

ERS 275: War and the Environment

Course Outline for Spring 2019

Tuesdays, 1:30-4:20, RCH 208

Professor Morgan Tait

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Office: EV1 244B

Office Hours: Tuesdays 12:15- 1:15, or by appointment

This course examines the ecology of war, violence, eco-terrorism, coercion, and other forms of social conflict, both as causes and consequences of environmental change. By examining the social psychology, behavioral economics, and philosophy of conflict, we will deepen our understanding of key issues at the intersection of war and the environment. Environmental security and national security, political-economic ideologies of resource extraction, consumption and depletion of resources, and the politics of climate change as drivers of conflict will all be examined. Along the way, we will also discuss nuclear war and information technology as existential threats to humanity, economic and neo-environmental determinism, eco-fascism and totalitarianism, and eco-terrorism. Rapid societal transformations during times of conflict will also be explored for hopeful insights for transitioning towards sustainability.

This course has 4 learning outcomes. Instruction, course material and grading will develop in the students:

1. The ability to critically and analytically assess the nature and causes of environmental and socio-ecological conflict, including violent conflict, and the discourse surrounding it;
2. The capacity to understand and apply standard theoretical tools from the domains of political theory, economics, ecology, systems theory, development theory, and environmental philosophy to the problem of environmental conflict;
3. Knowledge of the reasons and causes of ethical, political, and cultural conflict with respect to environmental issues;
4. Fluency in the interconnections between existential risk assessment, collective action and coordination problems, ideology and conflict studies, environmental governance, and just-war theory.

Students will be evaluated as follows:

1. 20% for two 1-page (double-spaced) expository assignments based on assigned readings: due on Learn by 11:59 PM Friday May 31st and Friday June 21st;
2. 5% for a one-paragraph essay topic proposal (due on Learn June 12th);
3. 30% for a 1500-1750-word (5-6 pages double-spaced) essay based on your topic proposal (due on Learn July 19th);

4. 15% for attendance and participation, including participation in online polls and exit slips (see note below)
5. 5% for a group video presentation proposal, due June 30th;
6. 25% for a group video presentation, to be presented in class on July 30th (see below for further details)

**Note there will be a penalty of 5%/day for late submissions*. Students will be allowed to use two 'grace days' for assignment deliverables in the course without any accommodation. Please inform the instructor if you plan to use a grace day for a late submission.*

Theme and Tentative Topic Schedule:

Note that all course readings will be made available on Learn. The instructor reserves the right to revise the schedule of readings.

Week 1: Introduction: Environmental Conflict, Ideological Conflict

War as an environmental concern and the environment as a driver and product of social conflict; The complex relationship between social conflict and environmental degradation; Classic arguments about ethics and morality, and how to apply them.

- Tuesday, May 7th: The logic of environmental conflict: complexity, synchronous failure, and system shock; brief introduction to ethical theories and applied environmental ethics

Assigned Readings: Thomas Homer-Dixon, "Exploring the Climate Mindscape"; Excerpts from Steven Pinker, *Enlightenment Now*; UNEP 2009. *From Conflict to Peacebuilding: The Role of Natural Resources and The Environment*.

- Tuesday, May 14th: Brief introduction to ethical theories and applied environmental ethics; Liberal rationality: social contract theory; Presaging eco-fascism?

Assigned Readings: Byron Williston, "Four Normative Theories"; Excerpts from Aldo Leopold, *The Sand County Almanac*.

Weeks 3 and 4: When is War Justified? What is a War Crime? Civil Disobedience and Ecoterrorism

- Tuesday, May 21st: Is it possible to justify violent interventions under any circumstances? How do we assess the moral status of acts of violence?

Assigned Readings: G.E.M. Anscombe: "Mr. Truman's Degree"; Thomas Nagel: "War and Massacre"; Lawrence et al., "The effects of modern war and military activities on biodiversity and the environment"

- Tuesday, May 28th: Ecoterrorism or justified resistance? Pipeline conflict in Canada; Environmental Scarcities and Conflict,

Assigned Readings: Smith, R. "Ecoterrorism: A Critical Analysis of the Vilification of Radical Environmentalists as Terrorists"; *Troops will be needed to get Trans Mountain built, says former Alberta energy minister*. CBC News. April 16, 2018; Crosby and Monaghan, *RCMP files say "violent aboriginal extremists" are undermining pipeline plans*. Vice News; Thomas Homer Dixon: "Tectonic Stresses"

Weeks 5 and 6: Theoretical Foundations: Economic Rationality and its Discontents, Collective Action Problems and the Social Contract; Ecological Economics

Examining the theoretical assumptions of economic, neoliberal and international governance frameworks: why do we make the choices we do, individually and collectively? Is economics the right tool for understanding, influencing, or changing collective human behavior?

- Tuesday, June 4th: Incentive structures and their discontents: The prisoner's dilemma and the tragedy of the commons; economic rationality

Assigned Readings: Garret Hardin: "The Tragedy of the Commons"; Stephen Gardiner: "A Perfect Moral Storm: Climate Change, Intergenerational Ethics and the Problem of Corruption"; Robinson Meyer: "Does Climate Change Cause More War?"

- Tuesday, June 11th: Ecological economics vs. neoclassical economics, and the neoliberal paradigm of development

Assigned Readings: Herman Daly: "Steady State Economics: A New Paradigm"; Julian Simon: "Can the Supply of Natural Resources be treated as Infinite? Yes!" Thomas Homer-Dixon, "No Equilibrium: The Dirty Little Secret of Development Economics"

Weeks 7, 8 and 9: The Vulnerable World Hypothesis and the Future of Humanity: Existential Threats and 'Turn-key Totalitarianism'

Examining the existential threat to humanity from violent actors: technology, environmental degradation, resource scarcity, and artificial intelligence

- Tuesday, June 18th: Malthus, Malthusian arguments, and living on a lifeboat; The techno-optimist response; Is scarcity just a distribution problem?

Assigned readings: Garret Hardin: "Living on a Lifeboat"; Thomas Homer-Dixon: "No Equilibrium" in *The Upside of Down*; Excerpts from Steven Pinker, *Enlightenment Now*; Excerpts from Nick Bostrom: *Superintelligence: Paths, Dangers, Strategies*

- Tuesday, June 25th: The Urn of Possible Inventions: the precarious relationship of humanity to technology and the environment; research havens and information hazards

Assigned Reading: Nick Bostrom: "The Vulnerable World Hypothesis"; John Gowdy: "The Evolution of Hyperbolic Discounting"

- Tuesday, July 9th: Virtual futures, distributed intelligence, and AI: threats and opportunities; Can we justify curbing our freedoms for the greater good of humanity? Who decides?

Assigned readings/listening: Podcast: *The Trouble with Facebook*; Excerpts from Shoshana Zuboff: *The Age of Surveillance Capitalism*; Nick Bostrom: "The Vulnerable World Hypothesis" (continued)

Week 10: Ideology and Conflict: Pluralism and Engagement of Difference

- Tuesday, July 16th: The role of ideology in understanding conflict resolution and management; Ideological state spaces and the limits of liberal conflict theory

Assigned Readings: Steve Mock and Thomas Homer-Dixon: "The Ideological Conflict Project: Theoretical and Methodological Foundations"; Isaiah Berlin: "Value Pluralism"

Week 11: Eco-fascism, Eco-catastrophism, and the Anthropocene Reconsidering Environmental Conflict

Is civil democracy compatible with environmental sustainability? Can we justify large-scale technocratic political interventions for environmental ends? Do environmental ends justify violent means?

- Tuesday, July 23rd: To what extent can we justify non-democratic or violent interventions on environmental grounds? Is civil or violent disobedience a necessary part of environmental transformation? Eco-catastrophism, and the prospects for transitioning toward a more sustainable future

Assigned readings: Excerpts from William Ophuls, *Plato's Revenge*; Excerpts from Christophe Bonneuil and Jean-Baptiste Fressoz, *The Shock of the Anthropocene*; Thomas Homer-Dixon: "Tectonic Stresses" in *The Upside of Down*

Week 12: In-class Presentation and Discussion of Group Videos

- Tuesday, July 30th: Presentation of group projects; peer evaluation and discussion of video presentations

Additional Notes Regarding Evaluation:

Group Presentation: The purpose of the video presentation is to either: i) examine a particular geographical case study involving an environmental conflict of concern, and explain the origins, causes, and potential solutions to the conflict, or ii) to perform an analysis of a theoretical problem or thought experiment derived from one of the topics discussed in the course, explaining its relation to or importance for thinking about environmental conflict. Students will submit proposals for instructor approval before proceeding to film the videos.

Students will be assigned to groups of 5 students each. Each group will be tasked with developing a 5-minute video presentation to be uploaded to an assigned google drive folder. All members of the group are expected to participate in each phase of the video project, from proposal through production, and to attend and evaluate the video presentations on July 30th.

Video projects will be evaluated by the instructor (75% of video grade) as well as by peers (25% of video grade).

Class Attendance and Participation: Students are expected to attend classes and participate in class discussion. A course email address will be introduced during the first week of class. Students will be expected to respond to i-clicker-style survey questions in class in real time, by sending them to the course address. Emails will be time-stamped to confirm attendance. There will also be periodic *exit slips* throughout the course: students will be asked to reflect on some aspect of course content during class time, and submit their responses to the gmail account for full credit (full marks for submission). Each student will receive two 'grace days' for absence throughout the term, in addition to legitimate accommodation for absence to be adjudicated on a case-by-case basis. The attendance grade will be calculated by taking the total number of possible responses, divided by actual responses.

Intellectual Property: For further information on IP related to teaching, please see https://uwaterloo.ca/legal-and-immigration-services/sites/ca.legal-and-immigration-services/files/uploads/files/volume_1_issue_3_winter_2018.pdf and the Guidelines for Faculty, Staff and Students Entering Relationships with External Organizations Offering Access to Course Materials, <https://uwaterloo.ca/secretariat/faculty-staff-and-students-entering-relationships-external>. The following text is recommended:

Students should be aware that this course contains the intellectual property of their instructor, TA, and/or the University of Waterloo. Intellectual property includes items such as:

- Lecture content, spoken and written (and any audio/video recording thereof);
- Lecture handouts, presentations, and other materials prepared for the course (e.g., PowerPoint slides);
- Questions or solution sets from various types of assessments (e.g., assignments, quizzes, tests, final exams); and
- Work protected by copyright (e.g., any work authored by the instructor or TA or used by the instructor or TA with permission of the copyright owner).

Course materials and the intellectual property contained therein, are used to enhance a student's educational experience. However, sharing this intellectual property without the intellectual property owner's permission is a violation of intellectual property rights. For this reason, it is necessary to ask the instructor, TA and/or the University of Waterloo for permission before uploading and sharing the intellectual property of others online (e.g., to an online repository).

Permission from an instructor, TA or the University is also necessary before sharing the intellectual property of others from completed courses with students taking the same/similar courses in subsequent terms/years. In many cases, instructors might be happy to allow distribution of certain materials. However, doing so without expressed permission is considered a violation of intellectual property rights.

Please alert the instructor if you become aware of intellectual property belonging to others (past or present) circulating, either through the student body or online. The intellectual property rights owner deserves to know (and may have already given their consent).

Mental Health: The University of Waterloo, the Faculty of Environment and our Departments/Schools consider students' well-being to be extremely important. We recognize that throughout the term students may face health challenges - physical and / or emotional. **Please note that help is available.** Mental health is a serious issue for everyone and can affect your ability to do your best work. Counselling Services <http://www.uwaterloo.ca/counselling-services> is an inclusive, non-judgmental, and confidential space for anyone to seek support. They offer confidential counselling for a variety of areas including anxiety, stress management, depression, grief, substance use, sexuality, relationship issues, and much more.

Religious Observances:

Students need to inform the instructor at the beginning of term if special accommodation needs to be made for religious observances that are not otherwise accounted for in the scheduling of classes and assignments.

Unclaimed assignments:

Unclaimed assignments will be retained for ... [period of time*; or: "until one month after term grades become official in quest"]. After that time, they will be destroyed in compliance with UW's [confidential shredding procedures](#).

Communications with Instructor and Teaching Assistants:

All communication with students must be through either the student's University of Waterloo email account or via Learn. If a student emails the instructor or TA from a personal account they will be requested to resend the email using their personal University of Waterloo email account.

Academic Integrity:

In order to maintain a culture of academic integrity, members of the University of Waterloo community are expected to promote honesty, trust, fairness, respect and responsibility. www.uwaterloo.ca/academicintegrity/

◆ _Students who are unsure what constitutes an academic offence are requested to visit the on-line tutorial at <http://www.lib.uwaterloo.ca/ait/>

Research Ethics: Please also note that the 'University of Waterloo requires all research conducted by its students, staff, and faculty which involves humans as participants to undergo prior ethics review and clearance through the Director, Office of Human Research and Animal Care (Office). The ethics review and clearance processes are intended to ensure that projects comply with the Office's Guidelines for Research with Human Participants (Guidelines) as well as those of provincial and federal agencies, and that the safety, rights and welfare of participants are adequately protected. The Guidelines inform researchers about ethical issues and procedures which are of concern when conducting research with humans (e.g. confidentiality, risks and benefits, informed consent process, etc.). If the development of your research proposal consists of research that involves humans as participants, the please contact the course instructor for guidance and see <http://iris.uwaterloo.ca/ethics/>

Note for students with disabilities: The AccessAbility Office located in Needles Hall, Room 1132, collaborates with all academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require academic accommodations to lessen the impact of your disability, please register with the AccessAbility Office at the beginning of each academic term.

Grievance: A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. Read Policy 70 - Student Petitions and Grievances, Section 4, www.adm.uwaterloo.ca/infosec/Policies/policy70.htm. When in doubt please contact your Undergraduate Advisor for details.

Discipline A student is expected to know what constitutes academic integrity, to avoid committing academic offence, and to take responsibility for his/her actions. A student who is unsure whether an action constitutes an offense, or who needs help in learning

how to avoid offenses (e.g., plagiarism, cheating) or about “rules” for group work/collaboration should seek guidance from the course professor, academic advisor, or the Undergraduate Associate Dean. For information on categories of offences and types of penalties, students should refer to Policy 71, Student Discipline,

www.adm.uwaterloo.ca/infosec/Policies/policy71.htm. For typical penalties, check Guidelines for Assessment of Penalties, www.adm.uwaterloo.ca/infosec/guidelines/penaltyguidelines.htm

◆ Appeals: A decision made or penalty imposed under Policy 70 - Student Petitions and Grievances (other than a petition) or Policy 71 – (Student Discipline) may be appealed if there is a ground. A student who believes he/she has a ground for an appeal should refer to Policy 72 (Student Appeals) www.adm.uwaterloo.ca/infosec/Policies/policy72.htm

◆ LEARN: Users can login to LEARN via:

<http://learn.uwaterloo.ca/>

use your WatIAM/Quest username and password

Documentation is available at:

http://av.uwaterloo.ca/uwace/training_documentation/index.html