

Graduate Course CHL5809H – Revised Syllabus for Fall 2017 session
Cross-listed with HST407H1F 20179 - Health Studies, University College undergraduate course

Ecological Public Health

Dalla Lana School of Public Health, University of Toronto

Instructors: Donald Cole (lead), Kate Mulligan
Time: Fridays 9-12:00 (9-10 graduate students, 10-12 with undergraduate students as well)
Location: Classroom sessions at UC
Enrolment: 5-10 graduate students, 15-20 undergraduate students

CONTEXT/BACKGROUND

Given recent environmental trends, several recent editorials (see for example Hancock, 2011) announce that ecological determinants will soon surpass social determinants as key drivers of human health and well-being in the coming decade. Nevertheless, there has been a relative lack of sustained attention to ecological determinants of health when compared to the contemporary currency of the social determinants of health, including at schools of public health (Ecological Determinants of health Group on Education scan).

Ecological public health addresses the complex inter-relationships between health (humans and other species), societies and ecosystems, unpacking the myriad interconnections between the social and the ecological in the co-creation of conditions for human and ecosystem health and flourishing. In keeping with a political ecology stance, it will address issues of equity, social and environmental justice, governance, scale, meaning-making and impact. When viewed in global perspective, these dynamics are inevitably tied up with legacies of colonialism and inequities both between and within countries in different regions of the world.

In this course, we will ask: What are the key challenges for ecological public health now and into the future? How are these challenges related to historical and ongoing global forces and flows? How do people think about these challenges? What can people do about these challenges? How can we determine if such efforts are effective, while maintaining our integrity and resilience?

PRE-REQUISITES

Coming into the course, students should have some background in public health, environmental health OR ecology. This can include courses and/or research and/or practice which informs their interest in ecological public health. The course is designed to work with concepts and implications for practice, policy and research and hence is not primarily a methods course, so knowledge of underlying theory and common research methods would be an important asset at the graduate level.

LEARNING OBJECTIVES/OUTCOMES

At the end of the course, we expect student participants to be able to:

Objective 1 - Concepts

Demonstrate an understanding of the relevance and complexity of terms such as ecology and human health, drawing on concepts such as ecohealth; one health; planetary health; ecological public health; ecosystems; watersheds; biodiversity; sustainability; and resilience. Critique existing definitions, in recognition of different knowledges, in order to defend personal working definitions relevant to different peoples, places, times and scales.

Objective 2 - Relationships

Explicate the inter-relationships between political and economic power, environmental change, and human health in particular places/watersheds/ecosystems/ecoregions through the use of different frameworks & theories. Explain how these dynamics operate at, and across, different scales in the global North and South. Articulate the implications for one's ethical practice with attention to respect, reciprocity, and responsibility. Demonstrate mentorship of undergraduates in group work.

Objective 3 - Tools

Illustrate the particular challenges that the diversity, breadth and complexity of ecosystem-health problems and responses pose to understanding and research. Select and apply different approaches and use a suite of observational and analytic tools in their work, including critical thinking and reflexivity.

Objective 4 - Applications

Draw on their critical understanding of concepts, relationships, and tools as well as their values, motivations and place in the world, to formulate responses (actions, interventions, and practice or policy changes). Work collaboratively in a group to share these and develop ways to promote better global health (ecosystems, other species and humans). Communicate these in inspiring ways through multiple media and in a variety of settings: individual & group face-to-face, on-line, and other appropriate venues. Consider the ways that these may be applied in different professional and organizational settings.

We have delineated the links to these objectives in the guides for each week and course tasks.

COURSE FORMAT

This course is being in conjunction with Health Studies, University College i.e. a cross-listed course. It include online, classroom, cross-level and cross-disciplinary group project and individual paper components. In contrast with traditional formats, students view lecture and other videos, do some reading and complete a task *before* classroom sessions – hence the use of the term ‘flipped’ for the course format (see <http://www.adelaide.edu.au/flipped-classroom/about/> for andragogical explanation. Andragogy is like pedagogy for adults see <https://elearningindustry.com/the-adult-learning-theory-andragogy-of-malcolm-knowles>):

1. The online component consists of viewing videos, reading short readings, and completing tasks, all through Blackboard. Within a set of timing guidelines i.e. all prior to the classroom component, these activities can be arranged by individual students to do their own thinking about the materials in light of their own experiences and fit their own time availability. Clarification will be with the TA.
2. The classroom component (11 dates as starting late) is devoted to clarification of concepts and substantive material with resource people (remotely or in person) and the instructor, along with activities applying tools/methods. Clarification through the instructor.
3. The group project will include both online and face to face (F2F) work, both inside and outside the classroom. The latter must be arranged by group members collectively. Clarification will be assisted by an in class orientation early on and workshopping of key parts of the project.
4. The individual paper will require work primarily outside the classroom, with one workshop session plus clarifications by the instructor upon request. Clarifications which might benefit all students will be posted in Discussion threads.

Schedule

To assist everyone's time planning, see the attached course schedule worksheet. Note that the first hour will be a discussion for graduate students alone, except the group presentation one which will include all students). The following two hours will be with undergraduates in the cross-listed Health Studies course.

Workload

Learning requires building on what students already know through active engagement with new concepts, substantive material, methods and tools. To optimize their learning through the course, graduate students should plan to dedicate approximately 8 hours a week to the course, although this may vary across students depending on their learning styles and existing knowledge, skills and motivations.

These hours can be roughly divided equally into three sets of about 2 hours each:

- a. watching videos, reading peer review articles and reports, and taking notes, completing pre class tasks, and preparation for graduate seminar brown bag component all weeks except the last (3 hrs);
- b. in-class activities (3 hrs);
- c. project work (during the first part of the course) and individual paper work (in the latter part of the course) (2 hrs).

Obviously, these are only estimates/indications - the time needed by each student in each particular week will likely vary.

INSTRUCTORS

Donald C Cole is a professor with DLSPH (profile at <http://www.dlsph.utoronto.ca/faculty-profile/cole-donald-c/>) trained as a physician and practiced primary care, public health, occupational health and environmental health in a variety of settings in Canada and lower and middle income countries. After a residency at McMaster, he qualified as a Royal College fellow in Occupational Medicine (1990) and Community Medicine (1992). A Tri-Council Eco-Research fellowship in environmental epidemiology led to research on environmental contaminants, agriculture ecosystems and human health. The role of Interim Director of Research at the Institute for Work & Health fostered research on evaluation of complex interventions for health. With the International Potato Center and support from the Rockefeller Foundation, CIDA, IDRC and the Bill and Melinda Gates Foundation, he has co-led research on pesticides, urban agriculture and nutrition in South America and East Africa. He teaches, mentors, and contributes research evidence to public health practice and policy globally. He is an active member of the Canadian Community of Ecosystem Health (CoPEH-Can) and Ecohealth Ontario.

Kate Mulligan is the Director of Policy and Communications with the Association of Ontario Health Centres and a status Assistant Professor in Social and Behavioural Health Sciences at the Dalla Lana School of Public Health (profile at <http://www.dlsph.utoronto.ca/faculty-profile/mulligan-kate/>). Her primary interest is in understanding and improving wellbeing at the intersections between politics, economy and environment – the applied political ecology of health. Kate works with researchers, policy makers, residents and practitioners to identify ecological public health needs and to implement policy changes that improve sustainability and health for all. Her ecological public health work with government, politics and civil society has included municipal public health, provincial politics, Latin American water and sanitation initiatives, and UN infectious disease projects in Southeast Asia. She holds a PhD in Health Geography from McMaster University and an MA in adult education and community development (community, international & transformative learning) from OISE/UT.



This course participates in the *Green Course* program at UofT aimed at reducing the use of paper. All assignments are submitted, marked, and returned electronically. Readings are available electronically and students are encouraged not to print the readings (there is now good hardware and software support for reading, highlighting, and annotating pdfs on a variety of portable e-reader devices and computers). Where applicable, lecture slides are made available only electronically in condensed format (several slides per page).

COMMON RESOURCES

An outline for each week will be posted in separate content folders under Materials in Blackboard. We have aimed to include a peer-reviewed reading, a more popular article/report/guide and a video for each week. Required pre-class resources will include URLs and "Get it! UTL" links that you can click on in the electronic version of the week's description or, if necessary, pdfs. Graduate students additional readings will be separately indicated in the common course materials.

'Further reading' documents/articles/chapters are provided for further exploration of the week's material in more depth. These additional readings may also be useful in completing the course tasks. Note that Graduate

In addition, several readings are taken from the following publications, available free online:

Conant, J., & Fadem, P. (2008). *A Community Guide to Environmental Health*. Berkeley, California: Hesperian Foundation. [Referred to in this syllabus as 'Hesperian']

http://en.hesperian.org/hhg/A_Community_Guide_to_Environmental_Health

People's Health Movement, MedAct, & Global Equity Gauge Alliance. (2011). *Global Health Watch 3: An Alternative World Health Report*. New York and London: Zed Books. [Referred to in this syllabus as 'GHW3']

<http://www.ghwatch.org/ghw3>

People's Health Movement, MedAct, & Global Equity Gauge Alliance. (2015). *Global Health Watch 4: An Alternative World Health Report*. New York and London: Zed Books. [Referred to in this syllabus as 'GHW4']

<http://www.ghwatch.org/node/45484>

And this text available electronically through the library link:

Frumkin (ed), 2016. *Environmental Health: From Global to Local*, 3rd Edition. Wiley, ISBN: 978-1-118-98476-5. It can be searched through UToronto library books, and is then available for on-line reading.

In addition, the following texts are recommended:

- Geof Rayner, & Tim Lang. (2013) *Ecological Public Health: Reshaping the Conditions for Good Health*. Routledge.
- Brian King & Kelley A. Crews, eds. (2013). *Ecologies and Politics of Health*. Routledge.

Blackboard (BB) Information

We will use a number of BB learning management system features for the course. Students will find:

Announcements – from the instructor and TA, welcoming you, alerting you to new material. Usually we will send these via email (see below) as well, but this provides a repository to go back and check earlier ones.

Syllabus folder - the syllabus and the schedule worksheet.

Course Materials – weekly content (as described above). Note again that special section for graduate students additional readings for the weekly brown bag seminar in the last hour.

Assessments are the Pre-Class Tasks-Assignments, and longer course assignments (group presentation and individual paper) – see below under Student Tasks & Assessment

My Grades/Grades Centre – for posting of grades on tasks

Contacts – for our information

Library Resources – as quick access for your searching, not tailored to the course. Generic readings overall for the course are under RESOURCES above.

STUDENT TASKS & ASSESSMENT

Weekly pre-class tasks (25%, due as per calendar)

Although there are tasks for each week, for six of the weeks, you will be expected to complete a specific task for grading. It should be about ½ to one page submitted before 17:00 each Tuesday. Each will be assessed by the TA, with brief feedback provided and rating between 0 (non-completion) and 5 (superb completion), in keeping with rubrics developed jointly by the TA and instructors. The best five out of your submissions will be included in this portion of your overall mark.

Classroom F2F session participation (5+5=10%)

A sign in sheet will be present at all sessions. It is the students' responsibility to sign in or inform the lead instructor via email prior to the session if they cannot make it. To foster engagement in F2F sessions, participation will be graded from 0 (rare attendance or contributions) to 5 (full attendance, active participation and important contributions) by the lead instructor in consultation with the other instructor, TA and resource people. (5%)

In addition, each graduate student will be responsible for facilitating a seminar (9-10:00) around the graduate designated reading. Facilitation will be graded from 0 (unprepared and unable to facilitate) through to 5 (very well prepared, creative approach to facilitation, engaging all grad students, comprehensive discussion wrt concepts, relationships, tools and application in course objectives). (5%)

Group project (35%, written summary due Oct 17th 17:00)

Working in a group of about five students, you develop an approach to communicating the need to advocate for policy and/or social change with respect to a specific ecological public health issue (could be Canadian with global implications - topic to be verified with the lead instructor). The way you deal with the issue is intended to draw on both readings-viewings and students' own experiences. Proceeding from your definition of the problem-issue-challenges being addressed clearly define who you as a group are (socio-ecological position-location, who is speaking), to what specific audience(s) you are communicating (your allies-supporters, external audiences such as the public etc.), and the steps-actions which you want your audience to join with you in addressing the issue. Consider global forces and actors (including non-human); b) respect for different ways of knowing (i.e. other than Western science and rationality); and c) motivators for change both among yourselves, your potential supporters, those with whom you want to communicate and broader system actors.

The overall goal of the presentation will be to educate and inspire, connecting with the emotional or visceral responses of the audience. Possible formats include an organizing tool and plan for a university club, a poster as part of an educational campaign, a video, music/spoken word/poetry; sociodrama-skit; an Avaaz-style email and petition around a letter to a set of politicians, a blog, or another campaign tool that you can imagine as discussed with the instructor. Have one member of your group submit your group's 1000 word explanation of your project-presentation with all involved students' names included. Together the explanation and presentation will be marked as follows:

- | | |
|---|---------|
| • Clarity on ecoregion e.g. watershed, airshed, foodshed... | 5 marks |
| • Discussion of social-ecological health relationships, include power | 4 marks |
| • Respect for different perspectives, ways of knowing | 4 marks |
| • Clarity on audience and rationale for proposed action(s) | 4 marks |
| • Coherence, elegance, overall appeal of your communication | 4 marks |
| • Emotional impact/inspirational quality of presentation | 4 marks |

In addition, each graduate student should engage in a reflection on their mentorship of others and mentorship by others during the group project process – guideline will be shared. 10 marks

Individual scholarly paper (30%: outline due Oct 31st 17:00; full paper due Dec 11th)

Each student will prepare a scholarly paper explain the nature, causes and potential responses to a particular ecological health issue, drawing on a combination of theoretical papers, documentations of experience, scholarly syntheses/reviews, and multiple representations of responses (all citable). The framing would ideally be transnational (across countries) but could be focused primarily within a country

from the global South (Middle or Low Income Country) or global North (High Income Country). It should reference concepts, relationships and analytical tools discussed in the course.

- a) Nature - begin with how it is **experienced** (ecological manifestations, lived experience and health consequences) in particular places by particular groups of people, including any inequitable patterns in terms of which groups of people are most affected, and other species as relevant.
- b) Lay out the ecological and political economic **root causes**, including how these have evolved historically. This exploration must acknowledge complex systemic interactions, multi-scalar interactions (from local to global), power dynamics, the role of non-humans and theoretical perspectives for understanding these.
- c) **Responses** you propose at different levels should flow from the characterization of the issue's nature, causes, and existing evidence on/experience with those responses. Be clear on to who is (or needs to be) involved in the responses e.g. program practitioners, researchers, policymakers and others (i.e. the people you think most need to be involved). As graduate students, also include research response options.

A 500-word outline of your paper is due Nov 7th. For these individual paper tasks please start the file with your last name e.g. "your last name.outline.EPH" and "your last name. paper.EPH You should use the instructor's feedback on this outline to develop your final paper. The final paper (about 2500 words in the body, plus appended references; total number of figures and table COMBINED not more than 5).

Total **30 marks** with breakdown as follows:

- | | |
|--|-------------------------------|
| • Outline | 6 marks – separate submission |
| • Characterization of nature and health impacts | 6 marks |
| • Exploration of root causes, including drawing on theory | 6 marks |
| • Appropriateness/justification of existing/proposed responses, including research options | 6 marks |
| • Writing style, referencing and overall impact | 6 marks |

Task-Assignment Submission

All weekly pre-class tasks should be submitted on-line via the Assessments – Assignments section of BB by 17:00 the Tuesday before the class, so that the TA can review them and summarize them for the resource person and instructor prior to the class on Friday.

Similar timing will be for the group presentation summary in some format +/- links to on-line resource so it may be circulated to the participating EcoHealth alumni observers and for the individual scholarly paper outline so that the Instructor can plan the workshoping of your ideas in the session that week.

The individual scholarly paper can be submitted any time up to the due date – happy to start marking earlier 😊

Extensions and Late Penalties

Extensions for personal and family illness and emergencies can be granted with appropriate documentation (see <http://www.illnessverification.utoronto.ca/Frequently-Asked-Questions.htm> for more information).

Extensions **must be discussed with the Instructor and TA as early as possible and not once the deadline for the task has passed.**

Late tasks will be penalized by 5 percentage points per day or part thereof, so aim to submit early. These submission will only be accepted up to one week after the due date, unless the student(s) has (have) received from the instructor explicit approval in writing for a longer extension.

Accommodation for a Disability

If you have ongoing difficulties during term – health related or otherwise – that prevent you from completing your course work satisfactorily please consider accommodation for a disability by registering with Accessibility Services at: <http://www.accessibility.utoronto.ca/>.

Academic Integrity

Honesty and fairness are considered fundamental values shared by students, staff and faculty at the University of Toronto. The University treats cases of cheating and plagiarism very seriously. Penalties can be severe. For further information and to learn how to avoid plagiarism students should carefully read all information available at: <http://academicintegrity.utoronto.ca/> and consult the guide below.

From the Code of Behaviour on Academic Matters: It shall be an offence for a student knowingly:

(d) to represent as one's own any idea or expression of an idea or work of another in any academic examination or term test or in connection with any other form of academic work, i.e. to commit plagiarism.

Wherever in the Code an offence is described as depending on “knowing”, the offence shall likewise be deemed to have been committed if the person ought reasonably to have known.

A handout explaining more is available online at www.writing.utoronto.ca/advice/using-sources/how-not-to-plagiarize . See also the list of advice files on academic writing at www.writing.utoronto.ca

Contacting the Instructor or TA

To ensure efficiency and a rapid response to you, emails should be sent primarily to the **TA for Weekly pre-class tasks**, to both the TA and instructor for the **Individual scholarly paper**, and to the instructor for the **Group presentations** and all other course-related matters.

Please always:

- 1) write from your University of Toronto official email address;
- 2) start the subject line with 'CHL5809H'; and
- 3) use a subject line that meaningfully describes the content of the message.

Emails that do not conform to this format will not be answered. Also, emails including questions that have already been addressed in this syllabus or in the task guidelines above will not be answered. As a general rule, all other emails will be answered within two work days, and answers relevant to the fuller class posted on announcements as appropriate.

COURSE, INSTRUCTORS AND TA FEEDBACK/EVALUATION

Formative feedback from students during the course will be most welcome, in person or via email to inform any needed adjustments during the course. In addition to the usual DLSPH end of course student feedback forms. Further, co-reflection among students and instructors at the end of the course will iteratively inform course modifications in future years.

Current Schedule

		Component			*TBD to be developed with Resource person(s)			
W k	Class- room Date	Topics	Tools/methods	Resource	Tasks & due date	Classroom activities	Group	Individual
				Person(s)	Pre [Tuesday before class]	During	project	paper
1	08-Sep	Orientation to course, + Nature of EPH, logistics course	Ecohealth frameworks	Donald Cole	Role in ecosystem exercise	Negotiating health & diversity of perspectives		
2	15-Sep	Interdisciplinary group learning and ecosystem approaches to health	Collaborative pedagogical frameworks	TA (Sarah Elton)	Learning styles - interests statement. Group project ideas [12th Sept]	Form interdisciplinary, cross-disciplinary groups. Work through group process assessment tool. Plan project phases in groups with plenary sharing.	Group project	
3	22-Sep	Political ecology & environmental justice,	locational histories, policy analysis, mapping power...	Kate Mulligan	a. Uncovering history through socio-ecological walk [19 Sep]	Interactive presentation on key theoretical perspectives & implications	Group project	
4	29-Sep	Resilience & socio-ecological change	Land-based learning, self care	Conscious Minds	b. Out of Pedagogy in the Anthropocene project TBD [26 Sept]	"Connections, systems and resilience" exercise led by CM	Group project	
5	06-Oct	Watersheds, foodshed, airsheds - Ecoregion geographic grounding and analysis	Geographic information systems, health impact assessment	Donald Cole	Mapping eco-region of relevance to the group project [3 Oct]	Presentation of eco-regions and health impacts of interest by project group and discussion	Group project	

6	13-Oct	Practical steps in socio-ecological action	Situational assessment, strategy design & communications	Donald Cole	Stakeholder communications analysis on group socio-ecological issue [10th Oct]	Workshopping group issues, refining communications strategy	Group project	
7	20-Oct	Group presentation & feedback day	Multi-media	Ecohealth alumni	Group presentation summary [17th Oct]	Note that extended class from 9-12:00 this day	Group presentation	
8	27-Oct	Sustainable development, biodiversity & health	Mixed methods	Fadya Orozco	c. TBD	TBD		Paper work
9	03-Nov	Workshop individual papers	Concept mapping, spaghetti diagrams, systems thinking	Donald Cole	Individual paper outlines [31st Oct]	Work on selected topics, brainstorming webs of causation and pathways of intervention		paper work
	5-10-Nov	FAS fall Reading week						Paper work
10	17-Nov	Global food systems (Ecuadorian banana case study)	Ethnography	Ben Brisbois	d. supermarket observation [14th Nov]	Focus groups on personal locations in banana food chain		Paper work
11	24-Nov	Land, culture & health	Community collaborative research	Warren Dodd	e. TBD [21st Nov]	Mix of contextualization of choices, work with analysis and discussion re implications		Paper work
12	01-Dec	Place-based health promotion & course feedback-evaluation	Place based community assessment & intervention planning	Kate Mulligan	f. place history & potential for change [28 Nov]	AOHC case examples TBD		Paper work
	11-Dec	Scholarly paper due						Submission

