

# TABLE OF CONTENTS

## INTRODUCTION

What is Geography and why study it? .....	3
What can Geography at York offer you?.....	4

## GEOGRAPHY THEME AREAS

The City.....	5
Globalization, Environment and Development.....	5
Production and the Politics of Difference .....	6
State, Empire and Power.....	7
Extreme Environments.....	7
Biophysical Processes.....	8
Geoinformatics.....	9

## GEOGRAPHY COURSES AND THEIR RELATION TO THE THEME AREAS

Listing .....	10
---------------	----

## DEPARTMENT MEMBERS

Faculty – Full-time .....	14
Faculty – Contract .....	15
Faculty – Retired (Teaching).....	15
Staff .....	16

## GENERAL INFORMATION

Advising.....	17
Enrolment, Prerequisites and Corequisites.....	17
Course Credit Exclusions and Equivalentents.....	18
Grade Point Equivalencies and Averages.....	18
Reappraisals .....	19
Deferred Standing and Petitions.....	19
Academic Honesty.....	20
Course Evaluations .....	20
Email Address.....	20
Geographic Resource Centre (GRC) .....	20
Map Library .....	21
Geographic Information Systems (GIS) Lab .....	21
Physical Geography Laboratory Facilities.....	21
Student Representation on Geography Department Committees .....	22
Geography Undergraduate Student Association .....	22
Bursaries, Awards and Prizes .....	23

## WHERE TO FIND HELP AROUND CAMPUS

Personal, Academic and Financial.....	25
---------------------------------------	----

## OVERVIEW OF REQUIREMENTS

Degrees Offered .....	26
Certificates and Concurrent Program .....	26
Co-Registration in the Faculty of Education.....	27

## DEGREE CHECKLISTS

Bachelor of Arts – Geography .....	28
BA Honours – Geography Major .....	29
BA Specialized Honours – Geography Major .....	30
BA Specialized Honours – Geography and Urban Studies .....	31
BA Honours – Double Major .....	32
BA Honours (Major/Minor) – Geography Major.....	33
BA Honours (Major/Minor) – Geography Minor.....	34
International BA Honours – Geography Major .....	35
International BA Specialized Honours – Geography Major .....	36
Geography BSc, Bachelor Program .....	37
Geography BSc Honours, Specialized Honours Program .....	38

## CERTIFICATE PROGRAMS

GIS and Remote Sensing .....	39
Urban Studies.....	40
Refugee and Migration Studies.....	41

## COURSE DESCRIPTIONS

SU & FW2013-2014 Course Offerings .....	42
Course Descriptions – 1000 Level .....	44
Course Descriptions – 2000 Level .....	46
Course Descriptions – 3000 Level .....	52
Course Descriptions – 4000 Level .....	65

**Information contained in this supplemental calendar may change throughout the year. For more information on updates on the department please check out our website:**

<http://www.yorku.ca/laps/geog/>

**For information on course availability, times offered and room locations for courses please refer to the on-line Lecture Schedule: <https://w2prod.sis.yorku.ca/Apps/WebObjects/cdm>**

**Please check the York University Undergraduate Calendar for a complete listing of degree requirements located at: <http://calendars.registrar.yorku.ca/>**

# INTRODUCTION

## WHAT IS GEOGRAPHY AND WHY STUDY IT?

Geography is a unique discipline in that it rests on all three pillars of intellectual life: physical sciences, social sciences and humanities.

Consequently, it offers students opportunities to understand and explore different dimensions of the world in which we live and offers a synthetic approach to understanding landscapes, people, places and environments.

Geography asks questions about how environmental, social, political and cultural processes shape how the world functions (and often fails to function!).

In particular, Geography is concerned with the spatial variations of human and physical phenomena, the processes that produce these variations and the interrelationships between people and their environments.

As global economic, political and environmental processes change, so do the places we live and our relationship to both immediate and distant environments.

Geography and geographic thinking is increasingly important as we face the challenges of the 21<sup>st</sup> century.

**The Chair, Undergraduate Program Director and  
Environmental Science Coordinator can be  
reached by telephone at  
416 736 5107  
or by department email at  
[lapsgeog@yorku.ca](mailto:lapsgeog@yorku.ca)**

**Chair  
Professor Steven Tufts**

**Undergraduate Program Director  
Professor André Robert**

**Environmental Science Coordinator  
Professor Rick Bello**

## WHAT CAN GEOGRAPHY AT YORK OFFER YOU?

We address some of the most pressing concerns facing humankind today like climate change, resource depletion, human migration, globalization, geopolitics, poverty, inequality and vulnerability – their causes, consequences, and implications on urban and regional development.

We are committed to hands-on learning, using technologies and field work to collect the facts on the ground, whether they are on the streets of Toronto or in the streams of the Arctic.

We provide access to specialized resources including:

- a world-class Map Library,
- a Geographic Resource Centre,
- a Geographic Information Systems & Remote Sensing laboratory,
- a dedicated river analysis flume laboratory, and
- one of the most comprehensive analytical nutrient laboratories in Geography anywhere.

You can choose your courses to focus on one or more of the following themes:

- The City
- Globalization, Environment and Development
- Production and the Politics of Difference
- State, Empire and Power
- Extreme Environments
- Biophysical Processes
- Geoinformatics

You can work towards:

- A Bachelor of Arts (BA) degree;
- A Bachelor of Science (BSc) degree; or
- An International Bachelor of Arts (iBA) degree

You can also pair your degree with a certificate in:

- Geographic Information Systems and Remote Sensing;
- Urban Studies; or
- Refugee and Migration Studies

# GEOGRAPHY THEME AREAS

A LISTING OF COURSES FOLLOWS THIS SECTION SHOWING THEIR RELATION TO THE THEME AREAS.

## THE CITY

In a world where over 50 per cent of the population lives in urban areas, cities play a significant role in shaping the social, cultural, economic, political, and environmental conditions of people's everyday lives.

Cities are intensely heterogeneous places, where flows of people, power, money, information, ideas, commodities, and traffic visibly intersect and find spatial expression in the built landscape.

A critical examination of cities involves investigating the shared characteristics of urban places and the complex ways in which global issues play out and local communities struggle over resources, services, and spaces.

The Geography Department possesses numerous foci on contemporary cities that, taken together, examine the interrelated forces that drive the process of urbanization in cities around the world.

These foci include:

- Gender and immigration in urban and suburban labour markets.
- Urban ethnic economies.
- Shopping behaviour and transportation modeling.
- The application of critical geographical information systems modeling to public service provision.
- Collective community action within neighbourhoods.
- The intricate social and spatial relationships within neighbourhoods, as visible in the dynamics of cultural production, creativity, sexuality, and identity politics in inner-cities and suburbs.
- The everyday interactions within and between cities that integrate urban places into systems of world cities.
- The distinct natural and physical systems operating within the built environment.

All of the courses at the undergraduate level encourage students to use films, photographs, novels, and public art as well as the more traditional tools of census data, maps, policy documents, interviews, and survey questionnaires to interpret the built and social landscapes that surround them.

Beginning with courses that provide a foundation in urban, social, and cultural geographies, students can go on to variously examine in greater detail migration patterns, immigrant settlement experiences, contemporary urban planning issues, urban infrastructure development, conflicts over public space provision, and the impact of global digital networks on city form and function.

Students can learn to navigate the world of urban social policy and to think critically about political strategies to create socially, economically, and environmentally sustainable cities.

Those students who follow this course of study will become critically engaged urban citizens with the necessary knowledge to help transform the world in which they live!

---

## GLOBALIZATION, ENVIRONMENT AND DEVELOPMENT

People interact with their environments and experience economic processes in diverse ways, both within societies and across the globe.

Courses in the Globalization, Environment and Development theme examine and explain this geographical diversity. Some courses are explicitly focused on the broader processes that shape our economic lives, some examine the driving forces behind global capitalism and its various manifestations, and some on the other hand, trace more intimate experiences of economic processes.

A major concern is to understand how such processes can lead to unevenness in material well-being around the world and within societies.

This issue is explored in specific regions of the world, including the Caribbean, Africa, South Asia, and the Asia-Pacific. While the broader context for understanding uneven development is always the global scale, studies of particular regions are used to ground our analyses in historical and geographical contexts.

A fundamental starting point for understanding uneven economic development is the way in which societies relate to nature, and how they convert environments into wealth-producing commodities. These processes are essentially struggles over the power to define, manage and profit from natural resources. Such power struggles are sometimes between states and their respective peoples or between men and women, or between the wealthy nations of the industrialized global North, and the poorer nations of the postcolonial South.

In a variety of ways, geographical perspectives on globalization, environment and development will allow you to explore pressing contemporary issues concerning wealth and poverty, resources, and conservation. This exploration involves grasping the 'big picture' in the form of global economic processes, but also the implications of such processes for particular regions, and the experiences and struggles of people around the world as they seek their livelihood.

---

## **PRODUCTION AND THE POLITICS OF DIFFERENCE**

In production and the politics of difference, we study the ways in which our everyday lives and landscapes become differentiated to produce inequality along many axes of identity, including class, race, ethnicity, nationality, indigeneity, gender, sexuality, religion, ability and legality.

We focus on understanding difference not as something obvious and inherent, but rather as a set of processes by which society makes certain attributes or characteristics of people and groups more relevant than others.

We are particularly interested in the spaces and places through which such codings of difference are produced, resisted and re-formulated. We also consider the ways in which practices of inclusion and exclusion are politically institutionalized through concepts of citizenship and national identity.

In society generally, we tend to understand identity as something natural and within our control: we are who we are and choose to be.

In Geography, we open up ideas of identity construction to examine the ways in which our ideas about ourselves and others are generated and sustained, particularly through the examination of relationships between identity and place. Much of our work concerns identities as they are impacted by migration and movement, whether that is through a short move from the country to the city or a transoceanic flight.

The Geography Department focuses upon numerous specialties within this area. Amongst our interests are:

- translation and recombination of identities by migration and urbanization, and how this in turn gives rise to globalizations.
- social institutions, identity politics and citizenship among racialized groups, immigrant communities and First Nations.
- impacts of community organizations, collective action and the politics of planning upon neighbourhood identities and civil society.
- construction of occupational identity by cultural workers.
- spatialization of queer identity politics.
- construction of identities among immigrant populations in 19<sup>th</sup>, 20<sup>th</sup> and 21<sup>st</sup> century Canadian and American cities.

Through its course offerings, the Department offers opportunities to study the concepts of identity and difference at every scale, from local to global, and at individual and group levels. Some courses trace the ways in which nation-states such as Canada, as well as their institutions, authorize and regulate identities within their borders.

Students also have the chance to study these concepts in both past and present contexts. Indeed, many courses emphasize the role and weight of history and tradition in the creation and manipulation of identities.

---

## **STATE, EMPIRE AND POWER**

In State, Empire and Power, we examine how people impose order in and through space to regulate, indoctrinate, discipline, control, dominate and exploit others. Additionally, we are interested in how people use space to accommodate, transform, or refuse and resist such impositions.

But power is not just a matter of one person's influence in relation to another. It is formulated and asymmetrically mobilized through larger entities. Prominent among these is the state, particularly in its territorial expressions and its expansion. In keeping with this our department has a specialization in how both formal states and shadow states enact power to produce such phenomena as citizens and citizenship, nations and the nation-state, empires and imperialism, and geopolitical world orders.

Our department investigates many different, but closely intertwined, aspects of the state, empire and power, that together analyze how power works in and through space, nationally and internationally. Our foci include:

- Colonial and postcolonial relationships between indigenous peoples, the state and Canadian society, particularly the creation of restrictive spaces and conflicts over access to resources.
- The relationships forged between diasporic populations and their 'historical homelands,' such as the various forms of 'long-distance' nationalism and loyalism that developed within Irish communities in North America in the nineteenth and twentieth centuries.
- The relations between class power and state power in terms of the severe constraints capitalism imposes on the state's attempt to alleviate poverty and counter uneven economic development, and lower-class resistance against the state at the local scale.
- The diverse governmentalities present in the liberalization of state policy, or in the rationality and power imbued in urban planning.
- The artifacts that assemble empires both old and new and hold them in place, from the stories told in picture books and movies, to architecture, to policing and military technologies.

The department provides undergraduates interested in State, Empire and Power opportunities to explore the subject from their earliest undergraduate coursework through to their graduating year. Beginning with classes that probe how nations are invented and how empires work, students may proceed in later years to considering the relations of the state to civil society, the experiences of colonialism and attempts in former colonies to transcend those experiences under conditions of postcolonialism, and how it all comes together on the world stage in the form of geopolitical maneuverings.

Students who embark upon this course of study will be expected to do a great deal of in-depth critical thinking and writing and will never again be able to take a news report at face value!

---

## **EXTREME ENVIRONMENTS**

Extreme environments include the polar regions and the desert. Northern environments will be the first and most dramatically altered by global warming. Deserts and desertification are also of concern in the face of global climate change. Some of their extremes include the:

- hottest temperatures in the world
- coldest temperatures in the world
- driest environments in the world
- windiest climates of the world
- greatest daily temperature variations in the world
- greatest annual temperature variations in the world
- longest light periods (non-stop for up to 6 months at a time) and dark periods (non-stop for up to 6 months at a time) in the world

How are these landscapes shaped by these extremes? How do organisms contend with these extremes? In these courses we explore landscapes and life on the fringes of existence. We not only gain an appreciation for environments very different from where we live but we also gain a better understanding of how extremes shape the changes we observe everywhere on Earth.

We have a particular focus in Northern research, with projects on microclimate and hydrological research on carbon cycling in the Hudson Bay Lowlands near Churchill Manitoba, and wetland hydrology at various scales and snowmelt energetics on High Arctic islands. But we are similarly engaged with arid land biogeography, studying plant-climate interactions in North America's deserts at the local scale (geographical associations between different plant species) and at the global scale (the effect of El Nino on desert plant communities).

Undergraduates get a glimpse of the relevance of their research findings in second year courses such as Hydrosphere and Vegetation and Soils. An in-depth appreciation for extreme environments follows in the fourth-year courses: Climates of High Latitudes, Dynamics of Snow and Ice, and Desert Ecosystems. Most of the students in physical geography and environmental science who have undertaken BSc theses in the last decade have found themselves in either Churchill or the high arctic islands during the summer, getting hands-on research experience while collecting field data for their own specific projects. Future students can also expect to find themselves in Arizona's Sonoran Desert conducting research on cacti and other desert species. At York, special funding programs exist to enable students to undertake thesis research in extreme environments.

---

## **BIOPHYSICAL PROCESSES**

Our departmental focus on biophysical processes emphasizes the interrelations among biological systems and the physical environment. We examine how natural and human factors effect change in environments ranging from the high arctic, through temperate forests, to sub-tropical deserts. Our goal is not only to understand the biological and physical systems themselves, but also to expand our knowledge of the processes that shape the landscape through the movement of water and wind, and through extreme disturbances generated by fire, drought and flood. Our courses examine not only the importance of climate as a factor in the global scale distribution of vegetation and soils, but also probe deeper to explore how plants influence climate, the development of soils, the flow of water, the availability of nutrients, and how plants influence each other in their communities.

The mutual interdependence of the physical and biological realms helps us to better understand both natural cycles and the longer-term responses to climate change. We place great emphasis on gaining practical experience in measuring these biophysical processes in both the field and laboratory and in analyzing their significance.

Amongst our specific foci we include:

- Watershed and stream biogeochemistry, and their uses in characterizing the biological controls on nutrient and contaminant transport.
- River systems, and a broader understanding of the impacts of fluvial forces on land surface change in conjunction with sediment transport and riverbed erosion.
- Sub-arctic wetland environments, carbon cycling and storage, and long-term climate change influences on moss/lichen communities.
- High arctic, permafrost-dominated environments that can serve to decipher the role of snowmelt in polar deserts in maintaining shallow pond-wetland systems.
- Vegetation dynamics in desert and tropical ecosystems, specifically the interactions between vegetation and climate with particular emphasis on vegetation adapted to dry environments and the recolonization of disturbed areas.
- Remote sensing and other geoinformatics techniques that can improve environmental monitoring, classification, and assessment, especially in relation to forested environments and large disturbance events.
- Linking the information content of satellite images with features on the ground, so as to explore such phenomena as the factors influencing hydrologic storage in locales like the Oak Ridges Moraine.

## **GEOINFORMATICS**

As computing, imaging, and space science technologies continue to advance at unprecedented rates, we as geographers embrace these developments to improve our studies of spatial and temporal patterns and processes. Geoinformatics integrates the study and examination of hardware, software, tools, techniques, and pedagogy related to the main developments in geographical science, including geographic information systems, remote sensing, photogrammetry, and global positioning systems.

A geographic information system is a digital spatial database system capable of assembling, storing, manipulating, displaying, and analyzing geographically referenced information. Remote sensing involves the science, technology, and art of evaluating satellite data, while photogrammetry is the science of taking detailed measurements from aerial photographs.

Global positioning systems link a constellation of satellites in orbit that together with ground control stations and roaming receivers can accurately triangulate positions on the surface of the Earth.

Our approach is to focus on the development and application of geoinformatics in both physical and human geography and build from introductory courses in the second year to advanced courses in years three and four.

We focus on both the human applications and physical applications of geoinformatics, and offer a wide range of courses that:

- Introduce and incorporate geoinformatics for purposes of retrieving biophysical or geophysical landscape properties for land cover classification, resources mapping, environmental monitoring, change detection, and accuracy assessment.
- Explore spatial analysis techniques for geological applications.
- Study extensive natural and anthropogenic disturbances (e.g., wildfire, harvesting) in boreal forest regions.
- Investigate economic and social processes in retail and shopping activities, neighbourhood characteristics and immigrant settlement patterns.
- Critically uncover questions related to spatial equity and social justice in cities.
- Through the incorporation of these rapidly developing technologies and continually emerging opportunities, it is possible to ask questions and perform geographical analyses that prior to recent developments would have been impossible, or at the very least daunting.

# Geography Courses and their Relation to the Theme Areas

GEOGRAPHY COURSE						Theme Areas						
						The City	Globalization, Environment & Development	Production and the Politics of Difference	State, Empire & Power	Extreme Environments	Biophysical Processes	Geoinformatics
AP		GEOG	1000	6.00	Introduction to World Geography	✓	✓	✓	✓			
AP	SC	GEOG	1400	6.00	Physical Geography					✓	✓	
AP		GEOG	1410	6.00	Human Geography	✓	✓	✓	✓			
AP		GEOG	2030	3.00	Global Environmental Change		✓					
AP		GEOG	2060	3.00	Historical Geography			✓	✓			
AP		GEOG	2070	3.00	Empire, State, & Power: An Introduction to Political Geography				✓			
AP		GEOG	2075	3.00	Everyday Life: Introduction to Cultural Geography			✓				
AP		GEOG	2105	3.00	Money, Power, & Space: Introduction to Economic Geography		✓					
AP		GEOG	2220	6.00	Urban Geography	✓						
AP		GEOG	2305	3.00	Identities: Introduction to Social Geography	✓		✓				
AP		GEOG	2310	6.00	Introduction to Refugee and Migration Studies			✓				
AP	SC	GEOG	2340	3.00	Geoinformatics: Introduction							✓
AP	SC	GEOG	2400	6.00	The Hydrosphere						✓	
AP	SC	GEOG	2420	3.00	Introductory Statistical Analysis in Geography							✓
AP	SC	GEOG	2500	3.00	Introduction to Vegetation and Soils						✓	
AP	SC	GEOG	2600	3.00	Geomorphology I						✓	
AP	SC	GEOG	2610	3.00	Geomorphology II						✓	
AP		GEOG	3010	6.00	Geography of Canada				✓			
AP		GEOG	3020	6.00	Geographical Transformation of the Caribbean Islands		✓		✓			
AP		GEOG	3030	3.00	Peopling of Ontario							
AP		GEOG	3040	3.00	Urban Environmental Justice	✓						
AP		GEOG	3050	3.00	Nature, Power and Society		✓		✓			
AP		GEOG	3060	3.00	Post-Colonial Geographies			✓	✓			
AP		GEOG	3070	6.00	Gender, Migration and Population		✓	✓	✓			
AP		GEOG	3080	3.00	Reading Landscapes Through Time							
AP		GEOG	3081	3.00	Historical Geographies of Modern Ireland				✓			
AP		GEOG	3130	3.00	The Global Economy	✓	✓		✓			

Geography Course						The City	Globalization, Environment & Development	Production and the Politics of Difference	State, Empire & Power	Extreme Environments	Biophysical Processes	Geoinformatics
AP		GEOG	3140	3.00	Retailing, Shopping, Society and Space	✓	✓					✓
AP	SC	GEOG	3200	3.00	Terrestrial Ecosystems						✓	
AP		GEOG	3220	6.00	Advanced Urban Geography	✓						
AP		GEOG	3250	3.00	Environmental Perception and Disasters		✓			✓		
AP		GEOG	3300	3.00	Space/Place			✓				
AP	SC	GEOG	3340	3.00	Geoinformatics: GIS I							✓
AP	SC	GEOG	3360	3.00	Morphogenesis of Soils						✓	
AP		GEOG	3370	3.00	Critical Geographical Perspectives on Development		✓					
AP		GEOG	3400	3.00	Dimensions of Difference			✓				
AP	SC	GEOG	3421	3.00	Intermediate Statistical Methods in Geography							
AP	SC	GEOG	3440	3.00	Geoinformatics: Remote Sensing I						✓	✓
AP		GEOG	3490	3.00	Making Canada				✓			
AP	SC	GEOG	3500	3.00	Biogeography						✓	
AP	SC	GEOG	3510	3.00	Methods of Sediment						✓	
AP	SC	GEOG	3540	3.00	Field Studies in Physical Geography						✓	
AP		GEOG	3590	3.00	Conservation in Canada		✓		✓			
AP		GEOG	3600	3.00	Nations and Nationalisms			✓	✓			
AP		GEOG	3650	6.00	WiredCities: Community, Tech. and Urban Places	✓						
AP	SC	GEOG	3700	3.00	Disaster! Earth's Extreme Events					✓		
AP		GEOG	3710	3.00	Society, Space and Environment in South Asia		✓		✓			
AP		GEOG	3730	6.00	Comparative Urban Development	✓						
AP		GEOG	3740	3.00	Qualitative Research in Human Geography							
AP		GEOG	3750	3.00	Africa: Impoverishment of a Continent		✓		✓			
AP		GEOG	3760	3.00	The Philippines: Geographical Perspectives on Global Integration		✓					
AP		GEOG	3770	3.00	Housing Policy	✓						
AP		GEOG	3800	3.00	Geographies of Work	✓		✓				
AP	SC	GEOG	3900	3.00	Physical Geography of the City	✓					✓	
AP		GEOG	4000	6.00	Honours Thesis							
AP		GEOG	4020	3.00	The Caribbean Islands since 1492		✓	✓	✓			
AP		GEOG	4040	6.00	Urban Historical Geography	✓						
AP		GEOG	4050	3.00	Nature Neoliberalism Political Ecology		✓		✓			
AP		GEOG	4051	3.00	Comparative Politics of Environment and Development		✓					
AP		GEOG	4060	3.00	Historical Geographies of Gender & Sexuality			✓				

Geography Course						The City	Globalization, Environment & Development	Production and the Politics of Difference	State, Empire & Power	Extreme Environments	Biophysical Processes	Geoinformatics
AP		GEOG	4090	3.00	Urban Identities	✓		✓				
AP		GEOG	4095	3.00	Aboriginal Space and the City	✓		✓	✓			
AP		GEOG	4130	3.00	Planning Suburbs	✓						
AP		GEOG	4150	3.00	Foodscapes & Agri-scapes: Geographical Perspectives		✓					
AP		GEOG	4170	3.00	Immigration, Ethnicity and Race in Modern Cities	✓		✓				
AP	SC	GEOG	4180	3.00	Laboratory Analysis of Ecological Materials						✓	
AP		GEOG	4190	3.00	Geographies of the Ethnic Economy	✓		✓				
AP	SC	GEOG	4200	3.00	Water Quality and Stream Ecosystems						✓	
AP	SC	GEOG	4205	3.00	Climatology of High Latitudes				✓		✓	
AP	SC	GEOG	4210	3.00	Hydrometeorology						✓	
AP	SC	GEOG	4215	3.00	Ecological Climatology						✓	
AP		GEOG	4220	3.00	Geographies of Industry: Neoliberal Era		✓					
AP		GEOG	4240	3.00	The Planning of Urban Public Facilities	✓						✓
AP		GEOG	4250	3.00	Imagined Landscapes			✓	✓			
AP		GEOG	4260	3.00	Applied Transportation Geography	✓	✓					
AP		GEOG	4280	3.00	Imagining Toronto: Literary Geographies of a City	✓						
AP	SC	GEOG	4290	3.00	Directed Reading							
AP	SC	GEOG	4290	6.00	Directed Reading							
AP	SC	GEOG	4310	3.00	Dynamics of Snow and Ice				✓		✓	
AP	SC	GEOG	4340	3.00	Geoinformatics: GIS II							✓
AP		GEOG	4380	3.00	Urban Social Policy	✓		✓	✓			
AP		GEOG	4395	3.00	Asia-Pacific Dev. Geographical Perspectives		✓		✓			
AP	SC	GEOG	4400	3.00	Physical Hydrology and Water Resources						✓	
AP	SC	GEOG	4410	3.00	Desert Ecosystems				✓		✓	
AP	SC	GEOG	4420	3.00	Project Experience in Geography							
AP	SC	GEOG	4440	3.00	Geoinformatics: Remote Sensing II						✓	✓
AP	SC	GEOG	4500	3.00	Northern Forest Environments						✓	
AP		GEOG	4520	3.00	Research Design & Field Studies in Human Geography							
AP	SC	GEOG	4541	3.00	Advanced Field Studies in Physical Geography						✓	
AP	SC	GEOG	4600	3.00	Rivers: Environment and Process						✓	
AP		GEOG	4605	3.00	The Greater Toronto Area - A Geographical Perspective	✓						
AP		GEOG	4610	3.00	Geopolitics				✓			
AP		GEOG	4700	3.00	The Critical Geographies of Education	✓		✓	✓			

AP		GEOG	4750	3.00	Geography of Disabilities	✓		✓				
AP		GEOG	4800	3.00	Geographies of Organized Labour	✓		✓				
AP		GEOG	4850	3.00	The State, Civil Society and Development		✓		✓			
AP		GEOG	4880	3.00	Spaces of Conflict, Violence, and Power			✓				
AP		GEOG	4900	3.00	Public Space	✓						

# DEPARTMENTAL MEMBERS

<b>FACULTY - FULL-TIME</b>			<i>Telephone: 416 736 2100 (Extensions noted below)</i>		
Bain, Alison	Associate Professor	abain@yorku.ca	66192	Ross N422	Urban development; creative capacity of mid-size cities; suburban cultural production; queer identity politics.
Basu, Ranu	Associate Professor	ranubasu@yorku.ca	22436	Ross N403	Urban social and political geography; theories of collective action; geographies of public education; critical GIS.
Bello, Richard	Associate Professor & <b>Environmental Science Coordinator</b>	bello@yorku.ca	22561	Ross N408	Microclimatology; evapotranspiration ; Arctic Canada; peatlands; bioclimatology; soil-plant-atmosphere gas exchange.
Best, Ulrich	Visiting Professor	ubest@yorku.ca	22406	718 YRT	Critical geopolitics of Europe, cross-border cooperation, Eastern Europe
Cheng, Qiuming	Professor	qiuming@yorku.ca	22842	116 Petrie	Geographic Information Systems (GIS); natural resources assessment; mathematical geology.
Das, Raju	Associate Professor & <b>Graduate Program Director</b>	rajudas@yorku.ca	22450	Ross S411	Development geography and political economy; state society relations; critical social theory; South Asia.
Drezner, T.	Associate Professor	drezner@yorku.ca	20511	Ross S408	Biogeography; arid lands; plant-climate interactions; tropical ecosystems; riparian areas; restoration and disturbance.
Hyndman, Jennifer	Professor	jhyndman@yorku.ca	33689	849 YRT	Forced migration; humanitarian aid in response to conflict/asylum/ disasters; refugee (re)settlement. critical and feminist geopolitics
Jenkins, William	Associate Professor	wjenkins@yorku.ca	22488	Ross S410	Cultural and historical geography; the Irish diaspora; histories of urban immigration; Irish-Canadian studies.
Kelly, Philip	Professor	pfkelly@yorku.ca	22499	Ross N423	Economic geography; labour markets and social reproduction; Filipino transnational experiences; development in the Philippines.
Kwak, Min-Jung	Assistant Professor	mikwak@yorku.ca	33327	Ross S413	Urban Social Geography, Globalization & Transnational Migration. Ethnic Economy.
Lo, Lucia (On Leave)	Professor	lucialo@yorku.ca	66199	Ross N402	Immigrant settlement and integration; retailing, shopping and ethnic economies; the Chinese diaspora; transportation geography
Lunstrum, Elizabeth (On Leave)	Associate Professor	lunstrum@yorku.ca	46010	739 YRT	Environmental politics in conflict spaces; territory and state formation; gender relations; southern Africa
Mensah, Joseph	Professor	jmensah@yorku.ca	66344	Ross N413A	Critical development theory; socio-spatial dialectics; religious transnationalism; neoliberalism and globalization; Africa.
Preston, Valerie A.	Professor	vpreston@yorku.ca	22421	Ross S412	Gender and urban labour markets; immigration and Canadian cities; social and economic effects of economic restructuring.
Rommel, Tarmo	Associate Professor	remmelt@yorku.ca	22496	Ross N413A	Geoinformatics and spatial statistics; spatial patterns with ecological processes of forest disturbance and recovery.

Robert, André.	Associate Professor & <b>Undergraduate Program Director</b>	arobert@yorku.ca	22002	Ross S406	River Science. Process Geomorphology.
Roth, Robin	Associate Professor	rothr@yorku.ca	22491	Ross N407	Political ecology; community conservation; feminist geography; global environmental change; SE Asia.
Sturm, Tristan	Assistant Professor	tsturm@yorku.ca	22482	Ross S404D	Critical Geopolitics, Environmental Disasters, Property Insurance, Political Geography
Tufts, Steven	Associate Professor & <b>Chair</b>	tufts@yorku.ca	20745	Ross N425	Economic geography; organized labour; community economic development; immigrant workers; employment and climate change.
Vandergeest, Peter	Associate Professor	pvander@yorku.ca	66191	Ross N405	Political ecology; agrofood systems; cultural politics of development; professional forestry standards & certification; SE Asia/Thailand.
Wood, Patricia	Professor	pwood@yorku.ca	22448	Ross S409	Citizenship & identity; Native studies; immigration & multiculturalism; urban, feminist, and historical geographies; Western Canada.
Young, Kathy (On Leave)	Professor	klyoung@yorku.ca	22371	Ross N415	High Arctic wetland hydrology; arctic ecohydrology; regional snowmelt modelling in the Canadian High Arctic.

<b>FACULTY - CONTRACT</b>					
Anderson, Richard		anderson@yorku.ca	22454	Ross N412	Environmental history, historical geography of air pollution
Code, Lewis		lcode@yorku.ca	77815	306 Calumet	Urban economic geography; financial services industry in North America.
Long, Peter		long@yorku.ca	22429	Ross N413	Geomorphology, sedimentology, palaeoecology and archaeology

<b>FACULTY - RETIRED (TEACHING)</b>					
Mahaney, William	Professor	mahaney@yorku.ca			Quaternary stratigraphy/soils; Planetary Geology/geomorphology; Glacial geology/geomorphology and Paleoclimatology
Radford, John	Professor	johnrad@yorku.ca	33648	Ross S404C	The social geography of the nineteenth century city; internal structure of cities; public policy and intellectual disability.

**STAFF**

Cunningham, Karen	Administrative Assistant	karen@yorku.ca	22490	Ross N419	
King, Carolyn	Cartographer	cking@yorku.ca	33742	Ross N426	
Ko, Connie (On leave)	Computer Laboratory Technician (GIS/RS)	cko@yorku.ca	20290	Ross N302	
Langat, Jackson	Laboratory Technican (Lumbers Lab)	jlangat@yorku.ca	22418/ 30395	105 Lumbers	
McCue, Meaghan (On leave)	Undergraduate Program Secretary	mmccue@yorku.ca	55107	Ross N430	Direct Telephone Line: 416 -736 -5107
Mojdehi, Patrick	Laboratory Technician	pmojdehi@yorku.ca	33784	Ross N305	
Ralph, Anne	Undergraduate Program Assistant	anner@yorku.ca	22460	Ross N430	
Siu, Doris	Acting Computer Laboratory Technician (GIS/RS)	dorissui@yorku.ca	20290	Ross N302	
Tortorelli, Laura	Secretary to the Chair/ Website Coordinator	laurat@yorku.ca	33816	Ross N418	
Walton, Laura	Geographic Resource Centre Coordinator	lwalton@yorku.ca	22419	Ross S403	
Wong, Prina	Acting Undergraduate Program Secretary	Prina714@yorku.ca	55107	Ross N430	Direct Telephone Line: 416-736-5107
Yim, Yvonne	Graduate Program Assistant	yvonney@yorku.ca	55106	Ross N431	Direct Telephone Line: 416 736 5106

# GENERAL INFORMATION

## ADVISING

Every effort is made in the Department of Geography to ensure that each student receives academic advice and sufficient information to guide course selection and program choice.

Within this context, the student is solely responsible for the following:

- ensuring that the courses chosen in consultation with an advisor meet all program and degree requirements for graduation;
- verifying the accuracy of registration records, including all course changes;
- fulfilling the requirements and being aware of academic progress in all registered courses;
- noting and abiding by the sessional deadline dates published in the Lecture Schedules each year, especially course change deadline dates.

Advising is available from the Undergraduate Program Director (UPD) and faculty members.

Appointments for general program enquiries and when needed, special advising can be made at the Geography office (N430 Ross).

Students are encouraged to have advising appointments on an annual basis. Special attention to courses, grade point averages (GPA's) and degree-requirements should be given in your graduating year.

Students who wish to obtain specific information about a particular field may arrange an appointment directly with a faculty member connected with that field.

---

## ENROLMENT, PREREQUISITES AND COREQUISITES

When enrolling in a Geography course by the Registration and Enrolment Module (REM), ensure that you have the prerequisites for the course. Prerequisites are intended to ensure that students do not enrol in a course for which they have inadequate preparation.

Instructors assume that students who enrol in their course have the substantive, theoretical and/or technical knowledge obtained in the prerequisite. Courses that carry prerequisites often have the following clause added to the prerequisite list: **"...or written permission of the instructor."** This means that an instructor may, under circumstances he/she feels are appropriate, waive a prerequisite for a particular student.

Normally prerequisites are waived only for those students who already have some background in the subject, which they may have obtained through courses other than the prerequisite or through work experience.

If you wish to get into a course for which you do not have the prerequisites you must get prior permission from the instructor by completing a **Course Permission Form** available in the Department of Geography Undergraduate Program Office (N430 Ross). This form can also be used to seek permission to register in those courses that have already filled.

The completed form must be returned to the Department of Geography Undergraduate Program Office so that a permission to enrol can be set up. If you do not have the prerequisite for the course in which you are enrolling, **you may be de-enrolled** even though the Registration and Enrolment Module (REM) will accept your initial enrolment.

De-enrolment exercises take place in the department throughout the summer months and into September.

REM enrolment access dates and times are posted on the Office of the Registrar's website. Students must log into the web application to obtain their enrolment access date and time.

---

## COURSE CREDIT EXCLUSIONS AND EQUIVALENTS

A course and its exclusion may not both be taken for degree credit. The overlap in content may range from a relatively small amount to complete overlap.

At the latter end of the overlap spectrum courses may be designated as “equivalents”. An equivalent is therefore a specific type of exclusion.

A course from another unit or Faculty may be substituted for its geography equivalent for the purposes of prerequisites or degree requirements subject only to the department and/or Faculty limitations on out-of-department or out-of-Faculty credit totals (see York University Undergraduate Calendar).

An exclusion which is not an equivalent may only be substituted with written permission of the instructor (prerequisites) or Undergraduate Program Director (specific degree requirements).

In the case of degree requirement substitution, this permission should also be filed in the student’s record in the Registrar’s Office for reference at the time of graduate assessment.

---

## GRADE POINT EQUIVALENCIES AND AVERAGES

Averages are calculated on the basis of the point value assigned to each letter grade.

	Grade Point	Percentage	Grade
A+	9.0	90-100	Exceptional
A	8.0	80-89	Excellent
B+	7.0	75-79	Very Good
B	6.0	70-74	Good
C+	5.0	65-69	Competent
C	4.0	60-64	Fairly Competent
D+	3.0	55-59	Passing
D	2.0	50-54	Marginally Passing
E	1.0	40-49	Marginally Failing
F	0	0-39	Failing

To calculate an overall grade point average, take each course and multiply the number of credits by the grade point value. Add the results of this calculation, and divide by the total number of credits. The result will be the overall grade point average.

**Please check the following website to calculate your GPA.  
<http://www.yorku.ca/laps/students/gpa.html>**

**It should be noted that grades of E and F are failures and will be included  
in the calculation of grade point averages.**

---

## REAPPRAISALS

<http://www.yorku.ca/laps/students/reappraisal.html>

### Requests for Reappraisal of Final Grades

Students may, with sufficient grounds, request that a final grade in a course be reappraised (<http://www.registrar.yorku.ca/services/grades/policy.htm>). The request to the Undergraduate Program Director should be made in writing on a Request for Reappraisal Form available in the Department of Geography Undergraduate Program Office (Ross N430). Students applying to have a grade reappraised in a Faculty of Liberal Arts and Professional Studies course should note the following:

- The Senate approved deadline\*\* for submitting grade reappraisals is the scheduled date for the term in which a course is completed and the grade released:
  - Winter Term: June 15
  - Summer Term: September 30;
  - Fall Term: February 15.

In all cases, a minimum of 21 days from the date of the release of grades will be allowed.

- Students may question the marking of specific pieces of work, or the overall course grade. Normally, however, only written work can be reassessed.
- When a student asks for a reappraisal, an original grade may be raised, lowered or confirmed.
- Students wishing to request the reappraisal of a final grade should fill out the appropriate form available from the department/school offering the course and submit it to the same office.
- The decision of the department/school may be appealed to the Faculty only on grounds of procedural irregularity or new evidence.

---

## DEFERRED STANDING AND PETITIONS

Under unusual circumstances (for example, medical emergencies) a student may not be able to complete term work or write a final examination within the regular timeframe of the course.

In cases where deferral of such work may be merited, a student should obtain a **Deferred Standing Agreement Form** from either the Registrar's Office (Bennett Centre for Student Services) or from the Department of Geography Undergraduate Program Office (N430 Ross). These forms can also be found at <http://www.registrar.yorku.ca/exams/deferred/>.

These forms must be completed by the student and the Instructor and then returned to the Department of Geography Undergraduate Program Office where the appropriate copy will be forwarded to the Registrar's Office.

Matters such as late withdrawal, late enrolment, failure to reach agreement over deferred standing and other problems may be subject to petition. A **Student Petition Application Form** can be obtained from the Registrar's Office or can be found online at <http://www.registrar.yorku.ca/petitions/academic/>

Please note that the grounds for a petition or deferral are carefully scrutinized. Deferral requests and petitions are never automatically granted. It is at the Instructor's discretion to accept or refuse the request.

---

## **ACADEMIC HONESTY**

All students are expected to familiarize themselves with the Senate Policy on Academic Honesty available in the York Calendar and on the York website.

The department wishes to add a special caution regarding material downloaded or found on the Internet. It is imperative that students treat material found on the Internet exactly the same as material found in a scholarly article or book: the material must be cited in the written text of an assignment if quoted or paraphrased. Material from any source must be properly cited.

---

## **COURSE EVALUATIONS**

At the end of each course, students are requested to complete a course evaluation online. These evaluations are important in helping to improve our courses. <http://courseevaluations.yorku.ca/>

---

## **EMAIL ADDRESS**

As a York University student you are entitled to a free YU e-mail account.

However, many students use an alternate address through either a portal such as Hotmail, Yahoo, Gmail, and so on or a private ISP such as interlog, Sympatico, @home etc.

If you use your YU address, then you need do nothing more. A search of your name on the list of students registered in the course will give your Instructor access to you.

However, if you use an alternate address you are urged to do the following:

1. Activate your YU account. Make a careful note of your user ID and password.
2. On the web go to <http://mymail.yorku.ca>
3. Once you have logged in, on the left hand side, click on Preferences.
4. At the bottom of the page, where it says, Edit Your Mail Forwarding Settings, enter the email address you really use (e.g., susie789@excite.ca or fastflash@hotmail.com)
5. Click on Logout.

You have now set a forward. All e-mail addressed to your YU address will now go to the address you entered in step 4. If you change your address, you need to change the forward, otherwise, all mail addressed to your YU address will not be automatically forwarded to you.

---

## **GEOGRAPHIC RESOURCE CENTRE (GRC)**

The Geographic Resource Centre (GRC) located in S403 Ross has a variety of resources for student use including:

- reserved readings for select Geography courses
- over 10,000 maps
- geographic books and other publications, geographic journals
- atlases
- digital media, air photos
- publications by current and former faculty members of the Department of Geography
- student theses (Undergraduate, Masters and PhD)

This space also provides large tables and seating for quiet individual and group study.

Computers are available for student use to allow for researching and working with materials from the collection.

These computers have internet access and various software to access MS Word, MS Excel, MS Powerpoint, MS Access, and Google Earth.

Course syllabi for Geography courses (since 1970) and Department of Geography supplemental calendars (since 1981) are also available and provide a historic context to our programs.

The Geographic Resource Centre is open Monday through Friday and is available by telephone at 416 736 2100 ext 22419 or by email at [lpsgrc@yorku.ca](mailto:lpsgrc@yorku.ca).

---

## **MAP LIBRARY**

The Map Library is located in Room 102 of the Scott Library.

It contains a variety of material for your use including 94,000 maps plus a supporting collection of 4,600 atlases and books.

There is both topographic and thematic map coverage for every country and major city of the world although the area emphasis of the collection is on Canada and more specifically southern Ontario and the Toronto-centered region.

The library also collects electronic atlases and digital geospatial data.

The telephone number for the Map Library is 416 736 2100 ext 33353 and the hours of operation are posted in the Map Library.

---

## **UNDERGRADUATE COMPUTING LABORATORY**

The undergraduate computing laboratory (located in N302 Ross) is equipped with 30 PC workstations, each running Windows XP, and a suite of software required in our courses (e.g., ArcGIS, Geomatica Focus, R, SPSS, Microsoft Office, Acrobat, Map Info).

A digitizing table and PC workstation is also available for precision data entry activities and each computer is connected to the network, permitting pay-per-use BW and colour laser printing.

This laboratory houses the office of the GIS Technician who is available to provide technical assistance.

For available drop-in times please refer to the schedule posted outside N302 Ross.

---

## **PHYSICAL GEOGRAPHY LABORATORY FACILITIES**

Although there are several physical geography research laboratories in the Department of Geography, the following describes the ones most commonly used by our undergraduates.

The largest is the biogeochemistry laboratory located in 105 Lumbers.

It is a state-of-the-art wet laboratory used for the analysis of soil, chemical, and biological materials.

This facility is used extensively for undergraduate teaching and has traditionally been used by faculty conducting research in biogeochemical cycling.

Our senior physical geography technician manages this laboratory and ensures that anyone entering this space is properly trained for the safe use of equipment and materials.

Two smaller labs are located in Curtis Lecture Halls 003 and 004.

The 003 lab is used for primary processing of soil, vegetation and snow samples by undergraduate students in the field studies courses, and honours thesis courses.

The 004 facility is primarily used for experiments involving controlled light, temperature and humidity conditions of the growth chambers.

---

### **STUDENT REPRESENTATION ON GEOGRAPHY DEPARTMENT COMMITTEES**

Students participate in the governance of the Geography Department through elected members of the Departmental Undergraduate Program Committee (UPC).

This committee comprises three faculty members, one student from each of third and fourth years, and two students from the first or second year who are normally selected in the fall.

Student members of the committee are Geography majors and the electorate is all students registered as Geography majors.

Duties of the UPC include the review of proposed changes to geography program requirements and course offerings, annual course evaluations, and student-faculty liaison.

Student representatives have full voting rights on curriculum matters brought before the Geography Departmental Committee.

Students interested in participating on the UPC should contact the Undergraduate Program Director.

---

### **GEOGRAPHY UNDERGRADUATE STUDENT ASSOCIATION AT YORK**

The Geography and Environmental Science Society at York (GESS@Y)(formerly YUGS) is an organization for geography students at all year levels, major or minor, or any student with a general interest in geography, to meet, share ideas, organize events, make new friends and have fun.

The goal of this student association is to ensure that members have access to information about the department and programs, research opportunities, mentoring, talks by professors and professionals, and a number of social events organized by students such as yourself!

This student association can be reached by email at, [thegessay@gmail.com](mailto:thegessay@gmail.com) or by contacting any of the executives with questions or ideas, or if you are looking to volunteer at our upcoming events!

---

---

## BURSARIES, AWARDS AND PRIZES

### JOHN WARKENTIN BURSARY

Professor John Warkentin is among the best-known and most widely respected geographers in Canada.

This award, named in his honour, is sponsored by the Department of Geography, Faculty of Liberal Arts & Professional Studies.

This bursary is awarded annually to an undergraduate student who meets the following criteria:

- A high grade point average in their first two years of study in Geography and participation in undergraduate program activities
- Ontario resident
- Canadian citizen/permanent resident
- Demonstrable financial need

The value of this bursary is \$500 and two bursaries will be awarded each year. To apply for this bursary, please complete an application form available at:

[http://www.yorku.ca/geograph/documents/WarkentinBursary\\_Application.doc](http://www.yorku.ca/geograph/documents/WarkentinBursary_Application.doc)

Applications should be sent to the following address, no later than **November 1**.

*Chair  
Department of Geography (N430 Ross)  
York University  
4700 Keele Street  
Toronto, ON  
M3J 1P3*

---

### CANADIAN ASSOCIATION OF GEOGRAPHERS (CAG) AWARD

This is an annual award given by the Canadian Association of Geographers. The winner will receive a complimentary membership in the CAG for the following year and her/his name will be published in the CAG Newsletter.

This award is presented to the most outstanding students graduating in Geography Honours programs at universities across Canada.

---

### GEORGE MICHIE MEMORIAL SCHOLARSHIP

Established to honour the late Professor George H. Michie by encouraging student interest in Canadian Rural Geography, this scholarship will be awarded to a Liberal Arts and Professional Studies student with a Major in Geography who has completed during the award academic year (the previous fall/winter or summer) at least 12 credits at the 2000-level or above in Geography, with a grade of at least 8.00 (A) in the Geography of Canada (AP GEOG 3010). Students must have completed 48 credits with a cumulative grade point average of 7.00 (B+).

---

### **HANS CAROL PRIZE**

The Hans Carol Prize is donated by the friends and colleagues of the late Hans Carol (1915-1971). Professor Hans Carol was the first Chair of the Department of Geography at York University.

This prize is given annually and is intended to recognize the academic achievements of a third year Geography student in the Faculty of Liberal Arts & Professional Studies or Science and Engineering.

---

### **SCIENCE GEOGRAPHY BOOK PRIZE**

The Science Geography Book Prize is awarded to the most outstanding student enrolled in a BSc (Geography) program in a third/fourth year Geography (SC/GEOG) course, selected from candidates nominated by instructors.

This prize is awarded in the fall following the academic year in which the students were nominated.

---

### **FACULTY OF LIBERAL ARTS AND PROFESSIONAL STUDIES GEOGRAPHY BOOK PRIZE**

The Faculty of Liberal Arts and Professional Studies Geography Book Prize is awarded to the most outstanding student enrolled in a BA (Geography) program in a third/fourth year geography (AP/GEOG) course, selected from candidates nominated by instructors.

This prize is awarded in the Fall following the academic year in which the students were nominated.

---

### **FIRST YEAR AWARDS**

The top student from each of our three first year classes (AP/GEOG 1000 6.0, AP/SC/GEOG 1400 6.0, and AP/GEOG 1410 6.0) will be recognized with a certificate to encourage their further study of Geography.

---

### **AWARD FOR FIELD-BASED RESEARCH IN PHYSICAL GEOGRAPHY.**

This prize is intended to be given annually (starting in 2014-15) to recognize the achievement of a student in Geography enrolled in a field course in physical geography and/or a field-based Honours thesis in physical geography. The excellence of a field work project will be recognized through this award and students will be nominated by course instructors (or supervisors in the case of Honours theses).

## WHERE TO FIND HELP AROUND CAMPUS

<b>Your Concern</b>		<b>Where to go for help</b>
<b>Personal</b>	<ul style="list-style-type: none"> <li>▪ Who can I talk to about personal issues &amp; concerns?</li> <li>▪ I need some help with study skills.</li> <li>▪ I need special accommodations for exams.</li> </ul>	<p style="text-align: center;"><b>Counselling &amp; Disability Services</b>  <a href="http://www.yorku.ca/cds/mhds/index.html">www.yorku.ca/cds/mhds/index.html</a>                      N110 Bennett Centre for Student Services                      416 736 5297</p>
		<p style="text-align: center;"><b>Physical, Sensory and Medical Disability Services</b>                      N108 Ross                      416 736 5140</p>
<b>Academic</b>	<ul style="list-style-type: none"> <li>▪ I am not sure what course I need to take next year</li> </ul>	<p style="text-align: center;"><b>Faculty of Liberal Arts &amp; Professional Studies</b></p> <p style="text-align: center;"><b>Office for New Students</b>                      103 Central Square                      416 736 5022</p>
		<p style="text-align: center;"><b>Academic Services</b>  <b>Faculty of Science and Engineering</b>                      352 Lumbers                      416 736 5085</p>
	<ul style="list-style-type: none"> <li>▪ I need to contact a Course Director or Undergrad Program Director</li> </ul>	<p style="text-align: center;"><b>Department of Geography</b>                      N430 Ross                      416 736 5107</p>
	<ul style="list-style-type: none"> <li>▪ English is my second language and I would like some academic support</li> <li>▪ I need some help with writing skills</li> </ul>	<p style="text-align: center;"><b>Writing Department</b>                      S329 Ross                      416 736 5134</p>
	<ul style="list-style-type: none"> <li>▪ I am interested in participating in an exchange program</li> </ul>	<p style="text-align: center;"><b>York International</b>                      200 York Lanes                      416 736 5177</p>
	<ul style="list-style-type: none"> <li>▪ I would like to request transcripts</li> <li>▪ I am having trouble with York Enrolment System</li> <li>▪ How do I petition? How do I apply to graduate?</li> </ul>	<p style="text-align: center;"><b>Office of the Registrar</b>                      Bennett Centre for Student Services                      416 736 5262</p>
<b>Financial</b>	<ul style="list-style-type: none"> <li>▪ I am looking for financial support.</li> <li>▪ I am looking for scholarship &amp; bursary information.</li> <li>▪ Am I eligible for OSAP?</li> </ul>	<p style="text-align: center;"><b>Student Financial Services</b>                      Bennett Centre for Student Services                      416 872 9675</p>

# OVERVIEW OF REQUIREMENTS

The Department of Geography offers BA and Honours BA degrees in the Faculty of Liberal Arts & Professional Studies and BSc and Honours BSc degrees in the Faculty of Science and Engineering as noted below.

Some degree requirements are common to a number of programs but others are not.

It is important that you fulfill all the requirements for the program you have selected.

To graduate with a BA or BSc requires a cumulative grade point average of at least 4.0 (C), and to graduate with an Honours BA or BSc requires a cumulative grade point average of at least 5.0 (C+).

## DEGREES OFFERED

### Bachelor's Degrees (90 Credit)

- Bachelor of Arts (BA) Geography
- Bachelor of Science (BSc) Geography

### Bachelor's Honours Degrees (120 Credit)

- BA Honours Geography
- BSc Honours Geography
- Honours Double Major BA
- Honours Double Major BSc/Geography/EATS (Earth Science Stream)
- Honours Double Major BSc/Geography (Atmospheric Science Stream)
- Honours (Major/Minor) BA - Geography Major
- Honours (Major/Minor) BSc-Geography Major
- Honours (Major/Minor) BA –Geography Minor
- Honours (Major/Minor) BSc-Geography Minor
- Specialized Honours (Major/Minor) BA- Geography
- Specialized Honours BA Geography/Urban Studies
- International BA -Geography iBA Honours (120 credits)
- Specialized Honours (Major/Minor) BSc- Geography

## CERTIFICATE PROGRAMS OFFERED

Geography students may be eligible to obtain certificates in addition to degrees. Three certificates are available to geography students:

- Geographic Information Systems and Remote Sensing;
- Urban Studies; or
- Refugee and Migration Studies

Advanced standing/residency requirement for certificate programs requires that at least 50% of the credits must be completed at York University.

## CO-REGISTRATION IN THE FACULTY OF EDUCATION

Geography majors who intend to pursue a career in teaching may be eligible for admission to the Faculty of Education at the beginning of the second year of a Bachelors program or the second or third year of an Honours program.

Application for admission to the Faculty of Education can be made by contacting the Faculty of Education, 128 Winters College.

For information on the Bachelor of Education program, see the appropriate section of the York Undergraduate Calendar. You may also visit the Faculty of Education website at <http://edu.yorku.ca/> to find out more about the various programs and deadlines.

Besides completing the degree requirements for the Bachelors or Honours BA or BSc set by the Geography Department, the Faculty of Liberal Arts & Professional Studies or the Faculty of Science and Engineering, those students majoring in Geography and Education must complete at least one half "regional" course and the equivalent of at least one half "systematic" course above the 1000 level among their courses of study.

Students must also take a course in Geomatics (GIS, GPS, Remote Sensing, Cartography and Statistics). An introductory course in Geography that fulfills this requirement is: **AP/SC/GEOG 2340 3.00, (Geoinformatics: Introduction)**

---

# BACHELOR OF ARTS (BA) – GEOGRAPHY

90 credits

GENERAL EDUCATION REQUIREMENT		
	Course Number	Credit
HUMA (6 - 9 credits)		
SOSC (6 - 9 credits)		
NATS (6 credits)		
<i>Total credits for this section:</i>		<i>/21</i>
GEOGRAPHY MAJOR REQUIREMENTS		
Two of AP/GEOG 1000 6.00, AP GEOG 1400 6.00, AP/GEOG 1410 6.00,		
6 Geography credits at or above the 2000 level		
12 Geography credits at the 3000 level or above		
<i>Total credits for this section:</i>		<i>/30</i>
COURSES OUTSIDE THE MAJOR (CANNOT BE GEOG COURSES)		
18 non-Geography credits		
<i>Total credits for this section:</i>		<i>/18</i>
FREE CHOICE COURSES (CAN BE ANYTHING INCLUDING EXTRA GEOG COURSES)		
21 free choice credits of which 6 must be at the 3000 or 4000 level		
<i>Total credits for this section:</i>		<i>/21</i>
<b>TOTAL CREDITS:</b>		<b>/90</b>

**Residency requirement:** a minimum of 30 course credits and at least 50% (or 15 credits) of the Geography major must be taken within the Department of Geography at York University.

**Graduation requirement:** students must successfully complete (pass) at least 90 credits that meet the Faculty's degree and program requirements with a cumulative grade point average of at least 4.00 (C).

# BA HONOURS – GEOGRAPHY MAJOR

120 credits

GENERAL EDUCATION REQUIREMENT		
	Course Number	Credit
HUMA (6 - 9 credits)		
SOSC (6 - 9 credits)		
NATS (6 credits)		
<b>Total credits for this section:</b>		<b>/21</b>
GEOGRAPHY MAJOR REQUIREMENTS		
AP GEOG 1400 6.00		
AP/GEOG 1000 6.00 <i>or</i> AP/GEOG 1410 6.00		
AP/GEOG 2420 3.00		
Three credits chosen from AP/GEOG 2340 3.00, AP/GEOG 3340 3.00, AP/GEOG 3440 3.00 <i>or</i> AP/GEOG 3740 3.00		
AP/GEOG 4520 3.00 and 12 GEOG credits at the 4000 level <b>OR</b> AP/GEOG 3540 3.00 and <b>15 GEOG credits</b> at the 4000 level		
15 Geography credits at or above the 2000 level.		
<b>Total credits for this section:</b>		<b>/48</b>
CREDITS OUTSIDE THE MAJOR (CANNOT BE GEOG COURSES)		
18 non-Geography credits.		
<b>Total credits for this section:</b>		<b>/18</b>
FREE CHOICE CREDITS (CAN BE ANYTHING INCLUDING EXTRA GEOG COURSES)		
33 free choice credits, 3 credits of which must be at the 4000 level.		
<b>Total credits for this section:</b>		<b>/33</b>
<b>TOTAL CREDITS:</b>		<b>/120</b>

**Residency requirement:** a minimum of 30 course credits and at least 50% (or 24 credits) of the Geography major must be taken within the Department of Geography at York University.

**Graduation requirement:** students must successfully complete (pass) at least 120 credits which meet the Faculty's degree and program requirements with a cumulative grade point average of at least 5.00 (C+).

**Upper Level Requirements:** 36 credits at the 3000 or 4000 level, including at least 18 credits at the 4000 level



# BA SPECIALIZED HONOURS GEOGRAPHY AND URBAN STUDIES

120 credits

GENERAL EDUCATION REQUIREMENT		
	Course Number	Credit
HUMA (6 - 9 credits)		
SOSC (6 - 9 credits)		
NATS (6 credits)		
<b>Total credits for this section:</b>		<b>/21</b>
GEOGRAPHY REQUIREMENTS		
AP GEOG 1400 6.00		
AP/GEOG 1000 6.00 <i>or</i> AP/GEOG 1410 6.00		
AP/GEOG 2420 3.00		
AP/GEOG 2220 6.00		
AP/GEOG 4520 3.00		
12 Geography credits (does not include AP/GEOG 4520 3.00), including at least six credits from AP/GEOG 4000 6.00, AP/GEOG 4040 6.00, AP/GEOG 4090 3.00, AP/GEOG 4170 3.00, AP/GEOG 4220 3.00, AP/GEOG 4240 3.00, AP/GEOG 4260 3.00, AP/GEOG 4380 3.00		
<b>Total credits for this section:</b>		<b>/36</b>
URBAN STUDIES REQUIREMENTS		
AP/SOSC 2710 9.00 ( <i>will be counted as a 6 credit course</i> ) <i>or</i> AP/SOCS 2730 6.0		
AP/SOSC 3700 6.00		
AP/SOSC 4700 6.00 <i>or</i> AP/SOSC 4735 6.0		
18 credits chosen from the urban studies list of courses, including at least 12 credits at the 3000 or 4000 level, and including no more than six geography credits		
<b>Total credits for this section:</b>		<b>/36</b>
COURSES OUTSIDE THE MAJOR (CANNOT BE GEOG or URBAN STUDIES COURSES)		
18 Credits		<b>/18</b>
FREE CHOICE (CAN BE ANYTHING INCLUDING GEOG OR URBAN STUDIES COURSES)		
9 Credits		<b>9</b>
<b>Total credits for this section:</b>		<b>/9</b>
<b>TOTAL CREDITS:</b>		<b>/120</b>

**Residency requirement:** a minimum of 30 course credits and at 50% (27 credits) of the course credits required in each undergraduate degree program major/minor must be taken at York University.

**Graduation requirement:** students must successfully complete (pass) at least 120 credits which meet the Faculty's degree and program requirements with a cumulative grade point average of at least 5.00 (C+).

**Upper Level Requirements:** 36 credits at the 3000 or 4000 level, including at least 18 credits at the 4000 level

# BA HONOURS DOUBLE MAJOR

120 credits

GENERAL EDUCATION REQUIREMENT		
	Course Number	Credit
HUMA (6 - 9 credits)		
SOSC (6 - 9 credits)		
NATS (6 credits)		
<b>Total credits for this section:</b>		<b>/21</b>
GEOGRAPHY MAJOR REQUIREMENTS		
AP GEOG 1400 6.00		
AP/GEOG 1000 6.00 <i>or</i> AP/GEOG 1410 6.00		
AP/GEOG 2420 3.00		
One of AP/GEOG 2340 3.00, AP/GEOG 3340.00, AP/GEOG 3440 3.00 or AP/GEOG 3740 3.00		
AP/GEOG 4520 3.00 and <b>12 GEOG credits</b> at the 4000 level <b>OR</b> AP/GEOG 3540 3.00 and <b>15 GEOG credits</b> at the 4000 level		
15 Geography credits at or above the 2000 level		
<b>Total credits for this section:</b>		<b>/48</b>
SECOND MAJOR REQUIREMENTS (CHECK REQUIREMENTS WITH MAJOR 2 DEPARTMENT)		
30 credits from the second major – check with Major 2 department to ensure you are taking the required courses.		
12 credits from the second major at the 4000 level – check with major to ensure you are taking the required course.		
<b>Total credits for this section:</b>		<b>/42</b>
FREE CHOICE COURSES (CAN BE ANYTHING INCLUDING EXTRA GEOG COURSES)		
9 free choice credits.		
<b>Total credits for this section:</b>		<b>/9</b>
<b>TOTAL CREDITS:</b>		<b>/120</b>

**Residency requirement:** a minimum of 30 course credits and at least 50% (or 24 credits) of the Geography major must be taken within the Department of Geography at York University.

**Graduation requirement:** students must successfully complete (pass) at least 120 credits which meet the Faculty's degree and program requirements with a cumulative grade point average of at least 5.00 (C+).

**Upper Level Requirements: 36 credits at the 3000 or 4000 level, including at least 18 credits at the 4000 level**

# BA HONOURS (MAJOR/MINOR) - GEOGRAPHY MAJOR

120 credits

GENERAL EDUCATION REQUIREMENT		
	Course Number	Credit
HUMA (6 - 9 credits)		
SOSC (6 - 9 credits)		
NATS (6 credits)		
<b>Total credits for this section:</b>		<b>/21</b>
GEOGRAPHY MAJOR REQUIREMENTS		
AP GEOG 1400 6.00		
AP/GEOG 1000 6.00 <i>or</i> AP/GEOG 1410 6.00		
AP/GEOG 2420 3.00		
One of AP/GEOG 2340 3.00, AP/GEOG 3340 3.00, AP/GEOG 3440 3.00 or AP/GEOG 3740 3.00		
AP/GEOG 4520 3.00 and <b>12 GEOG credits</b> at the 4000 level <b>OR</b> AP/GEOG 3540 3.00 and <b>15 GEOG credits</b> at the 4000 level		
15 Geography credits at or above the 2000 level.		
<b>Total credits for this section:</b>		<b>/48</b>
MINOR REQUIREMENTS (CHECK REQUIREMENTS WITH MINOR DEPARTMENT)		
24 credits from the minor – check with Minor department to ensure you are taking the required courses		
6 credits from the minor at the 4000 level – check with minor to ensure you are taking the required course		
<b>Total credits for this section:</b>		<b>/30</b>
FREE CHOICE COURSES (CAN BE ANYTHING INCLUDING EXTRA GEOG COURSES)		
21 free choice credits		
<b>Total credits for this section:</b>		<b>/21</b>
<b>TOTAL CREDITS:</b>		<b>/120</b>

**Residency requirement:** a minimum of 30 course credits and at least 50% (or 24 credits) of the Geography major must be taken within the Department of Geography at York University.

**Graduation requirement:** students must successfully complete (pass) at least 120 credits which meet the Faculty's degree and program requirements with a cumulative grade point average of at least 5.00 (C+).

**Upper Level Requirements: 36 credits at the 3000 or 4000 level, including at least 18 credits at the 4000 level**

# BA HONOURS (MAJOR/MINOR) - GEOGRAPHY MINOR

120 credits

GENERAL EDUCATION REQUIREMENT		
	Course Number	Credit
HUMA (6 - 9 credits)		
SOSC (6 - 9 credits)		
NATS (6 credits)		
<b>Total credits for this section:</b>		<b>/21</b>
GEOGRAPHY MINOR REQUIREMENTS		
AP GEOG 1400 6.00		
AP/GEOG 1000 6.00 <i>or</i> AP/GEOG 1410 6.00		
12 Geography credits at or above the 2000 level.		
6 Geography credits at the 4000 level.		
<b>Total credits for this section:</b>		<b>/30</b>
MAJOR REQUIREMENTS (CHECK REQUIREMENTS WITH MAJOR DEPARTMENT)		
30 credits from Major department. Check with the Major department regarding their requirements		
12 credits from the Major department at the 4000 level. Check with the Major department regarding their requirements		
<b>Total credits for this section:</b>		<b>/42</b>
FREE CHOICE COURSES (CAN BE ANYTHING INCLUDING EXTRA GEOG COURSES)		
27 free choice credits		
<b>Total credits for this section:</b>		<b>/27</b>
<b>TOTAL CREDITS:</b>		<b>/120</b>

**Residency requirement:** a minimum of 30 course credits and at least 50% (or 15 credits) of the Geography minor must be taken within the Department of Geography at York University.

**Graduation requirement:** students must successfully complete (pass) at least 120 credits which meet the Faculty's degree and program requirements with a cumulative grade point average of at least 5.00 (C+).

**Upper Level Requirements:** 36 credits at the 3000 or 4000 level, including at least 18 credits at the 4000 level

# INTERNATIONAL BA HONOURS - GEOGRAPHY MAJOR (HONOURS iBA)

120 credits

GENERAL EDUCATION REQUIREMENT		
	Course Number	Credit
HUMA (6 - 9 credits)		
SOSC (6 - 9 credits)		
NATS (6 credits)		
<b>Total credits for this section:</b>		<b>/21</b>
GEOGRAPHY MAJOR REQUIREMENTS		
AP GEOG 1400 6.00		
AP/GEOG 1000 6.00 <i>or</i> AP/GEOG 1410 6.00		
AP/GEOG 2420 3.00		
Three credits chosen from AP/GEOG 2340 3.00, AP/GEOG 3340 3.00, AP/GEOG 3440 3.00 or AP/GEOG 3740 3.00		
AP/GEOG 4520 3.00 and <b>12 GEOG credits</b> at the 4000 level		
<b>OR</b>		
AP/GEOG 3540 3.00 and <b>15 GEOG credits</b> at the 4000 level		
15 Geography credits at or above the 2000 level		
<b>Total credits for this section:</b>		<b>/48</b>
LANGUAGE STUDY CREDITS		
18 credits in a modern language offered by York University, including the Advanced I university-level course in the chosen language		
		<b>/18</b>
INTERNATIONALLY ORIENTED CREDITS		
12 credits of internationally-oriented courses chosen outside Geography		
<b>Total credits for this section:</b>		<b>/12</b>
INTERNATIONAL EXCHANGE		
At least one full term abroad as a full-time student at one of York University's exchange partners		
CREDITS OUTSIDE THE MAJOR (CANNOT BE GEOG COURSES)		
21 credits. (Note: for the Honours iBA, courses taken outside the major to satisfy the language requirement and/or the internationally-oriented courses requirement can also be used to satisfy the outside the major requirement. Students who are completing a double major or major/minor are deemed to have fulfilled this requirement).		
<b>Total credits for this section:</b>		<b>/21</b>
<b>TOTAL CREDITS:</b>		<b>/120</b>

**Residency requirement:** a minimum of 30 course credits and at least 50% (or 24 credits) of the Geography major must be taken within the Department of Geography at York University.

**Graduation requirement:** students must successfully complete (pass) at least 120 credits which meet the Faculty's degree and program requirements with a cumulative grade point average of at least 5.00 (C+).

**Upper Level Requirements:** 36 credits at the 3000 or 4000 level, including at least 18 credits at the 4000 level

**INTERNATIONAL BA SPECIALIZED HONOURS - GEOGRAPHY MAJOR  
(SPECIALIZED HONOURS iBA) 120 Credits**

GENERAL EDUCATION REQUIREMENT		
	Course Number	Credit
HUMA (6 - 9 credits)		
SOSC (6 - 9 credits)		
NATS (6 credits)		
<b>Total credits for this section:</b>		<b>/21</b>
GEOGRAPHY MAJOR REQUIREMENTS		
AP GEOG 1400 6.00		
AP/GEOG 1000 6.00 or AP/GEOG 1410 6.00		
AP/GEOG 2420 3.00		
Three credits chosen from AP/GEOG 2340 3.00, AP/GEOG 3340 3.00, AP/GEOG 3440 3.00 or AP/GEOG 3740 3.00		
AP/GEOG 4520 3.00 and <b>12 GEOG credits</b> at the 4000 level <b>OR</b> AP/GEOG 3540 3.00 and <b>15 GEOG credits</b> at the 4000 level		
15 credits in Geography at or above the 2000 level		
<b>Total credits for this section:</b>		<b>/48</b>
LANGUAGE STUDY CREDITS		
18 credits in a modern language offered by York University, including the Advanced I university-level course in the chosen language		
<b>Total credits for this section:</b>		<b>/18</b>
INTERNATIONALLY ORIENTED CREDITS		
12 credits of internationally-oriented courses chosen outside Geography		
<b>Total credits for this section:</b>		<b>/12</b>
INTERNATIONAL EXCHANGE		
One full term abroad as a full-time student at one of York University's exchange partners		
COURSES OUTSIDE THE MAJOR (CANNOT BE GEOG COURSES)		
21 credits (Note: for Specialized Honours iBA, courses taken outside the major to satisfy the language requirement and/or the internationally-oriented courses requirement can also be used to satisfy the outside the major requirement. Students who are completing a double major or major/minor are deemed to have fulfilled this requirement)		
<b>Total credits for this section:</b>		<b>/21</b>
<b>TOTAL CREDITS:</b>		<b>/120</b>

**Residency requirement:** a minimum of 30 course credits and at least 50% (or 30 credits) of the Geography major must be taken within the Department of Geography at York University.

**Graduation requirement:** students must successfully complete (pass) at least 120 credits which meet the Faculty's degree and program requirements with a cumulative grade point average of at least 5.00 (C+).

**Upper Level Requirements: 36 credits at the 3000 or 4000 level, including at least 18 credits at the 4000 level**

## BACHELOR OF SCIENCE AND ENGINEERING (BSc) – GEOGRAPHY

90 credits

FACULTY OF SCIENCE AND ENGINEERING GENERAL EDUCATION REQUIREMENT										
<ul style="list-style-type: none"> <li>• non-science requirement: 12 credits;</li>   <li>• mathematics: six credits from: SC/MATH 1505 6.00, SC/MATH 1013 3.00, SC/MATH 1014 3.00, SC/MATH 1025 3.00, SC/MATH 1300 3.00, SC/MATH 1310 3.00;</li> </ul> <p><b>Note:</b> SC/MATH 1300 3.00 is a course credit exclusion for SC/MATH 1013 3.00; SC/MATH 1310 3.00 is a course credit exclusion for SC/MATH 1014 3.00.</p> <ul style="list-style-type: none"> <li>• computer science: three credits chosen from LE/CSE 1520 3.00, LE/CSE 1530 3.00, LE/CSE 1540 3.00 or LE/CSE 1020 3.00;</li>   <li>• foundational science: six credits chosen from SC/BIOLOGICAL 1000 3.00, SC/BIOLOGICAL 1000 3.00, SC/CHEM 1000 3.00, SC/CHEM 1001 3.00, SC/PHYS 1010 6.00, SC/PHYS 1410 6.00, SC/PHYS 1420 6.00.</li> </ul>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Course Number</th> <th style="text-align: left;">Credit</th> </tr> </thead> <tbody> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </tbody> </table>	Course Number	Credit							
Course Number	Credit									
<b>Total credits for this section:</b>		<b>/27</b>								
FACULTY OF SCIENCE AND ENGINEERING 1000-LEVEL SCIENCE REQUIREMENT										
SC/GEOG 1400 6.0 (should be taken in year 1)										
AP/GEOG 1410 6.00 or AP/GEOG 1000 6.00										
<b>Total credits for this section :</b>		<b>/12</b>								
GEOGRAPHY CORE										
SC/GEOG 2400 6.00										
SC/GEOG 2420 3.00										
SC/GEOG 2600 3.00										
SC/GEOG 2500 3.00 or SC/GEOG 2610 3.00										
<b>Total credits for this section:</b>		<b>/15</b>								
3000/4000 LEVEL SC/GEOG										
12 SC/GEOG credits at the 3000/4000 level										
<b>Total credits for this section:</b>		<b>/12</b>								
OTHER COURSES										
credits in science disciplines outside the major, of which 3 credits must be at the 2000 level or above, which may include: <ul style="list-style-type: none"> <li>- science credits in the General Education requirements that are <u>not in the major</u>: and</li> <li>- science credits required by the major that are <u>not in the major discipline</u>.</li> </ul>										
<b>Total credits for this section:</b>		<b>/24</b>								
<b>TOTAL CREDITS:</b>		<b>/90</b>								

A minimum overall grade point average of 4.00 (C) is required in order to be eligible to graduate with a BSc degree (bachelor program).

- the Geography program core as specified above;
- the Faculty of Science and Engineering general education and 1000-level science requirements, as specified above
- at least six credits from science geography courses at the 3000 or 4000 level, for an overall total of at least 30 credits from geography courses;
- additional elective credits, as required for an overall total of at least 90 credits, including at least 66 credits from science courses and at least 18 credits at the 3000 or higher level.
- **Any course substitutes must be approved in writing by the Department of Geography.**

Residency Requirement:

A minimum of 30 course credits and at least half (50 per-cent) of the course credits required in each undergraduate degree program major/minor must be taken at York University.

**GEOGRAPHY BSC HONOURS, SPECIALIZED HONOURS PROGRAM**  
120 credits

FACULTY OF SCIENCE AND ENGINEERING GENERAL EDUCATION REQUIREMENT		
	Course Number	Credit
<ul style="list-style-type: none"> <li>non-science requirement: 12 credits;</li> <li>mathematics: six credits from: SC/MATH 1505 6.00, SC/MATH 1013 3.00, SC/MATH 1014 3.00, SC/MATH 1025 3.00, SC/MATH 1300 3.00, SC/MATH 1310 3.00;</li> </ul> <p><b>Note:</b> SC/MATH 1300 3.00 is a course credit exclusion for SC/MATH 1013 3.00; SC/MATH 1310 3.00 is a course credit exclusion for SC/MATH 1014 3.00.</p> <ul style="list-style-type: none"> <li>computer science: three credits chosen from LE/CSE 1520 3.00, LE/CSE 1530 3.00, LE/CSE 1540 3.00 or LE/CSE 1020 3.00;</li> </ul> <p>foundational science: six credits chosen from SC/BIOL 1000 3.00, SC/BIOL 1000 3.00, SC/CHEM 1000 3.00, SC/CHEM 1001 3.00, SC/PHYS 1010 6.00, SC/PHYS 1410 6.00, SC/PHYS 1420 6.00.</p>		
<b>Total credits for this section:</b>		<b>/27</b>
FACULTY OF SCIENCE AND ENGINEERING 1000-LEVEL SCIENCE REQUIREMENT		
SC/GEOG 1400 6.0 (should be taken in year 1)		
AP/GEOG 1410 6.00 or AP/GEOG 1000 6.00		
6 credits from SC/BIOL 1010 6.00, SC/CHEM 1000 3.00 and SC/CHEM 1001 3.00, LE/EATS 1010 3.00 and LE/EATS 1011 3.0, SC/PHYS 1410 6.00 or SC/PHYS 1010 6.00		
<b>Total credits for this section (includes 27 SC credits):</b>		<b>/18</b>
GEOGRAPHY CORE		
SC/GEOG 2400 6.00		
SC/GEOG 2420 3.00		
SC/GEOG 2600 3.0		
SC/GEOG 2500 3.00 or SC/GEOG 2610 3.00		
<b>Total credits for this section:</b>		<b>15</b>
3000/4000 LEVEL SC/GEOG		
AP/GEOG 3540 3.0		
33 additional SC/GEOG credits at the 3000/4000 level		
<b>Total credits for this section:</b>		<b>/36</b>
2000+ LEVEL NON-GEOG SC COURSES		
6 non-Geography credits at or above the 2000 level		
<b>Total credits for this section:</b>		<b>/6</b>
OTHER COURSES		
18-21 credits to satisfy minimum credit totals noted below.		
<b>Total credits for this section:</b>		<b>/18-21</b>
<b>TOTAL CREDITS:</b>		<b>/120</b>

To graduate in an Honours program requires successful completion of all Faculty requirements and departmental required courses and a minimum cumulative credit-weighted grade point average of 5.00 (C+) over all courses completed.

- the Geography program core as specified above
- the Faculty of Science and Engineering general education and 1000-level science requirements, as specified above
- SC/GEOG 3540 3.00
- at least 33 additional credits from science geography courses at the 3000 or 4000 level, for an overall total of at least 54 credits from science geography courses (at least 60 from geography courses); at least six credits from non-geography science courses at the 2000 or higher level; additional elective credits, as required for an overall total of at least 120 credits, including at least 90 credits from science courses and at least 42 credits at the 3000 or higher level.
- **Any course substitutes must be approved in writing by the Department of Geography.**

## **CERTIFICATE IN GEOGRAPHIC INFORMATION SYSTEMS AND REMOTE SENSING - GEOGRAPHY STREAM**

York University students may earn a Certificate in Geographic Information Systems and Remote Sensing concurrent with fulfillment of the requirements of a Bachelor's Degree.

The Certificate is designed for students to learn theory and techniques of GIS and RS and their applications in urban and natural environments with the aid of the state-of-the-art software packages.

Possible job opportunities after obtaining the certificate include various industries such as banks, energy/hydro, environmental planning, mining, real estate, and federal, provincial or municipal governments (e.g., environment, health, natural resources, urban and regional planning).

This certificate is open to students concurrently enrolled in any of York University's undergraduate programs and to students who already hold a BA or BSc degree in Geography or Environmental Science from York University.

***Applications for registration in the Geography Stream of the Certificate in Geographic Information Systems and Remote Sensing should be submitted to the Geography Department, Faculty of Liberal Arts & Professional Studies (N430 Ross).***

**To fulfil certificate requirements, students must successfully complete the following 24 credits:**

- AP/SC/GEOG 1400 6.00 or AP/GEOG 1410 6.00 or AP/GEOG 1000 6.00
- AP/SC GEOG 2340 3.00
- AP/SC/GEOG 2420 3.00
- AP/SC/GEOG 3340 3.00
- AP/SC/GEOG 3440 3.00 (EN/ENVS 3521 3.00)
- AP/SC/GEOG 4340 3.00
- AP/SC/GEOG 4440 3.00 (EN/ENVS 4521 3.00)

In order to be awarded the Certificate in Geographic Information Systems and Remote Sensing, students must achieve a cumulative grade point average of 6.0 (B) in the York University courses required for the GIS/RS Certificate, and achieve an overall cumulative grade point average of 5.0 (C+) in all courses.

## CERTIFICATE IN URBAN STUDIES

**Certificate Requirements:** Please contact The Department of Social Science for additional information (<http://www.yorku.ca/laps/sosc/urst/>)

For purposes of meeting certificate requirements, all nine-credit general education (foundation) courses will count as six credits.

York University students may earn a General Certificate in Urban Studies concurrent with fulfillment of the requirements for a bachelor's degree. This certificate is not, however, open to students who are pursuing or who already hold a degree in urban studies. To qualify for the General Certificate in Urban Studies, students must complete 24 credits from a list of approved urban studies courses, and the cumulative grade point average in these 24 credits must be 5.00 (C+) or higher.

### **Course requirements for the general certificate are as follows:**

- AP/SOSC 2710 9.00 or AP/SOSC 2730 6.00;
- 18 additional credits from among the courses recognized as satisfying the degree requirements in urban studies, including at least six credits at the 4000 level;
- an advising appointment with a faculty member teaching in one of the core courses in the Urban Studies program.

### **Courses in Geography that are eligible include:**

- AP/GEOG 2220 6.00 Urban Geography
- AP/GEOG 2305 3.00 Identities: Introduction to Social Geography
- AP/GEOG 3040 3.00 Urban Environmental Justice
- AP/GEOG 3080 3.00 Reading Landscapes through Time
- AP/GEOG 3220 3.00 Advanced Urban Geography
- AP/GEOG 3650 6.00 Wired Cities: Community, Technology and Changing Urban Places
- AP/GEOG 3770 3.00 Housing Policy
- AP/GEOG 3800 3.00 Geographies of Work
- AP/GEOG 4040 6.00 Urban Historical Geography
- AP/GEOG 4090 3.00 Urban Identities: Historical Perspectives on Race, Ethnicity, Gender and Class in Canadian and American Cities
- AP/GEOG 4095 3.00 Aboriginal Space and the City: North American Urbanization and Aboriginal People, 1890-1980
- AP/GEOG 4130 3.00 Planning Suburbs
- AP/GEOG 4170 3.00 Immigration, Ethnicity and Race in Modern Cities
- AP/GEOG 4220 3.00 Geographies of Industry Neoliberal Era
- AP/GEOG 4240 3.00 The Planning of Urban Public Facilities
- AP/GEOG 4260 3.00 Applied Transportation Geography
- AP/GEOG 4280 3.00 Imagining Toronto: Literary Geographies of a City
- AP/GEOG 4380 3.00 Urban Social Policy
- AP/GEOG 4605 3.00 The Greater Toronto Area: A Geographical Perspective
- AP/GEOG 4900 3.00 Public Space

Courses taken to fulfill the requirements for the General Certificate in Urban Studies may not also be used to fulfill requirements for the degree in public policy and administration. For a current list of approved courses, refer to the urban studies section of the York on-line calendar. Further information about the General Certificate in Urban Studies is available from the coordinator of the Urban Studies program or the coordinator of the Public Policy and Administration program. A Certificate in Urban Studies may be pursued by any student in an undergraduate honours program and requires at least 24 credits.

## CERTIFICATE IN REFUGEE AND MIGRATION STUDIES

The Certificate in Refugee and Migration Studies offered through the Faculty of Liberal Arts and Professional Studies must be completed either as a direct entry certificate or concurrently with fulfillment of the requirements for a bachelor's degree. Students must choose one of the following certificate options below. Students are not permitted to combine the requirements of each option. For purposes of meeting certificate requirements, all nine-credit general education (foundation) courses will count as six credits.

*Note: to further enhance their educational experiences, students registered in this certificate are required to be involved in scholarly activities of the Centre for Refugee Studies. Further information may be obtained from the Centre for Refugee Studies. Refer to the Academic Standards section of the on-line calendar for details of the undergraduate certificate minimum standards.*

### OPTION 1: DIRECT ENTRY OR CONCURRENT

**Requirements: 30 credits including:**

**Prerequisites for core requirements:**

- a 1000-level 6.00 credit social science course.

**Core requirements:**

- AP/REI 2000 6.00 (cross-listed to: AP/GEOG 2310 6.00) (in the event that AP/REI 2000 6.00 is not offered, please contact the undergraduate program director of the Department of Equity Studies for a substitute course); and
- 18 credits from the following list:
  - AP/HIST 3581 6.00;
  - AP/HIST 4053 6.00;
  - AP/REI 3620 6.00 (cross-listed to: AP/SOCI 3620 6.00);
  - AP/REI 3580 6.00;
  - AP/REI 3370 6.00;
  - AP/GL/WMST 3801 6.00);
  - AP/GL/WMST 3502 6.00.

**Geography courses that are eligible include:**

- AP/GEOG 4395 3.00 Asia-Pacific Development: Geographical Perspective
- AP/GEOG 4370 3.00 The Geography of Third World Development
- AP/GEOG 4170 3.00 Geographic Perspectives on Immigration, Ethnicity and Race in Modern Cities

### OPTION 2: CONCURRENT ONLY

**Requirements: 24 credits including:**

- AP/SOSC 1130 9.00; and
- 18 credits in core courses chosen from the following:
  - AP/ANTH 3410 6.00,
  - AP/GEOG 4370 3.00,
  - AP/HIST 4505 6.00,
  - AP/POLS 3065 3.00,
  - AP/POLS 4541 6.00,
  - AP/SOCI 3430 6.00,
  - AP/SOCI 4350 3.00,
  - AP/SOCI 4430 3.00,
  - AP/SOSC 3480 6.00 or
  - AP/GL/WMST 4802 3.00.

**Geography courses that are eligible include:**

- AP/GEOG 4395 3.00 Asia-Pacific Development: Geographical Perspective
- AP/GEOG 4370 3.00 The Geography of Third World Development
- AP/GEOG 4170 3.00 Geographic Perspectives on Immigration, Ethnicity and Race in Modern Cities

**The cumulative grade point average in these courses must be 5.00 (C+) or higher and other relevant requirements governing the award of a general certificate will apply.**

## 2014-2015 COURSES

\*As of publication date, the following courses are scheduled to be offered in the upcoming academic year\*

### SUMMER 2014

AP		GEOG	2060	3.00	Historical Geography
AP	SC	GEOG	2340	3.00	Geoinformatics: Introduction
AP		GEOG	3650	6.00	Wired Cities: Community, Technology and Changing Urban Places
AP		GEOG	4095	3.00	Aboriginal; Space and the City: North American Urbanization and Aboriginal People, 1890-1980
AP		GEOG	4130	3.00	Planning Suburbs
AP		GEOG	4280	3.00	Imagining Toronto: Literary Geographies of a City
AP	SC	GEOG	4541	3.00	Advanced Field Studies in Physical Geography
AP		GEOG	4605	3.00	The Greater Toronto Area: A Geographical Perspective

### FALL/WINTER 2014-2015

AP		GEOG	1000	6.00	The World Today: An Introduction to World Geography
AP	SC	GEOG	1400	6.00	Physical Geography
AP		GEOG	1410	6.00	Human Geography
AP		GEOG	2030	3.00	The End of the Earth as We Know It: Global Environmental Change
AP		GEOG	2070	3.00	Empire, State, & Power: An Introduction to Political Geography
AP		GEOG	2075	3.00	Everyday Life: Introduction to Cultural Geography
AP		GEOG	2105	3.00	Money, Power and Space: Introduction to Economic Geography
AP		GEOG	2220	6.00	Urban Geography
AP		GEOG	2305	3.00	Identities: Introduction to Social Geography
AP		GEOG	2310	6.00	Introduction to Refugee and Migration Studies
AP	SC	GEOG	2340	3.00	Geoinformatics: Introduction
AP	SC	GEOG	2400	6.00	The Hydrosphere
AP	SC	GEOG	2420	3.00	Introductory Statistical Analysis in Geography
AP	SC	GEOG	2500	3.00	Introduction to Vegetation and Soils
AP	SC	GEOG	2600	3.00	Geomorphology I
AP		GEOG	3010	6.00	Geography of Canada
AP		GEOG	3040	3.00	Urban Environmental Justice
AP		GEOG	3050	3.00	Nature, Power and Society
AP		GEOG	3060	3.00	Post-Colonial Geographies
AP		GEOG	3070	6.00	Gender, Population and Migration
AP		GEOG	3080	3.00	Reading Landscapes Through Time
AP		GEOG	3130	3.00	The Global Economy
AP	SC	GEOG	3200	3.00	Terrestrial Economy
AP		GEOG	3220	3.00	Advanced Urban Geography
AP		GEOG	3300	3.00	Space/Place
AP	SC	GEOG	3340	3.00	Geoinformatics: GIS I
AP	SC	GEOG	3360	3.00	Morphogenesis of Soils
AP		GEOG	3370	3.00	International Development: Critical Geographical Perspectives
AP		GEOG	3400	3.00	Dimensions of Difference: Geography of Gender, Race and Power
AP	SC	GEOG	3440	3.00	Geoinformatics: Remote Sensing I
AP	SC	GEOG	3500	3.00	Biogeography
AP	SC	GEOG	3510	3.00	Methods of Sediment
AP		GEOG	3520	3.00	Designing and Conducting Research in Geography

AP	SC	GEOG	3540	3.00	Field Studies in Physical Geography
AP		GEOG	3600	3.00	Nations and Nationalisms
AP		GEOG	3650	3.00	Wired Cities: Community, Technology and Changing Urban Places
AP	SC	GEOG	3700	3.00	Disaster! The Earth's Extreme Natural Events
AP		GEOG	3750	3.00	Africa: The Impoverishment of a Continent
AP		GEOG	3770	3.00	Housing Policy
AP		GEOG	3800	3.00	Geographies of Work
AP	SC	GEOG	4000	6.00	Honours Thesis
AP		GEOG	4040	6.00	Urban Historical Geography
AP		GEOG	4060	3.00	Women in North America: Historical Geographies of Gender and Sexuality
AP		GEOG	4090	3.00	Urban Identities: Historical Perspectives on Race, Ethnicity, Gender and Class in Canadian and American Cities
AP		GEOG	4130	3.00	Planning Suburbs
AP		GEOG	4150	3.00	Foodscapes and Agri-scapes: Geographical Perspectives
AP		GEOG	4170	3.00	Geographic Perspectives on Immigration, Ethnicity and Race in Modern Cities
AP		GEOG	4190	3.00	Geographies of the Ethnic Economy
AP	SC	GEOG	4200	3.00	Water Quality and Stream Ecosystems
AP	SC	GEOG	4210	3.00	Hydrometeorology
AP		GEOG	4240	3.00	The Planning of Urban Public Facilities
AP		GEOG	4250	3.00	Imagined Landscapes
AP	SC	GEOG	4290	3.00	Directed Reading
AP	SC	GEOG	4290	6.00	Directed Reading
AP	SC	GEOG	4340	3.00	Geoinformatics: GIS II
AP		GEOG	4380	3.00	Urban Social Policy
AP		GEOG	4395	3.00	Asia-Pacific Development: Geographical Perspectives
AP	SC	GEOG	4400	3.00	Physical Hydrology and Water Resources
AP	SC	GEOG	4410	3.00	Desert Ecosystems
AP	SC	GEOG	4440	3.00	Geoinformatics: Remote Sensing II
AP		GEOG	4520	3.00	Research Design & Field Studies in Human Geography
AP	SC	GEOG	4600	3.00	Rivers: Environment and Process
AP		GEOG	4610	3.00	Geopolitics
AP		GEOG	4750	3.00	Geography of Disabilities
AP		GEOG	4850	3.00	The State, civil society and spaces of development
AP		GEOG	4880	3.00	Spaces of Conflict, Violence, and Power
AP		GEOG	4900	3.00	Public Space

## COURSE DESCRIPTIONS – 1000 LEVEL

### AP/GEOG 1000 6.00 - INTRODUCTION TO WORLD GEOGRAPHY

**This course explores geographic approaches to disparities of cultural, economic, political and environmental development in major world regions comprising developed capitalist and socialist countries and underdeveloped nations.**

**Expanded Description:** This course takes up issues particular to specific regions and ecologies, and common themes among them, including past and current significance of both human migrations and commodity flows, the birth and shaky persistence of territorial nation states, the rise of regions, and what is at stake in the creation of regions. A wide variety of topics is covered from a geographical perspective, including the creation of stereotypes associated with different regions; urbanization and industrialization in the third world, migration to North America, international development, war and imperialism, political protest, food and agriculture, indigenous peoples, ethnicity and race, global environmental change, energy politics, and social inequalities.

**Course credit exclusion:** AS/GEOG 1000 6.00.

**Format:** Two lecture hours and one tutorial hour per week.

**Text:** Rowntree et al., Diversity Amid Globalization: World Regions, Environment, Development

**Assignments:** Short answer tests, essay, final exam.

**Instructors:** V. Preston, R. Roth, P. Vandergeest

---

### AP/SC/GEOG 1400 6.00 - PHYSICAL GEOGRAPHY

**A study of the physical-biotic environment through a consideration of the character and processes of its components - atmosphere, hydrosphere, biosphere and lithosphere - and of the spatial distributions which reflect interaction among these components.**

**Expanded Description:** This course introduces principles behind the interpretation of the earth's surface environment. It is divided into three sections climate, landforms, and biogeography. Interrelations among these environmental components are stressed. Topics include: (a) the atmosphere and climate radiation and heating of the earth atmosphere, atmospheric water and precipitation, weather types and frequencies, large and small scale climate zones, climate change and the greenhouse effect; (b) drainage systems, runoff and water balance, rock weathering and debris movements on slopes, the work of rivers and glaciers, landforms in Canada; (c) the biosphere (natural and modified) energy and ecosystems, small and large scale ecosystems, soils and their development and modification, human impact on the biosphere.

**Course credit exclusions:** AK/GEOG 2510 6.00, AS/GEOG 1400 6.00, SC/GEOG 1400 6.00.

**Format:** Two lecture hours per week, three laboratory hours normally every second week. Two terms.

**Text:** de Blij, HJ, Muller, PO, Williams, RS, Conrad, CT & Long P. 2009 Physical Geography: The Global Environment. Second Canadian Edition.

**Assignments:** Lab exercises (40%); six in-class tests (60%).

**Instructors:** T. Drezner, A. Robert (CD)

---

## AP/GEOG 1410 6.00 - HUMAN GEOGRAPHY

**An introduction to the study of human geography with an emphasis on the geographical aspects of culture, society, politics, economy, cities, and the environment.**

**Expanded Description:** Human geography seeks to understand both the spatial organization of human activities and the meanings attached to the places and regions where these activities are found. The objectives of this course are to: define geography as a discipline, and introduce its current ideas, especially those of human geography; exemplify various approaches used in studying human geography; introduce the main sub-fields of human geography (many of which you can study in more detail in subsequent more specialized courses); introduce at an elementary level some of the techniques and methods of analysis used by geographers; and relate geography to the broader debates in the social sciences

**Course credit exclusions:** AS/GEOG 1410 6.00 and AK/GEOG 2500 6.00.

**Format:** Two lecture hours per week, two tutorial hours normally every second week.

**Required Reading:** Knox, Paul L., Sally A. Marston, Alan E. Nash Human Geography: Places and Regions in the Global Context, 3<sup>rd</sup> Canadian edition, Prentice-Hall. Other supplemental readings will be assigned.

**Assignments:** Assignments (54%), two exams (36%), and tutorial participation (10%).

**Instructors:** R. Basu (CD), S. Tufts, P. Wood

---

### Q & A

**Question:** How do I calculate my grade point average?

**Answer:** Take each course and multiply the number of credits by the grade point value. Add the results of this calculation, and divide by the total number of credits. The result will be the overall grade point average.

Alternatively you could use the on-line calculator at:

<http://www.yorku.ca/laps/students/gpa.html>

## COURSE DESCRIPTIONS – 2000 LEVEL

### AP/GEOG 2030 3.00 - THE END OF THE EARTH AS WE KNOW IT: GLOBAL ENVIRONMENTAL CHANGE

This course explores how human society has transformed the earth system and investigates the social, economic and political implications of contemporary environmental change. Topics include deforestation, climate change, biodiversity loss and natural disasters such as hurricanes, flooding and drought. Internet access is required.

This course is designed to introduce students to human-environment geography by exploring both historical and contemporary human-induced transformations of the earth system. The objectives are to better understand how and why the global environment is changing; what the societal implications of these changes are; and the ways in which individuals and societies adapt to, respond to, and mitigate environmental change. We will investigate the decision to act and the decision not to act on the part of individuals, governments, activist organizations and corporations.

While it is tempting to see global environmental change as a large scale phenomenon and problem, it is not limited to the global scale. Both the impacts of global environmental change (GEC) and responses to it occur across scale and are geographically variable. In order to stress this dimension of GEC, this course will examine the local manifestations of these global processes. Much of our tutorial discussion regarding the effects of and responses to global environmental change will be focused on three locales: Highland Thailand, Urban Canada: Toronto and Arctic Canada.

**Recommended prerequisites:** AP/GEOG 1000 6.00, AP/GEOG 1400 6.00 or AP/GEOG 1410 6.00.

**Course credit exclusion:** AS/GEOG 2030 3.00.

**Format:** Weekly lecture and tutorials

**Assignments:** Tutorial component 60%; and final 40%

**Required Reading:** To be announced.

**Instructor:** R. Roth

---

### AP GEOG 2060 3.00 - HISTORICAL GEOGRAPHY – OFFERED SUMMER 2014

An exploration of the content of and approaches to historical geography, with a focus on major historical shifts in the geography and geographic knowledge of human beings, such as imperialism, mass migration and urbanization.

**Course credit exclusion:** AS/GEOG 2060 3.00.

**Format:** Three lecture hours per week.

**Required Reading:** To be announced.

**Assignments:** To be announced.

**Instructor:** To be announced.

---

### Q & A

**Question:** I applied to graduate but received a letter indicating that I won't be able to graduate because I did not fulfil the Major requirements. What should I do?

**Answer:** You should make an appointment with the Undergraduate Program Director (UPD) right away.

The UPD will review your transcript and will help you determine what the problem is and whether a solution is possible in order for you to graduate.

## **AP/GEOG 2070 3.00 – EMPIRE, STATE & POWER: AN INTRODUCTION TO POLITICAL GEOGRAPHY**

**This course explores the geography, ideology, expansion and representation of empire, colonialism, settlers and colonized. The historical-geographical perspective will highlight the importance of space and place as mechanisms of control and domination, at multiple scales.**

**Expanded Description:** Throughout this course, emphasis is placed on a critical reading and analysis of the ideology, expansion and representation of empire, colonialism, settlers and the colonized. The historical-geographical perspective will highlight the importance of space and place as mechanism of control and domination, at multiple scales. Topics covered include imperial geography; geography and ideology of empire; British Empire; slave trade; French Empire and colonialism; the Maghreb and colonial rule; Empire of Japan; Japanese colonization of Korea and; Canada and colonialism; empire and culture; and empire, knowledge and scholarship. Throughout the course concepts and discussions of gender, race, sexuality and borders will be addressed and incorporated into each week's lectures. This course will emphasize not only a critical understanding of empire and colonialism through texts and readings, but also through maps and photographs. Case studies include readings on Jamaica, Morocco, Algeria and Korea.

**Course credit exclusion:** AS/GEOG 2070 3.00

**Format:** Three lecture hours per week

**Required Readings:** Please refer to course syllabus for required reading list.

**Assignments:** Participation (15%), short essay (25%), assignment (25%), final exam (35%)

**Instructor:** TO BE ANNOUNCED.

---

## **AP/GEOG 2075 3.00 – EVERYDAY LIFE: INTRODUCTION TO CULTURAL GEOGRAPHY**

**This course critically explores 'everyday life' and the spaces and places through which it is experiences, reproduced, represented and negotiated. Topics covered include, geographies of mobility; urban parks; geographies of capitalism; geographies of cinema; surveillance; geographies of boredom and silence; geographies of deliberation and everyday sites of citizenship and identity formation.**

**Expanded Description:** Throughout this course, emphasis is placed on a critical reading and analysis of 'everyday life' and the spaces and places through which it is experienced, represented and negotiated. Students will be introduced to important socio-spatial theorists who have demonstrated that the 'everyday', 'banal' and 'common' are as important as the 'macro', 'global' and 'exceptional', and that, in fact, they are inseparable. As such, the concept of scale and scalar processes will be emphasized in the lectures and assignments. Topics covered include, geographies of mobility; urban parks; geographies of capitalism; geographies of cinema; the banality of surveillance; geographies of boredom and silence; geographies of deliberation and everyday sites of citizenship and identity formation. Other than academic readings, students will be asked to consider other means/media of sharing and constructing knowledge about everyday life, including their own knowledge about everyday life spaces. Photographs, novels, visual art and music will be used to demonstrate how geographies of everyday life are articulated and represented in other practices of everyday life. Notions of gender, class, race, sexuality will be incorporated into each week's lectures and discussions.

**Course credit exclusion:** AS/GEOG 2075 3.00.

**Format:** Three lecture hours per week

**Required Reading:** Please refer to course syllabus for required reading list.

**Assignments:** To be announced.

**Instructor:** To be announced.

---

## **AP/GEOG 2105 3.00 - MONEY, POWER AND SPACE: INTRODUCTION TO ECONOMIC GEOGRAPHY**

**This course introduces the field of economic geography, addressing spatial dimensions of: wealth and poverty; structures of production and commodity chains; patterns and processes of retailing and consumption; the role of states in economic governance; the struggles of organized labour; the organization of transnational corporations; and, the ways in which ethnic identity and gender shape economic life.**

**Prerequisites:** One of AP/GEOG 1000 6.00, AP/GEOG 1410 6.00, AK/GEOG 2500 6.00, or written permission of the Instructor.

**Course credit exclusions:** AP/GEOG 2100 6.00 and AP/GEOG 2105 6.00.

**Format:** Three lecture hours per week.

**Required Reading:** Coe, N. Kelly, P. Yeung, H (2007) Economic Geography:

**Assignments:** In-class tests(15%) each, Analytical Assignment (30%) Reading Response Papers (40%)

**Instructor:** P. Kelly

---

## **AP/GEOG 2220 6.00 - URBAN GEOGRAPHY**

**In a world where over 50 per cent of the population lives in urban areas, cities play a significant role in shaping the social, cultural, economic, political, and environmental conditions of people's everyday lives. This course introduces the geographical literature on the urbanization process in historical and contemporary perspective. It provides students with the foundations of urban processes and patterns, urban systems and structure, and urban social/cultural issues from a geographical perspective.**

**Course credit exclusions:** AS/GEOG 3120 6.00 and AK/GEOG 3430 6.00.

**Format:** Three hours per week.

**Required reading:** Bunting, T., Filion, P. & Walker, R. (eds) (2010) Canadian Cities in Transition: New Directions in the Twenty-First Century, 4th Edition. Toronto: Oxford University Press.

**Assignments:** Two assignments (60%); participation (10%); and mid-term and final exam (30%)

**Instructor:** U. Best

---

## **AP/GEOG 2305 3.00 – IDENTITIES: INTRODUCTION TO SOCIAL GEOGRAPHY**

**This course examines the production, reproduction and mediation of identities through space and place at various scales. The course will introduce students to the complex relations between space, place and identity, and ask them to think critically about the spaces of their own lives.**

**Expanded Description:** Throughout this course, emphasis is placed on a critical reading and analysis of the production, reproduction and mediation of identities through space, place and scales. This course will introduce students to the complex relations between space, place and identity, as well as the ways in which these relations and their practices are manifested in space and time. Topics covered include imperialism, colonialism and national identities; citizenship and identity politics; mobility and identity; race, class and identity formation, politics and movements; criminalized identities; museums and architecture; global cities; globalization and postmodernity; corporate identities; and sexualities and genders. In addition to academic readings, students will be asked to consider the ways in which architecture, maps, photographs, political slogans, corporate logos, visual art, music, and film help construct, represents and mediate identities.

**Course credit exclusion:** AS/GEOG 2305 3.00.

**Format:** Three lecture hours per week.

**Required Reading:** Gill Valentine (2001), Social Geographies: Space and Society, Prentice Hall.

**Assignments:** Midterm (20%); three assignments (50%); and final exam (30%).

**Instructor:** T. Sturm

---

## **AP/GEOG 2310 6.00 - INTRODUCTION TO REFUGEE AND MIGRATION STUDIES**

**An introduction to the problem of refugees: conceptual issues (definitions, refugee rights, ethical norms), the historical background, Canadian policy and the issues in specific areas of the world - Africa, Asia, Latin America, Eastern Europe and the Middle East.**

**Cross-listed with AP/REI 2000 6.0**

**Prerequisite:** A 1000-level social science course.

**Course credit exclusions:** AP/SOSC 1130 9.00, AP/SOSC 1139 9.00, AS/GEOG 2310 6.0, AK/SOSC 2000 6.0

**Format:** Three lecture hours weekly

**Required Reading:** course kit

**Assignment:** Mid-term 20%, final exam 20%, two assignments 40%, participation 20%

**Instructor:** V. Preston

---

## **AP/SC/GEOG 2340 3.00 – GEOINFORMATICS: INTRODUCTION**

**This course covers fundamental concepts and approaches of geographical information systems, remote sensing, and global positioning systems. Students also acquire knowledge and skills in descriptive statistics, map design and interpretation, basic computer cartography, photogrammetry, and sensor networks.**

**Expanded Description:** Geoinformatics integrates computer science, geosciences, certain branches of engineering, and cartography such that the geographical context of any phenomena can be measured, quantified, presented, and analyzed. In essence, geographic position forms a critical component in a new information infrastructure. This course will introduce and explore the historical context to geoinformatics by tracing some of the more important historical developments before examining many of the sub-domains of this discipline. We will explore and provide experience with cartography, global positioning systems (GPS), vector and raster geographic information systems (GIS), surveying, photogrammetry, remote sensing, visualization, and other related topics. This course is suitable for geographers and education students majoring in geography, or those genuinely curious about technologies related to geographical analysis, this course will provide a foundation to geoinformatics and basic computer cartography. Computers will be used in the lab sessions and basic computer skills are a prerequisite. Some fieldwork on campus is required.

**Prerequisites:** AP/GEOG 1000 6.00 or AP/GEOG 1400 6.00 or AP/GEOG 1410 6.00; or written permission from the instructor.

**Recommended:** AP/SC/GEOG 2420 3.00

**Course credit exclusion:** AS/AP/SC/GEOG 2350 3.00, LE/EATS 2610 2.0, SC/ENG 2110 2.0

**Format:** Two lecture and two laboratory hours per week.

**Required reading:** Shellito, B.A. 2012. Introduction to geospatial technologies. W.H. Freeman and Company: New York. 469 p.

**Assessments:** 4 assignments 40%, test 20%, discussion forum and participation 7%, and final exam 33%

**Instructor:** T.K. Rimmel

## AP/SC/GEOG 2400 6.00 - THE HYDROSPHERE

**This course examines the physical processes and the environmental factors that govern the movement of water and energy in lakes, rivers, oceans and the soil-plant-atmosphere continuum. Boundary-layer climates and mechanisms of water movement and storage are emphasized.**

**Expanded Description:** This course examines the movement and storage of water in various phases near the Earth's surface and the energy driving the hydrologic cycle. The focus is on the interdependency of water and energy in the hydrosphere. The course begins with a discussion of basic atmospheric and hydrologic processes and then traces the flow of energy and water to and beneath the earth's surface. Then the return of water from the subsurface to the atmosphere is examined, initially in simple vegetation-free environments and finally in more complex forest systems. Aspects of the cryosphere (snow and ice), and the lateral redistribution of water as runoff on slopes and in drainage basins will also be examined. We will also investigate some of the implications for changing land-use and climate change of these processes. The course is designed to combine a theoretical understanding of the hydrosphere with applied field measurements.

**Prerequisite:** AP/SC/GEOG 1400 6.00, AK/GEOG 2510 6.00

**Course credit exclusions:** AS/GEOG 2400 6.00.

**Format:** Two lecture hours per week, 16 three-hour laboratories over two terms.

**Required Reading:** Oke, T.R., (1987), Boundary Layer Climates, Methuen & Co. Ltd. Ward, R.C. and T. Robinson, (2001), Principles of Hydrology, Prentice Hall. Supplemental readings will be placed on reserve in the Geography Geographic Resources Centre.

**Assignments:** Four tests, eight laboratory exercises.

**Instructor:** R. Bello

---

## AP/SC/GEOG 2420 3.00 - INTRODUCTORY STATISTICAL ANALYSIS IN GEOGRAPHY

**This introductory course aims to provide a working knowledge of several statistical techniques which are widely used in many branches of geography. Some attention is also given to broader questions concerning the nature of the scientific method.**

**Expanded Description:** The course aims to provide the fundamental concepts of descriptive and inferential statistics and a working knowledge of several standard statistical techniques which are widely used in many different branches of geography. Examples of such techniques include measures of central tendency and dispersion (descriptive statistics), comparisons of means and proportions (inferential statistics) and correlation and regression analyses (analyzing relationships and causation). These techniques are used in numerous disciplines, and are not in themselves 'geographical'. Consideration will be given to the nature of geographical data and the examples used in lectures and assignments will be geographical in content. Emphasis will be placed on the concepts underlying each procedure as much as on the mechanics of the numerical calculations. This policy reflects the belief that "knowing why" is just as important as "knowing how". Computers will be used in the lab sessions but no prior knowledge of computers or specific computer programs is assumed.

**Prerequisites:** 24 credits successfully completed. This course is intended primarily for students majoring in geography and is normally taken during the second year of study. NCR: AK/GEOG 3520 3.00.

**Course credit exclusions:** AP/ECON 2500 3.00, AP/POLS 3300 6.00, AP/SOCI 3030 6.00, HH/KINE 2050 3.00, HH/KINE 3150 3.00, HH/PSYC 2020 6.00, HH/PSYC 2021 3.00, SC/BIOL 2060 3.00, SC/MATH 2560 3.00, SC/MATH 2565 3.00, SC/MATH 2570 3.00, AK/ADMS 3320 3.00

**Format:** Two lecture hours per week, nine two-hour laboratory sessions. One term.

**Required Reading:** To be announced.

**Assignments:** To be announced.

**Instructor:** T. Drezner (F), TO BE ANNOUNCED. (W)

---

## **AP/SC/GEOG 2500 3.00 - INTRODUCTION TO VEGETATION AND SOILS**

**An introduction to the structure and functioning of vegetation and soil systems, emphasizing local patterns and processes, methods of description and sampling, dynamic processes, response to environmental change and human disturbance. Field work is emphasized in laboratories.**

**Prerequisite:** AP/SC/GEOG 1400 6.00 or ES/ENVS 2500 6.00

**Course credit exclusion:** AS/GEOG 2500 3.00.

**Format:** Two lecture hours and two laboratory hours per week.

**Required Reading:** To be announced.

**Assignments:** To be announced.

**Course Instructor:** To be announced.

---

## **AP/SC/GEOG 2600 3.00 - GEOMORPHOLOGY I**

**This course concentrates on basic principles and fundamental concepts in geomorphology, including energy flows in geomorphic systems, hill slope forms and materials, weathering and landforms, and drainage basin geomorphology and hydrology (with a particular emphasis on Canadian examples).**

**Expanded Description:** The course opens with a brief survey of the history of geomorphology as a science. It then surveys modes of formulating significant geomorphological questions and predominant modes of investigation. The course then concentrates on basic principles and fundamental concepts in geomorphology (with a particular emphasis on Canadian examples). Being process-oriented, the course is based on a quantitative approach. The main topics addressed include energy flows in geomorphic systems, hillslope forms and materials, weathering and landforms, drainage basin geomorphology and hydrology, the physical geography of Canada, and periglacial geomorphology. A course website is used.

**Prerequisite:** AP/SC/GEOG 1400 6.00 or LE/EATS 1010 3.00.

**Course credit exclusions:** AS/GEOG 2600 3.00,

**Format:** Three lecture hours per week.

**Assignments:** Mid-term test: 30%; final exam: 40%; Term paper: 30%.

**Required Reading:** Trenhaile, A. 2007. *Geomorphology, A Canadian Perspective*, (3<sup>rd</sup> edition), Oxford University Press

**Instructor:** To be announced.

---

## **AP/SC/GEOG 2610 3.00 - GEOMORPHOLOGY II – NOT OFFERED FW2014-2015**

**This course concentrates on geomorphic processes and landforms (with a particular emphasis on Canadian examples). Five main areas are explored: fluvial forms and processes; the glaciation of Canada and glacial mechanics; periglaciation; aeolian processes; and coastal processes and landforms.**

**Prerequisite:** AP/SC/GEOG 2600 3.00.

**Course credit exclusions:** AS/GEOG 2610 3.00.

**Format:** To be announced.

**Required Reading:** To be announced.

**Assignments:** To be announced.

**Instructor:** To be announced.

---

## COURSE DESCRIPTIONS - 3000 LEVEL

### AP/GEOG 3010 6.00 - GEOGRAPHY OF CANADA

**A study of basic physical and human geographical patterns in Canada, stressing the processes which produced the latter, and selected characteristics of major Canadian regions.**

**Expanded Description:** This Canadian regional geography course explores the physical, economic, political, social, cultural, and historical development of Canada as an urbanized nation. Lectures in the first term use the core-periphery model to frame discussions of the importance of transportation and communication networks to the development of regionally-based staples economies. Lectures in the second term use the spatial scale of the city-region to frame discussions of contemporary urban issues.

**Prerequisite:** One of AP/GEOG 1410 6.00 or AP/SC/GEOG 1400 6.00.

**Course credit exclusions:** AK/GEOG 3540 6.00, AS/GEOG 3010 6.00.

**Format:** Three lecture hours per week.

**Required reading:** Course kit.

**Assignments:** Four assignments (60%); and mid-term test/final examination (40%)

**Instructor:** R. Anderson

---

### AP/GEOG 3020 6.00 - GEOGRAPHICAL TRANSFORMATION OF THE CARIBBEAN ISLANDS – NOT OFFERED FW2014-2015

**This course analyzes the geographic status of the Caribbean islands. It examines how interactions between natural-environmental factors and human activities since the beginnings of settlement account for the current appearance, character, problems and prospects for individual islands and for the region.**

**Expanded Description:** This course analyzes the geographical changes that have occurred in the islands of the Caribbean since 1492, including changes in population, economy, environmental conditions, social conditions, and political status. Current economic, social and environmental problems are related to a long series of transformations over the past 500 years, transformations which have led to migration, radical changes in the use of land, reshaping of the landscape, and to the development of unique Caribbean cultures. Geographical changes are traced using texts, maps, data, pictures, and video. Lectures, illustrations, and related data are compiled on the course's comprehensive website.

**Course credit exclusion:** AS/GEOG 2020 6.00, AP GEOG 2020 6.00

**Format:** Three lecture hours per week.

**Coursebook of Selected Readings:** (York University Bookstore) MacMillan Caribbean Certificate Atlas (3rd Ed.), MacMillan Caribbean, 2001, Potter, R. et al., "The Contemporary Caribbean", Harlow, Pearson Education, 2004, Rogozinski, J., A Brief History of the Caribbean (Revised Edition), New York, Penguin Putnam, 2000;

**Assignments:** To be announced.

**Instructor:** To be announced.

---

### **AP/GEOG 3030 3.00 - PEOPLING OF ONTARIO - NOT OFFERED FW2014-2015**

This course deals with the process of an agricultural population occupying a new territory, gradually developing it, and participating in its transformation from rural - to urban-dominated. There will be a strong historical emphasis, especially embracing the 19th and early 20th centuries, and a number of specific aspects and demographic trends will be followed into recent decades. The peopling of Ontario will be placed in the context of the peopling of Canada. Attention will be paid to emigration and immigration and to the ethnic component at various periods.

**Course credit exclusions:** AK/GEOG 3550D 3.00 (prior to Summer 2004), AK/GEOG 3550D 6.00 (prior to Fall/Winter 1998-1999), AK/GEOG 3550 3.00.

**Format:** Three lecture hours per week.

**Required reading:** To be announced.

**Assignments:** To be announced.

**Instructor:** To be announced.

---

### **AP/GEOG 3040 3.00 - URBAN ENVIRONMENTAL JUSTICE**

This course examines how processes of urbanization result in the unequal spatial and social distribution of environmental goods (e.g., pollution, toxic waste, landfills) in North American cities. It investigates the ways in which cities, as dynamic human ecologies in their own right, have increasingly become sites of environmental contestation, and explores the articulation of social justice, urbanization and environmentalism.

**Course credit exclusion:** AK/GEOG 3520 3.00, AP/HIST 3891 3.00

**Format:** Three hours of lecture per week.

**Assignments:** To be announced.

**Required text:** To be announced.

**Instructor:** R. Anderson

---

### **AP/GEOG 3050 3.00 - NATURE, POWER & SOCIETY**

This course examines the geographic understanding of nature-society relationships. We review popular and scientific theories of environmental change, conflict and conservation, and examine the role that politics and power play in shaping ecological problems and issues.

**Expanded Description:** This course explores the role that politics and power play in shaping ecological problems and issues. With reference primarily to the developing world, we will review dominant apolitical understandings of environmental issues, such as deforestation, land degradation, pollution and biodiversity loss. We will then introduce a political ecological approach to understanding environmental change, conflict and conservation.

**Prerequisites:** 54 credits completed including at least three credits in geography (GEOG) or permission of the instructor.

**Course credit exclusions:** AS/GEOG 3050 3.00 and AS/GEOG 3050 6.00

**Format:** Three hours of lecture and discussion per week.

**Assignments:** To be announced.

**Required text:** To be announced.

**Instructor:** R. Roth

---

### **AP/GEOG 3060 3.00 - POST-COLONIAL GEOGRAPHIES**

**This course examines the particular landscapes produced by colonialism and the struggles to move beyond it. Attention is paid to the use of space and place as mechanisms of control and liberation. Examples are international, and concern fictional and non-fictional landscapes.**

**Prerequisite:** 54 credits successfully completed.

**Course credit exclusion:** AS/GEOG 3060 3.00.

**Format:** Three hours of lecture and discussion per week.

**Assignments:** To be announced.

**Required text:** To be announced.

**Instructor:** J. Mensah

---

### **AP/GEOG 3070 6.00 - GENDER, MIGRATION AND POPULATION -**

**Characteristics and problems in growth and distribution of human populations, including birth, fertility and death rates, population growth and environment, globalization and migration and population control policies.**

**Prerequisite:** 54 credits successfully completed.

**Course credit exclusion:** AK/SOCI 3880D 6.00, AP/GEOG 4070 6.00

**Format:** Three seminar hours per week.

**Required Reading:** To be announced.

**Assignments:** To be announced.

**Instructor:** J. Mensah

---

### **AP/GEOG 3080 3.00 - READING LANDSCAPES THROUGH TIME**

**Cultural landscapes change over time. This can result from changes in legal tenure, cultural adaptation, changes in the economic base or historical events. This course considers landscapes in various countries in chronological sequence.**

**Course credit exclusion:** AS/GEOG 3080 3.00.

**Format:** Three hours of lecture and discussion per week.

**Assignments:** To be announced.

**Required text:** To be announced.

**Instructor:** R. Anderson

---

### **AP/GEOG 3081 3.00 - HISTORICAL GEOGRAPHIES OF MODERN IRELAND – NOT OFFERED FW2014-2015**

**This course explores selected themes on the historical geography of Ireland, concentrating on the period since 1600. Attention is paid to the role and impact of economic, cultural, and political processes (including colonialism, famine, migration, nationalism and partition) that have shaped Irish landscapes and senses of place.**

**Course credit exclusion:** AS/GEOG 3081 3.00, AP/HIST 3460 6.00

**Format:** Three hours of lecture and discussion per week.

**Assignments:** To be announced.

**Required text:** To be announced.

**Instructor:** To be announced.

---

### **AP/GEOG 3130 3.00 - THE GLOBAL ECONOMY**

**This course examines the evolution of the world economy as well as the major institutions that have supported it, and interprets the new geography of investment, production and consumption that accompanies it.**

**Expanded Description:** The world economy has evolved over a long period marked by the globalization of trade, investment and, more recently, production. The course will begin by tracing this evolution and its geography. The course will then focus on contemporary world economy, and in particular the following elements: patterns of world trade and the Trade; transnational corporations; direct foreign investment and global finance; world cities; international migration; global institutions; and cultural imperialism. It will conclude by examining local-global conflicts.

**Course credit exclusion:** AS/GEOG 3130 3.00.

**Format:** Three lecture hours per week.

**Required Reading:** Course reading kit.

**Assignments:** To be announced.

**Instructor:** M.J. Kwak

---

### **AP/GEOG 3140 3.00 - RETAILING, SHOPPING, SOCIETY AND SPACE – NOT OFFERED FW2014-2015**

**This course provides an overview of consumer shopping behaviour, the structure and process of retail location, and various social and economic issues associated with the contemporary retail economy. The geographical perspective is emphasized.**

**Expanded Description:** This course is about the geography of needs, opportunities and enterprises. It aims to provide an overview on consumer shopping behavior, the structure and process of retail location, and the various economic, social and cultural issues associated with the contemporary retail economy. It also introduces the use of GIS as an analytical tool in retail analysis and location decision-making, and integrate its usage with various data sources. Topics discussed include but are not limited to: geodemographics and market segmentation; store location, store choice and market analysis; corporate spatial strategies; planned commercial development and redevelopment; new retail formats; internalization of retailing; shopping, leisure and lifestyle; impact on the workforce; and culture of consumption.

**Prerequisites:** 54 credits passed, including AP/GEOG 1000 6.00 or AP/GEOG 1410 6.00 or written permission of the Instructor.

**Course credit exclusions:** AK/GEOG 3100 3.00, AS/GEOG 3140 3.00.

**Format:** Lectures and computer labs

**Required Reading:** Readings will be provided as a course kit.

**Assignments:** To be announced.

**Instructor:** To be announced.

---

### **AP/SC/GEOG 3200 3.00 - TERRESTRIAL ECOSYSTEMS**

**An examination of the structure and function of vegetation and soil systems. The course focuses on such topics as the adjustment of ecosystems to human modification and the role of biogeography in conservation and resource management.**

**Prerequisites:** 54 credits successfully completed, including one of AP/SC/GEOG 1400 6.00 or ES/ENVS 2420 3.00 or SC/BIOL 2050 4.00.

**Course credit exclusion:** AS/GEOG 3200 3.00.

**Format:** Three lecture hours per week

**Required Reading:** To be announced.

**Assignments:** To be announced.

**Instructor:** To be announced

---

### **AP/GEOG 3220 3.00 - ADVANCED URBAN GEOGRAPHY**

This course addresses significant contemporary urban issues that frame geographic understandings of metropolitan change in the twenty-first century.

Attention is directed towards understanding how cities are produced, consumed, and theorized as complex social, economic, ecological, and political systems. Case studies are drawn from Canada and other countries in the Global North and

Global South. Through lectures, discussion, and assignments students are encouraged to challenge geographical interpretations of the urban world, and to think critically about cities as products of capital investment, as collective public goods, and as socio-cultural spaces.

**Prerequisites:** 54 credits including AP/GEOG 2220 6.00.

**Course credit exclusion:** AK/GEOG 4180 6.00

**Format:** Three lecture hours per week

**Required reading:** To be announced.

**Assignments:** To be announced.

**Instructors:** A. Bain

---

### **AP/GEOG 3250 3.00 - ENVIRONMENTAL PERCEPTION AND DISASTERS – NOT OFFERED FW2014-2015**

This course assesses the way people perceive their environment. Initially the course considers the theory of environmental perception. Considerable emphasis is placed on appraisal of natural and technological hazards and cultural perception.

**Course credit exclusion:** AS/GEOG 3250 3.00.

**Format:** Three lecture hours per week

**Required reading:** To be announced.

**Assignments:** To be announced.

**Instructor:** To be announced.

---

### **AP/GEOG 3300 3.00 - SPACE/PLACE**

This course explores the construction, reproduction and representation of space, place and scale. Students are introduced to important socio-spatial theories that have affected how geographers understand such key concepts, including feminism, Marxism and postmodernism.

**Prerequisites:** 54 credits passed.

**Course credit exclusion:** AS/GEOG 3300 3.00.

**Format:** Three lecture hours per week

**Required Reading:** To be announced.

**Assignments:** To be announced.

**Instructor:** To be announced.

---

## **AP/SC/GEOG 3340 3.00 – GEOINFORMATICS: GIS I**

**An introduction to the application of GIS to geographical/environmental problems. A broad conceptual overview of GIS approaches and their strengths and limitations. Students gain hands-on experience in the use of raster-based GIS technology with particular reference to resource management and planning topics.**

**Expanded Description:** The purpose of the course is to introduce students to the basic concepts and tools used in GIS. The lectures will review technical aspects, examine various case studies and discuss critical perspectives using GIS.

At the end of the course, students should be able to understand how to develop some strategies for using GIS techniques in their own work and research. During the term, assignments will be structured to enable students to undertake their own research investigations using GIS.

These assignments will lead up to a final group project depending on the student's area of interest (e.g. issues related to social, political, economic, planning, health or environmental themes). Students gain hands-on experience using the MapInfo Professional GIS software package.

Topics covered during the lectures will include: map as model; data input; cartographic and GIS data structures; data storage, errors and editing; elementary spatial analysis; measurement; map comparison; classification; spatial arrangement; Ethics and GIS: privacy and confidentiality.

**Prerequisite:** AP/SC/GEOG 2420 3.00.

**Course credit exclusions:** ES/ENVS 3520 3.00, AP/AS/SC GEOG 3180 3.00

**Format:** Two lecture hours and two laboratory hour per week

**Required Reading:** To be announced.

**Assignments:** To be announced.

**Instructor:** Q. Cheng

---

## **AP/SC/GEOG 3360 3.00 - MORPHOGENESIS OF SOILS**

**This course is concerned with the systematic study of climate, vegetation, parent material, topography and time on the development, classification and chemistry of soils. A field trip and laboratory work will form part of this course.**

**Course credit exclusions:** AK/GEOG 3360 3.00 and AK/GEOG 3360 6.00.

**Format:** Combination of lecture, labwork, & fieldwork

**Required Reading:** To be announced.

**Assignments:** To be announced.

**Instructor:** W. Mahaney

---

## **AP/GEOG 3370 3.00 - INTERNATIONAL DEVELOPMENT: CRITICAL GEOGRAPHICAL PERSPECTIVES**

**The course deals with conceptual debates on 'Third World' development. It explores issues of development including economic growth and poverty, resource use, agrarian change, industrial transformation, service-sector development, rural-urban inequality, gender relations, neoliberalism and imperialism, and prospect for democracy and macro-level structural social change in the less developed world.**

**Prerequisites:** 54 credits successfully completed, including AP/GEOG 1000 6.00 or AP/GEOG 1410 6.00 or written permission of the Instructor.

**Course credit exclusions:** AS/GEOG 3370 3.00, AS/GEOG 4370 3.00.

**Format:** Three hours per week

**Required Reading:** To be announced.

**Assignments:** Midterm 30%, final exam 30%, short paper 25%, project 15%

**Instructor:** J. Hyndman

---

## **AP/GEOG 3400 3.00 - DIMENSIONS OF DIFFERENCE: GEOGRAPHY OF GENDER, RACE AND POWER**

This course considers the construction, reproduction and representation of identity and difference in, through and across space and time. This course will introduce students to important feminist theorists and academics that have affected how geographers understand social relations through space, including gender relations and their intersection with race and power relations.

**Prerequisites:** 54 credits successfully completed.

**Course credit exclusion:** AS/GEOG 3400 3.00.

**Format:** Three lecture hours per week.

**Required Reading:** To be announced.

**Assignments:** To be announced.

**Instructor:** T. Sturm

---

## **AP/SC/GEOG 3421 3.00 - INTERMEDIATE STATISTICAL METHODS IN GEOGRAPHY – NOT OFFERED FW2014-2015**

This course examines the application of methods of geographical analysis to empirical data sets representing geographical and ecological phenomena. Bivariate linear regression and multiple regression and time/spatial series are emphasized.

**Prerequisite:** AP/SC/GEOG 2420 3.00 or equivalent.

**Course credit exclusions:** AP/SC/MATH 3033 3.00, AP/SC/MATH 3034 3.00, AP/SC/MATH 3230 3.00, AP/SC/MATH 3330 3.00, AP/POLS 3300 6.00, AP/SC/PSYC 2020 6.00, AP/SC/PSYC 2022 3.00, AS/SOCI 3030 6.00 and HH/PSYC 3030 3.00.

**Format:** Two lecture hours, two laboratory hours. One term.

**Required Reading:** To be announced.

**Assignments:** To be announced.

**Instructor:** To be announced.

---

## **AP/SC/GEOG 3440 3.00 – GEOINFORMATICS: REMOTE SENSING I**

This course represents an introduction to the methods in which remote sensing data are collected, processed, and analyzed. An emphasis is placed on environmental applications. The synergy between the technologies of remote sensing and geographic information systems (GIS) is introduced.

**Expanded Description:** Remote sensing is introduced as the process of examining, measuring, and studying our planet from a distance, without physical contact. As an extension of photography, remote sensing relies on an understanding and digital recording of energy interactions at or near the surface of the Earth and within the atmosphere. The science of these interactions will be presented as a foundation to understanding the theoretical utility and application of remote sensing techniques. This course will then explore the typical sequence of image acquisition, processing, analysis, and accuracy assessment as related to physical and human influenced environments.

**Cross-listed:** ES/ENVS 3521 3.00

**Prerequisites:** AP/SC/GEOG 2420 3.00 or ES/ENVS 2010 6.00 or written permission from the instructor.

**Recommended:** AP/SC/GEOG 2340 3.00

**Course credit exclusion:** AS/GEOG 3440 3.00

**Format:** Two lecture and two laboratory hours per week.

**Required reading:** Tempfli, K., N. Kerle, G.C. Huurneman, and L.L.F. Janssen (Eds.). 2009. Principles of remote sensing: an introductory textbook. The Netherlands: The International Institute for Geo-Information Science and Earth Observation. 591 p. (Note: this is a free online textbook)

**Assessments:** 5 assignments 40%, test 15%, discussion forum 10%, and final exam 35%

**Instructor:** T.K. Rimmel

---



---

**AP/GEOG 3490 3.00 - MAKING CANADA – NOT OFFERED FW2014-2015**

This course investigates the historical transformations of Canada's geography prior to the 20th century, including settlement by indigenous peoples, resettlement by colonizing and immigrant populations, the expansion of the nation-state's territory, land clearance, resource extraction and related geographies of the labour force, the creation of national parks, and urbanization.

**Expanded Description:** In clarifying the changing geography of Canada from the eighteenth century to the opening of the twentieth century, this course will highlight transformative developments in the expansion of the country across the continent. Special topics might include the evolution from colony to self-governing nation, the role and treatment of aboriginal populations, the importance and materials of transportation, the entry of old world populations, way-of-life and cultural comparisons among regions, and the rise of urbanization.

**Course credit exclusion:** AK/GEOG 3490 6.00.

**Format:** Three lecture hours per week.

**Required Reading:** To be announced.

**Assignments:** To be announced.

**Instructor:** To be announced.

---

**AP/SC/GEOG 3500 3.00 - BIOGEOGRAPHY**

An analysis of the geography of plants and animals emphasizing processes that operate at the population level, the origin and diversity of plants and animals, geographic patterns of diversity, and dynamics of species populations from local to continental scales.

**Same as SC/BIOL 3500 3.00**

**Prerequisite:** AP/SC/GEOG 2500 3.00 or SC/BIOL 2050 4.00.

**Course credit exclusion:** AS/GEOG 3500 3.00.

**Format:** Two lecture hours and two laboratory hours per week.

**Required Reading:** To be announced.

**Assignments:** To be announced.

**Instructor:** To be announced.

---

**AP/GEOG 3510 3.00 - METHODS OF SEDIMENT**

An examination of methods of laboratory analysis of soils and sediments including soil/sediment sampling, particle size, water and organic component analyses, microscopic analysis and data interpretation. Special emphasis is placed on methods of analysis in soil/sediment research.

**Course credit exclusion:** AK/GEOG 3370 3.00.

**Format:** Three lecture hours per week.

**Required Reading:** To be announced.

**Assignments:** To be announced.

**Instructor:** W. Mahaney

---

## **AP/GEOG 3520 3.00 – Designing and Conducting Research in Geography**

**This course examines how geographers design and carry out research, and the different philosophical bases for creating geographical knowledge. A range of approaches will be covered, including research in qualitative human geography, quantitative human geography, and physical geography.**

**Expanded Description:** This course covers qualitative research design and the philosophical bases of qualitative methodological approaches to knowledge, as well as practical techniques such as questionnaire surveys, participant observation, interviewing/focus groups, archival research and content/textual analysis. These techniques will be applied in practical settings involving field projects. The structure of the course is based on the required textbook, although the order of topics is different. The first half of the course will be organized as a series of lectures and seminar discussions based on assigned readings; after Reading Week, there will be more workshop-type activities as various qualitative research methods are both discussed and experienced in the field.

**Course credit exclusion:** AP/AS/GEOG 3740 3.00.

**Format:** Three lecture hours per week

**Required Reading:** To be announced.

**Evaluation:** To be announced.

**Instructor:** To be announced.

---

## **AP/SC/GEOG 3540 3.00 - FIELD STUDIES IN PHYSICAL GEOGRAPHY**

**This course begins with lectures on field research methodology. The second phase concentrates on defining a field problem, leading to data collection in the field. The final part of the course deals with data analysis, and reviews methodological implications. Two two-hour periods per week (including lectures, seminars and workshops), a three to four day field trip. One term.**

**Expanded Description:** The course is an introduction to research design and methodology in physical geography. The course integrates on-campus preparation and report writing with off-campus fieldwork during which data collection and preliminary analysis are carried out. The fieldwork relates to a geographic problem offering scope for the special interests of students in various aspects of physical geography.

**Prerequisites:** Students must be registered as Honours majors in Geography or Environmental Science and must have successfully completed AP/GEOG 2420 3.00 and one of AP/GEOG 2400 6.00, AP/GEOG 2500 3.00 or AP/GEOG 2600 3.00; or permission of the instructor.

**Course credit exclusions:** AK/MATH 3330 3.00, AS/GEOG 4540 3.00, AS/SC/GEOG 3390B 3.00 (prior to Fall/Winter 2002-2003) and AS/SC/GEOG 3420 3.00.

**Format:** Two two-hour periods per week (including lectures, seminars and workshops), a three to four day field trip. One term.

**Grading:** Field participation 20%, seminar presentation 35% and final report: 45%.

**Reading and Resource Material:** Suggestions for readings will be made once research topics have been identified.

**Instructor:** T. Remmel

**\*\*ADDITIONAL FEES MAY BE INCURRED TO COVER THE EXPENSE OF TRANSPORTATION AND ACCOMMODATION FOR OUT-OF-TOWN FIELD TRIPS.\*\***

---

### **AP/GEOG 3590 3.00 - CONSERVATION IN CANADA – NOT OFFERED FW2014-2015**

This course investigates the significance of conservation in Canada, charting its history, and examining the socio-political and economic trends that gave rise to a particular vision of conservation. The course additionally examines the social and environmental effects of conservation policies and practices and the significance of these measures for the Canadian nation-state.

**Course Credit Exclusion:** AK/GEOG 3590 6.0

**Format:** Three lecture hours per week

**Required Reading:** To be announced.

**Assignments:** To be announced.

**Instructor:** To be announced.

---

### **AP/GEOG 3600 3.00 - NATIONS AND NATIONALISM -**

This course examines theories, geographies and histories of nations, nationalisms and nation-states.

**Expanded Description:** The purpose of this course is to investigate the rise of modern nations and nationalisms and the ways in which they shape our lives in both profound and seemingly trivial ways. We will focus in particular on:

- the processes, practices and narratives that shape and reproduce nations and nationalisms; and
- their radically varied expressions, ranging from comic books to genocide.

While the course will cover various theories of nations and nationalism, we will explore these within geographically and historically specific contexts. The course aims to help students develop the conceptual tools to critically evaluate various nations and nationalisms and to see what is at stake—politically, economically, socially, and environmentally—in their formulation.

To this end, we will examine nations and nationalisms in relation to several overlapping concepts and areas of inquiry, including space and geography, “nature,” identities and bodies, multicultural and indigenous nationalisms, and globalization.

**Course credit exclusion:** AS/GEOG 3600 3.00.

**Format:** Three hours per week: combination of lecture and discussion

**Required Reading:** To be announced.

**Assignments:** To be announced.

**Instructor:** To be announced.

---

## **AP/GEOG 3650 6.00 - WIRED CITIES: COMMUNITY, TECHNOLOGY AND CHANGING URBAN PLACES**

**Examines the impact of technology on urban form, urban function and community. Emphasis is placed on the social, economic and political parameters of urban infrastructure, community formation, and everyday life in the wake of technological change.**

**Expanded Description:** Topics that will be explored will include the following: urban form and function and the impact of technological change on urban places; urban infrastructure and technology; cities as communication nexus and the evolution of communication technologies; community and neighborhood formation in the Information Age; the impact on individuals and the family; privacy issues; access to information; issues of governance; nationalism and globalization; and speculations about the future of cities.

**Note:** You do not need to be a computer or Internet 'expert' to take this course, but you should have a working knowledge of e-mail and also be somewhat familiar with using a web browser (Internet Explorer, Netscape, Safari, etc.) as the entire course is organized around these two activities. You may use your own computer at home, or ones located in the University's computer labs to participate in this course.

**Course credit exclusion:** AK/AS/GEOG 3650 6.00.

**Format:** Internet course. No face-to-face lectures or tutorials. Participation in online course discussion groups is mandatory. Course website: <http://www.yorku.ca/lcode/wiredcities/>

**Required Reading:** Graham, Stephen and Simon Marvin (2001). Splintering Urbanism: Networked Infrastructures, Technological Mobilities and the Urban Condition. New York: Routledge. Additional online readings will be indicated during 1<sup>st</sup> week of classes.

**Evaluation:** Participation 20%, written assignments 35%, research essay 25%, and final exam 20%.

**Instructor:** To be announced.

---

## **AP/GEOG 3700 3.00 - DISASTER! EARTH'S EXTREME EVENTS**

**Geographical perspectives on the physical processes behind extreme natural events (volcanoes, tsunamis, tornadoes, hurricanes) and their impact on people. Many case studies and the literature will be used to understand how physical geography impacts human activities and settlements.**

**Prerequisite:** AP/SC/GEOG 2600 3.00.

**Course credit exclusions:** None.

**Format:** Three lecture hours per week.

**Required Reading:** To be announced.

**Instructor:** To be announced

---

## **AP/GEOG 3710 3.00 - SOCIETY, SPACE AND ENVIRONMENT IN SOUTH ASIA – NOT OFFERED FW2014-2015**

**This course deals with the historical-geographical specificities of South Asia that are products of its own internal economic-political evolution and physical environmental context as well as of its historical and contemporary linkages to other parts of the world.**

**Prerequisites:** 54 credits successfully completed, including at least one of AP/GEOG 1000 6.00 or AP/GEOG 1410 6.00 or AP/SC/GEOG 1400 6.00, or written permission of the Instructor.

**Course credit exclusion:** AS/GEOG 3710 3.00.

**Format:** Three lecture hours per week

**Required Reading:** To be announced.

**Assignments:** Map quiz 20%, two short essays 25% each, and final exam 30%

**Instructor:** To be announced.

---

### **AP/GEOG 3730 6.00 - COMPARATIVE URBAN DEVELOPMENT**

**\*\* (Please Note: This course is administered through the Department of Social Science)\*\***

Significant dimensions of urbanization and urban-rural relationships are examined comparatively across major world regions, with emphasis upon Africa, Asia and Latin America. Students may choose a regional focus for research papers, including North America. Migration patterns, socio-economic structure of cities, values and images of rural and urban life, employment and planning to meet the needs of growing cities are the principal topics covered.

***Cross-listed with: AP/SOSC 3730 6.00***

**Course credit exclusion:** AS/SOSC 3730 6.00.

**Format:** Three lecture hours per week

**Required Reading:** To be announced.

**Evaluation:** To be announced.

**Instructor:** To be announced.

---

### **AP/GEOG 3750 3.00 - AFRICA: IMPOVERISHMENT OF A CONTINENT -**

This course critically examines the changing geography and depletion of Africa's resources from the precolonial to the present, with an emphasis on current events. The course covers a range of topics, including agriculture, natural resource extraction, migration, the slave trade, and AIDS.

**Course credit exclusion:** AS/GEOG 3750 3.00.

**Format:** Three lecture hours per week

**Required Reading:** To be announced.

**Evaluation:** To be announced.

**Instructor:** J. Mensah

---

### **AP/GEOG 3760 3.00- THE PHILIPPINES: GEOGRAPHICAL PERSPECTIVES ON GLOBAL INTEGRATION – NOT OFFERED 2014-2015**

This course examines the processes through which the Philippines was, and is, incorporated into the global system. Topics will include precolonial trade and religious networks; colonial integration into Spanish and American empires; modern integration through Developmental institutions, and manufacturing and resource commodity chains. Filipino migrations will be given careful consideration, especially those that link the Philippines and Canada.

**Course credit exclusions:** None.

**Format:** Three lecture hours per week

**Required Reading:** To be announced.

**Evaluation:** To be announced.

**Instructor:** To be announced.

---

### **AP/GEOG 3770 3.00 - HOUSING POLICY**

**\*\* (Please Note: This course is administered through the Department of Social Science)\*\***

The course studies Canadian housing policy using the approaches of economics, political science and public administration. The course examines models of housing markets, the effects of housing policies, the politics and process of policy formation and procedures for policy evaluation.

**Prerequisites:** 54 credits successfully completed, including one of AP/GEOG 1410 6.00 or AP/SOSC 2710 9.00 or permission of the course instructor.

**Course credit exclusion:** AS/SOSC 3770 3.00.

**Format:** Three lecture hours per week

**Required Reading:** To be announced.

**Evaluation:** To be announced.

**Instructor:** To be announced.

---

### **AP/GEOG 3800 3.00 - GEOGRAPHIES OF WORK**

This course examines the geographies of productive and reproductive labour at multiple scales, including global, national, regional, urban, domestic and personal.

**Expanded Description:** This course explores how human struggles to “make a living” simultaneously shape and are shaped by changing economic landscapes. The course addresses the different theoretical perspectives on work, both paid and unpaid. With a primary focus on workers in advanced capitalist economies, the course discusses both new and old spatial divisions of labour and the restructuring of work and workplaces at the international, local and household scales.

**Course credit exclusion:** AS/GEOG 3800 3.00.

**Format:** Three lecture hours per week

**Evaluation:** To be announced.

**Required Reading:** To be announced.

**Instructor:** M.J. Kwak

---

### **AP/SC/GEOG 3900 3.00 - PHYSICAL GEOGRAPHY OF THE CITY – NOT OFFERED FW2014-2015**

This course explores the natural and physical systems of the city, focusing on the climate, water, geomorphology, biogeography of the urban landscape, including its built environment.

**Course credit exclusion:** AS/GEOG 3900 3.00.

**Format:** Three lecture hours per week

**Required Reading:** To be announced.

**Evaluation:** To be announced.

**Instructor:** To be announced.

---

#### **Q & A**

**Question:** I don't agree with a grade I received on a test. What should I do?

**Answer:** You should approach the person (teaching assistant/instructor/course director) who marked the test and find out why you obtained the mark you did.

If you are still concerned, and have already spoken to the Course Director, please make an appointment to see the Undergraduate Program Director (UPD). The UPD will advise you of your next course of action. For example the UPD may indicate that you have grounds to fill out a petition form to have your test re-graded. The UPD will then ask another faculty member to review the test. The grade determined through the reappraisal will be the final grade even if it is a lower grade. Please Note; There are time limes on grade reappraisals.

## COURSE DESCRIPTIONS – 4000 LEVEL

**\*\*UNLESS OTHERWISE INDICATED, 4000 LEVEL COURSES ARE ONLY OPEN TO GEOGRAPHY MAJORS AND MINORS WHO HAVE SUCCESSFULLY COMPLETED AT LEAST 54 CREDITS OR HAVE WRITTEN PERMISSION OF THE COURSE INSTRUCTOR.\*\***

---

### **AP/SC/GEOG 4000 6.00 - HONOURS THESIS**

**\*\*Only thesis topics in physical geography are eligible for Science (SC) credit.\*\***

An independent piece of research done under the supervision of a faculty advisor. The thesis must be submitted before the end of classes in the winter term; an exact date is established each year. There is an oral examination on the Honours thesis.

**Prerequisite:** 84 credits passed.

**Course credit exclusion:** AS/GEOG 4000 6.00.

**Format:** To be announced.

**Required Reading:** To be announced.

**Coordinator:** Chair

**Deadline for application:** May 31st

**Note:** In consultation with a faculty advisor, Honours students may choose a topic towards the end of their third year of study, allowing a full year for completion.

The completed thesis must be submitted on a date selected annually by the course coordinator. Normally this date falls in late March, shortly before the end of regular classes. An oral defense of the Honours Thesis is required. The thesis provides Honours students with an opportunity to work on a major research project of their own choosing or on a project proposed by a faculty member. Students should seek out an appropriate faculty member who will help to formalize the topic and aid in preparing a detailed outline. This outline must be approved before the end of the winter term in the third year of study. Students are invited to examine theses written in past years to obtain an idea of the range and scope of topics that have been addressed. These are kept in the Geographic Resources Centre (S403 Ross).

---

### **AP/GEOG 4020 3.00 - PROCESSES OF GEOGRAPHIC CHANGE: THE CARIBBEAN ISLANDS SINCE 1492 – NOT OFFERED FW2014-2015**

This course considers changes in the public perception of the regional character of the Caribbean Islands through five centuries, and then examines the evidence and methods that can be used to assess regional change - both "real" and "imagined". **Note: Weekly reflections posted to WebCT.**

**Expanded Description:** The course examines the extent to which the geographic features (both human and physical) of the Caribbean Islands have changed since prehistoric times, and presents a number of possible explanations for such change – including changing relationships between human activity and the “natural” world. Following a brief but intensive review of our understanding of empirical change in the region, the course focuses on the methods used to gather and assess evidence; and critically analyzes the relevance of alternative theories of change.

**Prerequisites:** 72 credits successfully completed including AP/GEOG 1400 6.00, AP/GEOG 1000 6.00 or AP/GEOG 1410 6.00. AP/GEOG 2020 6.00 is recommended.

**Course credit exclusions:** AS/GEOG 4020 3.00.

**Format:** Three seminar hours per week.

**Required Reading:** To be announced.

**Assignments:** To be announced.

**Instructor:** To be announced.

---

### **AP/GEOG 4040 6.00 - URBAN HISTORICAL GEOGRAPHY -**

**A course which examines the historical geography of cities, particularly those of 19th-century North America. The major focus of attention is the role of certain economic and cultural factors in the development of spatial arrangements within and among cities.**

**Expanded Description:** This course has three main components. During the first term attention focuses on the cultural and social geography of nineteenth century cities in Britain, the United States and Canada, including Victorian Toronto. Processes and spatial patterns associated with such variables as social class, ethnicity, and race are discussed. The second main emphasis is on the evolution of the North American urban system, especially during the nineteenth century. The third theme is the urban built environment, including town planning. In each case both theoretical and substantive issues are addressed.

**Prerequisite:** 72 credits successfully completed and one of AP/GEOG 1410 6.00, AP/HIST 2600 6.00.

**Course credit exclusion:** AS/GEOG 4040 6.00.

**Format:** Three lecture hours per week.

**Required Reading:** Course reading kit.

**Assignments:** Three papers and a final exam.

**Instructor:** W. Jenkins/To be announced.

---

### **AP/GEOG 4050 3.00 - NATURE, NEOLIBERALISM AND POLITICAL ECOLOGY – NOT OFFERED IN FW2014-2015**

**This seminar explores complementary scholarship on 'first world' political ecology and the commodification of nature in order to critically explore issues of environmental management and resource conflict. It will draw on case studies about rural and urban North American environments.**

**Prerequisites:** 72 credits successfully completed including AP/GEOG 3050 3.00 or permission of the Instructor.

**Course credit exclusions:** AS/GEOG 4050 3.00

**Format:** To be announced.

**Required Reading:** To be announced.

**Assignments:** To be announced.

**Instructor:** To be announced.

---

### **AP/GEOG 4051 3.00 - COMPARATIVE POLITICS OF ENVIRONMENT AND DEVELOPMENT – NOT OFFERED IN FW2014-2015**

**This course applies a political ecological approach to the understanding of nature-society relationships. Using case studies from Asia, Africa and the America, the course examines the everyday realities of people and landscapes affected by environmental change, conflict and conversation.**

**Prerequisite:** 72 credits successfully completed and AP/GEOG 3050 3.00 or permission of the instructor.

**Course credit exclusions:** AS/GEOG 4051 3.00, AS/GEOG 3051 3.00

**Format:** Three lecture hours per week.

**Required Reading:** To be announced.

**Assignments:** To be announced.

**Instructor:** To be announced.

---

## **AP/GEOG 4060 3.00 - WOMEN IN NORTH AMERICA: HISTORICAL GEOGRAPHIES OF GENDER AND SEXUALITY**

**This course explores the changing geographies of women in Canada and the United States over the past three centuries, focusing on the historical and spatial construction of gender.**

**Expanded Description:** A theoretical and substantive exploration of the changing geographies of women in Canada and the United States over the past three centuries. The course has three principal themes: the historical and spatial production of the concept of gender and gender inequality; the multiple meanings of women's spaces and places, and the impact of changes to those geographies; and a comparison of the experiences of women in Canada with those in the United States. The approach of the class is interdisciplinary.

**Prerequisite:** 72 credits successfully completed.

**Course credit exclusions:** AS/GEOG 4060 3.00

**Format:** Three seminar hours per week.

**Required Reading:** Course reading kit; Virginia Woolf, *A Room of One's Own*.

**Assignments:** Short essay, oral history project, original research paper, and class participation.

**Instructor:** To be announced.

---

## **AP/GEOG 4090 3.00 - URBAN IDENTITIES: HISTORICAL PERSPECTIVES ON RACE, ETHNICITY, CLASS AND GENDER IN CANADIAN AND AMERICAN CITIES**

**This course considers the historical and spatial construction of racial, ethnic, gender and class identities in the broader context of urban development in Canada and the United States in the 19th and 20th centuries.**

**Expanded Description:** A consideration of the historical and spatial construction of racial, ethnic, gender and class identities, and the relationships among them, in the broader context of urban development in Canada and the United States in the 19th and 20th centuries. Emphasis is on the urban nature of these identities and the production of communities along these lines. Selected topics range from riots to suburbs to AIDS.

**Prerequisite:** 72 credits successfully completed and one of: AP/GEOG 2220 6.00 or AP/GEOG 4040 6.00 or AP/GEOG 4170 3.00 or AP/GL/WMST 3505 3.00 or AP/SOSC 2710 9.00 or AP/SOSC 3760 6.00 or AP/SOCI 3830 6.00 or AP/SOCI 4055 6.00 or AP/SOCI 4120 6.00, or written permission of the Instructor.

**Course credit exclusions:** AS/GEOG 4090 3.00, AS/HIST 4050F 3.00 (prior to Fall/Winter 2003-2004), AS/HIST 4083 3.00 (prior to Fall/Winter 2005-2006).

**Format:** Three seminar hours per week.

**Required Reading:** Course kit

**Assignments:** To be announced.

**Instructor:** To be announced.

---

**AP/GEOG 4095 3.00 - ABORIGINAL SPACE AND THE CITY: NORTH AMERICAN URBANIZATION AND ABORIGINAL PEOPLE, 1890-1980 – OFFERED SUMMER 2014**

This course considers the historical construction of Aboriginal space in Canada and the US and its relationship to cities, from early colonization to the present.

**Expanded Description:** The interdisciplinary course explores the historical construction of Aboriginal space in Canada and US, and its relationship to cities. It does so as a cross-border study, examining this process in both Canada and the US, thereby viewing the border as part of this colonial mapping of space in North America. Canada and the United States are predominantly urban nations, and have been since the early part of the century. In contrast, Aboriginal people have remained predominantly rural, tied to reservation lands. This course explores the way in which this difference was imagined, as well as the impact this spatial arrangement had on Aboriginal economies, politics, and identity. It also draws attention to the various ways in which Aboriginal people have responded to this process. An interdisciplinary course, it draws on Geography, History and Native Studies, among others.

**Prerequisite:** 72 credits successfully completed.

**Course credit exclusion:** AS/GEOG 4095 3.00.

**Format:** Three Seminar hours per week.

**Required Reading:** To be announced.

**Assignments:** Book review (15%), research proposal and bibliography (10%), original research paper (35%), in-class presentation (15%), and class participation (25%)

**Instructor:** To be announced.

---

**AP/GEOG 4130 3.00 - PLANNING SUBURBS**

From garden suburbs to post-war inner- and outer-suburbs, from New Urbanist communities to edge cities, technoburbs, and exurbs, this course critically considers the planning of suburban built form and the suburbanization process in historical perspective. Consideration is given to the mechanisms and the challenges of managing suburban growth, and to the complex socio-cultural geographies and values that shape the suburbs and the suburban way of life. Attention is directed to issues of gender, racialized poverty, unemployment, infrastructural inadequacy, sprawl, and sustainability, and an effort is made to envision alternative futures.

**Course credit exclusion:** AK/GEOG 4130 6.00.

**Format:** Three seminar hours per week.

**Required Reading:** To be announced.

**Assignments:** To be announced.

**Instructor:** A. Bain

---

**AP/GEOG 4150 3.00 - FOODSCAPES AND AGRI-SCAPES: GEOGRAPHICAL PERSPECTIVES –**

The course explores the landscapes and scales of food and agriculture. Questions include: Can we change ourselves and the world through what we eat? Why do we still have world hunger? Who really controls how food is produced and consumed? Emphasis is given to food and agricultural geographies in the global south.

**Pre-requisites:** 84 credits completed.

**Course credit exclusions:** None.

**Format:** Three seminar hours per week.

**Required Reading:** To be announced.

**Assignments:** Reading reactions 15%, research assignments 70%, and participation 15%

**Instructor:** P. Vandergeest.

---

### **AP/GEOG 4170 3.00 - GEOGRAPHIC PERSPECTIVES ON IMMIGRATION, ETHNICITY AND RACE IN MODERN CITIES**

**This course first discusses a number of conceptual issues concerning the residential segregation of ethnic and racial groups. The course then considers several case examples that exemplify the varied experiences of ethnic and racial groups in modern cities.**

**Expanded Description:** This course is divided into two major sections. In the first section we discuss contemporary migration trends and then focus on the settlement patterns of immigrants in major urban centres and immigrant experiences in local labor and housing markets. Topics include international population movements, Canadian immigration policies and trends, patterns of segregation, transnational migration, and the reasons for and consequences of segregation. In the second section we consider how geographies of housing and labour markets are linked and the consequences of labour market segmentation. The focus is primarily on immigrant flows in the post World War Two period. Examples are drawn from a variety of cities and cultural contexts but particular stress is placed on the Canadian experience and especially immigrant settlement in the Toronto area.

**Prerequisites:** 84 credits successfully completed, including AP/GEOG 1000 6.00 or AP/GEOG 1410 6.00 or written permission of the Instructor. Third-year Honours students with 78 credits completed who are also taking summer courses may enrol.

**Course credit exclusion:** AS/GEOG 4170 3.00.

**Format:** Lectures and discussion periods.

**Required Reading:** A course reading kit must be purchased.

**Assignments:** To be announced.

**Instructor:** M.J. Kwak

---

### **AP/SC/GEOG 4180 3.00 - LABORATORY ANALYSIS OF ECOLOGICAL MATERIALS – NOT OFFERED IN FW2014-2015**

**This course introduces students to a comprehensive range of laboratory techniques for the analysis of plant, soil and water samples. Laboratory sessions and projects provide students with experience in analytical procedures and the operation of major items of laboratory equipment.**

**Prerequisite:** Six credits in physical geography at the 3000 or 4000 level or ES/ENVS 2410 3.00 or ES/ENVS 2420 3.00 or LE/EATS 1010 3.00 or SC/BIOLOG 2050 4.00.

**Course credit exclusion:** AS/GEOG 4180 3.00.

**Format:** Four scheduled lecture/laboratory hours, three additional laboratory hours. One term.

**Required Reading:** To be announced.

**Assignments:** To be announced.

**Instructor:** To be announced.

---

### **AP/GEOG 4190 3.00 - GEOGRAPHIES OF THE ETHNIC ECONOMY**

**This course examines how location helps, hinders, or shapes ethnic economies; how various socio-cultural, economic-political, institutional, and transnational spaces shape ethnic economies; how ethnic economies and other geographically identifiable phenomenon, such as residential segregation or institutional distributions, are related; and how ethnic economies shape the urban landscape.**

**Prerequisites:** 84 credits completed; at least one of AS/GEOG 2100 6.00, AP/GEOG 2105 3.0, AP/GEOG 2220 6.00, AP/GEOG 3140 3.00 or permission of instructor.

**Course credit exclusion:** AS/GEOG 4190 3.00.

**Format:** Lectures and seminars/discussions.

**Required Reading:** A course kit must be purchased.

**Assignments:** Participation/seminar discussion (30%); reaction memos (30%); and term paper (40%).

**Instructor:** M.J. Kwak

---

### **AP/SC GEOG 4200 3.00 - WATER QUALITY AND STREAM ECOSYSTEMS**

The course focuses on selected aspects of river water quality, including hillslope hydrology and the transport of pollutants, the impacts of human activities on water chemistry, nutrient transformations within stream ecosystems, and the effects of water quality on stream biological communities.

**Prerequisite:** AP/SC/GEOG 1400 6.00, ES/ENVS 2410 3.00, or SC/BIOL 2050 4.00.

**Course credit exclusions:** AS/SC/GEOG 4200 3.00

**Format:** Two lecture hours weekly, two lab hours every other week

**Required Reading:** To be announced.

**Assignments:** To be announced.

**Instructor:** To be announced.

---

### **AP/SC/GEOG 4205 3.00 - CLIMATOLOGY OF HIGH LATITUDES – NOT OFFERED IN FW2014-2015**

A study of the processes of energy and moisture exchanges in polar regions with emphasis on the Canadian north. Topics include atmospheric and oceanic transport of energy, surface microclimate and the sensitivity of high latitude environments to climate change.

**Prerequisites:** 54 credits successfully completed, including AP/SC/GEOG 2400 6.00 or written permission of the Instructor.

**Course credit exclusion:** AS/SC/GEOG 4205 3.00.

**Format:** Three lecture hours. One term.

**Required Reading:** On reserve in GRC (S403 Ross)

**Assignments:** Four laboratory exercises 40%, term paper 30%, seminar presentation 30%

**Instructor:** To be announced.

---

### **AP/SC GEOG 4210 3.00 – HYDROMETEOROLOGY**

A study of the relationship between the atmosphere and the hydrosphere with the emphasis on the process of evaporation. The course includes an in-depth review of evaporation models and the instrumentation necessary for data acquisition.

**Prerequisite:** AP/SC/GEOG 2400 6.00.

**Course credit exclusions:** AS/SC/GEOG 4210 3.00.

**Format:** Three lecture hours per week, one full-day laboratory session. One term.

**Required Reading:** To be announced.

**Assignments:** To be announced.

**Instructor:** R. Bello

---

### **AP/SC/GEOG 4215 3.00 - ECOLOGICAL CLIMATOLOGY – NOT OFFERED FW2014-2015**

The field of Ecological Climatology provides an interdisciplinary framework for understanding how terrestrial ecosystems function in relation to climate systems. It examines the physical, chemical and biological processes by which landscapes affect and are affected by climate. The central theme is that ecosystems, through their cycling of energy, water, chemical elements and trace gases are important determinants of climate. The coupling between climate and vegetation is seen at spatial scales from the leaf to biomes and at timescales from seconds to millennia. Both natural vegetation dynamics and human induced land-use changes are mechanisms of climate change. The course combines a theoretical understanding of ecological climatology with applied experimentation to reinforce the principals involved.

**Prerequisites:** AP/SC GEOG 2400 6.00; and either AP/SC GEOG 2500 3.00 or SC/BIOL 2050 4.00; and either AP/SC GEOG 2420 3.00 or SC/BIOL 2060 3.00 or permission of the Instructor.

**Course credit exclusion:** None.

**Format:** Two lecture hours and three laboratory hours per week

**Required Reading:** To be announced.

**Assignments:** To be announced.

**Instructor:** To be announced.

---

### **AP/GEOG 4220 3.00 - GEOGRAPHIES OF INDUSTRY: NEOLIBERAL ERA – NOT OFFERED IN FW2014-2015**

This course draws on contemporary institutional approaches and theories of regulation to interpret trends in industrial production and location in the current neoliberal age. Emphasis is put on concepts of: restructuring; the evolution of post-Fordist systems of production; new regional and global divisions of labour; neo-artisanal production; the emergence of new industrial spaces; cultural production; resource economies; and the social economy.

**Expanded Description:** This course examines the new geographies of industry that have emerged in the neoliberal age. An examination of changes in modes of production, and then of changes in the regulatory, institutional and cultural environment provides the base for interpreting a series of contemporary changes including: industrial restructuring; flexible, lean, neo-artisanal and other post-Fordist systems of production; various new divisions of labor; the emergence of new industrial spaces and the supply chains that them; the new resource economy in peripheral regions; learning regions, technopoles and hi-tech clusters; new global production arrangements; and the survival of informal work.

**Prerequisites:** 72 credits passed, including one of AP/ECON 1010 3.00, AP/ECON 3230 3.00, AP/GEOG 2100 6.00 (AP/GEOG 2105 3.00), AP/GEOG 2220 6.00, or written permission of the Instructor.

**Course credit exclusion:** AS/GEOG 4220 3.00.

**Format:** Three seminar hours per week.

**Required Reading:** Course pack plus online electronic readings.

**Assignments:** Two essays (each 1,500 words) (50%); final exam (40%); participation (10%).

**Instructor:** To be announced.

---

## **AP/GEOG 4240 3.00 - THE PLANNING OF URBAN PUBLIC FACILITIES**

**Theoretical and practical problems concerning the supply and distribution of public goods and services in urban areas.**

**Expanded Description:** Considerable interest is shown by academics, planners, politicians and the public in the provision of public goods and services to urban dwellers. These goods and services include: emergency services, social services, utilities, recreation, leisure, transportation and communications. Interest ranges from theoretical treatment of abstract optimization problems to practical issues of conflict resolution. All recognize that the problem of defining and searching for an ideal level of supply and style of distribution is complex because multiple criteria and goals must be considered. Not infrequently many individuals and groups are involved in the determination of the criteria and goals. The search process (involving collection of information) may be lengthy and costly, opinions and preferences may shift during the study, and conflicts can arise. Problems of a theoretical and practical nature concerning the production, consumption and distribution of public goods and services in urban areas will be examined using literature from geography, economics, political science, planning and operations research. Empirical examples for cities in North America will be used.

**Prerequisite:** AP/GEOG 1000 6.00 or AP/GEOG 1410 6.00 or AP/SOSC 2710 9.00 or written permission of the Instructor.

**Course credit exclusion:** AS/GEOG 4240 3.00.

**Format:** Three lecture hours weekly.

**Required Reading:** To be announced.

**Assignments:** To be announced.

**Instructor:** To be announced.

---

## **AP/GEOG 4250 3.0 - IMAGINED LANDSCAPES**

**This course examines the representation of landscapes in fictional literature, film, visual arts and music. Emphasis is placed on the power, purpose and problems of metaphor, symbolism and representation.**

**Prerequisite:** 72 credits successfully completed.

**Course credit exclusion:** AS/GEOG 4250 3.00.

**Format:** Three lecture hours weekly.

**Required Reading:** To be announced.

**Assignments:** To be announced.

**Instructor:** To be announced.

---

### **AP/GEOG 4260 3.00 - APPLIED TRANSPORTATION GEOGRAPHY - NOT OFFERED IN FW2014-2015**

**This course focuses on urban transportation planning and policy analysis as an area of research. It discusses the theoretical principles governing movement and planning, and analytically examines approaches to policy problems.**

**Expanded Description:** This course focuses on urban transportation planning and policy analysis. The major objective is to make students aware that:

- travel patterns are described such that they might be understood and behavior can be explained,
- the search for explanation should invoke some theory, which, when operationalized can be used to adjust or control a system, and
- the policy tools carry values as well as limitations.

**Prerequisites:** 84 credits successfully completed, including one of AP/GEOG 2100 6.00 (AP/GEOG 2105 3.00), AP/GEOG 2220 6.00.

**Course credit exclusion:** AS/GEOG 4260 3.00.

**Format:** Lectures and discussions/seminars.

**Required Reading:** A course reading kit must be purchased.

**Assignments:** Two written assignments (50%); term test (20%); and participation/seminar discussion (30%).

**Instructor:** To be announced.

---

### **AP/GEOG 4280 3.00 - IMAGINING TORONTO: LITERARY GEOGRAPHIES OF A CITY – OFFERED SUMMER 2014**

**This course explores intersections of literature and place in the Toronto region, exposing students to critical and imaginative works on place, culture, and representation. Close readings of a wide selection of Toronto-based literature are paired with critical scholarly works interrogating how places are invented, (re)presented, and (re)produced.**

**Prerequisite:** At least 84 credits successfully completed or permission of the instructor.

**Course credit exclusion:** AS/GEOG 4280 3.00.

**Format:** Three seminar hours per week.

**Required Reading:** Course kit.

**Assignments:** Four short pieces 40%, essay 40%, and participation 20%.

**Instructor:** To be announced.

---

### **AP/SC/GEOG 4290 3.00 - DIRECTED READING**

**This course may be used for individualized study, in which case the student requires permission from a faculty member who agrees to supervise the program of directed reading and from the Chair of the department.**

**Course credit exclusion:** AS/GEOG 4290 3.00.

**Note:** See the Faculty of Liberal Arts and Professional Studies section of the Undergraduate Programs Calendar for Faculty of Liberal Arts and Professional Studies regulations on Independent Reading Courses.

**Only topics in physical geography are eligible for Science (SC) credit.**

**Application Process:** An application form is available in the Department of Geography Undergraduate Program Office, N430 Ross.

**Application Deadline:**

- June 30 (Fall Term)
  - October 31 (Winter Term)
  - March 31 (Summer Term)
-

## **AP/SC/GEOG 4290 6.00 - DIRECTED READING**

**This course may be used for individualized study, in which case the student requires permission from a faculty member who agrees to supervise the program of directed reading and from the Chair of the department.**

**Course credit exclusion:** AS/GEOG 4290 6.00.

**Note:** See the Faculty of Liberal Arts and Professional Studies section of the Undergraduate Programs Calendar for Faculty of Liberal Arts and Professional Studies regulations on Independent Reading Courses.

**Only topics in physical geography are eligible for Science (SC) credit.**

**Application Process:** An application form is available in the Geography Main Office, N430 Ross.

**Application Deadline:** June 30

---

## **AP/SC/GEOG 4310 3.00 - DYNAMICS OF SNOW AND ICE – NOT OFFERED FW2014-2015**

**This course examines the formation, distribution, structure and degradation of snow, as well as lake, river and sea ice.**

**Expanded Description:** In this course the occurrence and distribution, formation and degradation and the environmental consequences of snow, lake, river and sea ice are examined. Additional components of the cryosphere such as massive ice, ground ice and glaciers will be discussed. Physical processes and fieldwork are emphasized in the course.

**Prerequisite:** AP/SC/GEOG 2400 6.00.

**Course credit exclusion:** AS/GEOG 4310 3.00.

**Format:** Two lecture hours and three lab hours every week. One term.

**Required Reading:** To be announced.

**Assignments:** To be announced.

**Instructor:** To be announced.

---

## **AP/SC/GEOG 4340 3.00 – GEOINFORMATICS: GIS II**

**Advanced course in geographic information systems (GIS), oriented around raster structures. Computer graphics for mapping introduced and work undertaken on finely divided surfaces. GIS considers both practical and theoretical questions of interpretation. Macintosh computers and raster-based software used for hands-on focus.**

**Expanded Description:** Advanced course in Geographic Information Systems (GIS), will cover: the fundamental concepts of spatial data management and spatial data models involved in modern GIS, file structures and management with ArcCatalog, GIS database construction and georeferencing with ArcScan, vector and raster-based spatial analysis and spatial decision support techniques. This course will present students with the fundamental concepts and advanced techniques of ArcGIS. It will also prepare students for applying GIS-based techniques to hand spatial data in various fields. ArcGIS and various extensions will be used for hands-on exercises. Application examples include site selection, predictive mapping, watershed-based hydrological modeling, stream network analysis, and environmental planning.

**Prerequisite:** AP/SC/GEOG 3180 3.00, AP/SC GEOG 3340 3.00

**Course credit exclusion:** AS/GEOG 4340 3.00.

**Format:** Two lecture hours, and two laboratory hours per week. One term

**Required Reading:** To be announced.

**Assignments:** To be announced.

**Instructor:** Q. Cheng

---

### **AP/GEOG 4380 3.00 - URBAN SOCIAL POLICY**

**A critical examination of the links between urban social problems and state policies. The course studies how policy makers, planners and geographers understand and deal with social problems in the contemporary city and evaluates selected planning policies.**

**Expanded Description:** This course explores the linkages among the geographies of inequalities, state policies and civil society. We will review a variety of theoretical and methodological approaches that uncover the contested meaning of social policy and note its variations over time and space. Some questions of concern relate to: how are marginal groups discriminated in the city? Is the urban form and design of cities exclusionary in nature? How do societies provide for social welfare that is in need of an equitable, educated, healthy and socially cohesive citizenry? The focus will be on urban areas and particular emphasis is placed on the Canadian experience, although some examples are drawn from other regions of the world.

**Prerequisites:** 84 credits successfully completed, including one of AP/GEOG 1000 6.00, AP/GEOG 1410 6.00, and at least six additional credits in human geography at the 2000 or 3000 level.

**Course credit exclusion:** AS/GEOG 4380 3.00.

**Format:** Two lecture hours followed by one seminar hour.

**Required Reading:** To be announced.

**Assignments:** To be announced.

**Instructor:** M.J. Kwak

---

### **AP/GEOG 4395 3.00 - ASIA PACIFIC DEVELOPMENT: GEOGRAPHICAL PERSPECTIVES**

**This course examines socio-economic development in the Asian-Pacific region from a Canadian prospective. In particular, the course focuses on geographical flows of migration, trade, investment and aid between Canada and Asia, and corresponding social, political and economic changes in Asian societies.**

**Expanded Description:** The rapid transformation of societies in East and Southeast Asia represents one of the most important shifts in the geographical structure of the global economy in recent decades. Development in the countries of the Asia-Pacific region is, however, the product of global linkages as well as internal socio-economic and political change. This course explores such linkages and focuses upon those that integrate and implicate Canada in the socio-economic development of the region. In particular, the course examines the geographical flow of migration, trade, investment, and aid between Asia and Canada, and relates these flows to social and economic change in Asian societies. Topics to be covered will include: approaches to understanding Pacific Asian development; the construction of Pacific regionalism; development and restructuring processes in East and Southeast Asian societies; the social and economic dimensions of Canadian aid and human rights advocacy in Asia. Students will have opportunities to conduct studies of the Asian communities that have emerged in Toronto, and their place of origin.

**Prerequisites:** 84 credits successfully completed or written permission of the Instructor.

**Course credit exclusions:** AS/GEOG 4395 3.00.

**Format:** Two lecture hours and one tutorial hour per week.

**Required Reading:** To be announced.

**Assignments:** To be announced.

**Instructor:** M.J. Kwak

---

### **AP/SC/GEOG 4400 3.00 - PHYSICAL HYDROLOGY AND WATER RESOURCES**

**An intermediate course in the physical principles of hydrological and water resource systems. Topics to be discussed include groundwater storage and flow, deterministic hydrological models and physical hydrological aspects of current water resource problems.**

**Expanded Description:** The course examines the physical principles of hydrological and water resource systems. Emphasis is placed on developing a conceptual understanding of:

- the movement and storage of surface and ground water in the Canadian environment;
- basic deterministic modelling of hydrological processes; and
- physical hydrological aspects of current “hot” issues in water resources such as global change, ecohydrology and contaminant flow.

**Prerequisite:** AP/SC/GEOG 2400 6.00.

**Course credit exclusions:** AS/GEOG 4400 3.00

**Format:** Two lecture hours, two laboratory hours. One term.

**Required Reading:** To be announced.

**Assignments:** To be announced.

**Instructor:** To be announced.

---

### **AP/SC/GEOG 4410 3.00 - DESERT ECOSYSTEMS**

**This course focuses on the vegetation of the desert, species adaptations to high temperature and aridity and the interactions between organisms, and between plants and their environment.**

**Prerequisites:** One of: AP/GEOG 1400 6.00 or SC/BIOL 2050 6.00.

**Course credit exclusion:** AS/GEOG 4410 3.00.

**Format:** To be announced.

**Required Reading:** To be announced.

**Assignments:** To be announced.

**Instructor:** T. Drezner

---

### **AP/SC/GEOG 4420 3.00 - PROJECT EXPERIENCE IN GEOGRAPHY - NOT OFFERED FW2014-2015**

**This course enables Honours students to apply work experience in geography to their degree program. It provides students an opportunity to put their classroom learning into practice in a non-academic environment. The objective is to encourage students to put geographic skills to work in the addressing of real world problems.**

**Prerequisites:** Permission of the Instructor. Students must be registered in an Honours Geography Program and must have successfully completed at least 84 credits, including AP/SC/GEOG 3420 3.00.

**Course credit exclusion:** AS/GEOG 4420 3.00.

**Format:** To be announced.

**Required Reading:** To be announced.

**Assignments:** To be announced.

**Instructor:** To be announced.

---

## **AP/SC/GEOG 4440 3.00 – GEOINFORMATICS: REMOTE SENSING II**

**Sophisticated methods and techniques for collecting, processing and analyzing remote sensing data are examined. Special topics include image enhancement techniques (e.g. texture transforms), non-traditional image classification and data integration for incorporation of remote sensing data products into geographic information systems (GIS).**

**Expanded Description:** This course aims to provide every student with a working knowledge of sophisticated methods and techniques for collecting, processing and analyzing remote sensing data along with the theories and practices of undertaking remote sensing projects. Throughout the course, emphasis will be placed on image processing, image analysis, image classification, and data integration. The goal is to apply remote sensing in geographical analysis and environmental monitoring. This course is composed of lectures, laboratories, individual and group analysis, a term paper, and student presentations.

**Cross-listed: ES/ENVS 4521 3.00**

**Prerequisite:** AP/GEOG 3440 3.00 or ES/ENVS 3521 3.00 or LE/EATS 4220 3.00 or written permission of the Instructor.

**Course credit exclusion:** AS/GEOG 4440 3.00.

**Format:** Two lecture hours and two laboratory hours per week.

**Required Reading:** To be announced. Supplementary articles will be provided.

**Assignments:** Two assignments 25%, weekly lab exercises 5%, group presentation 10%, term paper 45%, and test 15%.

**Instructor:** T. Rimmel

---

## **AP/SC/GEOG 4500 3.00 - NORTHERN FOREST ENVIRONMENTS – NOT OFFERED FW2014-2015**

**An examination of the northern forested regions of Canada: Coastal, Subalpine, Montane, Columbian, Boreal, Great Lakes-St. Lawrence and Acadian Forests. Various aspects of each region are explored, including vegetation composition and development, environmental conditions and major disturbance regimes.**

**Prerequisites:** 84 credits successfully completed, including AP/SC/GEOG 2420 3.00, and AP/SC/GEOG 2500 3.00 or SC/BIO 2050 4.00 or permission of the Instructor.

**Course credit exclusion:** AS/GEOG 4500 3.00.

**Format:** Two lecture hours, two laboratory hours. One term.

**Required Reading:** To be announced.

**Assignments:** To be announced.

**Instructor:** To be announced.

---

## **AP/GEOG 4520 3.00 - RESEARCH DESIGN AND FIELD STUDIES IN HUMAN GEOGRAPHY**

This course puts into practice what students have learned in GEOG 3520 3.00: Designing and Conducting research in Human Geography. The course integrates on-campus preparation, data analysis and report writing with off-campus fieldwork during which data collection and preliminary analysis are carried out. The fieldwork relates to a geographic problem offering scope for the special interests of students in various aspects of Geography.

**Prerequisites:** Students must be registered as Honours majors in Geography and must have successfully completed 54 credits, including AP/SC GEOG 1400 6.00 or AK GEOG 2510 6.00, AP/GEOG 1000 6.00 or AP/GEOG 1410 6.00 or AK/GEOG 2500 6.00; AP/SC GEOG 2420 3.00 and AP/GEOG 3520 3.00; or permission of the course director.

**Course credit exclusions:** AK/MATH 3330 3.00, AS/SC/GEOG 3390B 3.00 (prior to Fall/Winter 2002-2003), AS/GEOG 3420 3.00 (prior to Fall/Winter 2007-2008), AS/GEOG 4520 3.00 and AS/SC/GEOG 4540 3.00.

**Format:** A combination of lectures, workshops, seminars and field trip.

**Required Reading:** To be announced.

**Assignments:** To be announced.

**Instructor:** R. Anderson (W), TBA, J. Mensah

**\*\*ADDITIONAL FEES MAY BE INCURRED TO COVER THE EXPENSE OF TRANSPORTATION AND ACCOMMODATION FOR OUT-OF-TOWN FIELD TRIPS. \*\* PLEASE CONTACT THE DEPARTMENT OF GEOGRAPHY UNDERGRADUATE PROGRAM OFFICE (N430 ROSS) FOR ADDITIONAL DETAILS.**

---

## **AP/SC/GEOG 4541 3.00 - ADVANCED FIELD STUDIES IN PHYSICAL GEOGRAPHY – OFFERED SUMMER 2014**

This course applies geographic principles and field techniques to problems in physical geography during a field trip of at least one weeks duration to a location outside of Ontario.

**Prerequisites:** AP/GEOG 1400 6.00, AP/GEOG 2420 3.00. **\*\*AP/GEOG 3540 3.00 recommended\*\***

**Priority will be given to Geography Honours and Environmental Science students having already completed 84 credits.**

**Course credit exclusions:** None.

**Format:** To be announced.

**Required Reading:** To be announced.

**Assignments:** To be announced.

**Instructor:** To be announced.

---

## **AP/SC/GEOG 4600 3.00 - RIVERS: ENVIRONMENT AND PROCESS**

This course provides fundamental knowledge of river mechanics and related environmental conditions. It provides an integration of physical, environmental and spatial aspects of river behaviour. The course involves the application of principles of hydrology, geomorphology, sedimentology and fluid mechanics.

**Course credit exclusion:** AS/GEOG 4600 3.00.

**Format:** To be announced.

**Required Reading:** Robert, A. 2003. River Processes. Arnold.

**Assignments:** To be announced.

**Instructor:** A. Robert

---

### **AP/GEOG 4605 3.00 - THE GREATER TORONTO AREA – A GEOGRAPHICAL PERSPECTIVE – OFFERED SUMMER 2014**

This course examines the processes and issues of urban growth and change in the Greater Toronto Area, including the forces shaping growth, the consequences of growth, and planning initiatives/proposals for managing growth.

**Prerequisite:** 72 credits successfully completed or permission of the Instructor.

**Course credit exclusion:** AS/GEOG 4605 3.00.

**Format:** Three seminar hours per week

**Required Reading:** To be announced.

**Assignments:** To be announced.

**Instructor:** To be announced.

---

### **AP/GEOG 4610 3.00 - GEOPOLITICS**

This course examines the geographic basis of the political evolution of the nation-state, from its emergence in Western Europe to its varied diffusions throughout the world. It explores notions of turf and territory, nationalism and the growth of geopolitical awareness.

**Expanded Description:** This course examines how concepts and practices of turf, territory, nationalism and the nation-state have come to order the world and dominate its politics. A central focus of the course is on the 'state', and how it has altered its geographical expression over the past half-millennium. This focus will be used to explore the structure and evolution of the geopolitical map of the world into the transnational, and perhaps postnational, 21st century.

**Prerequisites:** At least 72 credits successfully completed, including AP/GEOG 1000 6.00 or AP/GEOG 1410 6.00.

**Course credit exclusion:** AS/GEOG 4610 3.00.

**Format:** Three hours per week of combined lecture and discussion.

**Required Reading:** O'Tuathail et al., The Geopolitics Reader. Other readings will be available on reserve.

**Assignments:** To be announced.

**Instructor:** T. Sturm

---

### **AP/GEOG 4700 3.00 - THE CRITICAL GEOGRAPHIES OF EDUCATION – NOT OFFERED FW2014-2015**

This course explores the complex interactions between education, space and civil society. Particular emphasis is placed on the effects of policy restructuring on the geographies of educational landscapes. Theoretical and empirical studies are used to explore, analyze and critically engage in current debates.

**Prerequisite:** 72 credits successfully completed including one of AP/GEOG 1410 6.0, AP/GEOG 1000 6.0 or written permission of the Instructor.

**Course credit exclusion:** AS/GEOG 4700 3.00.

**Format:** Three seminar hours per week.

**Required Reading:** To be announced.

**Assignments:** Assignment 1 (15%); Assignment 2 (15%); Presentation (20%); Class Participation (20%); Final Research Paper (30%).

**Instructor:** To be announced.

---

### **AP/GEOG 4750 3.00 - GEOGRAPHY OF DISABILITIES**

**This course explores the inter-relationships between disability, space and environment. It investigates the ways in which these have been treated in the social science literature, examines both individual and collective experiences, explores aspects of planning and design, especially in cities, and seeks paths towards an enabling geography.**

**Prerequisites:** AP/GEOG 1000 6.00 or AP/GEOG 1410 6.00, and 72 credits successfully completed or permission of instructor.

**Course credit exclusion:** AS/GEOG 4750 3.00.

**Format:** Three seminar hours per week.

**Required Reading:** To be announced.

**Assignments:** Two tests 15% each, short assignment 15%, major paper 40%, participation 15%

**Instructor:** J. Radford

---

### **AP/GEOG 4800 3.00 - GEOGRAPHIES OF ORGANIZED LABOUR – NOT OFFERED FW2014-2015**

**This course explores the contemporary struggles of workers and their institutions to remain relevant actors in the making of economic landscapes. The central theme is the dynamic and multi-scalar nature of organized labour's response to aggressive and increasingly mobile capital.**

**Expanded Description:** Geographies of Organized Labour examines the struggles of workers and their institutions to remain relevant actors in the shaping of contemporary economic landscapes. The focus of the course is largely on the experience of workers and unions in Canada, the US, Britain and Australia. The first part of the course establishes the theoretical foundations for understanding the attack on organized labour by capital and neo-liberal states from a geographical perspective. The current spatial mismatch between increasingly global capital and 'local' organized labour will be addressed. The bulk of the course will focus on workers' concerted efforts to regulate capital and shape economic production to its advantage through organizing (and, in many cases, reorganizing) at multiple scales, from the home and the worksite to the formation of international networks. The course will examine new spatial formations from community unionism and Living Wage Campaigns to Global Unionism. At the completion of the course students will appreciate the multi-scalar actions of organized labour to remain relevant in the 21<sup>st</sup> century.

**Prerequisite:** 72 credits successfully completed.

**Course credit exclusion:** AS/GEOG 4800 3.00.

**Format:** Three seminar hours per week

**Required Reading:** To be announced.

**Assignments:** To be announced.

**Instructor:** To be announced.

---

### **AP/GEOG 4850 3.00 - THE STATE, CIVIL SOCIETY AND SPACES OF DEVELOPMENT**

**This course deals with theoretical and empirical understandings of the ways in which the state and civil society organizations co-determine the geography of development.**

**Prerequisites:** 72 credits successfully completed, including one of AP/GEOG 1410 6.00 or AP/GEOG 2100 3.00 or written permission of the Instructor.

**Course credit exclusion:** AS/GEOG 4850 3.00.

**Format:** Three seminar hours per week.

**Required Reading:** To be announced.

**Assignments:** Participation 20%, Mid-term 25%, Research Paper 25%, Take-home exam 30%

**Instructor:** To be announced.

---

## **AP/GEOG 4880 3.00 - SPACES OF CONFLICT, VIOLENCE, AND POWER**

**This course examines the spatial aspects of conflict, violence, and power across various scales from the body to the transnational arena. Topics include territory and state violence, terrorism, forced migration, environmental conflict, and the spatial dimensions of resisting violence.**

**Expanded Description:** In this course we will examine the spatial dimensions of conflict, violence, and power across various scales from the body to the nation-state and transnational arena. We begin with the premise that space is not simply the static backdrop upon which conflict unfolds and power relations play out. We will examine, rather, how conflict, violence, and power relations emerge from particular spatial relations such as territorial boundaries and access to environmental resources. We will investigate, moreover, how conflict, violence, and power relations reshape spaces, from the redrawing of territorial boundaries to the emergence of warscapes, prisons, and traumatized bodies. Building from this, we will investigate the ways in which goods, capital, and people move across—as well as create—spaces of conflict by looking at forced migration and displacement and extractive economies such as those of diamonds and oil. Ultimately, by bringing space, violence, and power into conversation, we will attempt to unearth and understand some of the root causes of conflict and violence in the modern world and what might be done to prevent and address them.

**Prerequisite:** 72 credits successfully completed.

**Course credit exclusions:** AS/GEOG 4880 3.00.

**Format:** Three hours per week; seminar/discussion.

**Required Reading:** Course kit

**Assignments:** Research paper 40%, presentation 10%, six short reading commentaries 25%, and participation 25%

**Instructor:** U. Best

---

## **AP/GEOG 4900 3.00 - PUBLIC SPACE**

**This course examines the existence, genealogies, qualities, significance, and use of public space, as well as past and emergent challenges and threats to public space.**

**Expanded Description:** This course examines the ways in which the meaning and the purpose of public space have been (re)defined and (re)shaped in contemporary Western cities. We will critically reflect on the implications of the private production of a traditionally public amenity and on the implications of the increase in consumption, corporate branding, security, and surveillance in public space. Through discussion we will debate the qualities, significance, and use of public space in order to determine whose space is public space. Artists working with public space as a medium are at the forefront of many of the themes addressed in the course and provide compelling and playful examples to illustrate course material

**Prerequisite:** 72 credits successfully completed.

**Course credit exclusions:** AS/GEOG 4900 3.00

**Format:** Three seminar hours per week.

**Required reading:** PDF articles available on-line on Moodle.

**Assignments:** Participation 20%; on-line journal entries 20%; research paper 30%; and research paper 30%

**Instructor:** A. Bain

---