WAR and the Environment
ERS275 (S2020)

Dr. James Nugent
Class format: Online (Live-recorded)
Email: james.nugent@uwaterloo.ca [please put "ERS275" into subject line]
Office Hours: By appointment

Course Description

This course examines environmental security and the political ecology of violence. War, colonialism and other forms of social conflict are discussed as both drivers and consequences of environmental change including the extraction, consumption and depletion of resources, and climate change. Topics may include: nuclear war and emerging technologies as existential threats to humanity; the industrial ecology of militaries; (neo)environmental determinism; eco-fascism and totalitarianism; and eco-terrorism. Hopeful insights for transitioning towards sustainability are drawn from rapid societal mobilization and transformation during wartimes and the role of the environment and environmentalism in peace-building.

Learning Objectives & Outcomes

This course has two primary objectives:

- To develop an analysis of war and violence as a central socio-ecological process (i.e., violence and socio-ecological change as a dialectical relationship).
- To apprentice our social, emotional and analytical skills as learners and civic participants both inside and outside the classroom (e.g., as critically informed discussants, inquisitive and generous listeners, and civically-engaged inhabitants who are reflexive of the power relations inherent in any communicative space).

By the end of this course students will be able to:

- List the socio-ecological impacts of militaries and violent conflict;
- Describe how militaries use and transform the environment strategically and how environmental politics and environmental change shape militaries and military strategy;
- Describe the socio-ecological relationship between technological innovation, war and capital accumulation (i.e., colonialism, imperialism, etc.);
- Evaluate critiques of colonialism and capitalism as inherently violent socio-ecological processes;
- Compare and critique three dominant theoretical paradigms for understanding the relationship between environmental change and violent conflict (i.e., neo-Malthusian scarcity hypotheses, neoclassical abundance or "resource curse" hypotheses, and political-ecological distributional and contextual hypotheses);
- Critically analyze war and violence as metaphors for socio-ecological processes (e.g., responses to pandemics, climate change, etc.) and for states of nature and human nature;
- Appraise past rapid societal transformations during wartime to inspire policies for addressing today's pressing socio-ecological crises;
- Facilitate small group meetings and discussions and strengthen a sense of collective responsibility;
- Author a webpage entry
- Conduct and effectively communicate research on conflict/peace-bauilding and socio-ecological processes.

	Weight	Due
Academic Integrity Quiz (Score of 100% required)	N/A	May 25th
Weekly Class Preparation Notes (15 submission x 2%) Includes: Reading Log Pre-Reading Notes Post-Reading Summary	30%	*up to 8x by June 15th *up to 7x more by August 4th *Each submitted weekly night before class
Perusall In-text Critical Reading Discussion Contributions (15 readings x 2%)	30%	*up to 8x by June 15th *up to 7x more by August 4th *Completed by assigned date each week
Lecture Notes & Discussion* (10 weeks x 1%) *Live chat or through LEARN Discussion Board	10%	3 days after lecture is posted
Environmental Security 1pg Comparative Summary	10%	June 22nd
Course Website Contributions	15%	Aug. 3rd
Final Oral Exam	5%	Final exam period
Bonus	Up to 5%	Throughout

Week	Topic	Readings (Located in Perusall)
1.	Overview COVID19 & War	Syllabus Scan News Articles in LEARN Announcements *Optional:* Larson, Brendon. 2005. The war of the roses: demilitarizing invasion biology. Frontiers in Ecology and the Environment. https://doi.org/10.1890/1540-9295(2005)003[0495:TWOTRD]2.0.CO;2
2.	Environmental Consequences of Warfare	Smith, Gar. 2017. Stones to Drones: A History of War on Earth. https://worldbeyondwar.org/stones-drones-short-history-war-earth/ Lawrence, M. et al. 2015. The effects of modern war and military activities on biodiversity and the environment. Environ. Rev. 23: 443–460 (2015) dx.doi.org/10.1139/er-2015-0039
3.	The Industrial Ecology and Geography of Warfare	Sanders, Barry. 2009. Fueling the engines of Empire. (10pgs) Evenden, M. 2011. Aluminum, Commodity Chains, and the Environmental History of the Second World War. *Environmental History*. 16(1) pp.69-93.
4.	Is War Natural? Biological & Environmental Determinism	Shiva, Vandana. [2016.] Patriarchy and War: Treating Nature Like Dirt. In Smith, Gar. 2017. "The War and Environment Reader." Apple Books. (10pgs) *Mead, Margaret. [1940.] War is not biological. In "The War and Environment Reader." (9pgs) *Coxe, Sally. [2016.] Lessons from the Bonobos. In "The War and Environment Reader." (5pgs) *Together comprise one reading for grading purposes. Can combine and submit one set of notes.
5.	"Resource Wars" & Environmental Security	UNEP. 2009. From Conflict to Peacebuilding: The Role of Natural Resources and the Environment. pp. 5-17 only. Kaplan, Rob. 1994. The Coming Anarchy: How scarcity, crime, overpopulation, tribalism, and disease are rapidly destroying the social fabric of our planet. The Atlantic. February. https://www.theatlantic.com/magazine/archive/1994/02/the-coming-anarchy/304670/ Dixon. Thomas Homer. 1994. Environmental Scarcities and Violent Conflict: Evidence from Cases Author. 19 (1). 5-40 .

6.	The Political Ecology of Violence	Peluso, N. & Watts, M. 2001. Violent Environments. Ithaca, NY : Cornell University Press. Chapter 1.
		Watts, M. 2003. Economies of Violence. More Oil, More Blood. Politics and Economic Weekly, 38(48): 5089-5099.
		Le Billon, Philippe. 2001. The political ecology of war: natural resources and armed conflicts. Political Geography. 20(5)561-584.

7.	Ecological Imperialism & Colonialism as a Socio-Ecological Process Film: Invasion (2019, 18mins)	Foster, J.B., and Clark, B. 2004. Ecological Imperialism: The Curse of Capitalism. Socialist Register. Volume 40. http://www.socialistregister.com/index.php/srv/article/view/5817/2713
		Defenders of the Earth. 2017. Global killings of land and environmental defenders in 2016. https://www.globalwitness.org/en/campaigns/environmental-activists/defenders-earth/
		Hyslop, Katie. 2020. Wet'suwet'en Crisis: Whose Rule of Law? The Tyee. https://thetyee.ca/News/2020/02/14/Wetsuweten-Crisis-Whose-Rule-Law/

8.	Slow Violence and the Environmentalism of the Poor	Nixon, R. 2011. Slow Violence and the Environmentalism of the Poor. Cambridge, MA: Harvard University Press.
9.	Nuclear War, Star Wars & the Existential Threat	Masco, J. 2012. The Ends of Ends. Anthropological Quarterly. 85(4) 1107-1124. https://muse.jhu.edu/article/488893/pdf
		Bertell, Rosalie. 2000. Planet Earth: The Latest Weapon of War. Montreal: Black Rose Books
10.	Eco-Terrorism Film: If a Tree Falls – A Story of the Earth Liberation Front (2011)	Vanderheiden, S. 2005. Eco-terrorism or Justified Resistance? Radical Environmentalism and the "War on Terror." Politics & Society. 33(3) 425-447. DOI: 10.1177/0032329205278462
		(No Author). 2018. Troops will be needed to get Trans Mountain built, says former Alberta energy minister. CBC News. April 16. http://www.cbc.ca/news/canada/edmonton/former-alberta-energy-minister-says-call-in-the-troops-trans-mountain-1.4621835
		Crosby, A. and Monaghan, J. RCMP files say "violent aboriginal extremists" are undermining pipeline plans. Vice News.

		https://news.vice.com/amp/en_ca/article/mbxyw8/rcmp-files-say-violent-aboriginal-extremists-are-undermining-pipeline-plans?__twitter_impression=true
11.	Hopeful lessons from Wartime Transitions	*Delina, L. and Diesendorf, M. 2013. Is wartime mobilisation a suitable policy model for rapid national climate mitigation? *Energy Policy* 58: 371–380. *Kester, J. and Sovacool, B. 2017. Torn between war and peace: Critiquing the use of war to mobilize peaceful climate action. *Energy Policy*.104: 50–55. *Delina, L. and Diesendorf, M. 2018. Correspondence Critiquing the use of war to mobilise peaceful climate action: A response to Kester & Sovacool. *Energy Policy*. 112: 1–3. *Together comprise one reading for grading purposes. Can combine and submit one set of notes.
Website Contributions **Due July 26th**		
12.	Hopeful lessons from Environmental Peace-building	Ogden, Lesley. 2018. Environmental Peacebuilding. BioScience. 68(3)March:157–163. https://doi.org/10.1093/biosci/bix159 Dresse, A., Fischhendler, I., Nielsen, J. Ø., & Zikos, D. 2019. Environmental peacebuilding: Towards a theoretical framework. Cooperation and Conflict. 54(1): 99–119. https://doi.org/10.1177/0010836718808331
Final Oral Exam **Due: Exam Period**		

Academic Integrity Quiz

This is a short quiz on LEARN that tests your understanding of Academic Integrity. You must score 100% before you will be able to submit anything else for this course. Students who do not score 100% on the first two attempts will be required to complete a brief on-line tutorial on Academic Integrity before attempting the quiz again. Students who continue to have troubles scoring 100% on this quiz will be asked to meet with the instructor to go over each question.

Weekly Class Preparation Notes

Most of your grades in this course will come from engaging deeply with the readings. To help you with this process, each week you will complete weekly class preparation notes based on the readings. You can find the template on LEARN>Content>Class Preparation Notes. Complete fifteen of these (one per reading of your choice). Finding a space and frame of mind to conduct reading and deep thinking is always tough, but will be exceptionally difficult under the current pandemic conditions. Because we have to work from home rather than the library there are many more distractions and anxiety on top of time-consuming daily tasks. So the first task will be to schedule a reading time for yourself and then reflect on how this is working for you (this is the "Reading Log" portion of the Weekly Notes). Then you will do an initial scan of the readings for the upcoming week and ask yourself some questions (this is the "Pre-Reading Notes"). During the reading you will write comments and questions directly on the shared document in Perusall (see below). And finally, you will briefly summarize what the article was about and think of one insightful question to bring to class ("Post-Reading Summary").

Class preparation notes must be submitted by midnight the day before lecture begins. Late submissions will not be graded.

Perusall Critical Reading Discussion Contributions

You will be put into readings groups of around 8-9 students through the application Perusall (you must click on link in LEARN to register). The readings for each week will be uploaded to Perusall. Your group will be paired with another group. One group will begin by making comments and questions about the reading, and then at the end of the week the other group will have a chance to respond. Then these groups will switch roles the following week. You are required to annotate the readings and contribute to the discussion in a thoughtful and critical manner. Your Perusall reading discussion grade will be based on the quality of your responses as well as achieving the minimum number of posts required (usually five per reading).

Lecture Notes & Discussion

Within three days of the lecture recording being posted, you will need to subject your lecture notes (at least 1 page formatted in any style you choose). If you are unable to attend the live version of the lecture then you are also required to make at least one quality contribution to the lecture discussion (which will be either on the LEARN discussion board or the Perusall discussion board).

Bonus

Bonus grades may be given throughout the course based on exceptional contributions to the various discussions taking place or due to exceptional work on an assignment.

Email Policy

Try to post questions to LEARN Discussion Board. If you have a more personal matter, please put « ERS275 » into the subject line and use your UW email address whenever communicating with the Instructor or TAs. I usually try to respond to emails in one or two business days, but please allow more time during busy periods. Please do not expect a response over the weekend.

Required Texts & Readings

This class will be run as a mix of lectures and seminar-style discussion. So doing weekly readings is critical for everyone to get the most out of this course.

Classroom Expectations

Your active participation in class every week is expected. You will receive 10% of your grade from submitting lecture notes (0.5-1pg, any format) and participation in discussion (either live or through LEARN Discussion Board if you are following along recorded lectures). Active participation means both listening as well as contributing to the class discussion. Your participation mark is **not** based on how many times you speak, but rather the quality of your contribution (e.g., raising one insightful question can help the discussion tremendously). Active participation means being conscious of the space you are taking up in the classroom and making efforts to include everyone in the discussion. Grades for discussion can not be earned retroactively; they are earned each week.

LEARN & Email

We will be using Waterloo LEARN for this course. You are required to upload your assignments to LEARN dropbox and Turnitin.com (see below). Please make sure you regularly check your email and LEARN for announcements, deadlines, and discussion boards throughout the semester and especially the night before class. Please only communicate with the Lecturer using your assigned University of Waterloo institutional email and check this email account regularly for announcements.

Late Assignment Policy & Accommodations

Only the Environmental Security 1pg Comparative Summary and the Course Website Contributions will be accepted late. The first day late will incur a 5% penalty off the final grade for that assignment, e.g., a 70% would become a 65%. The second and subsequent days will incur an additional 10% each day.

Circumstances always arise which cause some people to legitimately miss deadlines. Please speak to me if you think your case qualifies consideration. Failure to provide a timely request may decrease the likelihood of providing an accommodation.

Please see the University's full accommodation policy at:
https://ugradcalendar.uwaterloo.ca/page/Regulations-Accommodations

The University acknowledges that, due to the pluralistic nature of the University community, some students may seek accommodations on religious grounds. Accordingly, students must consult with their instructor(s) within one week of the announcement of the due date for which accommodation is being sought. Elective arrangements (such as travel plans) are not generally considered acceptable grounds for granting an accommodation.

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. The University's guiding principles on academic integrity can be found here: http://uwaterloo.ca/academicintegrity. ENV students are strongly encouraged to review the material provided by the university's Academic Integrity office specifically for students: http://uwaterloo.ca/academicintegrity/Students/index.html

Students are also expected to know what constitutes academic integrity, to avoid committing academic offenses, and to take responsibility for their actions. Students who are unsure whether an action constitutes an offense, or who need 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. Students may also complete the following tutorial: https://uwaterloo.ca/library/get-assignment-and-research-help/academic-integrity/academic-integrity-tutorial

When misconduct has been found to have occurred, disciplinary penalties will be imposed under Policy 71 – Student Discipline. For information on categories of offenses and types of penalties, students should refer to Policy 71 - Student Discipline: https://uwaterloo.ca/secretariat-general-counsel/policies-procedures-guidelines/policy-71. Students who believe that they have been wrongfully or unjustly penalized have the right to grieve; refer to Policy #70, Student Grievance: https://uwaterloo.ca/secretariat-general-counsel/policies-procedures-guidelines/policy-70

Please note that I reserve the right to ask you to speak with me in person about any assignment you have submitted for marks. This may include a request to show me drafts or previously saved versions of your assignment and for you to walk me through the logic, arguments, and sources of your assignment.

NOTE: Cutting and pasting some or *even part of* a sentence directly from a source and using it in your assignment is plagiarism unless you have put the phrase *or part of the phrase* you used in quotations with a proper citation. Cutting and pasting sentences or parts of sentences into your assignment without using quotations and a citation could result in you receiving a zero or being put on probation (or possibly expulsion for repeat offences).

Turnitin.com

Text matching software (Turnitin®) may be used to screen assignments in this course. Turnitin® is used to verify that all materials and sources in assignments are documented. Students' submissions are stored on a U.S. server, and are subject to the USA PATRIOT ACT, 2001; therefore, students must be given an alternative (e.g., scaffolded assignment or annotated bibliography) if they are concerned about their privacy and/or security. Students will be given due notice, in the first week of the term and/or at the time assignment details are provided, about arrangements and alternatives for the use of Turnitin® in this course.

See: https://uwaterloo.ca/academic-integrity/guidelines-instructors for more information.

Citation Format

Properly referencing your sources helps you avoid plagiarism and builds the credibility of your argument by pointing to supporting evidence. In general, please use either APA (American Psychological Association) style or the Chicago style for referencing your sources, unless otherwise instructor. For more information on these styles, please consult: http://ereference.uwaterloo.ca/display.cfm?categoryID=15&catHeading=Citation%20/%20Style%20Guides.

Intellectual Property

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).

AccessAbility

AccessAbility Services located in Needles Hall, Room 1401, provides academic support for University of Waterloo students who have both permanent and temporary disabilities. AccessAbility Services 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 AccessAbility Services at the beginning of each academic term (https://uwaterloo.ca/accessability-services/about).

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.

Grievances

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. See 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.

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

Recording lectures

Posting of lecture videos or links to the video to any website, including but not limited to social media sites such as: facebook, twitter, etc., is strictly prohibited. Permission from the instructor is required for any kind of audio-visual recording of the lecture or other meetings. Violation of this is an offence under Policy 71.

Co-op interviews and class attendance

Co-op students are encouraged to try and choose interview time slots that result in the least amount of disruption to class schedules. When this is challenging, or not possible, a student may miss a portion of a class meeting for an interview. Instructors are asked for leniency in these situations; but, a co-op interview does not relieve the student of any requirements associated with that class meeting.

When a co-op interview conflicts with an in-class evaluation mechanism (e.g., test, quiz, presentation, critique), class attendance takes precedence and the onus is on the student to reschedule the interview. CECA provides an interview conflict procedure to manage these situations.
Students will be required to provide copies of their interview schedules (they may be printed from WaterlooWorks) should there be a need to verify class absence due to co-op interviews.

Prerequisites

None.

Last Updated: May 14th, 2020