

**CRITICAL THINKING ON THE ENVIRONMENT 2020**  
**ENVR 4110**  
**(Jan 7, 2020)**

**COURSE CONTENT, GOAL, AND OBJECTIVES**

“Critical Thinking” is a critical capstone course offered by the Environmental Science and Studies Programme. In previous years, we combined an emphasis on local, experience-based knowledge and alternative strategies. Now I also give greater emphasis on globalization and some of the recent grassroots responses, as well as introduce some new topics, in particular environmental education. However, we will continue to recognize that many of the most promising strategies lie at the margins of science; indeed, some are explicitly anti-science.

This course is interdisciplinary in approach and, following my biases, will emphasise the importance of local, community-based viewpoints and hands-on, experiential learning. However, there will be much flexibility for you to tailor the course to conform to your own needs and interests. The emphasis is on in-class work, and only 20% of the mark is exam-based. My teaching philosophy is that learning should be a participatory and creative process, rather than fact and memory-centred, and that students should take responsibility for what they create. Much of the course work will involve discussion and collaborative assignments. As many of these subject areas are value-laden and controversial, please respect the right of class members to voice opinions that may conflict with your own.

The goal of the course is to critically evaluate the real-world strategies that are being generated to mitigate the destruction of the environment, these ranging from local to global efforts.

The learning objectives of the course are for you to:

- i) encounter and critically evaluate many current real-world environmental issues;
- ii) examine factors that underlie and contribute to these issues;
- iii) continue to evaluate the assumptions underlying much of the ostensibly objective, value-free, expert-based responses to these issues; and
- iv) become familiar with and evaluate collective and individualist approaches to environmental education as well as social and environmental change.

**GENERAL INFORMATION**

**Instructor:** Stéphane McLachlan

**Office:** 302b Wallace

**Phone:** (w) 474-9316, (h) 284-6939

**E-mail:** steph.mclachlan@umanitoba.ca

**Office Hours:** open-door (email is generally the quickest)

**TAs**

Rebecca Kingdon

< kingdonr@myumanitoba.ca >

303 Wallace, 474-7949; meetings by arrangement

Sandra Wiebe < sandrawiebe1468@gmail.com >

303 Wallace, 474-7949; meetings by arrangement

**Lectures:** Tues & Thurs, 11:30 - 12:45 p.m. (221 Wallace)

**Labs:** Thurs 2:30-5:30 p.m. (221 Wallace)

**Assigned Readings**

■ posted electronically on UM Learn

■ please read them before class as they will provide background for the lectures/discussion

**Textbook:** (none)

**Class Notes**

- any class notes will be made available before each class
- briefing notes will be made available within your groups in class

### Other

- late submissions will be penalised 5% per day (unless arrangements are made with the TAs)
- students should be familiar with the University's policy on academic dishonesty including plagiarism, cheating, and exam impersonation (see General Calendar)
- marking scheme is: A+ ( $\geq 90$ ), A (80-89), B+ (75-79), B (70-74), C+ (65-69), C (60-64), D (50-59), F (0-49)

### STRUCTURE OF COURSE

- lecture
- small group work
  - briefs
  - in-class reading assignments
- discussion
  - films and videos
  - briefs and reflections
- tutorials: focus on assignments
  - occasional guest speakers
  - term assignments

### MARK ALLOCATION

- E-biosheets (Pass/Fail: participation mark)
  - picture, contact info, academic background
  - expectations of course, instructor and TA, what you hope to do in 10 years
    - **due by email: Jan 14**
- Term assignment: (30%).
  - Service learning with an ENGO or other non-profit organization Winnipeg
    - Topics: **Feb 6**
    - Proposal (two-page) **Feb 13** (5%)
    - Written summary (five-page) of activity and learning moments: Due **April 8 (email to appropriate TA)** (25%)
- Brief (individual) (2\*5=10%)
  - Note. present your completed briefs to your group in-person (plus one copy to instructor at beginning of that class)
  - Any exceptions, saving those that have been arranged with instructor ahead of time or accompanied by a physician's note, will receive a zero
- Critical reflections (individual) (2\*15=30%)
  - Summary, critical insight, personal reflection
  - Max four pages (double-spaced); do two of four possible CRs
  - Due dates: CR1: Feb 6; CR2: Feb 25; CR3: Apr 1; CR4: Apr 8
- Participation (10%)
  - Instructor evaluation
  - Self evaluation (**voluntary, submitted along with exam**)
- Final Exam (20%)
  - Take home
    - Hand out: **April 8**
    - Email return: **April 25**

## DETAILED COURSE OUTLINE

DATE	TOPIC	READINGS
<b>ENVIRONMENTAL EDUCATION</b>		
<b>Critical Reflection 1: Due Feb 6</b>		
Jan 7	Intro: collaborative curriculum design	
Jan 9	Education, critical pedagogy and the “modern” university	Bellino and Adams, 2017
Jan 14	Environmental education: Conventions and alternatives	Schild, 2016. <b>E-biosheets due</b>
Jan 16	Student experiences in environmental education;	
Jan 21	Critical thinking and the environment <i>In-class env readings (pro and con)</i>	Hofreiter et al. 2007
Jan 23	Community service learning and social change	Dharamsi et al. 2010
<b>GLOBALIZATION: PROMISE OR THREAT?</b>		
<b>Critical Reflection 2: Due Feb 25</b>		
Jan 28	Environmental careers – trends and hopes <b>Brief1</b>	Knowles, 2012; Eco Canada 2012
Jan 30	Trump, Ford and the rise of the right: implications for the environment <i>In-class readings</i>	
<b>Jan 30 - T</b>	Meet with TAs: hand out and review term assignment	
Feb 4	Manitoba Hydro and environmental injustice for Indigenous communities <i>Guest: Ramona Neckoway, NCN Les Dysart, SIL</i>	McLachlan et al. 2015
Feb 6	Electoral politics and climate change: Carbon tax <i>Guest: Rob Altemeyer, MLA</i>	Anon 2015
<b>Feb 6 - T</b>	Meeting with Office of Sustainability <i>Guest: Leanne Shewchuk, UM-OS</i> Meet with TAs re. assignments	<b>Hand in term-assignment topic</b>
Feb 11	Dissent: Manitoba Hydro and the Jenpeg Occupation <b>Brief2</b>	CBC 2014
<b>POLITICS OF CONSUMPTION</b>		
<b>Critical Reflection 3: Apr 1</b>		
Feb 13	Online shopping; convenience at what cost? <b>Brief3</b>	Santiago and Lara 2016 Evans-Cowley 2016
<b>Feb 13 - T</b>	Meet with TAs Touch base re. assignments	<b>Hand in two-page term-assignment proposal</b>
Feb 18 - 21	MID-TERM BREAK	

Feb 25	Tar Sands, a critical analysis; contaminant, diets, and health <i>In-class readings</i>	McLachlan, 2014
Feb 27	Canadian mining and the true cost of rare earth materials <b>Brief4</b>	Beaumont, 2018; Anderson 2019; Melnitzer, 2018
<b>Feb 27 - T</b>	Is this oil worth the price? Film: <i>One River, Many Relations</i>	Tyas and McLachlan, 2015
Mar 4	Community based monitoring: small but powerful <b>Brief5</b>	Turreira-García et al. 2018
Mar 6	Midway: A plastic beach	Minton, 2003
<b>Mar 6 – T</b>	Environmental Solutions Film: <i>The True Cost</i>	
Mar 11	Voluntary simplicity: a case study of degrowth <b>Brief6</b>	Alexander and Ussher 2012
Mar 13	“What’s mine is yours”; a case for collaborative consumption <b>Brief7</b>	John, 2013
Mar 18	Ecotourism: case study of Churchill Guest: <i>John Gunter,</i> <i>Frontiers North Adventures</i>	
<b>POLITICS OF FOOD</b>		
<b>Critical Reflection 4: Due April 6</b>		
Mar 20	Water consumption and the global south: Private, public or both <i>In-class reading assignment</i>	
<b>Mar 20- T</b>	Indigenous Teachings Guest: <i>Elder Roberta Mandamin</i>	
Mar 25	Neonicotinoids and their risk to aquatic ecosystems Guest: <i>Mark Hanson</i>	Reeves et al. 2019
Mar 27	Holistic management and the future of food and rural communities Guest: <i>Davis Pogson, HM farmer</i>	Rudolph and McLachlan, 2013
<b>Mar 27 - T</b>	Social enterprises as business alternatives <i>Panel presentation and discussion</i>	
Apr 1	Alternative agriculture and the corporate university <b>Brief8</b>	McLachlan, 2012
Apr 3	Addressing the northern Indigenous food crisis. Is the status quo working? Guest: <i>Tabitha Martens</i>	Martens, 2017
<b>Apr 3 - T</b>	Cities, urban decay and alt futures Film: <i>We are not ghosts</i>	
Apr 8	Class review and in-class exam	<b>Hand out final exam (due April 25); CSL report due</b>

## REFERENCES

- \*Alexander, S., and S. Ussher. 2012. The voluntary simplicity movement: A multi-national survey analysis in theoretical context. *Journal of Consumer Culture* 12: 66-86.
- \*Anon, 2015. Real Change; A New Plan for Canada's Environment and Economy <https://www.liberal.ca/files/2015/08/A-new-plan-for-Canadas-environment-and-economy.pdf>
- \*Bellino, M.E., and J.D. Adams. 2017. A critical urban environmental pedagogy: Relevant urban environmental education for and by youth. *Journal of Environmental Education*, 48:4, 270-284
- \*CBC, 2014. Manitoba Hydro evicted from northern dam station. October 17, 2014. <http://www.cbc.ca/news/canada/manitoba/manitoba-hydro-evicted-from-northern-dam-station-1.2803462>
- \*Dharamsi, S., Espinoza, N., Cramer, C., Amin, M., Bainbridge, L., and G. Poole. 2010. Nurturing social responsibility through community service-learning: Lessons learned from a pilot project. *Medical Teacher* 32: 905-911.
- \*Eco-Canada. 2012. Land Your Dream Green Job. Know What Employers Are Looking for. <http://216.129.91.30:8080/eco3/publications/pdf/Land-Your-Dream-Green-Job-3July2012.pdf>
- \*Ecocide Alert, 2015. Critics slam fine print in newly released Trans-Pacific Partnership text. <http://ecocidealert.com/?p=15353>
- \*Hofreiter, T.D., Monroe, M.C., T.V. Stein. 2007. Teaching and evaluating critical thinking in an environmental context. *Applied Environmental Education and Communication* 6:149-157
- \*\*\*Imai, S., and N. Bolton. 2015. Canadian government does little to curb problems with Canadian mining companies in Latin America. *Aportes Magazine*. [http://ojen.ca/sites/ojen.ca/files/resources/Shin%20Imai\\_Article\\_0.pdf](http://ojen.ca/sites/ojen.ca/files/resources/Shin%20Imai_Article_0.pdf)
- \*John, N.A. 2013. Sharing, collaborative consumption and Web 2.0. *MEDIA@ LSE Working Paper*. <http://www.lse.ac.uk/media@lse/research/mediaWorkingPapers/pdf/EWP26-FINAL.pdf>
- \*Knowles, A. 2012. Employment in the environmental sector continues to grow. *Environmental Science and Engineering Magazine*, Summer. [http://ese.dgtlpub.com/2012/2012-08-31/pdf/employment\\_in\\_the\\_environmental\\_sector\\_continues\\_to\\_grow.pdf](http://ese.dgtlpub.com/2012/2012-08-31/pdf/employment_in_the_environmental_sector_continues_to_grow.pdf)
- \*Louv, R. 2005. Last child in the woods: Saving our children from nature Deficit Disorder <http://richardlouv.com/books/last-child/excerpt/>
- \*McAllester, A. et al. 2016. McAllester et al, 2016 Brexit, Trump, Le Pen and the rise of the right: the anger goes global. <http://www.independent.co.uk/news/world/brexit-trump-le-pen-and-the-rise-of-the-right-a7443241.html>

- \*McCarthy, S., and J. Hunter. 2017. From Standing Rock to Trans Mountain, dissent is in the pipeline. *Globe and Mail*. Jan 5, 2017. <http://www.theglobeandmail.com/news/national/standing-rock-and-what-comes-next/article33280583/>
- \*McCormack, R. 2009. Obama's top economic aide sings the praises of the 'Wal-Mart economy. *Manufacturing and Technology News* (14) <http://www.manufacturingnews.com/news/09/0309/furman.html>
- \*McLachlan, et al. 2015. *Wa Ni Ska Tan*: Cross-regional research alliance on the implications of hydro development for environments and Indigenous communities in northern Canada. Executive Summary. SSHRC Proposal. October 4, 2015.
- \*McLachlan, S.M. 2014. One River, Many Relations: Environmental and Human Health Implications of the Athabasca Oil Sands for the Mikisew Cree First Nation and Athabasca Chipewyan First Nation in Northern Alberta. Phase Two Report, Prepared for Health Canada. January 31, 2014 (excerpts)
- \*McLachlan, S.M. 2012. Relative importance of agro-ecological and other alternative agricultural research in Canadian universities. Submission to UN Special Rapporteur on the Right to Food
- \*Minton, G. 2003. Eliminate plastic waste. *The Week: Green Column*, ESO [http://www.eso.org.om/UserFiles/files/ESO\\_Eliminate\\_plastic\\_waste\\_En.pdf](http://www.eso.org.om/UserFiles/files/ESO_Eliminate_plastic_waste_En.pdf)
- \*Rohrlich, J. 2015. Fair trade, free markets, and the bitter fight behind your morning cup of coffee. <https://news.vice.com/article/fair-trade-free-markets-and-the-bitter-fight-behind-your-morning-cup-of-coffee>
- \*Rudolph, K.R. and McLachlan, S.M., 2013. Seeking Indigenous food sovereignty: origins of and responses to the food crisis in northern Manitoba, Canada. *Local Environment* 18:1079-1098.
- \*Schild, R. 2016. Environmental citizenship: What can political theory contribute to environmental education practice? *Journal of Environmental Education* 47:19-34.
- \*Schwanen, D. 2015. Daniel Schwanen: TPP is a good deal for Canada. *Financial Post* Oct 5 2015. <http://business.financialpost.com/fp-comment/daniel-schwanen-tpp-is-a-good-deal-for-canada>
- \*Sheppard, K. 2013. Walmart's sustainability results don't match promises, report finds [http://www.huffingtonpost.com/2013/11/13/walmart-sustainability\\_n\\_4263032.html](http://www.huffingtonpost.com/2013/11/13/walmart-sustainability_n_4263032.html)
- \*Small Farm permaculture. 2016. Advantages and disadvantages of organic farming: Good things, barriers and environmental effects. [http://www.small-farm-permaculture-and-sustainable-living.com/advantages\\_and\\_disadvantages\\_organic\\_farming.html](http://www.small-farm-permaculture-and-sustainable-living.com/advantages_and_disadvantages_organic_farming.html)
- \*Tyas, M., and S.M. McLachlan. 2015. One river, many relations: The Oil Sands, environment, and Indigenous rights. A documentary film. [www.onerivethefilm.ca](http://www.onerivethefilm.ca)

## ADDITIONAL INFORMATION

### Schedule “A”

Schedule “A” is a requirement passed by the University of Manitoba Senate in 2016, which requires that a list of available supports for services plus contact information be provided to all students. *While this information is important and useful, should you require advice and support, I will of course happy to meet with you and discuss any issues and concerns you might have*

### Academics

#### The Academic Calendar

An important source of information that is relevant to your coursework is the academic calendar: <http://umanitoba.ca/student/records/academiccalendar.html>. Please review the sections on University Policies and Procedures and General Academic Regulations. While all of the information contained in these two sections is important, the following information is especially relevant:

- If you have questions about your grades, please talk to me as your instructor. There is a process for term work and final grade appeals. Note that you have the right to access your marked final exam. Please see the Registrar’s Office website for more information including appeal deadline dates and the appeal form
  - <http://umanitoba.ca/registrar/>
- You are also expected to be conversant with the General Academic Regulation section within the Academic Calendar, and more specifically the regulations regarding Academic Integrity. Please review the above information on this syllabus regarding academic integrity and feel free to ask me as your instructor about any concerns you might have. For the Academic Integrity Site for tools and support:
  - <http://umanitoba.ca/academicintegrity/>View the Student Academic Misconduct procedure for more information.

#### Academic Programs and Regulations

For information on regulations that are specific to your academic program, read the section in the Academic Calendar and on the respective faculty/college/school web site <http://umanitoba.ca/faculties/> For additional information on your academic program and regulations, please contact the Academic Advisors within our Faculty

- Ilka Cudmore (204-474-9847)
- Jason Jorgenson (204-894-8710)

#### Copyright

All students are expected to respect copyright as per Canada’s Copyright Act. Instructors and students both play a key role in the University’s copyright compliance as we balance user rights for educational purposes with the rights of content creators from around the world.

The Copyright Office provides copyright resources and support for all members of the University of Manitoba community. For more information, visit

- <http://umanitoba.ca/copyright>

#### Student Rights and Responsibilities

As a student of the University of Manitoba you have both rights and responsibilities. It is important for you to know what you can expect from the University as a student and to understand what the University expects from you. Please become familiar with the policies and procedures of the University and our Faculty-specific regulations.

## Writing and Learning Support

The Academic Learning Centre (ALC) offers services that may be helpful to you throughout your academic program. Through the ALC, you can meet with a learning specialist to discuss concerns such as time management, learning strategies, and test-taking strategies. The ALC also offers peer supported study groups called Supplemental Instruction (SI) for certain courses that students have typically found difficult. In these study groups, students have opportunities to ask questions, compare notes, discuss content, solve practice problems, and develop new study strategies.

You can also meet one-to-one with a writing tutor who can give you feedback at any stage of the writing process, whether you are just beginning to work on a written assignment or already have a draft. If you are interested in meeting with a writing tutor, reserve your appointment two to three days in advance of the time you would like to meet. Also, plan to meet with a writing tutor a few days before your paper is due so that you have time to work with the tutor's feedback.

These Academic Learning Centre services are *free* for U of M students. For more information, please visit the Academic Learning Centre website at:

- <http://umanitoba.ca/student/academiclearning/>

You can also contact the Academic Learning Centre by calling 204-480-1481 or by visiting 201 Tier Building.

## University of Manitoba Libraries (UML)

As the primary contact for all research needs, the librarian serving our Faculty (liaisons) can play an important role when completing academic papers and assignments. They can answer questions about managing citations or locating appropriate resources, and may be able address any other course-specific concerns you may have, regarding education and research. Liaisons can be contacted by email or phone, and are also available to meet with you in-person. A complete list of liaison librarians can be found by subject:

- <http://bit.ly/WcEbA1> or name: <http://bit.ly/1tJ0bB4>.

In addition, general library assistance is provided in person at 19 University Libraries, located on both the Fort Garry and Bannatyne campuses, as well as in many Winnipeg hospitals. For a listing of all libraries, please consult the following:

- <http://bit.ly/1sXe6RA>.

When working remotely, students can also receive help online, via the Ask-a-Librarian chat found on the Libraries' homepage:

- [www.umanitoba.ca/libraries](http://www.umanitoba.ca/libraries).

## Respectful Work and Learning Environment

As an instructor, I am absolutely committed to a respectful learning and work environment. You, of course, have the right to be treated with respect as a student, but you are also expected conduct yourself in an appropriately respectful manner with regards to the other students, teaching assistants, and me as your instructor. University policies governing such behavior include the:

- **Respectful Work and Learning Environment**
  - [http://umanitoba.ca/admin/governance/governing\\_documents/community/230.html](http://umanitoba.ca/admin/governance/governing_documents/community/230.html)
- **Student Discipline**
  - [http://umanitoba.ca/admin/governance/governing\\_documents/students/student\\_discipline.html](http://umanitoba.ca/admin/governance/governing_documents/students/student_discipline.html)
- **Violent or Threatening Behaviour**
  - [http://umanitoba.ca/admin/governance/governing\\_documents/community/669.html](http://umanitoba.ca/admin/governance/governing_documents/community/669.html)



## **Student Support**

### **Student Advocacy**

If you want to know more about your rights and responsibilities as a student, have questions about policies and procedures, and/or want support in dealing with academic concerns, please consider contacting:

- <http://umanitoba.ca/student/advocacy/>, 520 University Centre 204-474-7423, or
- [student\\_advocacy@umanitoba.ca](mailto:student_advocacy@umanitoba.ca).

### **Student Counselling Centre (SCC)**

Please consider contacting the Student Counselling Centre (SCC) if you are concerned about any aspect of your mental health, including anxiety, stress, or depression, or for help with relationships or other life concerns. The SCC offers crisis services as well as individual, couple, and group counselling.

- Student Counselling Centre: <http://umanitoba.ca/student/counselling/index.html>  
474 University Centre or
- S207 Medical Services, 204-474-8592

### **Mental Health**

For 24/7 mental health support, please consider contacting the Mobile Crisis Service at

- 204-940-1781.

### **Student Accessibility Services**

If you are a student with a disability, please contact SAS for academic accommodation supports and services such as note-taking, interpreting, assistive technology and exam accommodations. Students who have, or think they may have, a disability (e.g., mental illness, learning, medical, hearing, injury-related, visual) are invited to contact SAS to arrange a confidential consultation.

- *Student Accessibility Services* <http://umanitoba.ca/student/saa/accessibility/>, 520 University Centre, 204-474-7423, TTY 204-474-9790, [Student\\_accessibility@umanitoba.ca](mailto:Student_accessibility@umanitoba.ca)

If you are experiencing difficulties with your studies or assignments, or have a disability or illness which may affect your course of study, you should discuss these issues with me as instructor and/or mentors at one of the following Student Affairs offices as soon as possible:

- Indigenous Student Centre (ISC); Phone: 204-474-8850. 114 Sidney Smith St.
- International Centre for Students; Phone: 204-474-8501. 541 University Centre
- English Language Centre; Phone: 204-474-9251. 520 University Centre
- UMSU – University of Manitoba Students' Union; 101 UMSU University Centre, [umsu@umsu.ca](mailto:umsu@umsu.ca), 204-474-8678 (UMSU)
- Numerous of campus ethno-cultural student groups and various communities of interest, action or belonging as funded or supported by UMSU.

### **Student Support Case Management**

Please consider contacting the Student Support Case Management team (SSCM) if you are concerned about yourself or another student and don't know where to turn. The SSCM helps connect students with on and off campus resources, provides safety planning, and offers other supports, including consultation, educational workshops, and referral to the STATIS threat assessment team.

- Student Support Intake Assistant <http://umanitoba.ca/student/case-manager/index.html>.  
520 University Centre, 204-474-7423

## **University Health Service**

Please consider contacting UHS for any medical concerns, including mental health problems. The UHS offers a full range of medical services to students, including psychiatric consultation.

- University Health Service <http://umanitoba.ca/student/health/>  
104 University Centre, Fort Garry Campus, 204-474-8411 (Business hours or after hours/urgent calls)

## **Health and Wellness**

Please consider contacting a Health and Wellness Educator if you are interested in information on a broad range of health topics, including physical and mental health concerns, alcohol and substance use harms, and sexual assault.

- Health and Wellness Educator <http://umanitoba.ca/student/health-wellness/welcome.html>. Katie.Kutryk@umanitoba.ca, 469 University Centre, 204-295-9032

## **Live Well @ UofM**

For comprehensive information about the full range of health and wellness resources available on campus, visit the Live Well @ UofM site:

- <http://umanitoba.ca/student/livewell/index.html>

## **Sexual Assault**

If you experience sexual assault or know a member of the university community who has, the first thing you need to do is make sure that you or these community members are safe. It is also important to feel that you can reach out and find support regarding this experience it is important to know there is a policy that provides information about the supports available to those who disclose and outlines a process for reporting.

- More information and resources can be found by reviewing the Sexual Assault site <http://umanitoba.ca/student/sexual-assault/>