## **GEOG 631 Methods of Geographical Research**

Fall Semester 2018

Wednesday 10:00am-11:30pm, room BH 308

The purpose of this course is to introduce graduate students to geographical research leading to the preparation of the thesis proposal and its presentation to the class in the winter term. During the fall term, there will be a series of seminars on research topics and seminars presented by Geography faculty on their research area. For some seminars, two to three articles or book chapters will be assigned and students are expected to have read them before the seminar and to participate in discussion. Students will be evaluated on depth of their reading, breadth of participation in discussion and, ultimately, their ability to articulate their research project and its broader significance.

**Instructor**: Professor Oliver Coomes (and colleagues)

Rm 415, Burnside Hall

Email: oliver.coomes@mcgill.ca

## Requirements (fall):

GEOG 631 is graded as "pass/fail". Attendance is mandatory. Please notify if you will be absent.

Research topic summary (1 page) October 31

Thesis topic presentation\* December 6 &7th

Literature review summary December 8

Attend Geospectives Lectures/

Job Talks\*\*

Various dates

Discussion questions\*\*\* As required

- Required readings are available on myCourses as PDF files or web links.
- Access web links on myCourses is limited to computers connected to the McGill network, either physically or through VPN software.

<sup>\*</sup> Thesis topic presentation. Students who started GEOG 631 in Fall 2018 will give 10-minute presentations (plus 5 minutes for questions); students who started GEOG 631 in January 2018 will give 20-minute presentations (plus 10 minutes for questions) of their full proposals.

<sup>\*\*</sup> Students are expected to attend lectures given periodically in the Department's Geospectives Series, held periodically during the fall term on Mondays, 10:00-11:30. In addition, students should attend research seminars presented by candidates for tenure-track positions in the Department.

<sup>\*\*\*</sup> Discussion questions. For some classes, students are required to bring questions and comments to class on the readings assigned for that day.

Your research topic summary (1 page, plus bibliography) is due November 1. Your literature review summary (5-6 pages, double-spaced, plus bibliography) is due on December 8th. In winter term, the course continues with seminars on thesis writing, publication, and selected topics in geographic research. Your thesis/dissertation proposal is due at the end of winter semester (typically about 20 pages, double-spaced, plus bibliography and ancillary materials). Please note that all of these should be given to your supervisor and to the instructor of GEOG 631.

For MA/MSc students, the thesis proposal becomes the written proposal for GEOG 698, which is submitted to and marked with a letter grade by the supervisory committee in mid-April. For PhD students, the dissertation proposal is submitted as part of the Comprehensive Examination, usually taken at the end of the first year, or beginning of the second year. Doctoral students typically continue to revise their proposal until it is submitted for the Comprehensive Examination.

You must work closely with your supervisor to establish mutual expectations for the thesis or dissertation proposal, including length and content. Proposals generally include a clear statement of your research question, the theoretical and empirical context of the research, the research design and methodology (including proposed data and analysis), the expected findings, and a demonstration of the originality and relevance of the research.

**Coursework**. MA/MSc students need to enroll in four graduate-level (-500 or -600 level) courses, plus 631 and 698: a total of 21 credits in the first year. The thesis course (GEOG-699) contributes a further 24 credits, in the second year. PhD students need to enroll in at least two graduate-level courses and 631. Enrolment in the Comprehensive Examination courses (GEOG700, -701 and -702) should take place before the examination.

The following two statements are required by University policy:

**Language Policy**: In accord 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.

**Academic Integrity**: 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 (see www.mcgill.ca/integrity for more information).

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 <a href="https://www.mcgill.ca/integrity">www.mcgill.ca/integrity</a>).

## **Schedule of Classes**

## September

- 5 Introduction and major Canadian fellowships (Prof. Coomes)
- 12 Geographic Information Centre and related resources (Dr. Tim Elrick)
- 19 Your McGill library needs (Ms. Emily Kingsland and NuRee Lee), McLennan e-classroom, McLennan Library
- 26 Philosophy of science (Prof. Coomes)

#### October

- 3 Geography and geographical research (Prof. Coomes)
- 10 Retrospective on graduate school: What I know now that I wish I had known in my first year
- 17 Research ethics and compliance (Prof. Wenzel)
- 24 Effective scholarly writing (Prof. Coomes)
- 31 Student writing workshop (Prof. Coomes)
  Research topic summary due

#### November

- 7 Finding a job workshop (Prof. Coomes)
- 14 How not to give a presentation (Prof. Coomes)
- 21 Faculty research presentations
- 28 No class

#### **December**

6 & 7<sup>th</sup> Student presentations: Thesis topic and literature review (15mins), Rm 426 Literature review summary due on December 7th

#### **General References**

These are books and articles that you may find helpful in your first year (and afterwards). Some are available from McGill Libraries. You may wish to purchase copies of others.

Writing your thesis/dissertation:

- Allison, B. and Race, P. 2004. *The Student's Guide to Preparing Dissertations and Theses.* London; New York: Routledge.
- Miller, J. E. 2004. The Chicago Guide to Writing About Numbers. Chicago: University of Chicago Press.
- Becker, H. S. 1998. *Tricks of the Trade: How to Think About Your Research While You're Doing It.* Chicago: University of Chicago Press.
- Creswell, J. W. 2003. *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches.*Thousand Oaks, Calif.: Sage Publications.
- Hay, I. Eds.. 2000. *Qualitative Research Methods in Human Geography*. Oxford; New York: Oxford University Press.

Geography as a discipline:

- Cutter, S. L., Golledge, R. and Graf, W. L. 2002. The big questions in geography. *The Professional Geographer*, 54 (4), 305-317.
- Gaile, G. L. and Willmott, C. J. 2003. *Geography in America at the dawn of the 21st century.* Oxford; New York: Oxford University Press.
- Haggett, P. 1990. The Geographer's Art. Oxford, UK; Cambridge, Mass., USA: Blackwell.
- Harrison, S., et al. 2004. Thinking across the divide: Perspectives on the conversations between physical and human geography. *Area*, 36, 435-442.
- Johnston, R. J. 2004. *Geography & geographers: Anglo-American human geography since 1945.* London; New York: Arnold; distributed in the U.S.A. by Oxford University Press.
- Livingston, D.N. 1992. *The Geographical Tradition: Episodes in the History of a Contested Enterprise*. Oxford: Blackwell Publishers
- Tuan, Y. F. 1991. A view of geography. The Geographical Review, 81, 99-107.

## "Class-by-Class" Outline

## September 5: Introduction and Major Canadian Fellowships workshop

Although there is no formal set reading for this week, you should review the materials on myCourses after this class. They include the syllabus, class presentations about fellowships and the Department's Graduate Handbook.

#### September 12: GIS, Remote Sensing, the GIC and other library resources

Dr. Tim Elrick, Director of McGill's Geographic Information Centre (GIC) will give an introduction to the GIC and to the facilities and services that provided to graduate students.

#### September 19: Your McGill library needs. NB: Held in McLennan e-classroom, McLennan Library.

For students new to McGill, as well as, 'old hands', it is important to know one's way around the McGill librarys, at least virtually. Library staff have reserved an e-classroom for us and will guide you on tools for bibliographic and citation searches, RSS feeds and library resources.

## September 26: Philosophy of science

This week we examine the idea of science in general and how scientific knowledge changes in particular. The required works are excerpts from two highly influential books in the philosophy and history of science. Read Popper (1959) first, and Kuhn (1970) second.

Come to class with written notes, prepared to answer and discuss the following questions: What are each authors' basic arguments regarding the nature of science and scientific knowledge (i.e., what makes science a distinct form of knowledge)? What are the major differences between Popper's and Kuhn's views? For Popper, what is the role of "falsification" in science? What does Kuhn mean by a "paradigm"? What is its relationship to "normal science"? How does each author view the relationship between the physical/natural and social sciences (and by extension, physical and human geography)? How do these ideas apply to your own (proposed) research?

## Required:

- Popper, K. R. 1959 Deductive testing of theories, and Falsifiability as a criterion of demarcation, in *The Logic of Scientific Discovery*.  $2^{\frac{1}{100}}$  edition. London: Hutchinson: 32-34; 40-42.
- ----- 1964 [original 1957]. The unity of method, in *The Poverty of Historicism*. Torchbook (3rd) ed. New York: Harper and Row: 130-143
- Kuhn, T. S. 1970 [1962]. The nature and necessity of scientific revolutions (chapter 9), in *The Structure of Scientific Revolutions*. Chicago: University of Chicago Press: 10-22.

#### Recommended:

For their full arguments, read the rest of Popper's and Kuhn's (1970) books. The Postscript in Kuhn (pp. 174-210) from the 1970 edition provides a very useful summary and refinement of his discussion of paradigms. Various collected writings on the history and philosophy of science are in Kuhn (1977). The issue of objectivity is often central in discussions of science. Popper (1979) addresses this issue, as does the very important book by T. Nagel (1986). T. Nagel in particular offers a way to think about and define

objectivity that gets away from rigid (and typically unproductive) distinctions between objectivity and subjectivity.

Popper, K. R. 1979. Objective Knowledge: An Evolutionary Approach. Oxford: Clarendon Press.

Kuhn, T. S. 1970. The Structure of Scientific Revolutions. Chicago, IL University of Chicago Press.

Kuhn, T. S. 1977. *The Essential Tension: Selected Studies in Scientific Tradition and Change*. Chicago: University of Chicago Press.

Nagel, T. 1986. The View From Nowhere. New York Oxford University Press.

## October 3: Geography and geographical research

This week we will discuss the nature of geography as a discipline. Come to prepared to answer and discuss the following questions: How do the various readings characterize geography as a discipline? Do these characterizations conform to your experience? What is the relationship between physical and human geography? What are recent developments in the field as a whole, and in the various subfields?

#### Required:

Pattison, W.D. 1990 [1964]. The four traditions of geography. *Journal of Geography*, 89(5): 202-206.

Cutter, S.L., R. Golledge and W.L. Graf. 2002. The big questions in geography. *The Professional Geographer*, 54(2): 305-317.

Phillips, J. D. 2004. Laws, contingencies, irreversible divergence, and physical geography. *The Professional Geographer* 56 (1): 37-43.

Rhoads, B.L. 2004. Whither physical geography? *Annals of the Association of American Geographers*, 94 (4): 748-755.

#### Recommended:

For more detailed overviews, see Gaile and Willmott (2003), Haggett (1990), Livingston (1992) and Johnston (2004).

#### October 10: A Retrospective on graduate school

This week two senior graduate students in Geography share their insights as to what they wish they had known in their first year at McGill in graduate school...promises to be interesting and helpful.

#### October 17: Research ethics and compliance

The presentation this week by Professor Wenzel is on the "nuts and bolts" of obtaining permission to do research on people, commonly referred to in Canada as the Research Ethics Board (REB), in the US as Institutional Review Board (IRB), or generally as "Human Subjects" review. If you will be doing research involving humans, you should begin by reading McGill's ethics policy (see required reading below) and looking at the web site of the Research Ethics Board Office at McGill (http://www.mcgill.ca/researchoffice/compliance/human/)

The other readings discuss the relationship between Human Subjects review and academic freedom. Although Hauck (2008) and Porter (2008) write in the context of political science, their comments are broadly applicable to the social sciences. Please consider the relationship between ethical behavior and institutional regulation, and extent to which IRBs are a necessary part of ethics in research, and the extent to which they a threat to academic freedom. In the recommended readings, the article by Freeley (2007) focus on law and society scholarship rather than geography, but their reviews of the history of IRBs offer an excellent background on this topic, and outlines some of the major controversies over their use.

### Required:

McGill University. n.d. Policy on the Ethical Conduct of Research Involving Human Subject.

- Hauck, R. J. P. 2008. Protecting Human Research Participants, IRBs, and Political Science Redux: Editor's Introduction. *PS: Political Science & Politics* 41 (3): 475-476.
- Porter, T. 2008. Research Ethics Governance and Political Science in Canada. *PS: Political Science & Politics* 41 (3): 495-499.

#### Recommended:

- Feeley, M. M. 2007. Legality, social research, and the challenge of institutional review boards. *Law* & *Society Review* 41:757-776 (especially pages 762-776).
- Israel, Mark, and Iain Hay. 2006. Research Ethics for Social Scientists: Between Ethical Conduct and Regulatory Compliance. London and Thousand Oaks, CA: Sage Publications.

### October 24: Effective scholarly writing

Professor Coomes will lead a seminar this week on how to write effectively. The session covers topics including, why we write; writing styles; common pitfalls; and strategies to improve our writing.

### October 31: Writing workshop

Professor Coomes will lead a workshop on academic writing. Please come to class with a 200 word statement (double spaced) that answers the following question: "What are two main research questions in your research area and why do these questions matter?" Our focus will be on writing (i.e., clarity, concision and precision) rather than content.

→Your research topic summary is due today ←

#### November 7: Finding a job workshop

This week, Professor Coomes will lead a workshop session on finding a job. The workshop examines the nature of the job market, how to present yourself and your skills, and how to go about the search and secure the job. Please come to class with a one-page cv that you will share in small groups for discussion.

## November 14: How <u>NOT</u> to give a presentation

This week, Professor Coomes presents a conference paper in a manner contrary to good practice and form. Identify the problems with his presentation in structure, content and delivery. Based on his talk, be prepared to discuss the 'shoulds' and (definitely) 'should nots' of oral presentations.

## **November 21: Faculty Research Presentations**

Three faculty members from our department have been invited to describe their research programs as a way of allowing graduate students to 'get to know' the interests and expertise of faculty who lie beyond their research circle or lab.

## November 28: No class

No class today; class held late next week.

**December 6&7th:** *Student presentations: Literature review and thesis topic (15mins), Rm 426*Your literature review summary is due on December 8th.

# **Graduate Program Schedule of Progress and Requirements**

## MA/MSc program

2018	2019			2020			
Fall	Winter	April	Summer	Fall	Winter	Summer	August
≥ 2 graduate courses & GEOG 631 GEOG 698	≥ 2 graduate courses & GEOG 631 GEOG 698			GEOG 699	GEOG 699		
Form Supervisory Committee.		Long proposal presentation (30					
Read literature and formulate ideas. Research topic summary (2-3 pages)	Complete proposal	minutes) Submit final proposal to supervisory committee (GEOG 698 grade)	Gather data in fieldwork, lab work, archives, etc.	Review data, begin analysis, and writing	Complete analysis and writing of thesis draft  Nominate thesis examiners	Revise thesis draft	Submit thesis by August 15, 2020
Short Presentation (15 minutes) Literature summary (5-6 pages)							

## **Graduate Program Schedule of Progress and Requirements**

## Ph.D. (entering as PhD2)

2018	2019			2020	2020-22	
Fall	Winter	April	Summer	Fall	Winter	
≥ 1 graduate courses & GEOG 631	≥ 1 graduate courses & GEOG 631			GEOG 700, 701, and 702		
Form supervisory committee. Read literature and formulate ideas. Research topic summary  (2-3 pages)	Complete draft proposal	Long proposal presentation (30 minutes) Submit draft proposal to supervisory committee	Revise proposal. Gather preliminary data in fieldwork, lab work, archives, etc.	Apply for fellowships and grants for research. Comp exams (pass/fail marks assigned for GEOG 700, 701, and	Begin doctoral research	Conduct research, complete analysis, draft dissertation. Publications (in consultation with supervisor). Complete dissertation in 2022
Short				702)		
Presentation						
(15 minutes)						
Literature summary (5-						
6 pages)						

## **Graduate Program Schedule of Progress and Requirements**

## Ph.D. (entering as PhD1)

2018	2019			2020	2020-23	
Fall	Winter	April	Summer	Fall	Winter	
≥ 2 graduate courses & GEOG 631	≥ 2 graduate courses & GEOG 631			≥ 1 graduate course	≥ 1 graduate course & GEOG 700,	
Form supervisory committee. Read literature and formulate ideas. Research topic summary		Long proposal presentation (30 minutes) Submit draft proposal to supervisory committee	Revise proposal. Gather preliminary data in fieldwork, lab work, archives,	Apply for fellowships and grants for research	701, and 702 Comp exams by end of summer (pass/fail marks assigned for GEOG 700, 701, and 702)	Conduct doctoral research, complete analysis, draft dissertation. Publications (in consultation with supervisor). Complete dissertation in 2023
(2-3 pages) Short Presentation (15 minutes) Literature summary (5-6 pages)	Complete draft proposal		etc.	Prepare for comps	Begin doctoral research	