late they are turned in.

Technology Requirements

The technology requirements for this online course are listed below:

Hardware

- A Windows or Macintosh computer with at least 2 GB of RAM and a fast, reliable broadband Internet connection (e.g., cable, DSL).
- Recommended computer monitors and laptop screen size be 13-inches or larger for optimum visibility of course material.
- Computer speakers or headphones to listen to recorded content.
- A headset microphone for live audio sessions using course tools like Blackboard Collaborate.

- A webcam for taking exams using Respondus Lockdown Browser and for student presentations.
- Enough space on your computer for 1) install the required and recommended software and, 2) save your course assignments.

Software

- Web browser (See [Blackboard Support](#) for supported web browsers)
- Blackboard Courses (Log into <http://mymason.gmu.edu>, select the Courses Tab)
- Blackboard Collaborate (select from the course menu)
- Adobe Acrobat Reader ([free download](#))
- Flash Player ([free download](#))
- Microsoft Office ([purchase](#))

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

University Policies

Student Privacy

Student Privacy is governed by the Family Educational Rights and Privacy Act (FERPA) and is an essential aspect of any course. This means that the instructor will not give information regarding grades or class status to anyone except the student, unless the student has provided the instructor with written permission stating otherwise.

Additionally, students must use their MasonLive email account to receive important University information, including messages related to this class. See <http://masonlive.gmu.edu> for more information.

Sexual Harassment

It is the policy of University to provide an academic and work environment free from sexual harassment. Sexual harassment is contrary to the standards and mission of the University. Sexual harassment is illegal and will not be tolerated. Each member of the University community has a responsibility to maintain an academic and work environment free from sexual harassment. The University will take whatever action necessary to prevent, stop, correct, or discipline harassing behavior. Same-sex sexual harassment violates this policy and is subject to discipline under the same procedures. More information available at <http://universitypolicy.gmu.edu/1202gen.html>.

Non-Discrimination Policy

George Mason University is committed to providing equal opportunity and an educational and work environment free from any discrimination on the basis of race, color, religion, national origin, sex, disability, veteran status, sexual orientation, age, marital status, pregnancy status or genetic information. George Mason University shall adhere to all applicable state and federal equal opportunity/affirmative action statutes and regulations. More information at <http://universitypolicy.gmu.edu/1201gen.html>.

Students with disabilities and student services

If you are a student with a disability and you need academic accommodations, please see me and contact the GMU Office of Disability Services (ODS) at 993-2474. All academic accommodations must be arranged through the ODS.

Services are also available to you if you need some assistance in writing, research, or counseling. For assistance with writing you can schedule an appointment with the Writing Center online at <http://writingcenter.gmu.edu>. If you need help with research they can find resources and contact the Environmental Science and Policy research librarian by visiting <http://infoguides.gmu.edu/ESP>. If you have a technical problem please contact IT Services. Finally, if at any time you need additional assistance or support you can find resources at Student Academic Affairs and Student Health Services.

Academic Integrity (Plagiarism)

All written and presented work submitted for this class must be original; i.e., it must be your work and your work alone. You must not simply cut-and-paste the work of others into your work, nor should you simply paraphrase existing work. You must use quotations and the proper citation (see Syllabus Appendix – Citation and Reference Guidelines). Be warned: Plagiarism (defined below) will not be tolerated. If there is any suspicion of plagiarism the case will be turned over to GMU's Office of Academic Integrity with the instructor's recommendation for the maximum penalty. Plagiarism is a GMU Honor Code violation that will have a serious impact on your academic record. Additionally, all other forms of cheating will be dealt with in the same manor.

Plagiarism includes the following:

- 1) Presenting as one's own the words, work, or opinions of someone else without proper acknowledgment.
- 2) Borrowing the sequence of ideas, arrangement of material, or pattern of thought of someone else without proper acknowledgment.

The University has made software available to the faculty to use for scanning student submissions and it will be used in this class. Contact your instructor if you have any uncertainty regarding the use of other sources before you submit any written assignment.