

Department of Geography & Program in Planning Graduate Geography Course Timetable 2013-2014

Fall 2013 Schedule

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

Course	Instructor	Day/Time	Room
GGR1105H - MA Human Geography Core Course	T. Kepe	Mondays, 10am-12pm	SS2124A
<p>GGR1105H Course Outline Fall 2013</p> <p>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.</p>			
GGR1110H - Issues in Geographical Thought and Practice (PhD core course)	K. MacDonald	Mondays, 1-4pm	SS5017B
<p>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.</p>			
GGR1200H - Physical Geography Core Course	W. Gough, G. Arhonditsis	Fridays, 1-4pm	PGB101
<p>GGR1200H Course Outline Fall 2013</p> <p>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.</p>			

JGE1425H - Livelihoods, Poverty and Environment in the Developing Countries	C. Abizaid	Wednesdays, 9-11am	SS2124A
JGE1425H Course Outline Fall 2013 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.			
JGP2408Y - Political Economy of International Development	R. Sandbrook, R. Isakson	Tuesdays, 2-4pm	UC148
JGP2408Y Course Outline Fall 2013 - Winter 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.			
JPG1408H - Carbon Free Energy	L. Harvey	Wednesdays, 4-6pm (lecture), 6-7pm (tutorial)	TBA
JPG1408H Course Outline Fall 2013 The course examines the options available for providing energy from carbon-free energy sources: solar, wind, biomass, hydro, oceanic, and geothermal energy, as well as through sequestration of carbon from fossil fuel sources. The hydrogen economy is also discussed. For each carbon-free energy source, the physical principles, physical or biophysical limits, efficiencies, and other constraining factors are discussed, as well as examples of current applications, current and projected future costs, and possible future scenarios. The course concludes by combining the main conclusions for JPG 1407H concerning the prospects for reducing energy demand through improved energy efficiency, with the conclusions drawn in this course concerning the feasibility of large-scale carbon-free energy, to generate scenarios of future greenhouse gas emissions, showing the range of possible consequences for global mean temperature, sea level rise, and ocean acidification. Exclusion: JPG 1406H			
JPG1510H - Recent Debates on Urban Form	J. Markovich	Thursdays, 1-3pm	SS5017B
JPG1510H Course Outline Fall 2013 This course reviews three significant bodies of literature on the topic of urban growth and how to structure it, those of Growth Management, New Urbanism, and Sustainable City Form. Each offers a critique of recent patterns of urbanisation, and proposes an alternate pattern of development, yet the problems identified and the approaches suggested vary widely. Participants will be encouraged to explore these differences.			

JPG1512H - Place, Politics and the Urban	A. Walks	Fridays, 12-2pm	SS2124A
JPG1512H Course Outline Fall 2013 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: Making a Difference	P. Bedford	Tuesdays, 9-11am	PGB101
JPG1514H Course Outline Fall 2013 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			
JPG1558H - Transportation: Historical and Geographical Perspectives	R. Buliung	Thursdays, 10am-12pm	SS5017B
JPG1558H Course Outline Fall 2013 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 be 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	Wednesdays, 9-11am	SS5064
JPG1607H Course Outline Fall 2013 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.			
JPG1616H - The Cultural Economy	D. Leslie	Tuesdays, 10am-12pm	SS2124A
JPG1616H Course Outline Fall 2013 This course examines the so-called "cultural turn" in economic geography, often referred to as "the new economic geography". We will begin by considering various ways of theorizing the relationship between culture and economy. After reflecting upon the historical antecedents of contemporary understandings of this relationship, we will explore selected themes in the cultural economy literature such as cultural industries, consumption, economic discourse, work cultures, governmentality and commodity chains/actor networks.			

JPG1812Y - Planning for Change	A. Daniere, C. Levkoe	Tuesdays, 5-7pm	SS5017B Sept 10 class will be held in 5th floor grad lounge
JPG1812Y Course Outline Fall 2013 - Winter 2014 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 2013 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	BV469 (computer lab)UTSC campus
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, 3-5pm (lecture)Wednesdays 5-6pm (labs)	PO101 (lecture)SW313 (labs)UTSC campus
EES1128H Course Outline Fall 2013 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	BV469 (computer lab)UTSC campus
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

Fridays, 10am-12pm

MW110UTSC campus

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.

*FOR1610H - Sustainable Forest Management Certification

T. Smith

Mondays and Wednesdays, 4-6pm

ES4001

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.

*POL2338H - Innovation and Governance

H. Bathelt

Tuesday, 4-6pm

UC148

[POL2338H Course Outline Fall 2013](#)

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 2014 Timetable

Course	Instructor	Day/Time	Room
GGR1202H - Sedimentation and Fluvial Geomorphology	J. Desloges	Wednesdays, 1-3pm	PGB107
GGR1202H Course Outline Winter 2014 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.			
GGR1302H - Advanced Hydrology and Water Quality	T. Duval	Thursdays, 3-5pm (lecture) & Fridays, 12-3pm (labs)	NE143 (lectures), Rock Lab (labs) - UTM campus
GGR1302H Course Outline Winter 2014 This course will take a hydrological perspective in examining the landscape controls on surface water quality. We will consider how the study of surface water and ground water hydrology lead to an understanding of stream water chemistry through the examination of hydrological flowpaths and the chemical interaction of water and the matrix/matrices through which it flows. An advanced understanding of hydrological processes will be emphasized. Pertinent field and laboratory techniques will be introduced. Pre-requisites: GGR 309H/315H, OAC Chemistry or equivalents. Exclusion: GGR407H (UTM).			
GGR1610H - Geography of Finance and Financial Crisis	A. Walks	Fridays, 12-3pm	NE144 - UTM campus
GGR1610H Course Outline Winter 2014 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.			
GGR1620H - Institutional and Evolutionary Economic Geography	J. Zhang	Tuesdays, 10am-1pm	SS5017B
GGR1620H Course Outline Winter 2014 Both institutional and evolutionary perspectives have recently exerted enormous influence in economic geography, generating an explosion of research programs and publications. However, the literature remains highly fragmented, and there is still much ambiguity as to what it means to say that economic geography is institutional or evolutionary. Furthermore, evolutionary economic geography is yet to be made compatible with institutional and political perspectives, so that a multi-layered and multi-scalar evolutionary process can be conceptualized. This graduate seminar examines the frontier of the interdisciplinary literature on institutions and economic evolution. It is designed to develop a close dialogue between institutional and evolutionary economic economy, as well as between economic geography and other heterodox economics. It seeks to help students develop a critical angle to the existing literature, and a clear conceptualization of			

institutions and evolution from a geographic perspective.

GGR1705H - Historical Geographies of Modernity

M. Farish

Tuesdays, 1-3pm

SS5017B

[GGR1705H Course Outline Winter 2014](#)

Building on critical assessments of the idea and influence of modernity, historical geographers have recently reconsidered subjects such as power and identity, human-environment relationships, and the genealogy of geographical thought. This course will treat modernity not just as a historical condition, but as a geographical project. Broad texts on modernity and its spatial dimensions will be read and discussed alongside a geographically diverse set of site-specific studies. Themes to be used for orientation include violence and anti-violence; science and empire; and cultures of modern urbanism.

GGR1714H - Cultural and Critical Geographies

E. Gilbert

Thursdays, 11am-1pm

SS2124A

[GGR1714H Course Outline Winter 2014](#)

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, 10am-12pm (lectures),
Tuesdays 3-5pm (labs), Thursdays
5-7 (labs)

TBA

[GGR1911H Course Outline Winter 2014](#)

Advanced image processing, theory and applications of spatial resolution effects on classification, monitoring and interpretation of landscapes. From field spectrometric data to simulated images.

GGR1922H - Topics in Geographical Information Science

V. Robinson

Wednesdays, 1-3pm

PGB101

[GGR1922H Course Outline Winter 2014](#)

This course provides an overview and introduction to the concepts, theory and application of Geographical Information Science (GISci). The course provides an opportunity for students to pursue a specific topic in-depth.

JPG1111H - Research Practice in Geography

K. Wilson, A. Daniere

Thursdays, 3-5pm

NE174 - UTM campus

[JPG1111H Course Outline Winter 2014](#)

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

SS5017B

[JPG1502H Course Outline Winter 2014](#)

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.

JPG1507H - Housing Markets and Housing Policy Analysis	L. Bourne	Wednesdays, 11am-1pm	SS2124A
JPG1507H Course Outline Winter 2014 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.			
JPG1508H - Planning for the Urban Poor in Dev Countries	A. Daniere	Mondays, 10am-12pm	SS2124A
JPG1508H Course Outline Winter 2014 This course covers public sector policies, programs and projects that target the urban poor in developing countries, particularly through attempts to improve their incomes through direct income-generating activities or employment and through the provision of basic environmental services. In addition the course examines planning for infrastructure services with an emphasis on the planning process.			
JPG1520H - Contested Geographies of Class Formation	M. Hunter	Mondays, 3-5pm	SS5017B
JPG1520H Course Outline Winter 2014 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.			
JPG1804H - Space, Power and Geography: Understanding Spatiality	S. Ruddick	Tuesdays, 10am-1pm	SS2124A
JPG1804H Course Outline Winter 2014 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.			
JPG1805H - Transnationalism, Diaspora and Gender	R. Silvey	Wednesdays, 3-5pm	SS5017B
JPG1805H Course Outline Winter 2014 This seminar focuses on the politics of contemporary global migration processes with particular attention to the gender dimensions. It examines the geographic literature on transnationalism and diaspora to develop insight into the theoretical ramifications of critical political-economy, post-colonialism, post-structuralism, and feminism.			

JPG1914H - GIS Research Project	D. Boyes	Tuesdays, 1-3pm	PGB303
Students will work in a group setting to explore the application of GIS techniques to a problem that crosses the boundaries of economic geography, physical geography, and planning. Students should discuss their backgrounds with the instructors before registering for the course. Exclusion: GGR462H.			
*EES1117H - Climate Change Impact Assessment	T. Mohsin	Mondays, 11am-2pm	BV469 (computer lab)UTSC campus
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, 3-6pm	BV469 (computer lab)UTSC campus
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) Tuesdays, 11am-12pm (labs)	AA208 (lectures)SW313 (labs)UTSC campus
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.			
*EES1126H - Environmental Tracers	C. Mitchell	Wednesdays, 3-6pm	PO101UTSC campus
This new course focuses on the use of various isotopes and chemical factors for furthering our understanding of complex environmental problems, ranging from the characterization of freshwater resources to contaminant transport in aquatic systems. Particular focus will be placed on how chemical and isotope tracer studies can be coupled with physical measurements to understand complex problems in hydrology, biogeochemistry, and contaminant transport. This course will cover fundamentals of environmental tracer chemistry through to recent case studies, advanced models and applications.			
*EES1131H - Applied Climatology	T. Mohsin	Tuesdays, 12-3pm	PO101UTSC campus
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.

GGR2150H - Advanced Seminars
in Selected Topics

See the [Reading Course Instructions and Request Form](#) for details.