

THE UNIVERSITY OF WESTERN ONTARIO
Faculty of Arts and Social Science, Huron University College

ENVIRONMENTAL SCIENCE 1021G Section 550:
Environmental Science & Sustainability
Winter 2019

Instructor:	Kelly Hollingshead Office: WSSB 2150 Phone: 519-661-2111 ext. 81151 E-mail: khollin2@uwo.ca
Grading Assistant:	TBA
Office Hours:	I am available by appointment until 5:00 pm, Monday to Friday. To schedule an appointment, please email me from your UWO email address.
Lectures:	Tuesday 9:30 am-12:30 pm; Location HC-V214
Course Prerequisites:	There are no prerequisites for this course.
Course Antirequisites:	There are no antirequisites for this course.

COURSE DESCRIPTION:

Every day the media reports on a large number of environmental issues, including the loss of insect pollinators, the development of oil pipelines, and the changing climate. This course is intended to give you the scientific background necessary to think critically about these issues. We will use readings from the textbook and from online news articles and additional sources to provide us with a basis of discussion in lectures.

COURSE LEARNING OBJECTIVES:

Upon successful completion of this course the student will be able to:

1. Make connections between humans, their behaviours, and environmental issues and solutions.
2. Recognize that environmental issues are multi-faceted and challenges are global.
3. Develop environmental literacy and critical thinking skills.
4. Learn to navigate various literature sources (TV, newspaper, journals, magazines, etc.) and evaluate environmental issues presented in them through well-formulated questions, information collection, and analysis.
5. Understand the scientific concepts behind environmental issues addressed in media, policy, legislation, and business decisions.
6. Use the skills developed in this class to make informed and well thought-out life choices regarding environmental issues.

CLASS FORMAT:

There will be breaks approximately every hour during the three-hour lecture. Some class time will be used as tutorial time to teach skills, work with the Library and Writing Centre, and to give you time to work on your group projects.

TEXTBOOK AND READINGS:

The textbook for the course is: Environmental Science for a Changing World (Canadian Edition) by Marnie Branfireun. It is available from the UWO Bookstore. Two copies are on reserve at the Huron Library and one copy is on reserve at the Taylor Library on main campus.

We will be using the textbook as well as online news articles throughout the semester to provide us with a starting point for our classroom discussions. Readings will be announced on the OWL course website and in class a week in advance. Students are expected to complete these readings and answer a short quiz on the OWL website before class. More information on these quizzes is given below. It is not necessary to own a copy of the textbook, but I recommend that you take steps to ensure you can keep up with the readings.

ASSESSMENT:

10%	Online quizzes (weekly)
10%	Annotated bibliography for research paper (due February 12)
20%	Final research paper individual component (due April 9)
5%	Group component of research paper (submitted with research paper on April 9)
5%	Participation on research paper (assigned by group members, by final exam)
20%	Midterm (March 5, 2019 9:30am-12:30pm in class)
30%	Final exam (date TBD by Registrar's Office)

ONLINE QUIZZES:

I will assign a short reading most weeks, from the textbook or an online article. On the Tuesday following class, a short quiz consisting of two multiple choice questions will become available on OWL. This quiz will remain open until the beginning of class the following Tuesday. I will announce if there will not be a quiz for the following week.

FINAL GROUP PROJECT:

This is a mixed group/individual project. Most of the work will be done individually, but you will work in a group of three to put together a mini-magazine that discusses a common theme. Each magazine should have the following:

1. A cover page with a picture that highlights your theme, a title, and a list of the articles with the authors;
2. An unsigned 'editorial' written by the group which is one page in length. It should summarize the importance of the issue and explain how each article discusses the issue; and
3. Three articles, with each article written by a single member of the group.

You may choose to include additional elements such as a table of contents page, or page numbers on the cover page, if you think that these would help a reader navigate your magazine. The articles should be tied together by a common theme. For example, you might choose a theme of water quality. Each group member will write a different article related to the common theme of water quality (e.g., microplastics in the Great Lakes). The cover page could show an aerial view of the Great Lakes, and the editorial might bring up statistics that describe the type and amount of pollutants found within the Great Lakes watershed. Groups are encouraged to discuss their ideas with the instructor.

Working well as a group on the final project is worth 10% of your total mark for the course. 5% of that will be marks based on the quality of the cover page and the editorial. The remaining 5% is based on a participation mark assigned to you by your fellow group members.

ANNOTATED BIBLIOGRAPHY:

To ensure that you are on the right track with your final research project, you are expected to submit an Annotated Bibliography by February 12. You will submit this assignment individually, using the Assignments section on OWL. In an annotated bibliography, you are expected to give a short outline of your final paper, and include at least five references, of which a minimum of two should be primary

articles and at least three should be books. With each of your references, you should give at least one piece of information that clearly shows how the article contributes to the point you are trying to make in your final paper.

Be sure to give the names of your two group members and mention the theme that your magazine will discuss. The annotated bibliography will be 1-2 pages long. The annotated bibliography should follow APA style guide.

FINAL RESEARCH PAPER:

The individual component of the group project will be an individually written article in the magazine and should be 6-8 double-spaced pages in length. The article should include a title, the name of the author, and a list of references. You may choose to include additional information such as graphs, tables, maps, or pictures that will not count towards your page allotment, but if you do include these items, make sure that you refer to them in the text and include a caption that makes it clear what each graph, table, map, or picture is showing. These additional elements may improve the readability, information level, or appearance of your article, but they are not required or expected.

REFERENCES:

It is important that you research your topics thoroughly and give credit to the original authors for their ideas. This means citing the author within the text when their idea is used, and again in the reference section at the end of the article. Citing well-established authors has the additional benefit of giving your article's message some additional credibility. References in your assignments should follow the APA style guide.

LATE ASSIGNMENTS:

Assignments are due at the beginning of class (9:30am) on the due date. Assignments submitted after that time will be penalized 10% per day. You are encouraged to submit all assignments online through the OWL website so that they can be inspected with the plagiarism software and so that the exact time and date of submission is recorded.

MIDTERM:

The midterm is scheduled for March 5 at 9:30am in class, and is worth 20% of your final mark. The test will include multiple choice and written questions, and will draw on material up to and including February 12.

FINAL EXAM:

The final exam will be scheduled by the Registrar's office for a date between April 11 and April 30, 2019. The final exam is worth 30% of your final mark. The exam will include multiple choice and written questions, and will draw on the material from the entire course, with an emphasis on material from the mid-term to the end of the course. Some questions may test your ability to integrate information from the first and second halves of the course. Further details will be posted on the OWL course website.

SCHEDULE: (Subject to change)

Date	Lecture topic	Tutorial activity	Assignments due
January 8, 2019	Introduction and philosophy of the environment	Description of group assignment; team building activity	-
January 15, 2019	Politics and environmental issues	Discussion on literature; find a group	Weekly quiz
January 22, 2019	Cultural Change and the Environment – NOTE: This class will take place at the Museum of Ontario Archeology. Travel time and museum tour will take place within the 3 hour lecture block. More information, including bus route from campus, posted in OWL.	Reflection assignment	Museum reflection assignment (in place of weekly quiz)
January 29, 2019	Food & Land I	Project management and productivity; meet with groups	Weekly quiz
February 5, 2019	Food & Land II	Discussion on referencing and plagiarism; meet with groups	Weekly quiz
February 12, 2019	Waste	Meet with groups	Weekly quiz Annotated Bibliography due (10%)
February 19, 2019	READING WEEK – NO CLASS	-	-
February 26, 2019	Midterm Review + video	Structure of media writing; editorial writing; meet with groups	-
March 5, 2019	Midterm	-	Midterm test: In class (20%)
March 12, 2019	Water I	Group work time on final project	Weekly quiz
March 19, 2019	Water II	Group work time on final project	Weekly quiz
March 26, 2019	Air Pollution	Group work time on final project	Weekly quiz
April 2, 2019	Energy & Transportation	Guided peer review of final project	Weekly quiz
April 9, 2019	Climate Change + Exam Review	-	Weekly quiz Final project due (20% individual component, 10% group component)
April exam period	-	Submit participation marks for your fellow group members on OWL by final exam	Final exam (30%)

ASSESSIBILITY:

Please contact the course instructor if you require material in an alternate format or if you require any other arrangements to make this course more accessible to you. You may also wish to contact Services for Students with Disabilities (SSD) at 519-661-2111 x 82147 for any specific questions regarding an accommodation.

SUPPORT SERVICES:

Learning-skills counsellors at the Student Development Centre (<http://www.sdc.uwo.ca>) are ready to help you improve your learning skills. They offer presentations on strategies for improving time management, multiple-choice exam preparation/writing, textbook reading, and more. Individual support is offered throughout the Fall/Winter terms in the drop-in Learning Help Centre, and year-round through individual counselling.

Students who are in emotional/mental distress should refer to Mental Health@Western (http://www.health.uwo.ca/mental_health) for a complete list of options about how to obtain help. Additional student-run support services are offered by the USC (<http://westernusc.ca/>).

The website for Registrarial Services is <http://www.registrar.uwo.ca>.

PLAGIARISM:

Plagiarism is an academic offense and will be treated as such. Students who are in doubt as to the nature of this offence should consult their instructor, Department Chair, or Dean's Office, as well as the Huron University College Statement on Plagiarism, available at the Reference Desk in the Huron University College Library and at www.huronuc.on.ca. In addition, students may seek guidance from a variety of current style manuals available at the Reference Desk in the Huron University College Library. Information about these resources can be found at <https://huronuc.ca/library>

Plagiarism detection software may be used in this course. Students may be required to submit their work in electronic form.

Appendix to Course Outlines

Prerequisite and Antirequisite Information

Students are responsible for ensuring that they have successfully completed all course prerequisites and that they have not completed any course antirequisites. Unless you have either the requisites for this course or written special permission from your Dean to enrol in it without them, you may be removed from this course and it will be deleted from your record. If you enrol in this course despite having already taken an antirequisite you may be removed from this course and it will be deleted from your record. Removals for these reasons may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisites or for having already taken the antirequisites.

Conduct of Students in Classes, Lectures, and Seminars

Membership in the community of Huron University College and the University of Western Ontario implies acceptance by every student of the principle of respect for the rights, responsibilities, dignity and well-being of others and a readiness to support an environment conducive to the intellectual and personal growth of all who study, work and live within it. Upon registration, students assume the responsibilities that such registration entails. The academic and social privileges granted to each student are conditional upon the fulfillment of these responsibilities.

In the classroom, students are expected to behave in a manner that supports the learning environment of others. Students can avoid any unnecessary disruption of the class by arriving in sufficient time to be seated and ready for the start of the class, by remaining silent while the professor is speaking or another student has the floor, and by taking care of personal needs prior to the start of class. If a student is late, or knows that he/she will have to leave class early, be courteous: sit in an aisle seat and enter and leave quietly.

Please see the *Code of Student Conduct* at:

<https://huronuc.on.ca/sites/default/files/pdfs/Code%20of%20Student%20Conduct.pdf>

Technology

It is not appropriate to use technology (such as, but not limited to, laptops, cell phones) in the classroom for non-classroom activities. Such activity is disruptive and is distracting to other students and to the instructor, and can inhibit learning. Students are expected to respect the classroom environment and to refrain from inappropriate use of technology and other electronic devices in class.

Academic Accommodation for Medical/Non-Medical Grounds

Students who require special accommodation for tests and/or other course components must make the appropriate arrangements with the Student Development Centre (SDC). Further details concerning policies and procedures may be found at:

http://www.sdc.uwo.ca/ssd/?requesting_acc

- (a) **Medical Grounds for assignments worth 10% or more of final grade: Go Directly to Academic Advising**

University Senate policy, which can be found at

http://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_medical.pdf,

requires that all student requests for accommodation on medical grounds for assignments worth 10% or more of the final grade be made directly to the academic advising office of the home faculty (for Huron students, the “home faculty” is Huron), with supporting documentation in the form (minimally) of the Senate-approved Student Medical Certificate found at:

http://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform_15JUN.pdf.

The documentation is submitted in confidence and will not be shown to instructors. The advisors will contact the instructor when the medical documentation is received, and will outline the severity and duration of the medical challenge as expressed on the Student Medical Certificate and in any other supporting documentation. The student will be informed that the instructor has been notified of the presence of medical documentation, and will be instructed to work as quickly as possible with the instructor on an agreement for accommodation. The instructor will not normally deny accommodation where appropriate medical documentation is in place and where the duration it describes aligns with the due date(s) of assignment(s). Before denying a request for accommodation on medical grounds, the instructor will consult with the Dean. The instructor’s decision is appealable to the Dean.

**(b) Accommodation on Medical Grounds for assignments worth less than 10% of final grade:
Consult Instructor Directly**

When seeking accommodation on medical grounds for assignments worth less than 10% of the final course grade, the student should contact the instructor directly. The student need only share broad outlines of the medical situation. The instructor **may** require the student to submit documentation to the academic advisors, in which case she or he will advise the student and inform the academic advisors to expect documentation. The instructor may not collect medical documentation. The advisors will contact the instructor when the medical documentation is received, and will outline the severity and duration of the medical challenge as expressed on the Student Medical Certificate and in any other supporting documentation. The student will be informed that the instructor has been notified of the presence of medical documentation, and will be instructed to work as quickly as possible with the instructor on an agreement for accommodation. The instructor will not normally deny accommodation where appropriate medical documentation is in place and where the duration it describes aligns with the due date(s) of assignment(s). Before denying a request for accommodation on medical grounds, the instructor will consult with the Dean. The instructor’s decision is appealable to the Dean.

(c) Non-medical Grounds: Consult Instructor Directly

Where the grounds for seeking accommodation are not medical, the student should contact the instructor directly. Late penalties may apply at the discretion of the instructor. Apart from the exception noted below, academic advisors will not be involved in the process of accommodation for non-medical reasons.

Where a student seeks accommodation on non-medical grounds where confidentiality is a concern, the student should approach an academic advisor with any documentation available. The advisors will contact the instructor after the student’s request is received, and will outline the severity and duration of the challenge without breaching confidence. The student will be informed that the instructor has been notified that significant circumstances are affecting or have affected the student’s ability to complete work, and the student will be instructed to work as quickly as possible with the instructor on an agreement for accommodation. Before denying a request for accommodation where documentation has been submitted

to an academic advisor, the instructor will consult with the Dean. The instructor's decision is appealable to the Dean.

Statement on Academic Offences

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following Web site:

http://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf

Statement on Academic Integrity

The International Centre for Academic Integrity defines academic integrity as "a commitment, even in the face of adversity, to five fundamental values: honesty, trust, fairness, respect, and responsibility. From these values flow principles of behaviour that enable academic communities to translate ideals to action." (CAI Fundamental Values Project, 1999).

A lack of academic integrity is indicated by such behaviours as the following:

- Cheating on tests;
- Fraudulent submissions online;
- Plagiarism in papers submitted (including failure to cite and piecing together unattributed sources);
- Unauthorized resubmission of course work to a different course;
- Helping someone else cheat;
- Unauthorized collaboration;
- Fabrication of results or sources;
- Purchasing work and representing it as one's own.

Academic Integrity: Importance and Impact

Being at university means engaging with a variety of communities in the pursuit and sharing of knowledge and understanding in ways that are clear, respectful, efficient, and productive. University communities have established norms of academic integrity to ensure responsible, honest, and ethical behavior in the academic work of the university, which is best done when sources of ideas are properly and fully acknowledged and when responsibility for ideas is fully and accurately represented.

In the academic sphere, unacknowledged use of another's work or ideas is not only an offence against the community of scholars and an obstacle to academic productivity. It may also be understood as fraud and may constitute an infringement of legal copyright.

A university is a place for fulfilling one's potential and challenging oneself, and this means rising to challenges rather than finding ways around them. The achievements in an individual's university studies can only be fairly evaluated quantitatively through true and honest representation of the actual learning done by the student. Equity in assessment for all students is ensured through fair representation of the efforts by each.

Acting with integrity at university constitutes a good set of practices for maintaining integrity in later life. Offences against academic integrity are therefore taken very seriously as part of the university's work in preparing students to serve, lead, and innovate in the world at large.

A university degree is a significant investment of an individual's, and the public's, time, energies, and resources in the future, and habits of academic integrity protect that investment by preserving the university's reputation and ensuring public confidence in higher education.

Students found guilty of plagiarism will suffer consequences ranging from a grade reduction to failure in the course to expulsion from the university. In addition, a formal letter documenting the offence will be filed in the Dean's Office, and this record of the offence will be retained in the Dean's Office for the duration of the student's academic career at Huron University College.

All required papers may be subject to submission for textual similarity review to the commercial plagiarism detection software under license to the University for the detection of plagiarism. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between The University of Western Ontario and Turnitin.com.

Computer-marked multiple-choice tests and/or exams may be subject to submission for similarity review by software that will check for unusual coincidences in answer patterns that may indicate cheating.

Personal Response Systems ("clickers") may be used in some classes. If clickers are to be used in a class, it is the responsibility of the student to ensure that the device is activated and functional. Students must see their instructor if they have any concerns about whether the clicker is malfunctioning. Students must use only their own clicker. If clicker records are used to compute a portion of the course grade:

- the use of somebody else's clicker in class constitutes a scholastic offence,
- the possession of a clicker belonging to another student will be interpreted as an attempt to commit a scholastic offence.

Policy on Special Needs

Students who require special accommodation for tests and/or other course components must make the appropriate arrangements with the Student Development Centre (SDC). Further details concerning policies and procedures may be found at:

http://www.sdc.uwo.ca/ssd/?requesting_acc

Attendance Regulations for Examinations

A student is entitled to be examined in courses in which registration is maintained, subject to the following limitations:

- 1) A student may be debarred from writing the final examination for failure to maintain satisfactory academic standing throughout the year.
- 2) Any student who, in the opinion of the instructor, is absent too frequently from class or laboratory periods in any course will be reported to the Dean of the Faculty offering the course (after due warning has been given). On the recommendation of the Department concerned, and with the permission of the Dean of that Faculty, the student will be debarred from taking the regular examination in the course. The Dean of the Faculty offering the course will communicate that decision to the Dean of the Faculty of registration.

Class Cancellations

In the event of a cancellation of class, every effort will be made to post that information on the Huron website, <https://huronuc.on.ca/about/accessibility> ("Cancellations and Closures").

Mental Health @ Western

Students who are in emotional/mental distress should refer to Mental Health @ Western <http://www.uwo.ca/uwocom/mentalhealth/> for a complete list of options about how to obtain help.

Academic Advising

For advice on course selections, degree requirements, and for assistance with requests for medical accommodation [see above], students should contact an Academic Advisor in Huron's Student Support Services (huronsss@uwo.ca). An outline of the range of services offered is found on the Huron website at: <https://huronuc.ca/student-life-campus/student-services/academic-advising>

Department Chairs and Program Directors and Coordinators are also able to answer questions about their individual programs. Their contact information can be found on the Huron website at: <https://huronuc.ca/student-life-campus/art-social-science>