

## MCGILL DEPARTMENT OF GEOGRAPHY

### PRELIMINARY COURSE OUTLINE

**GEOG 503**

**ADVANCED TOPICS IN HEALTH GEOGRAPHY**

**Fall 2020**

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<b>Instructor:</b>	Professor Mylene Riva and Professor Nancy Ross
<b>Class Meeting Times:</b>	Mondays 14:35 to 17:25 * There will be a course on Thursday Dec 3 <sup>rd</sup> to make up for lost lectures (Monday Sept 7 – Labour Day; Monday Oct 12 – Thanksgiving)
<b>Modes of teaching:</b>	Synchronous discussions: Monday 14:35 to 16:05 Asynchronous lectures
<b>Contact information:</b>	Prof. Riva, Burnside Hall, room 419; <a href="mailto:mylene.riva@mcgill.ca">mylene.riva@mcgill.ca</a> Prof. Ross, Burnside Hall, room 420; <a href="mailto:nancy.ross@mcgill.ca">nancy.ross@mcgill.ca</a>
<b>Office Hours:</b>	Prof. Riva: Mondays 16:05-17:25, or by appointment Prof. Ross: Mondays 16:05-17:25, or by appointment
<b>Readings:</b>	Readings are available electronically on myCourses.

### **COURSE DESCRIPTION**

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This course provides a critical review of advanced topics in health geography, including perspectives on environmental and social determinants of health and chronic disease. Seminars will focus on critical appraisal of conceptual and methodological approaches in health geography research. Students will work in teams and will develop independent project topics throughout the course, with the opportunity to focus on selected themes in health geography.

### **LEARNING OUTCOMES**

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

1. Identify and describe dominant paradigms and conceptual approaches in health geography.
2. Critically appraise the empirical literature in the health and geographic sciences.
3. Evaluate alternative methodological approaches to health geography research.
4. Facilitate seminar discussions on selected health geography themes.
5. Acquire skills in conducting systematic and realist review of the scientific literature.

## INSTRUCTIONAL METHOD

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The course will combine flexible and fixed strategies. Pre-recorded lectures will be posted on myCourses prior to the set course time. During the set course time, we will have a live-streaming 90-minute class convened on Zoom. This portion of the class will focus on group discussion of the topics seen in the lectures and the readings. Questions accompanying the readings will be posted ahead of time to facilitate discussion. Students are expected to complete readings and prepare to participate actively during class discussions. This 90-min session will also be used by students to present their work. Every week the course instructors will host virtual office hours to provide one-on-one guidance and feedback to students about the preparation of their systematic review and other course work. Office hours can also be used by students to get further clarifications about courses topics.

## METHOD OF EVALUATION

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Thematic presentation <u>and critical appraisal</u>	30%
Proposal for systematic review	10%
Final Paper	50%
Final presentation of review paper	10%

**Thematic presentation and critical appraisal:** In teams of 2, students will write a 2-page critical appraisal of a scientific paper of their choice for one of the course themes (social gradient in health, natural experiments and population health intervention research, neighborhoods and health, housing and health, built environment and chronic disease). Students have to identify an empirical paper appropriate to the week's topic and provide it to the instructor to post for class-wide reading. Students will present the critical appraisal of the paper (15- to 20-minute presentation) and facilitate discussion. More guidelines about the format and content of the 2-page critical appraisal and presentation will be communicated to students in class.

**Proposal for systematic review using a realist perspective:** Students will propose a systematic review on a topic that is related to social and/or spatial determinants of health. The proposal must communicate the need for a systematic review using a realist perspective of a particular body of work (what is the rationale for conducting the review? For using a realist perspective?). In addition, the proposal must include: a search strategy, a description of criteria for inclusion/exclusion of studies, an estimate of the number of studies to be included in the review, and a reference list of the potential studies to be included in the review. Maximum 3 pages; Times New Roman 12 pts font; no restrictions on spacing. More guidelines about the format and content of the proposal will be communicated to students in class.

- **Students must submit two to three research question/topics for the systematic review on myCourses no later than Friday September 25<sup>th</sup>, 4pm.**
- **The proposal is due Monday, October 19<sup>th</sup>, 2020. The proposal must be submitted on myCourses prior to class.**

**Final paper:** Students will prepare a systematic review with a realist perspective of the scientific literature on a topic related to their research interests. This review must incorporate principles of systematic review, realist philosophy, and critical appraisal learned in class. The aim is to produce a publishable quality paper that will also inform the student’s research. Students will present their reviews to the class in the final course sessions. Paper: 5000-word maximum; Times New Roman 12 pts font; no restrictions on spacing. More guidelines about the format and content of the final paper will be communicated to students in class.

- **The final papers are due on Friday, December 11<sup>th</sup>, 2020 by 5pm Eastern Standard Time. Paper submission in word on myCourses.**

**Final presentation of review paper:** Students will prepare a short power point presentation of their systematic review paper, including a summary of the background, review objectives, methodology, key findings, and implications of their work. Students will present their systematic review during the last weeks of the course, ahead of the final submission of the paper so they can integrate comments from the instructors and their peers. More guidelines about the format and content of the presentation will be communicated to students in class.

**Participation:** Student participation is essential for the success of the course and for students’ success in this course. This is an advanced seminar course and the expectation is that everyone who is enrolled is eager to participate. In the past years, students who have done well in the class came to class discussions prepared (will have done the readings), thoughtfully contributed to discussions, asked questions, and met with the instructors to get guidance on their systematic review.

## **COURSE SCHEDULE 2020**

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<b>Sept 7</b>	<i>No class- Labour Day</i>	
<b>Sept 14</b>	First meeting: introductions, student-led discussion about their research interests, course expectations, review of the syllabus	NR + MR
<b>Sept 21</b>	An introduction: Health geography, epidemiology, population level perspectives	NR + MR
<b>Sept 28</b>	Pragmatics of systematic review - getting a handle on the health literature	Library Session
<b>Oct 5</b>	Critical appraisal of health literature systematic review – theory	MR + NR
<b>Oct 12</b>	<i>No class - Thanksgiving</i>	
<b>Oct 19</b>	Social gradient in health	NR + students
<b>Oct 26</b>	Natural experiments and Population health intervention research	MR + students
<b>Nov 2</b>	Neighborhoods and health	NR + MR + students

<b>Nov 9</b>	Housing and health	MR + students
<b>Nov 16</b>	Built environment and chronic disease	NR + students
<b>Nov 23</b>	Student paper presentations	ALL
<b>Nov 30</b>	Student paper presentations	ALL
<b>Dec 3</b>	Student paper presentations + Course conclusions	ALL

**READINGS (please check myCourses for final listing of readings; readings may be updated throughout the semester to integrate recent studies on the selected topics or to discussed these topics in relation to Covid-19)**

### **An Introduction to Health Geography, Epidemiology, and Population Level Perspectives**

- Scan the latest issue of the scientific journals Health and Place and Social Science and Medicine
- Schwartz S, Susser E, Susser M. A future for epidemiology? Annual Review of Public Health, 1999; 20: 15-33.
- Rose, G. Sick individuals and sick populations. International Journal of Epidemiology, 1985; 14: 32-38.
- Susser M, Susser E. Choosing a future for epidemiology: I. Eras and paradigms. American Journal of Public Health, 1996; 86: 668-673.

### **Critical Appraisal**

- Elwood M. Forward projection-using critical appraisal in the design of studies. International Journal of Epidemiology, 2002; 31: 1071–1073.
- Greenhalgh T. How to read a paper: getting your bearings (deciding what the paper is about). BMJ, 1997; 315: 243-246.
- Greenhalgh T, Taylor R. How to read a paper: Papers that go beyond numbers (qualitative research). BMJ, 1997; 315: 740-743.
- Greenhalgh T. How to read a paper: Statistics for the non-statistician. II: "Significant" relations and their pitfalls. BMJ, 1997; 315: 422-425.
- Greenhalgh T. How to read a paper: Papers that summarize other papers (systematic reviews and meta-analysis). BMJ, 1997;315: 672-75.
- Heller RF, Verma A, Gemmell I, Harrison R, Hart J, Edwards R. Critical appraisal for public health: A new checklist. Public Health 2008; 122: 92–98.
- Paper that we will appraise together:
  - Généreux M, Auger N, Goneau M and Daniel M. Neighbourhood socioeconomic status, maternal education and adverse birth outcomes among mothers living near highways. Journal of Epidemiology and Community Health, 2008; 62: 695-700.

## **Systematic Review**

- Pawson R, Greenhalgh T, Harvey G, Walshe K. Realist review – a new method of systematic review designed for complex policy interventions. *Journal of Health Services Research and Policy*, 2005; 10: 21-34.
- Barnett-Page E, Thomas J. Methods for the synthesis of qualitative research: a critical review. *BMC Medical Research Methodology*, 2009; 9: 59.
- Greenhalgh T, Peacock R. Effectiveness and efficiency of search methods in systematic reviews of complex evidence: audit of primary sources. *BMJ*, 2005; 331:1064-65.
- Greenhalgh T, Kristjansson E, Robinson V. Realist review to understand the efficacy of school feeding programmes. *BMJ*, 2007; 335: 858-861.
- Example of a published systematic review from GEOG 503:
  - DeBono NL, Ross NA, Berrang-Ford L. Does the Food Stamp Program cause obesity? A realist review and a call for place-based research. *Health & Place*, 2012; 18: 747-756.

## **Social Gradient in Health**

- Link BG, Phelan J. Social conditions as fundamental causes of disease. *Journal of Health and Social Behavior*, 1995; 35: Special issue:80-94.
- Phelan JC, Link BG, Tehranifar P. Social conditions as fundamental causes of health inequalities: theory, evidence, and policy implications. *Journal of Health and Social Behavior*, 2010; 51: Suppl:S28-40.
- Evans G, Kim P. Multiple risk exposure as a potential explanatory mechanism for the socioeconomic- health status gradient. *Annals of the New York Academy of Sciences*, 2010; 1186: 174–189.
- Hertzman C. The social geography of developmental health in the early years. *Health Care Quarterly*, 2010; 14: 32-40.
- Arnold C. Money for nothing: the truth about universal basic income. *Nature* 2018; 557: 626-28.

## **Natural Experiment and Population Health Intervention Research**

- Petticrew M, Cummins S, Ferrell C, Findlay A, Higgins C, Hoy C, et al. Natural experiments: an underused tool for public health? *Public Health*, 2005; 119:751-757.
- Hawe P, Potvin L. What is population health intervention research? *Canadian Journal of Public Health*, 2009; 100: I8-I14.
- Petticrew, M., Viehbeck, S., Cummins, S., Lang, T. Same words, different meanings: How epidemiological terminology struggles with population health intervention research. *Revue d'Epidemiologie et de Sante Publique*. 2016;64 Suppl 2:S43-54.
- Examples of Natural Experiments:
  - Fuller D, Gauvin L, Kestens Y, Daniel M, Fournier M, Morency P, Drouin L. Impact evaluation of a public bicycle share program on cycling: a case example of BIXI in Montreal, Quebec. *American Journal of Public Health*, 2013; 103:e85-92.
  - Clark C, Smuk M, Cummins S, Eldridge S, Fahy A, Lewis D, et al. An Olympic Legacy? Did the Urban Regeneration Associated with the London 2012 Olympic Games Influence Adolescent Mental Health? *American Journal of Epidemiology*, 2018; 187: 474-483.

## Neighbourhoods and Health

- Ellaway A and McIntyre S. Neighbourhoods and health. Chapter 21 in *A Companion to Health and Medical Geography*. Wiley: New York. 2009.
- Diez Roux AV, Merkin SS, Arnett D, Chambless L, Massing M, Nieto FJ, et al. Neighborhood of residence and incidence of coronary heart disease. *New England Journal of Medicine*, 2001; 12: 99-106.
- Ludwig J, Duncan GJ, Gennetian LA, Katz LF, Kessler RC, Kling JR, Sanbonmatsu L. Neighbourhood effects on the long-term well-being of low-income adults. *Science*, 2012; 337: 1505-1510.

## Housing

- Dunn JR. Housing and health inequalities: review and prospects for research. *Housing Studies*, 2000; 15: 341-366.
- Howden-Chapman P, Matheson A, Crane J, et al. Effect of insulating existing houses on health inequality: cluster randomised study in the community. *BMJ* 2007; 334:460.
- Rodgers SE, Bailey R, Johnson, R. et al. Emergency hospital admissions associated with a non-randomised housing intervention meeting national housing quality standards: a longitudinal data linkage study. *Journal of Epidemiology and Community Health* 2018; 72: 896-903.
- Riva, M., Fletcher, C., Perreault, K., Dufresne, P. Relocating to a new or preexisting social housing unit: significant health improvements for Inuit adults. *Canadian Journal of Public Health*. 2020; 111: 21-30.

## Built Environment and Chronic Disease

- Althoff T, Sosič R, Hicks J, King AC, Delp SL, Leskovec J. Large-scale physical activity data reveal worldwide activity inequality. *Nature*, 2017; 547: 336-339.
- Swinburn BA, Sacks G, Hall KD, McPherson K, Finegood DT, Moodie ML, Gortmaker SL. The global obesity pandemic: shaped by global drivers and local environments. *Lancet* 2011; 378: 804-814.
- Kolb H, Martin S. Environmental/lifestyle factors in the pathogenesis and prevention of type 2 diabetes. *BMC Medicine*, 2017; 15: 131.
- Herrmann T, Gleckner W, Wasfi RA, Thierry B, Kestens Y, Ross NA. A Pan-Canadian Measure of Community Active Living Environments (Can-ALE) Using Open Data. *Health Reports*, Under Review.

## IMPORTANT INFORMATION

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Policies governing academic issues which affect students can be found in the Policies on Student Rights and Responsibilities available at: <https://www.mcgill.ca/students/srr/>

**Late Policy.** Illness or family misfortune can happen to anyone and both are legitimate reasons for extensions on assignments or the postponement of exams. Please advise the instructor in advance of an assignment due date to make suitable arrangements and provide supporting documentation. Assignments will be assessed as late at 10% per day (including weekends).

**Student Assessment Policy.** The University's **Student Assessment Policy** exists to ensure fair and equitable academic assessment for all students and to protect students from excessive workloads. All students and instructors are encouraged to review this Policy, which addresses multiple aspects and methods of student assessment, e.g. the timing of evaluation due dates and weighting of final

examinations. The Student Assessment Policy can be consulted here:

[https://mcgill.ca/secretariat/files/secretariat/2016-04\\_student\\_assessment\\_policy.pdf](https://mcgill.ca/secretariat/files/secretariat/2016-04_student_assessment_policy.pdf). As per article 3.2.3. in the Student Assessment Policy, “In the event of extraordinary circumstances beyond the University’s control, the evaluation scheme in a course is subject to change, provided that there be timely communications to the students regarding the change.”

**Academic Integrity.** Academic integrity is important. Anything that undermines the evaluation process at McGill undermines the value of our degrees. McGill's Code of Student Conduct and Disciplinary Procedures appears in the Handbook on Student Rights and Responsibilities Article 15(a) of the Code, which is devoted to plagiarism, reads as follows:

*No student shall, with intent to deceive, represent the work of another person as his or her own in any academic writing, essay, thesis, research report, project or assignment submitted in a course or program of study or represent as his or her own an entire essay or work of another, whether the material so represented constitutes a part or the entirety of the work submitted.*

J. Raymond Hendrickson, in his book *The Research Paper* (Henry Holt and Company, New York, 1957), suggests the following guidelines for avoiding plagiarism:

- When writing a paper try to use your own words the majority of the time.
- When you do use another person’s words, use quotation marks and give credit to the source, either within the text or in a footnote.
- Don’t make slight variations in the language and then fail to give credit to the source. If the expression is essentially the same, the author still deserves credit.
- Even if you aren’t directly quoting the material, you should still document information and ideas that you use in your paper whenever they are new to you (i.e., something that you discovered in your research).
- If you're unsure, add the footnote or citation. It is better to be extra cautious than not give credit when you should.

These rules concern information obtained from any source (e.g., books, journal articles, the Internet, other students) and apply to any written submission (term papers, essays, assignments, take-home exams and lab reports). Remember that, according to McGill's Code of Student Conduct and Disciplinary Procedures, plagiarism is an academic offence. Students who are found violating the Code will be reported to the Associate Dean, and appropriate action will be taken.

McGill University values academic integrity. Therefore, all students must understand the meaning and consequences of cheating, plagiarism and other academic offences under the Code of Student Conduct and Disciplinary Procedures; for more information, see [www.mcgill.ca/students/srr/honest/](http://www.mcgill.ca/students/srr/honest/).

L’Université McGill attache une haute importance à l’honnêteté académique. Il incombe par conséquent à tous les étudiants de comprendre ce que l'on entend par tricherie, plagiat et autres infractions académiques, ainsi que les conséquences que peuvent avoir de telles actions, selon le Code de conduite de l’étudiant et des procédures disciplinaires (pour de plus amples renseignements, veuillez consulter le site [www.mcgill.ca/students/srr/honest/](http://www.mcgill.ca/students/srr/honest/)

**Language of Submission / Langue de Soumission.** In accordance with McGill University’s Charter of Students’ Rights, students in this course have the right to submit in English or in French any written work that is to be graded.

Conformément à la Charte des droits de l'étudiant de l'Université McGill, chaque étudiant a le droit de soumettre en français ou en anglais tout travail écrit devant être noté (sauf dans le cas des cours dont l'un des objets est la maîtrise d'une langue).

**Copyright.** Instructor-generated course materials (e.g., recordings of lectures, handouts, notes, summaries, etc.) are protected by law and may not be copied or distributed in any form or in any medium without explicit permission of the instructor. Note that infringements of copyright can be subject to follow up by the University under the Code of Student Conduct and Disciplinary Procedures.

We remind everyone of their responsibility in ensuring that videos produced for GEOG 503 and associated material are not reproduced or placed in the public domain. This means that each of you can use it for your educational (and research) purposes, but you cannot allow others to use it, by putting it up on the Internet or by giving it or selling it to others who may also copy it and make it available. Please refer to McGill's Guidelines for Instructors and Students on Remote Teaching and Learning ([//www.mcgill.ca/tls/instructors/classdisruption/strategies/guidelines-remote](http://www.mcgill.ca/tls/instructors/classdisruption/strategies/guidelines-remote)) for further information. Thank you very much for your help with this.

**Learning Environment.** As the instructors of this course we endeavor to provide an inclusive learning environment. However, if you experience barriers to learning in this course, do not hesitate to discuss them with me and the Office for Students with Disabilities, 514-398-6009.

McGill University is on land which has long served as a site of meeting and exchange amongst Indigenous peoples, including the Haudenosaunee and Anishinabeg nations. We acknowledge and thank the diverse Indigenous people whose footsteps have marked this territory on which peoples of the world now gather.

L'Université McGill est sur un emplacement qui a longtemps servi de lieu de rencontre et d'échange entre les peuples autochtones, y compris les nations Haudenosaunee et Anishinabeg. Nous reconnaissons et remercions les divers peuples autochtones dont les pas ont marqué ce territoire sur lequel les peuples du monde entier se réunissent maintenant.