
GENV 131-IS: Global Environmental Issues (Independent Study)

Course Syllabus

Trinity Western University, Department of Geography
Summer 2017

Pre-requisites: None
Semester Hours: 3

Instructor Details

Professor: Dr. Jamie Spinney
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Course Description (from the Academic Calendar)

The course provides an investigation of the scientific principles behind global environmental issues. The course focuses on key ecological concepts and the changing relationship of humans with the natural world including the different approaches to understanding and solving environmental problems, from local to global scales. It investigates such issues as human populations and environmental impact; loss of species biodiversity; air, water, and soil pollution; energy use; climate change; and waste management.

Course Format

This independent study course is divided into thirteen sections, and it may be helpful to think of them as weeks to help organise time to complete this course. The first section introduces the global environment from a geographer's "perspective". In fact, "perspective" is an important component of this course and students are expected to examine environmental issues from multiple, and often competing, perspectives. The course then examines environmental issues as "conflicts" between natural and human systems. The remainder of the course examines specific issues that include atmospheric issues, aquatic issues, terrestrial issues, biodiversity issues, waste issues, and energy issues. This course relies heavily on readings from the textbook and documentary videos.

Required Text

Textbook – Berg, L.R., Hassenzahl, D.M. and Hager, M.C. (2014) *Visualizing Environmental Science, Fourth Edition*. <http://ca.wiley.com/WileyCDA/WileyTitle/productCd-EHEP002774.html>

Course Evaluation

<u>Deliverable</u>	<u>Points</u>	<u>Description</u>
Position Papers	40%	5 worth 8 points each
Mid-Term Test	30%	Covers ALL Readings & Assignments to Week 6
Final Exam*	30%	Covers ALL Readings & Assignments after Week 6

***Students are required to pass the final exam in order to pass the course.**

Position Papers – The position papers are based on the insights gained from topical readings and videos. The objective of the position paper is to provide an opportunity for students to discuss the different “perspectives” on a given environmental issue. Students will be required to write short assignments (3 pages) and are to be submitted by e-mail to the professor. There are 12 topics, but the student needs to **choose any 5** of the following topics and **write a total of 5 position papers**. A bibliographic entry of “quality” references is expected using any consistent style using either www.easybib.com or www.citationmachine.com.

	TOPIC
1	Watch the documentary video entitled “Home”. Discuss what three aspects of the film that you found most interesting, surprising, and/or shocking. Describe the issue(s) in terms of their problem they pose to society and at least two perspectives on how to solve that problem. http://www.youtube.com/watch?v=iqxENMKaeCU
2	There are several perspectives (or philosophies) of human’s relationship with nature. Deep ecology is an ecological philosophy that is focused on the inherent value of nature that goes beyond the utility to humans. At the core of deep ecology is the belief that all living organisms should be respected and have the right to live and flourish. On the other hand a Christian Worldview is based on the ideas and beliefs through which Christians perceive the natural world and their interactions with it. Many people believe that the Bible shows little concern for human’s relationship and perhaps even encourages the exploitation of nature. These beliefs stem from scriptures that suggests human beings “have dominion” over all living things (Genesis 1:28), which many people interpret as meaning that humans transcend nature and may exploit it in whatever way they please. However, careful interpretation of the Hebrew word, <i>radah</i> , in other passages in the Old Testament reveals that the word refers to the rule of a king or a nation, which emphasizes the humane and compassionate rule that results in peace and prosperity. Compare and contrast Deep Ecology (from textbook or other source) and the Christian Worldview (e.g. Genesis 1:28).
3	The concept of environmental justice, also known as environmental racism, emerged in the early 1980s in the United States. The United States Environmental Protection Agency defines environmental justice as “the fair treatment and meaningful involvement of all people regardless of race, color, sex, national origin, or income with respect to the development, implementation and enforcement of environmental laws, regulations, and policies”. The term is most commonly used to describe a social movement toward the fair distribution of environmental benefits and burdens. The term is also used to describe an interdisciplinary body of social science that studies theories associated with the environment, justice, policy, sustainability, and political ecology. Watch the following videos and discuss what can be done to promote environmental justice. http://www.youtube.com/watch?v=5Opr-uzet7Q ; http://www.youtube.com/watch?v=fxUGONR9pQw ; http://www.youtube.com/watch?v=0JZey9GJQP0 Also, consider and discuss the social implications of recycling e-waste here at home. http://www.youtube.com/watch?v=gXkYDUrAxdE#t=58

4	<p>Read the following two articles and compare and contrast the main ideas of each author.</p> <ul style="list-style-type: none"> Leopold, Aldo (1949) <i>The Land Ethic</i>. Available at www.nyu.edu/classes/gmoran/LEOPOLD.pdf or http://oregonstate.edu/instruct/phl201/modules/texts/text3/leopold.html Hardin, Garrett (1968) <i>The Tragedy of the Commons</i>, <i>Science</i>, 162, 1243-1248. http://www.garretthardinsociety.org/articles_pdf/tragedy_of_the_commons.pdf
5	<p>There are many environmental problems that exist throughout the world, such as natural resources depletion, air pollution, and overpopulation. The root of most of these problems stems from the local environment and decisions made at local levels based on lifestyle choices, such as those regarding food, transportation, and housing. Your home town is not immune to these problems, and there are many environmental problems that exist throughout your city/town. Discuss a local environmental problem in your town or city. Are any causes related to human values or environmental ethics? It may be helpful to reconsider last week's readings and the Christian and deep ecology worldviews.</p>
6	<p>Water pollution is a physical or chemical change in water that adversely affects the health of humans and other organisms. Sustainable water use is the wise use of water resources, without harming the essential functioning of the hydrologic cycle or the ecosystems on which present and future humans depend. Municipal water waste can be reduced by collecting and storing gray water for later use in toilets, on lawns and to wash vehicles. Watch "Nature of Things - Save My Lake" and discuss what, in your opinion is the most important thing you can do, individually, to help protect water quality? http://www.youtube.com/watch?v=-eaUihTvwyl</p>
7	<p>The global ocean is a single continuous body of water, but geographers divide it into four sections separated by continents: the Pacific, Atlantic, Indian, and Arctic Oceans. The oceans are among our biggest resource for life on earth, and also our biggest dumping grounds. Watch Rob Stewart's "Revolution" and discuss what, in your opinion, is the most pressing environmental issue facing the global ocean? https://vimeo.com/119626181</p>
8	<p>Watch "Cowspiracy", which is available on Netflix. Discuss whether, and how, the film's content has made you rethink about the environmental implications of your diet.</p>
9	<p>Watch "Seeds of Death" at https://www.youtube.com/watch?v=aFVF3MJNOHg, which is free on YouTube right now. Describe what the most troubling aspect of the documentary is for you, and what can be done about it.</p>
10	<p>Watch "Pandora's Promise" at https://www.youtube.com/watch?v=QiNRdmaJkrM and discuss whether your perspective was changed as a result of watching the video.</p>
11	<p>Rent and Watch "White Water Black Gold" https://vimeo.com/ondemand/whitewaterblackgold and discuss whether, in your opinion, it is worth the economic benefits of developing the tar sands.</p>
12	<p>Watch "Solar Power Revolution - Here Comes the Sun" http://www.youtube.com/watch?v=nr-grdspEWQ and discuss the pros and cons of solar power.</p>

Course Policies

1. **E-mail** - I welcome e-mail questions and will do my best to reply promptly to any questions. I do, however, have teaching commitments that can take me away from my desk for hours at a time. I am also usually available intermittently on evenings and on weekends at jamie.spinney@smu.ca.
2. **Exams** - The **midterm test** should be written close to Week #8, and will cover all readings and assignments completed up to the end of Week#7. The **final exam** should be written in week 15 or 16 and will cover all readings and assignments covered throughout the entire course. Therefore, it is important to read the material and complete the assignments. There is some flexibility in these dates, but try to stick to the schedule as best as you can. Alternatively, you should also feel free to complete this course intensely in 2-3 weeks (many have successfully done so).
3. **Requests for re-grading** – I will make every effort to provide you with a grade that best reflects the quality of your work, and re-marking will be conducted at discretion. If you wish to have your work (assignment or exam) re-marked, you will be asked to explain in writing, within at most 10 business days after the work is initially returned, the reasons why it should be reviewed and the mark changed. A reply will be forthcoming in a period of at least 48 hours. Please note that re-marking may result in a higher or a lower grade.
4. **Academic Integrity and Avoiding Plagiarism at TWU** - As Christian scholars pursuing higher education, academic integrity is a core value of the entire TWU community. Students are invited into this scholarly culture and required to abide by the principles of sound academic scholarship at TWU. This includes, but is not limited to, avoiding all forms of plagiarism and cheating in scholarly work. TWU has a strict policy on plagiarism. Learning what constitutes plagiarism and avoiding it is the student's responsibility. An excellent resource describing plagiarism and how to avoid it has been prepared by TWU Librarian William Badke and is freely available for download (PPT file) or used as flash (self-running) tutorials of varying lengths from: <http://acts.twu.ca/library/plagiarism.ppt>, <http://acts.twu.ca/library/Plagiarism.swf> (14 minute flash tutorial) http://acts.twu.ca/library/Plagiarism_Short.swf (8 minute flash tutorial)
5. **Students with Disabilities** - Students with a disability who need assistance are encouraged to contact the Equity of Access Office upon admission to TWU to discuss their specific needs. All disabilities must be recently documented by an appropriately certified professional and include the educational impact of the disability along with recommended accommodations. Within the first two weeks of the semester, students must meet with their professors to agree on accommodations appropriate to each class. Students should follow the steps detailed by the Equity of Access Office outlined on the TWU website at <http://twu.ca/life/wellness/learningresources/disabilities-and-equity-of-access/steps-to-attaining-disability-services.html>.

Grading Scale:

Assessment will always be part of our academic professional lives. Grades earned in this class reflect the instructor's assessment of the student's effort. A grade of A+ is typically reserved for exceptional or distinguished work that exceeds the instructor's expectations. The following table describes the **University Grading System** and translates letter grades, numeric grades, and grade point averages.

Letter Grade	Percent	Grade Point	Description
A+	90-100	4.3	<p>A - Distinguished Work (A+ = 90-100%; A = 85-89%; A- = 80-84%) Excellent problem solving ability is demonstrated. Questions are answered completely and directly, and are supported with reliable and directly-relevant evidence and/or examples. Connections are made with other parts of the course and information. All information is correct and attractively presented with no grammar or spelling errors.</p> <p>B - Superior Work (B+ = 77-79%; B = 73-76%; B- = 70-72%) Good problem solving ability is demonstrated. Questions are answered completely with some mention of related topics. Supporting evidence is provided from the textbook and/or class, but no supplementary research. All information provided is mostly correct and is properly formatted with few grammatical and/or spelling errors.</p> <p>C - Adequate Work (C+ = 67-69%; C = 63-66%; C- = 60-62%) Limited problem solving ability is demonstrated. Questions are answered completely but minimally. Answers are partially supported by evidence from class or textbook, but few or general examples are used. Most of the information provided is correct, but lacks attention to formatting and has grammatical and/or spelling errors.</p> <p>D - Minimally Acceptable Work (D+ = 57-59%; D = 53-56%; D- = 50-52%) Weak problem solving ability is demonstrated. Most questions, or most parts of the question, are answered, but supporting evidence and/or examples are lacking or inappropriate. Part of the answer is wrong, lacks formatting, and has grammatical and/or spelling errors.</p> <p>F - Inadequate/Unacceptable Work (F = below 50%) Little or no evidence of competency is demonstrated in course content or skills. Questions are not answered completely or the answers are not on point. Little or no supporting evidence or the information is incorrect. Most of the answers are wrong, lack formatting, and have grammatical and/or spelling errors.</p>
A	85-89	4	
A-	80-84	3.7	
B+	77-79	3.3	
B	73-76	3	
B-	70-72	2.7	
C+	67-69	2.3	
C	63-66	2	
C-	60-62	1.7	
D+	57-59	1.3	
D	53-56	1	
D-	50-52	0.7	
F	< 50	0	

Proposed Course Outline

WEEK	DESCRIPTION
Week 1	The Environmental Challenges We Face <u>Read</u> Chapter 1 of textbook
Week 2	Environmental Sustainability and Human Values <u>Read</u> Chapter 2 of textbook
Week3	How Ecosystems Work <u>Read</u> Chapter 5 of textbook
Week 4	Human Population Change and the Environment <u>Read</u> Chapter 7 of textbook
Week 5	Air and Air Pollution <u>Read</u> Chapter 8 of textbook
Week 6	Global Atmospheric Changes <u>Read</u> Chapter 9 of textbook
Week 7	Freshwater Resources and Water Pollution <u>Read</u> Chapter 10 of textbook
Week 8	MID-TERM EXAMINATION
Week 9	The Ocean and Fisheries <u>Read</u> Chapter 11 of textbook and watch MIDWAY a Message from the Gyre (Chris Jordan)
Week 10	Agriculture and Food Resources <u>Read</u> Chapter 14 of textbook
Week 11	Biological Resources <u>Read</u> Chapter 15 of textbook and watch How Wolves Change Rivers (Sustainable Man)
Week 12	Solid and Hazardous Waste <u>Read</u> Chapter 16 of textbook
Week 13	Non-Renewable Energy Resources <u>Read</u> Chapter 17 of textbook
Week 14	Renewable Energy Resources <u>Read</u> Chapter 18 of textbook
Week 15	FINAL EXAM

GENV 131-IS: Global Environmental Issues						Student: _____
Position Paper Rubric						
Criteria	5	4	3	2	1	Total
Thesis Statement	Developed a strong thesis & included it in the appropriate place. Thesis was focal point & was strongly & thoroughly supported throughout.	Developed a strong thesis & included it in the appropriate place. The thesis was the focal point & was supported throughout.	Developed a thesis statement & included it. Some of the information supported the thesis statement.	Thesis Statement needs to be developed further or is not included. The thesis is not fully supported.	A clear position is not present throughout the paper.	
Strong Reasons	Position is supported with well developed & thought out reasons (min. of three). Reasons show strong analysis & conclusions based on the information.	Position is supported with well developed & thought out reasons (min. of two). Reasons well developed, but analysis & conclusions need to be strengthened.	Position is supported with a minimum of three distinct reasons. Reasons are developed, but are more general & need to be developed further.	Reasons are weak and/or repetitive. They need to be developed & explained further.	Reasons are not developed or are repetitive. Ideas can be difficult to understand.	
Depth & Variety of Evidence	Substantial valid & accurate information (CREST) has been used throughout the paper. Information is relevant & supports the writer's ideas.	Adequate valid & accurate information has been used throughout paper. Information is relevant & supports the writer's ideas.	Review needs to be supported with more valid & accurate information. Some of the information may not be relevant and/or does not support the thesis.	Paper lacks valid & accurate information. Some of the information is not relevant & does not support the position.	Little to no support from researched information is present.	
Citations www.easybib.com or www.citationmachine.com	Review is supported in depth with > 5 sources, including textbook. Citations follow a consistent "style".	Review is supported with a ≤ 5 sources. Citations follow a consistent "style".	Review is supported with a ≤ 3 sources. Citations lack a consistent "style".	Review is supported with a ≤ 1 source, OR citations improperly formatted	No sources referenced.	
Formatting	Paper is well formatted & very attractively presented with title page, header & footer (not on first page).	Paper is formatted & attractively presented with title page, header & footer.	Paper uses default formatting & lacks title page, header or footer.	Paper uses default or distracting formatting & lacks details in presentation.	Default or distracting formatting.	
Organization & Mechanics	Ideas are well organized & free of mechanical errors.	Most ideas are well organized & free of mechanical errors.	Some organization but diversions in purpose are present. Many mechanical errors. Sentence structure needs strengthening.	Little organization & many diversions. Many mechanical errors & transitions are not utilized.	Lacks organization & numerous mechanical errors that make comprehension difficult.	
Position Paper Score:						