2014-2015 Course Timetable

Fall 2014 Schedule

Courses marked with an *asterisk are offered through other departments. Enrolment is subject to available space and approval of the host department.

Please consult the St. George campus map for building/room locations (SS = Sidney Smith Hall, 100 St. George St.)

Course	Instructor	Day/Time	Room
GGR1105H - MA Human Geography Core Course	T. Kepe	Mondays, 1pm-3pm	SS2124A
GGR1105H Course Outline Fall 2014 This course is primarily aimed at MA students, but would be open, with instructor approval, to PhD students as well. 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 core course)	K. MacDonald	Mondays, 1-4pm	SS5017A
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	W. Gough, Y. He	Fridays, 1-4pm	PGB101

GGR1200H Course Outline Fall 2014

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.

GGR1215H: Advanced Watershed Hydroecology	J. Liu	Wednesdays 11am-1pm (lecture) Thursdays 1-2	SS2125

GGR1215H Course Outline Fall 2014

Hydrology and ecology are inter-related disciplines in Earth science. Hydroecology is a branch of ecology with emphasis on the effects of hydrological processes on living and non-living organisms and on their relationships in terrestrial and aquatic ecosystems. In particular, the redistribution of water over the landscape through surface and subsurface water flows regulates energy, mass and carbon fluxes from the land surface to the atmosphere, affecting the plant distribution and productivity as well as regional and global climate. In this course, a user-friendly, menu-driven hydroecological model will be used in practice to give a hands-on experience for modeling. Methods for handling spatial datasets, including

those derived from remote sensing, will also be taught. About 2/3 of course time is devoted to lecturing the basic principles, concepts and related equations, and 1/3 for conducting a research project using the hydroecological model. The list of topics for the project will be suggested, but it can also be self-chosen. Exclusion: GGR413			
GGR1806H: Feminist Geographies	M. Mahtani	Fridays, 1-3pm	SS2124A
GGR1806H Course Outline Fall 2014 This course will examine feminist challenges to human geography since the 1970s, paying particular attention to the way women's voices have been marginalized through our critical examination of the social landscape. Focusing on the relationship between multiple scales of the body, the urban, the community and the global, we will explore the construction and representation of gendered and racialized identities with particular emphasis on the relationship between critical race scholarship, anti-colonialism and feminist geographical interventions.			
GGR2150H: Advanced Seminars in Selected Topics- Geography of Food, Geographical Patterns and Environmental Impacts	P. Desrochers	Mondays, 3-5pm	DV 1147 (UTM)
GGR2150H Fall 2014 Course Outline This seminar course examines the geographic patterns and environmental impacts of our food production and distribution system. Topics include the sustainability of the current system, as well as alternatives to the norm. The geographic focus is Southern Ontario. Topics such as food miles, urban agriculture, and small scale production systems are also evaluated. This course fulfills one field day.			
JGP2408Y - Political Economy of International Development	R. Sandbrook, R. Isakson	Tuesdays, 2-4pm	UC248
JGP2408Y Course Outline Fall 2014 Following an introductory section setting out the theoretical context and themes of the course, we evaluate a range of development strategies. Neoliberal reform has dominated the theory and practice of development since 1980, shifting from an initial market-fundamentalist Washington Consensus to an augmented Post-Washington Consensus. We therefore devote 10 sessions to understanding the origins, evolution, political implications and performance of this evolving policy paradigm. Case studies from Latin America, Africa, and Asia complement our discussion of general themes and issues. The second half of the course deals with development alternatives at the local, national and global levels. To achieve such goals as prosperity, poverty reduction, greater equality and environmental sustainability, activists and scholars have recently explored nationally-based social-democratic, 'twenty-first-century' socialist, and revived developmental-state strategies, projects of local empowerment or community-			

centered development and programs for reforming global economic governance. We probe the nature, practicability and desirability of these development alternatives.

JPG1407H: Efficient Use of Energy	L. Harvey	Wednesdays, 4-7pm	SS2106

JPG1407H Course Outline Fall 2014

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 generation of electricity from fossil fuels and 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: GGR347

JGE1413H: Workshop in Environmental Impact Assessment	V. Maclaren, B. Savan	Tuesdays, 5-7pm	PGB101

JGE1413H Course Outline Fall 2014

Lectures and workshops examine the major methodologies and techniques used in environmental impact assessment and allow the student to apply these to relevant planning situations. Exclusion: GGR416

JPG1419H: Aboriginal/Canadian Relations in Environmental and Resource Management	D. McGregor	Tuesdays, 5-8pm	SS5017A

JPG1419H Course Outline Fall 2014

The course will explore the relationship between Aboriginal and non-Aboriginal peoples in Canadian society from pre-European contact to the present. The relationship between Aboriginal and non-Aboriginal peoples in Canada shapes historical and current views of environmental and resource management in a variety of ways. Economic, environmental, political, social and cultural aspects will be discussed.

JPG1426H: Natural Resources Difference and Conflict	S. Mollet	Thursdays, 10-12pm	SS2124A

JPG1426H Course Outline Fall 2014

This course is concerned with the ways in which international development policies governing natural resource use, access and control reproduce difference and inequality, and how together these processes fashion conflict. Through attention to the entanglements of environment, difference and inequality, a core aim of this seminar is to interrogate what is taken as given in the governing instruments and institutions

shaping natural resource policies that inform development activities from oil and mineral extraction to land and territorial demarcation, and tourism to name a few.
Three overlapping themes will guide this seminar. First, we will explore historical and geographical perspectives of natural resource conflicts with attention to post-colonial, post-structural and feminist theorizations of development as a way to understand the woven relations of environment, difference and conflict. Second, we will examine the contemporary role of the state in the provocation and abatement of natural resource conflict and work to unpack the meanings of conflict itself. Third, we will investigate how multiple forms of difference and their intersections (caste, class, gender, race, sexuality, nationality etc.) are materially and symbolically imbued in natural resource policy. Together, our seminar discussions, readings, films, and news analyses will address a number of conceptual and empirical debates and policy-related discussions in geography, planning and development studies.

JPG1512H - Place, Politics and the Urban	A. Walks	Fridays, 10:30-1pm	SS2124A

JPG1512H Course Outline Fall 2014

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.

JPG1514H: The Role of the Planner	P. Bedford	Tuesdays, 9-11am	PGB101

JPG1514H Course Outline Fall 2014

This course is intended to shake the conventional planning tree. Its purpose is to help develop future leaders in the planning profession who truly want to make a difference by breaking out of the conventional mindset of North American Planning. The course is structured around four basic themes: The vocation of planning, planning for changing societies: the GTA region, the political realities of planning: Toronto's Official Plan, and a 100 year plan for the Greater Toronto Area. Exclusion: JGI454H

JPG1518H: Sustainability and Urban Communities	S. Bunce	Wednesdays, 11-1pm	SS2124A

JPG1518H Course Outline Fall 2014

This course focuses on sustainability and communities and neighbourhoods in cities in North America and Europe, with some exploration of examples of community-based sustainability in cities in the global south. The intention of this course is to examine academic and policy discussion on urban sustainability and the contemporary context and future of urban communities, and will address socio-political dimensions of urban sustainability found in human geography and urban planning literatures, rather than focusing on physical or technical applications of sustainability principles.

JPG1558H - Transportation: Historical and Geographical Perspectives	R. Buliung	Thursdays, 10am-1pm	SS5017A

JPG1558H Course Outline Fall 2014

Transportation of goods, people, and information is an integral aspect of everyday life, but what of the origin of the various modes of transportation? How did the systems that we use and plan today, and their constituent technologies come to be? Annually, this course will involve an exploration of the history and geography of a particular mode of transportation. Using lectures, seminars, student papers and presentations, and occasionally fieldwork, the key people and places, technologies associated with the development of the modes of transport will be examined. The ebb and flow of demand for the modes of transport (e.g., biking, walking, public transit, the car) through time and across space will discussed, as will costs and benefits. Adopting an historical and geographical lens, we will also consider the uneven way in which transport modes seem to fall into and out of favour, locally, nationally, and globally.

JPG1607H - Geography of Competition	J. Miron	Tuesdays, 10-12pm	SS5064

JPG1607H Course Outline Fall 2014

In a market economy, how do firms come to be at the places where they produce, distribute, or sell their goods or services? How, when, and why does competition among firms as well as the impact of firm sitting on the sitting of their suppliers and customers, lead to localization (clustering) of firms in geographic space, the growth of some places (e.g., some cities or districts), and the decline of others? Such questions are central to an area of scholarship known as competitive location theory. A spatial (regional) economy incorporates "shipping costs" which include costs related to search, freight, insurance and brokerage, storage, installation and removal, warranty and service, and arbitrage profit. As a result, the effective or delivered price of a firm's products or inputs, inclusive of shipping costs, may well vary locally. This course focuses on how, as a result of competition, location and clustering shape and are shaped by local prices.

JFG1610 Sustainable Forest Management & Certification	T. Smith	Mondays 3-6pm	ES4000

JFG1610H Course Outline Fall 2014

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.

JPG1812Y - Planning for Change	A. Daniere	Mondays 10-1pm, and occasional Tuesdays 5-8, including Tues Sept 9 in room SS2125	BL112

JPG1812Y Course Outline Fall/Winter 2014/15

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.

JPG1906H - Geographic Information Systems	D. Boyes	Fridays, 11am-1pm (lecture), 1-3pm (labs)	SS2125 (lecture), SS620 (labs)

JPG1906H Course Outline Fall 2014

This course provides an intensive introduction to fundamental geographic information system (GIS) theory, as well as practical, hands-on experience with state-of-the-art software. The course is designed to accommodate students from a variety of research backgrounds, and with no previous GIS experience. The goal is to provide students with a theoretical understanding of spatial data and analysis concepts, and to introduce the practical tools needed to create and manage spatial data, perform spatial analysis, and communicate results including (but not limited to) the form of a well-designed map. Assignments require the use of the ArcInfo version of ESRI's ArcGIS software and extensions, and are designed to

encourage proper research design, independent analysis, and problem solving. By the end of the course, successful students should be able to apply what they have learned to their own research, to learn new functions on their own, and have the necessary preparation to continue in more advanced GIS courses should they wish to do so. Classes consist of a two hour lecture each week, which integrate live software demonstrations to illustrate the linkages between theory and practice.			
*EES1118H Fundamentals of Ecological Modelling	G. Arhonditsis	Tuesdays, 2-5pm	BV471 (UTSC)
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.			
*EES1128H - Biophysical Interactions and Managed Environments	M. Isaac	Wednesdays, 3-5 (lecture) and 5-6 (lab)	PO101 (lecture) and SW313 (lab) (UTSC)
This course will focus on biophysical interactions at the advanced level, incorporating specialized concepts on plant-soil relationships, biogeochemical cycles, and ecosystem functioning in managed forests and agriculture. Students will be provided the opportunity to engage with course topics in seminar, field and laboratory format. Sampling and analytical techniques covered are in-situ soil and leaf-level gas exchange analysis, soil sampling, preparation and elemental analysis, and quantification of plant metrics. By the end of this course, students will have an understanding of the complexities and dynamics in managed environments, specifically ecosystem structure and function, soil fluxes including decomposition and mineralization processes, plant growth and nutrition, and production-diversity relationships.			
*EES1132H Climate Data Analysis	T. Mohsin	Tuesdays, 10am-1pm	BV417 (UTSC)
This course will offer an advanced introduction to climate data analysis. It is intended for graduate students studying climate science and is mainly laboratory (computer) based. For the first part of the course, the goal is to provide an understanding of the theory underlying the statistical analysis of climate data, in the space, time and spectral domain. In the second part of the course, the basic concepts of time series analysis will be introduced in terms of identifying stationarity or trends in the data. Some of the important statistical estimation techniques such as regression, correlation and spectral analysis will be used for the time series analysis by giving a detailed account on the interpretation of the data and the			

associated climatological questions. Although some previous knowledge of probability and statistics will be helpful, a review will be provided at the beginning of the course. Concepts and notation will be reintroduced, as needed. If time permits, the statistical modelling approach will also be covered.

*EES1133H Climate Change Science and Modelling	T. Mohsin, W. Gough	Mondays, 2-4pm	PO101 (UTSC)

The course is designed to introduce the fundamental concepts underlying our current understanding of the climate system. The science of climate includes basic radiation physics and dynamics, which are the basis of modern climate modelling. The changes in the radiation energy budget will be examined in terms of natural variability and anthropogenic activities, in particular, greenhouse gases and their sources and sinks. Underlying physical processes that shape our climate will be explored e.g. solar variability, orbital mechanics, atmospheric and oceanic circulation, and volcanic and atmospheric aerosols. In addition, the types of climate modelling experiments performed with modern climate models and scenarios will be reviewed by focusing on the evidence for past and present climate change. The latest projections of future climate on a variety of temporal and spatial scales will also be presented and evaluated. This course is aimed at connecting the essentials of climate science and modelling, and training students to interpret the results of modelling experiments.

*POL2338H - Innovation and Governance	H. Bathelt	Tuesdays, 4-6pm	UC248

POL2338H Course Outline Fall 2014

The course discusses a broad range of topics related to innovation and governance, such as (i) technological change and its social and economic consequences, (ii) the spatial effects which result from this, and (iii) the necessities for economic 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 be increasingly associated with capabilities related to knowledge generation and innovation. As a consequence, questions of performance in innovation and policy support will become decisive at the firm, regional-state and national-state levels.The seminar is divided into four main parts: The first part deals with conceptual foundations of innovation processes, such as evolutionary and institutional views of innovation. In the second part, national configurations of innovation processes and governance are investigated. The third part will deal with innovation processes at the subnational level, focusing on regional innovation and a knowledge-based conception of clustering. The final part of the course discusses aspects of multilevel governance in regional and global context. The seminar develops a relational perspective of institution-building and territorial governance which helps us to understand cross-national innovation processes.This course is inter-disciplinary in nature and uses literature from a number of different fields dealing with innovation, governance and its consequences in economic and social life. The course should, thus, also be of interest to students in Economics,

Geography, International Relations, the History and Philosophy of Science and Technology, and Sociology.			
GGR1149H - Readings in Selected Topics (Masters level)			
See the Reading Course Instructions and Request Form for details.			
GGR2149H - Readings in Selected Topics (PhD level)			
See the Reading Course Instructions and Request Form for details.			
GGR2150H - Advanced Seminars in Selected Topics			
See the Reading Course Instructions and Request Form for details.			

Winter 2015 Timetable

Course	Instructor	Day/Time	Room
GGR1202H - Sedimentation and Fluvial Geomorphology	J. Desloges	Mondays, 1-3pm	SS2105
GGR1202H Course Outline Winter 2015 Elements of drainage basin morphology and hydrology, classification of rivers, stream patterns, and hydraulic geometry. Elements of open channel flow, sediment transport, channel change mechanisms and human impacts on river development. Exclusion: GGR301			
NEW: GGR1216H - Advanced Biogeochemical Processes	I. Lehnherr	Fridays, 1-4pm	IB270 (UTM campus)
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 processes underlying biogeochemical cycles of major elements such as carbon and nutrients, and examines how humans alter these cycles. Topics covered include biogeochemical processes in atmospheric, aquatic and terrestrial compartments, emerging techniques (e.g., stable-isotopes) used in biogeochemistry, and how disruptions to these processes are at the root of many environmental issues such as eutrophication, climate change, ocean acidification and toxic metal contamination. Exclusion: GGR406H5			

GGR1610H - Geography of Finance and Financial Crisis	A. Walks	Fridays, 11-2pm	SS2121A
GGR1610H Course Outline Winter 2015 The rupture in the global economy following the collapse of Lehman Brothers in the United States brought to mainstream attention the important role played by finance, as well as the vulnerable ways that the global economy is linked together through financial instruments. This course seeks to understand the world of financial flows, intermediaries, and instruments, and how these may be related to the uneven geography of mortgage foreclosures, real estate inflation and deflation, bank bailouts, and government austerity programs. It explores how this geography of finance might be related to the production of financial crises, and how the global geography of international finance relates to the public finances of nations and municipalities, pension and hedge funds, and individual investors. The course begins by exploring the workings of international finance, and the literature on the geography of financialization and the globalization of finance. It then moves to examine the history and geography of financial crises, including both the current crisis and the great depression, to consider the different theories of financial crisis emanating from disparate political-economic-geographical perspectives, as well as the divergent policy implications that flow from such theories. The course then explores the literature regarding the localized effects of the geography of finance, from the cultural politics of homeownership, to the geography of sub-prime lending and foreclosures, deepening unemployment in European cities, and the geography of credit card debt, bankruptcies and defaults.			
GGR1714H - Geographies of Citizenship	E. Gilbert	Thursdays, 11am-1pm	SS2124A
GGR1714H Course Outline Winter 2015 This course will critically examine discourses of citizenship and subject formation in contemporary Western societies. Questions that will be addressed include: How are citizens constituted? Who is a citizen subject? Who is not? How are past and present subjects and populations governed through citizenship? The focus on citizen subjects arises because of the important ways that citizenship is being reformulated: citizenship is increasingly being used to justify contemporary articulations of political community that are exclusive and reactionary even while citizenship is idealized as a political mechanism through which liberal rights and responsibilities are articulated. Moreover, citizenship is being reworked by discourses around localism, nationalism and globalization that are creating new forms of community, and potentially new claims regarding rights and engagement. The implications of these transformations will be examined in this course.			
GGR1911H - Remote Sensing	J. Chen	Mondays, 11am-12pm (lectures), Tuesdays 5-7pm (labs), Thursdays 3-5 (labs)	SS2106
Advanced image processing, theory and applications of spatial resolution effects on classification, monitoring and interpretation of landscapes. From field spectrometric data to simulated images. Exclusion: GGR337			

GGR2150H - Advanced Seminars in Selected Topics: Troubling Militarism: Space, Affect, Economy	D. Cowen/J. Han	Fridays 10am-12pm	SS5017A

GGR2150H Course Outline Winter 2015

In this course we examine the spatial politics and affective economies of militarism. Our approach is feminist, queer, and geographical, and combines questions of geopolitical and geoeconomic inquiry. Rather than approach "militarism" as a coherent set of ideas and practices that must simply be opposed or reversed somehow, we seek to trouble militarism and its affective mobilization through faith, orientation, disposition, and aspiration. We will grapple with the violence of militarism, not only in the immediately martial practices that the term typically denotes, but also in the imperial and colonial political geographies out of which the modern use of the term arises, and through its everyday and banal attachments. The ultimate aim is to develop conceptual and theoretical tools to explain militarism, militarization, and militancy through questions that trouble ideas of race, class, gender, identity, and difference. What are the historicalconnections between the practice of nationalism and imperialism and the rise of militarism? What are the economic and political factors that have led to the rise of militarism throughout the world? How do the concepts of militarism, militarization, and militancy help us to rethink the geo-political economies of labour, race, gender, and violence? How can we broaden statist approaches to militarism to draw critically from scholarly, journalistic, and creative engagements with social movements and resistance strategies? Can we extend our analysis to envisage a more expansive set of questions concerning militarism to include sexual politics, queer militancy, and martyrdom? Throughout the semester, we will fine-tune our concepts and terminology to build a robust set of tools to trouble militarism, militarization, and militancy across time and space.

JPG1111H - Research Practice in Geography	K. Wilson, A. Daniere	Wednesdays, 2-4pm	TBA- UTM campus

JPG1111H Course Outline Winter 2015

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.

JPG1502H - Global Urbanism and cities of the Global South	R. Reddy	Wednesdays, 10am-12pm	SS2124A

JPG1502H Course Outline Winter 2015

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, 3-6pm	SS5017A

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 Zizek, Daniel Bensaïd, Jacques Rancière, Giorgio Agamben, Bruno Bosteels and Peter Hallward to re-theorize revolution in the face of global liberaldemocratic 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*.

JPG1507H - Housing Markets and Housing Policy Analysis	L. Bourne	Wednesdays, 11-1	SS5017A

JPG1507H Course Outline Winter 2015

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.

JPG1516H: Declining Cities	J. Hackworth	Thursdays, 2-4pm	SS5017A

JPG1516H Course Outline Winter 2015

Much of planning and urban thought more generally is implicitly or explicitly oriented around the idea of growth—growth allows cities to be managerial, gives them room for error, salves intra-constituency squabbles, etc. In the face of decline, the most common planning or urban theoretical response is to engage in economic development (that is, to reignite growth). But what about those cities (or sections of otherwise growing cities) that have declined in population or resources and remained healthy, pleasant, places to live? Can we learn something

from their experience that allows us to rethink the way that cities decline, or what the professional response to it should be? What about those cities, conversely which retain an infrastructure footprint that was intended for a much larger city? Can they be downsized in a planned way? If so, what would such an effort (mobilizing the state to sponsor planned decline) mean for the bulk of urban theory that suggests that it is the state's role to reignite growth?

JPG1520H - Contested Geographies of Class Formation	M. Hunter	Mondays, 3-5pm	SS5017A

JPG1520H Course Outline Winter 2015

How are spatial and class inequalities produced and contested in mutually constituted ways? Why are class inequalities always spatial inequalities? Following criticisms of Marxism and feminism in the 1980s (tied up with what some call the "cultural turn") scholars have become accustomed to view race, class, gender, and sexuality as "intersecting." This is an important development—a starting point in fact for the course—but it has also left a situation whereby we routinely evoke class to explain the social world in which we live but often in a way that lacks a sense of the term's genealogy and analytical strengths and limitations. This course therefore excavates writings on class from sociologists like Marx, Weber, and Bourdieu; geographers like Cindi Katz and Doreen Massey; intersection scholars like Patricia Hill Collins; urbanists like David Harvey; and writers on colonialism like Franz Fanon. We divide the seminar into two parts: the first explores key theories on class and the second explores these through monographs.

JPG1554H - Transportation and Urban Form	S. Farber, A. Elgeneidy	Wednesdays, 1-3pm	SS5017A

JPG1554H Course Outline Winter 2015

The need to reduce automobile dependence and congestion has been argued widely in recent years, and urban form has been identified as a major aspect influencing choice of travel mode. The combined imperatives of sustainability, healthier cities, and worsening congestion has prompted an increasingly rich body of research on the relationships between urban form, transport infrastructure, and travel patterns, and an array of new methodological approaches to research them. This course critically examines this research and examines planning strategies that seek to influence travel through coordinated transport investment and land use and design control. Both regional and neighbourhood scale issues and strategies will be addressed. The geographic focus of the course will largely be metropolitan regions in Canada and the United States, but there will be opportunity to examine other national contexts.

JPG1804H - Space, Power and Geography: Understanding Spatiality	S. Ruddick	Tuesdays, 12am-3pm	SS2124A

JPG1804H Course Outline Winter 2015

The course charts new ways of thinking about space and power that are non-Cartesian, non-Hobbesian, and non-representational originating in divisions in Enlightenment thinking 400 years ago. Contemporary

manifestations of this shift can be seen in the work of Foucault and Deleuze, Hardt and Negri, Bruno Latour their growing influence in geography manifest in geo-philosophy, non-representational space, emotional geographies, geographies of affect, politics of the multitude, networks and assemblages. The course explores the conceptual developments that give rise to this shift, introducing students to new ways of thinking about the nature of power, the nature of resistance, forms of social organization and mobilization, and the organization of space itself.

JPG2150: Advanced Seminars in Selected Topics-Regional Dynamics: Learning Regions, Clusters and Innovation	R. DiFrancesco	Tuesdays, 1-3pm	SS5017A

JPG2150H Course Outline Winter 2015

This course examines theoretical and empirical research that addresses a fundamental question in economic geography: why, in an era of increasing globalization and light-speed communication and collaboration possibilities at the pan-global scale, has the region remained a fundamentally important level of analysis for socioeconomic processes? In so doing, literatures dealing with knowledge circulation, corporate organization, the role of institutions and culture in economic growth and change, and economic clusters generally will be sampled.

*ENV1444H: Capitalist Nature	S. Prudham	Thursdays, 11-2	ES1042

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?

*EES1117H Climate Change Impact Assessment	T. Mohsin	Tuesdays 5-7pm (lecture), 7-8pm (tutorial)	HW215 (lecture) / BV469 (tutorial) (UTSC)

The study and consideration of climate change is of increasing significance to society. This course will review the evidence for climate change over the past 150 years using both direct measurements and proxy data. Projection of future climate change will also be considered by modeling. Students will complete a major case study and research paper.

*EES1119H Quantitative Environmental Analysis	G. Arhonditsis	Tuesdays 2-5pm	BV469

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.			
*EES1120H The Dynamics of Contaminant Dispersal in Fluids	M. Wells	Tuesdays 9-11am (lecture), 11am-12pm (labs)	PO101 (lecture) / SW313 (lab) (UTSC)
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.			
*EES1131H Applied Climatology	T. Mohsin	Mondays 11am-1pm (lecture), 1-2pm (labs)	BV469 (UTSC)
This course will introduce and discuss the basic topics and tools of applied climatology, and how its concepts can be used in everyday planning and operations (e.g. in transportation, agriculture, resource management, health and energy). The course involves the study of the application of climatic processes and the reciprocal interaction between climate and human activities. Students will also learn the methods of analyzing and interpreting meteorological and climatological data in a variety of applied contexts. Topics include: Solar Energy; Synoptic Climatology and Meteorology; Climate and Agriculture; Climate and Energy; Climate and Human Comfort; Urban Effects on Climate and Air Pollution.			
GGR1149H - Readings in Selected Topics (Masters level)			
See the Reading Course Instructions and Request Form for details.			
GGR2149H - Readings in Selected Topics (PhD level)			

See the Reading Course Instructions and Request Form for details.