

Graduate Geography Course Timetable 2018-19

Fall 2018

Fall courses begin the week of **September 10, 2018**

GGR1105H: Human Geography Core Course	E. Gilbert	Fridays, 12-3pm	SS5016G	GGR only
--	-------------------	------------------------	----------------	-----------------

[GGR1105H Course Outline Fall 2018](#)

The course will feature discussion of a number of issues pertaining to what life is like as an academic and some of the related skills and experiences that go along with it (e.g., the tenure process, journal peer review processes, tips on how to publish journal articles, research collaboration, conference presentations, teaching, the academic job market, relationship between academia and the wider world, public intellectualism, theoretical versus applied work, etc.). In addition, it will include engagement with non-academic career trajectories, including how skills and experiences from graduate school can contribute to (or hinder?) success in policy deliberations, activism, government and non-profit work, etc. It will also encompass an overview of non-profit work, major debates in the field, and of theory and explanation in geography. The course incorporates a workshop on proposal writing or research statement element for MA students. The main difference between GGR 1105H and GGR 1110H is in the reading load but also the contrast in specific goals. Specifically, GGR 1110H emphasizes critical reading and thinking drawing on contemporary texts by or relevant to geographers, discussion of readings and the role of theory and evidence in explanation, and perhaps also paying explicit attention to different writing styles. GGR 1105H is more of a wide ranging course but with some emphasis on practical survival tips for academic and related spheres of life.

GGR1110H: Issues in Geographical Thought and Practice (PhD Human Geography Core Course)	R. Buliung	Fridays, 12-3pm	SS5017A	GGR only
--	-------------------	------------------------	----------------	-----------------

[GGR1110H Course Outline Fall 2018](#)

How do geographers go about addressing the challenges and problems of the world? How does the wider context (social, institutional, environmental....geographical!) shape the kinds of issues geographers examine, how these issues are framed, and how they are addressed? How do broad intellectual currents influence the work that is done in geography (and vice versa), and how do we understand the relationships between the broad intellectual currents and the “world out there”? Consistent with current emphasis in critical geography, all geographers, whether explicit or not, are using both theory and so politics in their work, along with some implicit or explicit problem statement in framing what they look at and what are they trying to explain. Even the choice of phenomena to examine is a political choice. Thinking carefully about these issues helps to understand the relationship between scholarship (geographical or otherwise) and the “real world”, while at the same time facilitating reflexive and careful consideration of research topics and approaches. This is, in our view, preferable to relying uncritically on policy or academic discourses and their prevailing theories, debates, questions, and approaches.

GGR1200H: Physical Geography Core Course	D. Harvey & Y. He	Fridays, 12-3pm	BL327	GGR only
---	------------------------------	------------------------	--------------	-----------------

[GGR1200H Course Outline Fall 2018](#)

This is a mandatory core course for all first year physical geography (MSc and PhD) graduate students. The main objective is to introduce students to successful approaches in graduate school and for conducting scientific research. Specifically, topics will include: fellowship application, literature review, experimental design, presentation skills, proposal preparation, and disseminating scientific research. It also will provide an overview of physical geography as a discipline and include guest presentations by members of each of the four newly established physical geography research clusters. The course will foster intellectual interactions and build support within student cohorts and include mandatory attendance at departmental and university seminar series. Doctoral students who completed their Master's in Physical Geography in this department and who took this course as a Master's student are exempted from taking this course as part of their doctoral course work. Following discussion between student, supervisor, and the Associate Chair, Graduate, exemption from this course may also be granted to certain PhD students who have taken an equivalent course as part of their MSc programme.

JPG1111H: Research Design in Geography and Planning	J. Zhang	Mondays, 2-4pm	SS5016G	GGR/PLA only
--	-----------------	-----------------------	----------------	---------------------

[JPG1111H Course Outline Fall 2018](#)

This course will introduce students to philosophical and methodological approaches to research in geography. Through seminar and lecture modules, students will acquire an understanding of different research paradigms, quantitative and qualitative methods, and the knowledge necessary for developing sound and reflective geographic research strategies. The goals of the course will be to provide students with the knowledge needed to effectively evaluate research, understand the process of research design, formulate research questions and develop a geographic research proposal.

GGR1407H: Efficient Use of Energy	D. Harvey	Wednesdays, 5-8pm	SS1072	Open
--	------------------	--------------------------	---------------	-------------

[GGR1407H Course Outline Fall 2018](#)

The course examines the options available for dramatically reducing our use of primary energy with no reduction in meaningful energy services, through more efficient use of energy at the scale of energy-using devices and of entire energy systems. Topics covered include energy use in buildings, transportation, industry, and agriculture. Each topic will cover (i) the underlying physical principles that determine the potential of and the limits to energy efficiency improvements, (ii) the difference in potential savings when focusing on individual energy using devices rather than entire energy-using systems, (iii) examples of efficiency improvements that have been achieved in practice in various countries around the world, and (iv) the cost and financing of energy efficiency improvements. As well, the role of the so-called rebound effect in eroding the energy-saving benefit of efficiency improvements will be discussed. Exclusion: GGR347H.

JFG1610H: Sustainable Forest Management	T. Smith	Mondays, 3-6pm	ES4001	Open
--	-----------------	-----------------------	---------------	-------------

The field and practice of sustainable forest management and certification are rapidly evolving. This course is designed to provide an overview of sustainable forest management policies and programs from a provincial, national and international perspective. Through the implementation of such policies and programs, various outcomes should be achieved (ecological sustainability, biodiversity conservation, economic stability and community longevity). Historical perspectives, current initiatives and future opportunities are reviewed. The successes achieved by the implementation of such a program are measured through the use of criteria and indicators and certification processes. The ISO, SFI, the Canadian Standards Association, the Forest Stewardship Council and other certification processes are studied. Enrollment in this course is managed by the [Faculty of Forestry](#).

JGE1425H: Livelihood, Poverty and Environment in Developing Countries	C. Abizaid	Tuesdays, 12-2pm	SS5016G	Open
--	-------------------	-------------------------	----------------	-------------

[JGE1425H Course Outline Fall 2018](#)

The livelihoods of the rural (and in some cases the urban) poor in the developing world are closely connected to the environment. Hundreds of millions of people, including many indigenous and other traditional peoples, rely directly upon natural resources, at least in part, for their subsistence and often, also, for market income. For many of them, access to such resources is a matter of survival-of life or death, a way of life, or the hope for a better future for them or for their children. Although the livelihoods of these peoples are sometimes regarded as having a negative impact on the environment, more recently, many of them are being heralded as models for biodiversity conservation and sustainable resource. A better understanding of how the rural (and urban) poor make a living -their livelihoods- is considered key to addressing issues of poverty and sustainable resource use, and also for environmental change mitigation and adaptation. This course seeks to develop an understanding of livelihoods among the poor in developing countries, with a focus on how assets, social relations and institutions shape livelihood opportunities in the present and into the future. More broadly, attention will be paid to the ways in which livelihoods are connected to the environment, but also to economic and political processes, with an eye to gain insight on their potential for poverty alleviation, sustainable resource use, and environmental change mitigation/adaptation. The course will also explore emerging areas of inquiry in livelihoods research.

JPG1400H: Advanced Quantitative Methods	M. Widener	Thursdays, 12-3pm	RW107	Open
--	-------------------	--------------------------	--------------	-------------

[JPG1400H Course Outline Fall 2018](#)

Spatial Analysis consists of set of techniques used for statistical modeling and problem solving in Geography. As such, it plays an integral role in the detection of spatial processes and the identification of their causal factors. It is therefore a key component in one's preparation for applied or theoretical quantitative work in GIScience, Geography, and other cognate disciplines. Space, of course, is treated explicitly in spatial analytical techniques, and the goal of many methods is to quantify the substantive impact of location and proximity on human and environmental processes in space.

JPG1426H: Natural Resources, Differences & Conflict	S. Mollett	Thursdays, 10am-12pm	SS5016G	Open
--	-------------------	-----------------------------	----------------	-------------

[JPG1426H Course Outline Fall 2018](#)

This course is concerned with the ways in which natural resource policies governing use, access, and control of resources are imbued with and reproduce conflict. Through a variety of case studies and theoretical engagements (feminist, postcolonial, anti-racist, Marxist, post-humanist), this course examines how natural resource conflicts are shaped by multiple kinds of power. In this course we discuss how such contests are more than political economic struggles. Through attention to the entanglements of environment, difference and struggle, a core aim of this seminar is to interrogate what is given and taken-for-granted within dominant narratives, instruments and institutions shaping land and territorial demarcation, water access and distribution, livelihood (in)security, oil and mineral extraction, biodiversity conservation, and struggles over urban citizenship. While this course looks to make visible how states and elites shape space through natural resource control, simultaneously, it attends to how people and their communities work to defend and remake their lives and livelihoods in the face of displacement and dispossession.

JPG1428H: Managing Urban Ecosystems	T. Conway	Wednesdays, 10am-12pm	UTM, DV1150	Open
--	------------------	------------------------------	--------------------	-------------

[JPG1428H Course Outline Fall 2018](#)

This reading seminar focuses on the different ways people interact with and manage urban ecosystems. The course begins by exploring the characterization of cities as ecosystems. We will then examine the socio-ecological research and management goals that draw on and build from an urban ecosystem perspective. Management of urban climates, hydrology, and vegetation will be explored. The role of municipal policy, built form, residents and other key actors will be examined in-depth. Throughout the course, issues associated with bridging knowledge gaps between the social and natural sciences, unique characteristics of urban ecosystems, and the role of individual decision-makers will be considered.

This course is taught at UTM campus with a video link to STG campus.

JPG1512H: Place, Politics and the Urban	A. Walks	Thursdays, 3-5pm	SS5016G	Open
--	-----------------	-------------------------	----------------	-------------

[JPG1512H Course Outline Fall 2018](#)

The course examines the relationship between geography, politics, and governance. In particular, it seeks to interrogate the theoretical importance of place, space and urban form in the production of political and social values, practices, strategies, and discourses, and in turn, analyze the implications of the place-politics nexus for understanding shifts in the direction and form of urban policy, governance and citizenship. The course begins with a broad examination of the theoretical bases for linking place and politics, particularly as this relates to the construction of urban and non-urban places, with literature drawn from a number of sources, including geography, urban studies, political science, and planning theory. The course then examines a number of specific cases, from gentrification as a political practice, to the politics of homelessness and anti-panhandling legislation, and the political geography of regional planning and municipal amalgamation, that inform and challenge our understanding of the relationship between place and political praxis.

JPG1617H: Organization of Economies and Cities	J. Miron	Tuesdays, 10am-12pm	SS5016G	Open
---	-----------------	----------------------------	----------------	-------------

[JPG1617H Course Outline Fall 2018](#)

This is a course about the urban economy. The emphasis is on understanding how agency (initiative) leads political actors in a state to make possible the conditions that give rise to an urban economy. I review and re-interpret fundamental models that explain how the operation of markets in equilibrium shapes the scale and organization of the commercial city in a mixed market economy within a liberal state. The course reviews classic models of the urban economy that are based on the work of Alonso, DiPasquale & Wheaton, Getz, Herbert & Stevens, Hurd, Lowry, Mills, Muth, Ripper & Varaiya, and Schlager, among others. The antecedents to these models can be traced back to the work of Andrews, Beckmann, Christaller, Clark, Cooley, Haig, Leontief, Polanyi, Power, Reilly, Thünen, Samuelson, and Tiebout. These models assume appurtenant property, contract, and civil rights. As befits the liberal state, such models also presume that individuals and firms are purposeful and have autonomy in these markets. These models raise questions about how and when does governance enable and facilitate markets, autonomy, and the urban economy in this way. Overall, the perspective of this course is that it is helpful to see governance (and hence the urban economy) as outcomes negotiated by political actors motivated by competing notions of commonwealth and aggrandizement.

JPG1660H: Regional Dynamics	R. DiFrancesco	Thursdays, 12-2pm	BL114	Open
------------------------------------	-----------------------	--------------------------	--------------	-------------

[JPG1660H Course Outline Fall 2018](#)

The space-economy has always been characterized by polarization across many dimensions. As a result, regional economic change has

proved very difficult to fully explain using conventional theories and methods. This course examines the theoretical linkage between related trends of globalization, vertical disintegration, technological and organizational innovation, regional specialization, and the locational behaviour of firms. We will focus on the seemingly counter-intuitive finding that regional economic change in a time of increasing global interdependence is only becoming more dependent on the local context. Topics will include evolutionary economic geography, path dependence, economic clusters, learning regions, the role of institutions, knowledge spill-overs, and the geography of innovation, among others. We will see why economic activity is becoming ever more concentrated in space even as it globalizes. Exclusion: GGR431.

JPG1809H: Spaces of Work	M. Buckley	Mondays, 10am-1pm	SS5016G	Open
---------------------------------	-------------------	--------------------------	----------------	-------------

[JPG1809H Course Outline Fall 2018](#)

This course will introduce students to Marxist, feminist, anticolonial and intersectional perspectives on ‘work’ in the twenty-first century. A key intention of this course is to prompt students to examine what forms of work – and also whose work – has been taken into account in geographical scholarship and to explore a number of prominent debates concerning labour, work and employment within geography over the last three decades. In doing so we will engage with foundational political economy texts on the relations of labour under capitalism, and texts within geography and sociology on work, labour, place and space. We will also examine a number of broad economic and cultural shifts in the nature of contemporary work and employment such as de-industrialization, the feminization of labour markets and service sector work, neoliberalization and the rise of the ‘precariat’. At the same time, students will be prompted to consider critiques of some of these ‘transformational’ narratives to probe the colonial, patriarchal, and capitalist continuities shaping the contours of contemporary work. In this sense this is not an exhaustive course on labour and work in geography, but rather a series of discrete introductions to key scholarly arguments about work, often followed by a range of responses to those arguments in the following week. The course will touch on a broad range of topics, including unfree labour, labour organizing, precarious employment and social reproductive work which are tied together by four overarching themes that run through the course – value, identity, agency and justice. Overall this course aims to give students the chance to explore not only how work has been conceptualized and studied in geography, but how it could be.

JPG1812Y: Planning for Change	A. Kramer	Fridays, 9am-12pm Fall and Winter	SS5017A	GGR/PLA priority, instructor approval is required
--------------------------------------	------------------	--	----------------	--

Geography & Planning students can request enrolment on Acorn and should attend the first class. Instructors will approve final registration after the first course meeting. Students from outside the department can attend the first class and if they are approved by the instructor must submit an [add/drop form](#) to the department to enrol.

[JPG1812Y Course Outline Fall 2018](#)

Planning for Change is a year-long course (Y) comprised of seminars, readings, films, discussion, writing, reflection and the completion of a major project designed by and for a community organization. Students will have the opportunity to gain an in-depth, reflective experience in the field of community development. The course is based on successful models of service-learning courses at other institutions. Service learning, as a pedagogical practice, aims to unite what often appear to be divisive realms of theory and practice by providing analytical tools to connect academic and community development work. Service-learning aims to create an educational space where work is done

for community organizations with students based on the self-identified needs of the community. Students are challenged to reflect on the work they are doing and the context in which service is provided. Planning/Geography education and service-learning are in many ways an ideal partnership. A service-learning course in the graduate program at the University of Toronto opens a way for students to gain hands-on experience in the field of community development.

JPG2150H: Special Topics - Planning Modernity, Post-War Toronto	P. Hess/R. Lewis	Thursdays, 5-8pm (lectures) Field trips on Friday afternoons	SS5017A	Open
--	-------------------------	---	----------------	-------------

[JPG2150H Course Outline Fall 2018](#)

This course examines the planning history of Toronto's post-war landscapes using local field trips linked to readings and seminars. Using historical perspectives on the changing character of selected areas, the course explores the planning, creation, reproduction, and evolution of the city's landscapes over time. A broad approach centered on the political economy of modernist planning and urbanism, metropolitan development, and creative destruction will be used to examine the key dynamics of urban change in Toronto after 1945 with attention paid to the role of changing ideas about planning and normative models of built form.

JPG2151H: Special Topics - Urban/Regional Economic Development in Theory and Practice	J. Spicer	Mondays, 10am-12pm	SS5017A	GGR/PLA priority
--	------------------	---------------------------	----------------	-------------------------

[JPG2151H Course Outline Fall 2018](#)

This course surveys a wide range of urban and regional economic development planning and policy practices in use in market-oriented societies today, with a focus on the North American context in comparative perspective. Coverage includes orthodox theories from economic geography, urban economics, and political science/sociology, which provide the rationale for people-centric, place-based, and institutionally-oriented economic plans and policies. Heterodox and equity-oriented alternatives to neoclassical and traditional approaches will also be systematically examined. Using a case-based approach, representative practices and models reviewed include: cluster strategies, enterprise zones/districts, tax/relocation incentives for both capital and labor, regional and anchor institution strategies, community benefit agreements, local hiring/procurement preferences, and community/shared ownership.

ENV1103H: The U of T Campus as a Living Lab of Sustainability	J. Robinson	Tuesdays, 2-4pm	WO20	Contact School for Environment
--	--------------------	------------------------	-------------	---------------------------------------

[ENV1103H Course Outline Fall 2018](#)

Sustainability is a growing priority for universities all over the world. Many are developing strong operational sustainability goals and targets, and are giving increasing emphasis to teaching and research on sustainability issues. Yet few have committed at the executive level to integrating academic and operational sustainability in the context of treating their campus as a living laboratory of sustainable practice, research and teaching. Such living lab approaches offer a large potential for universities to play a significant role in the sustainability transition. This course will explore and apply the living lab concept, in the context of operational sustainability at the University of Toronto. We will begin by looking briefly at the literature on university sustainability and the living lab concept. The bulk of the course will involve undertaking an applied research project on some aspect of campus sustainability, working in close partnership with operational staff at the University of Toronto. Students will develop the skills needed to work across disciplines and fields of study, and

with non-academic partners.

Enrollment in this course is managed by the [School for the Environment](#).

EES1119H: Quantitative Environmental Analysis	A. Neuman/Y. Shimoda	Thursdays, 10am-1pm	UTSC, BV471	Contact Physical & Environmental Sciences
--	-----------------------------	----------------------------	--------------------	--

This course provides an introduction to the field of ecological statistics. Students will become familiar with several methods of statistical analysis of categorical and multivariate environmental data. The course will provide a comprehensive presentation of the methods: analysis of variance, regression analysis, structural equation modeling, ordination (principal component & factor analysis) and classification (cluster & discriminant analysis) methods, and basic concepts of Bayesian analysis. Emphasis will be placed on how these methods can be used to identify significant cause-effect relationships, detect spatiotemporal trends, and assist environment management by elucidating ecological patterns (e.g., classification of aquatic ecosystems based on their trophic status, assessment of climate variability signature on ecological time series, landscape analysis). The course will consist of 2 hr-lectures/tutorials where the students will be introduced to the basic concepts of the statistical methods and 2-hr lab exercises where the students will have the opportunity to get hands-on experience in statistical analysis of environmental data.

Enrollment in this course is managed by the [Department of Physical & Environmental Sciences](#).

EES1128H: Biophysical Interactions in Managed Environments	M. Isaac	Wednesdays, 12-3pm	UTSC, TBD	Contact Physical & Environmental Sciences
---	-----------------	---------------------------	------------------	--

This course will introduce the mechanisms of contaminant transport in lakes and the coastal ocean. The emphasis will be on a practical understanding of different dispersion regimes from point and distributed pollution sources. Students will learn to use the basic equations that model these processes and understand how these equations are used in water quality models. Students will also be introduced to field measurement techniques and learn to compare field data with model data. Among the subjects to be discussed are the dispersion of pollutants in lakes, rivers and the coastal zone, mixing in stratified estuaries and the dynamics of the seasonal thermocline.

Enrollment in this course is managed by the [Department of Physical & Environmental Sciences](#).

POL2338H: Innovation and Governance	H. Bathelt	Tuesdays, 4-6pm	TBD	Contact Political Science
--	-------------------	------------------------	------------	----------------------------------

[POL2338H Course Outline Fall 2018](#)

The course discusses a broad range of topics related to innovation and governance including (i) technological change and its social and economic consequences, (ii) the spatial effects, which result from this, and (iii) necessities for innovation policies at different territorial levels. As the international competitiveness of industrial economies cannot be based on cost advantages alone, future growth in the knowledge-based economy will increasingly rely on capabilities related to knowledge generation and innovation. As a consequence, questions of performance in innovation and support policy will become decisive at the firm, regional-state and national-state levels. The seminar is divided into three main parts. The first part deals with conceptual foundations of innovation, and explores the connection between economic learning, knowledge creation and innovation processes. In the second part, innovation and governance are

investigated in territorial context, ranging from national and subnational innovation systems to permanent and temporary clusters and varieties of capitalism. The third part of the course discusses aspects of transnational innovation processes and multilevel governance challenges.

Enrollment in this course is managed by the [Department of Political Science](#).

Winter 2019

Winter courses begin the week of **January 7, 2019**

GGR1216H: Advanced Biogeochemical Processes	I. Lehnherr	Wednesdays, 3-6pm (NEW TIME)	UTM, NE3210	Open
--	--------------------	---	------------------------	-------------

Biogeochemistry explores the intersection of biological, chemical, and geological processes that shape the environment. In an era of unprecedented human-induced environmental and climate change, research in this field is advancing rapidly. This seminar course explores the biogeochemical cycles of major and trace elements including carbon, nitrogen, phosphorus, sulfur and mercury, and examines how humans alter these cycles resulting in many of the environmental issues we are faced with today, such as eutrophication, climate change, ocean acidification and pollution by toxic contaminants. Additionally, the course focuses on the mechanisms controlling biogeochemical processes at local to global scales, including interactions between abiotic and biotic factors, such as climate, redox conditions, microbial metabolism and ecology. Topics covered include biogeochemical processes in the atmosphere (e.g., aerosols-ecosystems productivity interactions, black carbon), aquatic ecosystems (e.g., redox controls on sediment P release in eutrophic lakes) and terrestrial environments (e.g., soil respiration of legacy carbon in thawing permafrost), as well as some of the emerging techniques (e.g., stable-isotopes, -omics) used in biogeochemistry. Exclusion GGR406H5.

GGR1218H: Open Source Methods in Physical Geography	T. Porter	Mondays, 2-5pm	UTM, DV2060	Open, instructor permission required
--	------------------	-----------------------	------------------------	---

Students may request enrolment on Acorn and must also contact the instructor who will approve enrollment requests.

Quantitative datasets in geographical research have grown rapidly in size and complexity, and often demand the implementation of custom open-source programs built in languages such as Matlab to mine, process, analyse and plot spatiotemporal phenomena (e.g., global climate warming). Such datasets may include, for example, self-describing, multi-dimensional gridded climate data organised as a NetCDF file, which cannot be accessed efficiently using standard spreadsheet software. This course will provide students with a hands-on, lab-based introduction to Matlab, a high-level programming language used in the natural and applied geosciences. Applications in data mining, spatial statistics, mapping, and time-series analysis will be demonstrated using examples in physical geography research. Students will complete a series of assignments to develop their coding and problem solving skills, and a final project that applies these skills in a practical way to their thesis research.

GGR1315H: The Cryosphere	L. Brown	Tuesdays, 9-11:30am	IB210 (UTM)	Open
---------------------------------	-----------------	----------------------------	--------------------	-------------

Snow and ice dominate the Canadian landscape. There is virtually no area in Canada which escapes the influence of snow and ice. We skate on frozen ponds, ski down snow laden mountains, drive through snow blizzards and watch how ice jams in rivers cause rivers to swell and floods to occur. The duration and the thickness of snow and ice increase rapidly northwards, and glaciers are found in mountainous areas and in large parts of the Arctic region. Given that snow and ice impact heavily on the Canadian way of life, this course seeks to understand the dynamics of snow and ice in a hydrological context. This course will examine snow properties, snowcover distribution, glacier hydrology, melt runoff, and ice in its many forms (lake ice, river ice, sea ice, and ground ice). This course will also examine some of the recent observed changes occurring in the cryosphere regions of Canada. This course includes a 2 day field trip (participation can be discussed on an individual basis). Exclusion; GGR317H (UTM).

GGR1411H: Nature and Justice in the Anthropocene	N. Singh	Tuesdays, 5-7pm	SS5016G	Open
---	-----------------	------------------------	----------------	-------------

[GGR1411H Course Outline Winter 2019](#)

The current ecological crisis is calling into question our ways of being human and of relating to the rest of the world. The course addresses the challenge of rethinking nature-society relations and issues of justice in the Anthropocene. It asks whether the concept of the Anthropocene and its variants, helps power (or not) emancipatory politics and visions for future that socially just and ecologically abundant. We will draw from Indigenous ontologies, Environmental Justice movements, transition discourses, and aspirations for “living well” as well as contemporary theories of affect, more-than-human geographies and new materialism to query and reimagine nature-society entanglements. Topics covered include: environmental thought and activism, Environmental and Climate Justice movements, post-capitalist economic imaginaries and transition discourses.

GGR1916H: Remote Sensing of Vegetation Traits and Function	J. Chen	Thursdays, 10am-12pm	KP113	Open
---	----------------	-----------------------------	--------------	-------------

This course is offered in conjunction with GGR414H Advanced Remote Sensing. Building on GGR337H1 Environmental Remote Sensing (also offered as a graduate course GGR1911H), which covers the basic theories and techniques of optical and microwave remote sensing of the land surface, GGR1916H introduces advanced theories and techniques for land cover mapping, retrieval of vegetation structural and physiological traits, and remote sensing of vegetation light use efficiency and photosynthetic capacity. Diagnostic ecosystem models will also be introduced for terrestrial water and carbon cycle estimation using remote sensing data. Optical instruments for measuring vegetation structural parameters in the field will be demonstrated, and high-resolution remote sensing images acquired from a drone system will be used as part of the teaching material and lab assignments. For GGR1916H additional lectures will be offered on basic radiative transfer theories as applied to remote sensing of vegetation traits and function. Exclusion GGR414H.

JPG1120H: Advanced Qualitative Research - Methodology and Epistemological Foundations for Planning and Geography	K. Rankin	Tuesdays, 1-3pm	SS5016G	GGR/PLA priority
---	------------------	------------------------	----------------	-------------------------

[JPG1120H Course Outline Winter 2019](#)

This course arises out of the interest of doctoral students in Planning and Geography who desire to acquire rigorous qualitative research skills that would complement their research interests, assist in developing their dissertation proposals, and contribute to preparation for a career as educators and scholars in academia and beyond. The primary concern is to develop a deep understanding of a range of qualitative research methods and their epistemological foundations, with an emphasis on ethnographic approaches. Readings and discussions will be oriented to developing a philosophical understanding of the epistemology and ontology of knowledge so that students can develop a critical approach to research design. Readings reflect an understanding that doctoral planning and geography students commonly conduct ethnographic research in international settings, which requires an ability to read and interpret complex meanings, as well as attend to the politics of knowledge production and representation. The course will also address basic qualitative research methods, such as interviews and discourse analysis, and approaches to analysis (including the use of qualitative analysis software) – with a focus on critical approaches to knowledge production and researchers’ positionality. The course is organized as a seminar with a heavy emphasis on collective analysis of course materials, and each student’s involvement in writing reflections and classroom discussions on a weekly basis.

JPG1429H: The Political Ecology of Food and Agriculture

R. Isakson

Tuesdays, 11am-1pm

SS5016G

Open

Agrifood systems, connecting production and consumption, markets and various types of agrarian labour, are undergoing profound social and ecological change. Among these developments are large-scale land grabs, the financialization of food and farming, challenges to settler agriculture and the resurgence of indigenous food systems, the emergence of robust ‘urban’ and ‘rural’ alternatives to industrial and colonial agriculture. In trying to make sense of these changes, and the various social movements that have emerged in their wake, this course deploys the related paradigms of agrarian political economy and political ecology to analyze the forces and social relations that define land-based and food-focused transformations, both historically and in the contemporary moment. The course examines the often forgotten roots of contemporary debates in political ecology and food, that is, the enduring agrarian question. The agrarian question examines the extent to which capital has transformed agricultural production and the degrees to which producers have been able to resist dispossession and the industrialization and capitalization of agriculture. The course starts with foundational perspectives on the agrarian question from the early 20th century before discussing the renaissance of these debates in the 1970s and 1980s and the emergence during this time of political ecology as a critical approach to the study of food and land-based practices. Updating these earlier debates the course tackles a number of defining contemporary developments, as noted above, that are reshaping the meaning and character of land and food.

JPG1502H: Cities of the Global South

R. Narayanareddy

Wednesdays, 10am-12pm

SS5016G

Open

In this course we will critically examine “global urbanism” while paying explicit attention to how cities of global South have been studied, understood and depicted in global urban research. In the past two decades, influential policymakers have promulgated the “global cities” paradigm, which frames 21st century urbanism in global terms. According to the “global cities” paradigm “global” cities of the North, such as New York, London and Tokyo are at the pinnacle of globalization. In contrast, cities of the global South are consistently portrayed as “mega” cities that are disorderly, polluted, chaotic, ungovernable, and marked by infrastructure collapse. In short, cities of the global South are mega cities with mega problems. In this course we will begin by examining policy-oriented as well as academic literature in order to understand how the global cities paradigm was given coherence and propagated across the world.

JPG1503H: Space, Time, Revolution

K. Goonewardena

Wednesdays, 5-8pm

SS5016G

Open

[JPG1503H Course Outline Winter 2019](#)

This graduate seminar examines the relations between critical spatio-temporal and socio-spatial thought and new conceptions of radical politics. Its references are twofold: on the one hand, it surveys the recent attempts of such thinkers as Alain Badiou, Slavoj Žižek, Daniel Bensaïd, Jacques Rancière, Giorgio Agamben, Bruno Bosteels and Peter Hallward to re-theorize revolution in the face of global liberal-democratic hegemony; on the other hand, it interrogates their conceptions of ‘event’, ‘situation’, ‘dissensus’, ‘exception’ and ‘communism’ in the historical court of actual revolutionary experiences produced by anti-colonial and socialist politics, especially at such moments as 1789, 1791-1803, 1848, 1871, 1917, 1949, 1968. The readings for this course will therefore draw on both contemporary theoretical texts and classic accounts of revolutionary subjectivity that highlight its spatio-temporal and socio-spatial dimensions, in the vein of Kristin Ross’s *The Emergence of Social Space: Rimbaud and the Paris Commune* as much as Frantz Fanon’s *The Wretched of the Earth*.

JPG1504H: Institutionalism and Cities

A. Sorensen

Mondays, 3-5pm

SS5017A

Open

[JPG1504H Course Outline Winter 2019](#)

This course focuses on the role of institutions in shaping processes of urban change, governance and planning. The premise of the course is that cities are extraordinarily densely institutionalized spaces, and that the formal study of institutions, and processes of institutional continuity and change will be productive for both planners and urban geographers. The course reviews the New Institutional literature in Political Science, Sociology, Economic Geography, and Planning Studies, with a focus on Historical Institutional concepts, and develops a conceptual framework for the application of institutionalist theory to urban space. The claim is that an understanding of institutions is revealing of power dynamics in urban governance, is valuable for understanding urban governance and planning in international comparative perspective, and provides a valuable perspective on urban property systems.

JPG1507H: Housing Markets and Housing Policy Analysis

L. Bourne

Wednesdays, 11am-2pm

SS5017A

GGR/PLA priority

[JPG1507H Course Outline Winter 2019](#)

The objective of this course is to provide an opportunity for in-depth analyses of housing, as both product and process, and to apply these analyses to concrete housing situations and current policy and planning problems. Two principal themes are emphasized: 1) assessments of changes in the structural and spatial dimensions of housing demand and supply, and alternative modes of housing provision; and 2) evaluations of housing policies and programs and their relationships to social and economic policies and urban planning. The latter will be undertaken primarily through the discussion of case studies of specific problems and policy issues, the former through a review of basic concepts on housing in the first few weeks of class.

JPG1605H: The Post-Industrial City

J. Hackworth

Thursdays, 2-4pm

SS5017A

Open

[JPG1605H Course Outline Winter 2019](#)

In the mid-twentieth century, most cities in the Great Lakes basin were oriented around some form of heavy manufacturing. Forty to fifty percent of the labour force in major cities was involved in manufacturing. Urban form, development, growth patterns, and social conflict were often related to, if not centered on, the manufacturing economy. Since then, all major cities have experienced at least some turn away from heavy centralized manufacturing. This shift has altered the form, social structure, and labor forces of cities throughout the region (and others like it in the Global North). Yet while most acknowledge this shift, a great deal of urban theory and planning practice still revolves around ideas developed to understand the industrial city. This seminar is devoted to better understanding the post-industrial city. We focus on the post-industrial thumbprint of four areas: 1) socio-spatial polarization; 2) ethno-racial conflict; 3) land use challenges; and 4) socially equitable economic development.

JPG1615H: Planning the Social Economy

K. Rankin

Mondays, 1-3pm

SS5016G

Open

[JPG1615H Course Outline Winter 2019](#)

What would it take to build a ‘social economy,’ an economy rooted in the principles of social justice, democratic governance and local self-reliance? What are the progressive and regressive implications of such an undertaking? JPG 1615 will explore these questions both theoretically and practically. Theoretically, with recourse to some canonical and more recent writings about the interface between ‘society’ and ‘economy’. Practically, the course will look at what role municipal governments could and do play in building the social economy. The case of social housing in the GTA serves as an example—as well as a context for learning about key tools in local economic development. The course will also consider how communities and neighbourhoods are growing increasingly active in developing alternative economic institutions, such as cooperatives, participatory budgets and community development financial institutions in order to institutionalize the social economy at the local scale.

JPG1706H: Violence and Security

D. Cowen

Fridays, 12-3pm

SS5017A

Open

This course explores the shifting spatiality of organized violence, as well as changing theories of war and in/security. From the historical nationalization of legitimate war as a project of ‘internal’ and ‘external’ colonialism, to the disciplining of labouring bodies as part of the rise of geo- and bio-political forms, to the contemporary securitization of everyday urban life and the blurring of the borders of military and civilian, war and peace, and ‘inside’ and ‘outside’ state space, this seminar tracks the geographies of the political through the logistics of collective conflict. The course will examine perpetual, urban, and privatized forms of war that trespass modern legal, political, ontological, and geographical borders. Finally, we will explore problems of war ‘at home’. How does the practice of war within the nation and the productive nature of war for domestic politics trouble our assumptions about the nation state, citizenship and ‘normal’ political space and time?

JPG1814H: Cities and Immigrants

V. Kuire

**Thursdays, 9am-
12pm**

SS5016G

Open

Globalization processes and changes in immigration laws in recent decades have led to an upsurge in cross-border movement of people and ushered in sequential waves of immigration from various regions of the world to Canada and the U.S. Cities and their adjoining metropolitan areas are the biggest beneficiaries of these changing dynamics where immigrants are important contributors to economic growth and social reinvigoration. This course will examine the dynamics and changing patterns of immigrant integration in cities and urban locations. Topics of focus will include theories of immigrant integration, socio-spatial patterns of immigrant settlements in cities, labour market participation, socio-cultural identity formation and transnational engagements. The course will rely on contemporary examples and case studies to provide a deeper understanding of how immigrants are shaping dynamics within cities.

JPG1815H: Political Economy, the Body and Health	M. Hunter	Mondays, 3-5pm	5016G	Open
<p>What are the health consequences of recent transformations in sexuality and intimate relationships? How are intimate geographies of disease spatialized? This course explores connections between intimacy, geography, and health particularly through the lens of sexually transmitted infections. The course takes as its starting point the recent turn from medical geography towards a more qualitative, theoretically driven, health geography. It draws from research in countries that include Papua New Guinea, the Dominican Republic, and South Africa.</p>				
JPG2151H: Special Topics - Utopia/Dystopia: Imaginary Places and What They Mean for Social Change	S. Wakefield	Thursdays, 4-6pm	5016G	Open
<p>TBD</p>				
PLA1517H: Special Topics - City Builders Lab, How Good Policies are Made	TBA	Tuesdays, 3-5pm	5016G	PLA/GGR priority
<p>PLA1517H Course Outline Winter 2019</p> <p>This class will introduce the ways that a dynamic array of actors across the private, public, charitable and social purpose sectors shape social, environmental, economic and physical infrastructures. Students will be exposed to active city builder and engage in hands-on-class activities to introduce them to collaborative and interactive approaches to developing and using tools from outside the discipline of planning to create good urban policy. They will gain familiarity with ideas such as design thinking, an appreciation of social power/privilege and an understanding of how to use narrative and values to inspire action. Geography students have permission to count this course as a geography elective.</p>				
EES1118H: Fundamentals of Ecological Modelling	A. Neuman/Y. Shimoda	Mondays, 10am-1pm	UTSC, BV471	Contact Physical & Environmental Sciences
<p>This course provides an introduction to the rapidly growing field of ecological and environmental modelling. Students will become familiar with most of the basic equations used to represent ecological processes. The course will also provide a comprehensive overview of the population and dynamic biogeochemical models; prey-predator, resource competition and eutrophication models will be used as illustrations. Emphasis will be placed on the rational model development, objective model evaluation and validation, extraction of the optimal complexity from complicated/intertwined ecological processes, explicit acknowledgment of the uncertainty in ecological forecasting and its implications for environmental management.</p> <p>Enrollment in this course is managed by the Department of Physical & Environmental Sciences.</p>				
EES1126H: Hydrology and Watershed Management	C. Mitchell	Wednesdays, 2-5pm	UTSC, TBD	Contact Physical & Environmental Sciences

This course focuses on advanced processes in watershed hydrology for furthering our understanding of complex environmental problems, ranging from the characterization of freshwater resources to contaminant transport in aquatic systems. Course topics will include a quantitative understanding of how water moves on, and below, the earth's surface, how tracer studies can be coupled with physical measurements to understand complex problems in hydrology and water quality, land use change impacts, and approaches to watershed management. Students will participate in discussions on current and benchmark scientific literature.

Enrollment in this course is managed by the [Department of Physical & Environmental Sciences](#).

ESS2303H: Earth System Evolution	S. Finkelstein, S. Cowling	Wednesdays, 10am-12pm	ES2119	Contact Earth Sciences
---	-----------------------------------	------------------------------	---------------	-------------------------------

This is a graduate seminar offered by the Department of Earth Sciences. This year an overarching theme of the global carbon cycle has been placed over the general subject of Earth System Evolution. This theme was chosen because it is a critical biogeochemical cycle involving all of the sub-components of the Earth System, and covering spatiotemporal scales ranging from the global to leaf-level and from geological to contemporary times. The course has been divided into four broad themes: Plants and carbon-based processes, Methods of reconstructing global carbon cycle dynamics through time, Carbon perturbations and major events in Earth system evolution, and Human disturbance of the carbon cycle. Specific topics will be given for student presentations and group discussions.

ENV1444H: Capitalist Nature	S. Prudham	Thursdays, 11am-2pm	ES1042	Contact School for the Environment
------------------------------------	-------------------	----------------------------	---------------	---

[ENV1444H Course Outline Winter 2019](#)

This course will draw on a range of theoretical and empirical research materials in order to examine the particularities of what might be referred to as “capitalist nature”. Specifically, the course is concerned with three central questions: (i) what are the unique political, ecological, and geographical dynamics of environmental change propelled by capital accumulation and the dynamics of specifically capitalist forms of “commodification”? (ii) how and why is nature commodified in a capitalist political economy, and what are the associated problems and contradictions? (iii) how can we understand the main currents of policy and regulatory responses to these dynamics?

Enrollment in this course is managed by the [School for the Environment](#).

JSE1708H: The Development of Sustainability Thought	J. Robinson	Tuesdays and Thursdays, 10am-12pm	TBD	Contact Munk School of Global Affairs
--	--------------------	--	------------	--

[JSE1708H Course Outline Winter 2019](#)

This course will examine how attitudes towards human nature and non-human nature have changed over the period from Mesolithic times until the present in Western society. By reading and discussing historical arguments and contemporary documents we will attempt to uncover the underlying assumptions about the world that were characteristic of different periods in the history of Western culture. The underlying question is whether contemporary concerns about sustainability require fundamental changes in the way we conceive of ourselves and our environment.

Enrolment in this course is managed by the [Master of Global Affairs Program](#).
