

Geography: know your world

Table of Contents

Table of Contents	3
Introduction	5
What York Geography (& Environmental Science) Offers You	5
Social Media	6
Contact Us	7
Faculty (Full-time)	8
Faculty (Contract)	10
Faculty (Retired – Teaching)	10
Staff	11
General Information	12
Advising	12
Enrolment, Prerequisites, and Co-requisites	12
Course credit exclusions and equivalents	13
Grade point equivalencies and averages	13
Requests for reappraisal of final grades	14
Deferred standing and petitions	14
Academic honesty	15
Course evaluations	15
Email address	15
Facilities	17
Geographic Resource Centre (GRC)	17
Map library	17
GIS lab – undergraduate computing laboratory	17
	10
Physical geography laboratory facilities	то
Physical geography laboratory facilities Student representation on Department of Geography committees	18
Physical geography laboratory facilities Student representation on Department of Geography committees Geography and Environmental Science society at York (GESS@Y)	18 18 18
Physical geography laboratory facilities Student representation on Department of Geography committees Geography and Environmental Science society at York (GESS@Y) Bursaries, awards, and prizes	18 18 18 19
Physical geography laboratory facilities Student representation on Department of Geography committees Geography and Environmental Science society at York (GESS@Y) Bursaries, awards, and prizes John Warkentin Bursary	18 18 18 19 19
Physical geography laboratory facilities Student representation on Department of Geography committees Geography and Environmental Science society at York (GESS@Y) Bursaries, awards, and prizes John Warkentin Bursary Canadian Association of Geographers (CAG) Award	18 18 18 19 19 19
Physical geography laboratory facilities Student representation on Department of Geography committees Geography and Environmental Science society at York (GESS@Y) Bursaries, awards, and prizes John Warkentin Bursary Canadian Association of Geographers (CAG) Award George Michie Memorial Scholarship	18 18 18 19 19 19 19
Physical geography laboratory facilities Student representation on Department of Geography committees Geography and Environmental Science society at York (GESS@Y) Bursaries, awards, and prizes John Warkentin Bursary Canadian Association of Geographers (CAG) Award George Michie Memorial Scholarship Hans Carol Prize	18 18 18 19 19 19 19 20
Physical geography laboratory facilities Student representation on Department of Geography committees Geography and Environmental Science society at York (GESS@Y) Bursaries, awards, and prizes John Warkentin Bursary Canadian Association of Geographers (CAG) Award George Michie Memorial Scholarship Hans Carol Prize Science Geography Book Prize	18 18 19 19 19 19 19 20 20
Physical geography laboratory facilities Student representation on Department of Geography committees Geography and Environmental Science society at York (GESS@Y) Bursaries, awards, and prizes John Warkentin Bursary Canadian Association of Geographers (CAG) Award George Michie Memorial Scholarship Hans Carol Prize Science Geography Book Prize Faculty of Liberal Arts & Professional Studies Geography Book Prize	18 18 19 19 19 19 20 20 20
Physical geography laboratory facilities Student representation on Department of Geography committees Geography and Environmental Science society at York (GESS@Y) Bursaries, awards, and prizes John Warkentin Bursary Canadian Association of Geographers (CAG) Award George Michie Memorial Scholarship Hans Carol Prize Science Geography Book Prize Faculty of Liberal Arts & Professional Studies Geography Book Prize First Year Awards	18 18 19 19 19 19 20 20 20 20
Physical geography laboratory facilities Student representation on Department of Geography committees	18 18 19 19 19 19 20 20 20 20 20
Physical geography laboratory facilities Student representation on Department of Geography committees Geography and Environmental Science society at York (GESS@Y) Bursaries, awards, and prizes John Warkentin Bursary Canadian Association of Geographers (CAG) Award George Michie Memorial Scholarship Hans Carol Prize Science Geography Book Prize Faculty of Liberal Arts & Professional Studies Geography Book Prize First Year Awards Award for Field-based Research in Physical Geography.	18 18 19 19 19 19 20 20 20 20 20 20
Physical geography laboratory facilities Student representation on Department of Geography committees	18 18 18 19 19 19 19 20 20 20 20 20 20 21
Physical geography laboratory facilities Student representation on Department of Geography committees. Geography and Environmental Science society at York (GESS@Y) Bursaries, awards, and prizes. John Warkentin Bursary Canadian Association of Geographers (CAG) Award. George Michie Memorial Scholarship Hans Carol Prize Science Geography Book Prize Faculty of Liberal Arts & Professional Studies Geography Book Prize First Year Awards Award for Field-based Research in Physical Geography. Accessing help on campus.	
Physical geography laboratory facilities Student representation on Department of Geography committees	
Physical geography laboratory facilities	
Physical geography laboratory facilities	
Physical geography laboratory facilities Student representation on Department of Geography committees Geography and Environmental Science society at York (GESS@Y) Bursaries, awards, and prizes John Warkentin Bursary Canadian Association of Geographers (CAG) Award George Michie Memorial Scholarship Hans Carol Prize Science Geography Book Prize Faculty of Liberal Arts & Professional Studies Geography Book Prize First Year Awards Award for Field-based Research in Physical Geography Accessing help on campus Overview of requirements Degrees offered Bachelor's Degrees (90 Credits) Bachelor's Honours Degrees (120 Credits) Certificate programs offered Co-registration in the Faculty of Education	
Physical geography laboratory facilities Student representation on Department of Geography committees. Geography and Environmental Science society at York (GESS@Y) Bursaries, awards, and prizes. John Warkentin Bursary Canadian Association of Geographers (CAG) Award. George Michie Memorial Scholarship Hans Carol Prize Science Geography Book Prize Faculty of Liberal Arts & Professional Studies Geography Book Prize First Year Awards. Award for Field-based Research in Physical Geography. Accessing help on campus. Overview of requirements Bachelor's Degrees (90 Credits). Bachelor's Honours Degrees (120 Credits). Certificate programs offered Co-registration in the Faculty of Education.	
Physical geography laboratory facilities Student representation on Department of Geography committees. Geography and Environmental Science society at York (GESS@Y) Bursaries, awards, and prizes. John Warkentin Bursary Canadian Association of Geographers (CAG) Award. George Michie Memorial Scholarship. Hans Carol Prize Science Geography Book Prize Faculty of Liberal Arts & Professional Studies Geography Book Prize First Year Awards. Award for Field-based Research in Physical Geography. Accessing help on campus. Overview of requirements Degrees offered Bachelor's Degrees (90 Credits). Bachelor's Honours Degrees (120 Credits). Certificate programs offered. Co-registration in the Faculty of Education. Geography Theme Areas. The City	
Physical geography laboratory facilities Student representation on Department of Geography committees	
Physical geography laboratory facilities	

Extreme Environments
Geography courses and theme areas
Degree and program checklists34Bachelor of Arts (BA) – Geography (90 Credits)34Bachelor of Arts (BA) Honours – Geography Major (120 Credits)35Bachelor of Arts (BA) Specialized Honours – Geography Major (120 Credits)36Bachelor of Arts (BA) Specialized Honours – Geography and Urban Studies (120 Credits)37Bachelor of Arts (BA) – Double Major (120 Credits)38Bachelor of Arts (BA) Major/Minor – Geography Major (120 Credits)39Bachelor of Arts (BA) Major/Minor – Geography Major (120 Credits)40International Bachelor of Arts (iBA) – Geography Major (Honours iBA) (120 Credits)41
(120 Credits)
Certificates45Geographic Information Systems and Remote Sensing45Urban Studies46Refugee and Migration Studies47
1000 LEVEL COURSES
2000 LEVEL COURSES
2000 LEVEL COURSES

Information within this supplemental calendar may change throughout the year without notice. For timely updates, please consult our website or contact the Department of Geography office:

geography.laps.yorku.ca

For information on course availability, scheduling, and room locations, please refer to the on-line lecture schedule, accessible via my.yorku.ca:

currentstudents.yorku.ca

Introduction

What York Geography (& Environmental Science) Offers You

As one of the oldest academic disciplines, geography is intertwined in virtually everything we do. As geographers, we focus on building an understanding of both the natural and human-built surface of our planet and how these interact to create the rich and complex environments within which we live. We study the terrestrial, aquatic, and atmospheric spheres which we inhabit, within which we move and interact, and the processes that continuously, both slowly and rapidly, reshape the Earth's surface, generate weather patterns, and redistribute energy and resources. We study how human activity has profoundly shaped the earth, giving rise to our cities, suburbs, farms, and even countries. In this respect, we also investigate the complex flows of people, goods, money, and ideas that continually reshape our world. We develop skills with the rapidly developing digital and quantitative technologies that allow us to measure, represent, interpret, and analyze the environments, phenomena, and processes that we study.

Our programs seek to connect the physical and human components of our existence by examining some of the most pressing contemporary concerns. We dissect the causes and impacts of climate change, unequal access to resources, the extraction and depletion or natural resources, and the precarious states of energy and food security. We seek to understand the causes of geographical phenomena as diverse as threats to biodiversity conservation, mass human migrations, and the impacts poverty and inequality have on urban systems and sustainability. We study the causes, consequences, and implications of human and natural processes on urban and regional development, the state of our being, and that of our environment.

We are committed to experiential learning, fieldwork, and the implementation of methods and technologies that address real-world challenges. We immerse our students in the subject matter they study, from the streets of Toronto and streams of the Arctic to the bustling cities and rural landscapes of Asia, Africa, and beyond. Our goal is to both provide a rich environment for learning that connects you with passionate instructors, vast resources, modern facilities, and unique experiences. We work to prepare our students for future employment and for life as an educated, informed, and skilled citizen of the world. We invite you to join us.

Geography: know your world

The Department of Geography Office and Administrators can be reached by calling 416-736-5107

Department Chair Professor Philip Kelly: geochair@yorku.ca

Undergraduate Program Director Associate Professor Steven Tufts: geoupd@yorku.ca

Environmental Science Coordinator Associate Professor Taly Drezner: <u>drezner@yorku.ca</u>

Social Media

The Department of Geography is active on social media and we invite you to follow us on Facebook and Twitter, and to regularly check our website for the latest information regarding activities, courses, achievements, and opportunities. If you have something to share, be sure to tag us in your posts and reach a wider audience. Some instructors use courses code hashtags to facilitate the distribution of course-related content on social media (e.g., **#GEOG2340**).



geography.laps.yorku.ca



www.facebook.com/YorkUGeography



@YorkGeography

Contact Us

Send us mail:

Department of Geography N 430 Ross Building York University 4700 Keele Street Toronto, Ontario, Canada, M3J 1P3

Send us email:

lapsgeog@yorku.ca

Contact the Department of Geography by phone or fax:

Telephone:	+1-416-736-5107
Fax:	+1-416-736-5988
Extensions:	+1-416-736-2100 (provide extension when requested)

Geographic Coordinates:

Latitude and Longitude:	43° 46' 23.200"N, 79° 30' 15.256"W
UTM:	17N 620378 4847760
what3words:	outer.circular.short

Faculty (Full-time)

Name	Rank	E-mail	Extension	Office	Interests
Bain, Alison L	Associate Professor	abain@yorku.ca	66192	RN 422	Arts and culture, gender issues, urban geography, arts- led urban redevelopment, geographies of artistic labour and creative practice, geographies of sexualities, feministpedagogies
Basu, Ranu	Associate Professor	ranubasu@yorku.ca	22436	RN 403	Urban social and political geography and planning, neoliberalization of public education in Ontario, critical geographies of education, diversity and public space, immigrant and refugee communities, community organization, urban demography and neighbourhoods, critical GIS
Bello, Richard	Associate Professor & Environmental Science Coordinator	bello@yorku.ca	22561	RN 408	Global and climate change, climate science, northern environments, carbon dynamics
Birch, Kean	Associate Professor	kean@yorku.ca	30126	RS 763A	Innovation, science and technology, bio-economy and biofuels, hi-tech finance, infrastructure
Das, Raju	Professor	rajudas@yorku.ca	22450	RS 411	Regional and industrial development, geographically uneven capitalist development, working class, poverty, Agrarian change, globalization, developmental policies of the state; radical social movements; social capital, the state, and capitalist development under imperialism, space-society relations, critique
Drezner, T	Associate Professor	drezner@yorku.ca	20511	RS 408	Deserts and arid lands, plant-climate interactions, disturbance and invasion
Hyndman, Jennifer	Professor	jhyndman@yorku.ca	33689	KR 849	Violence, forced migration/immigration, humanitarian aid in response to conflict/asylum/disasters, refugee (re)settlement

Name	Rank	E-mail	Extension	Office	Interests
Jenkins, William	Associate Professor	wjenkins@yorku.ca	22488	RS 410	Immigration, history, transnational studies, nationalism
Kelly, Philip	Professor	pfkelly@yorku.ca	22499	RN 418A	Immigration, Philippines, Southeast Asia, labour
Korosi, Jennifer	Assistant Professor	jkorosi@yorku.ca	22491	RN407	Environment, global/climate change, limnology, biogeography, biogeochemistry
Lunstrum, Elizabeth	Associate Professor	lunstrum@yorku.ca	46010	KT 739	Political ecology of international borders and conflict spaces, people-park relations, militarization of conservation, wildlife crime, environmental displacement, conservation and human rights abuses, Aboriginal rights, migration and mobility, territorialization and land grabs, Southern Africa, North America
Mensah, Joseph	Professor & Department Chair	jmensah@yorku.ca	66344	RN413A	Regional and industrial development, culture and cultural studies
Preston, Valerie	Professor	vpreston@yorku.ca	22421	RS 412	Immigration, gender issues, urban labour and housing markets
Remmel, Tarmo	Associate Professor & UPD	remmelt@yorku.ca	22496 Lab: 66187	RN 423	GIScience, remote sensing, GIS, spatial pattern analysis, boreal forest disturbances, scale
Tufts, Steven	Associate Professor	tufts@yorku.ca	20745	RN 425	Labour, populism, labour market adjustment and integration, work, and climate change
Vandergeest, Peter	Professor & GPD	pvander@yorku.ca	66191	RN 405	Political ecology, agrofood systems, cultural politics of development, environmental certification, Southeast Asia, Thailand
Wood, Patricia	Professor	pwood@yorku.ca	22448	RS 409	Citizenship and identity; Native studies; immigration and multiculturalism; urban, feminist, and historical geographies; Western Canada
Young, Kathy	Professor	klyoung@yorku.ca	22371	RN 415	Environment, Arctic hydrology, Arctic wetland hydrology, extreme environments

Faculty (Contract)

Name	Rank	E-mail	Extension	Office	Interests
Anderson,		anderson@yorku.ca	22454	RN 412	Environmental history, historical geography of air
Richard					pollution
Code, Lewis		lcode@yorku.ca	77815	CC 306	Urban economic geography, financial services industry in
					North America
Long, Peter		long@yorku.ca	22429	RN 413	Geomorphology, sedimentology, paleoecology,
					archaeology

Faculty (Retired – Teaching)

Name	Rank	E-mail	Extension	Office	Interests
Mahaney, William	Professor	mahaney@yorku.ca			Quaternary stratigraphy/soils, planetary
					geology/geomorphology,glacial
					geology/geomorphology, and paleoclimatology
Radford, John	Professor	johnrad@yorku.ca	33648	RS 404C	Social geography of the nineteenth century city, internal
					structure of cities, public policy and intellectual disability

Staff

Name	Position	E-mail	Extension	Office
Cheema, Khansa	Administrative Assistant	kcheema@yorku.ca	22490	RN 419
Ko, Connie	Computer Laboratory Technician (GIS/RS)	cko@yorku.ca	20290	RN 302
Langat, Jackson	Laboratory Technician (Lumbers Lab)	jlangat@yorku.ca	22418 Lab: 30395	LUM 105
Mojdehi, Patrick	LaboratoryTechnician	mojdehip@yorku.ca	33784	RN 305
Ralph, Anne	Undergraduate Program Assistant	anner@yorku.ca	22460	RN 430
Vong, Le	Undergraduate Program Secretary	lvong783@yorku.ca	55107	RN 430
Walton, Laura	Geographic Resource Centre Coordinator	lwalton@yorku.ca	22419	RS 403
Yim, Yvonne	Graduate Program Assistant	yvonney@yorku.ca	55106	RN 431

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 their 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 "Important Dates" published by the Registrar's Office each year, especially course change and drop deadlines

Advising is arranged through the Undergraduate Program Office by making an appointment. Appointments for general program enquiries and when needed, special advising can be made at the by email or phone, or by visiting RN 430.

Students are encouraged to have advising appointments on an annual basis. Special attention to courses, grade point averages (GPA) and degree-requirements should be given in your graduating year. Students in most programs have access to an online tool that tracks their progress through their degree.

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 Co-requisites

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. It is your responsibility to obtain this permission, although this should be the exception rather than the norm. 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 (RN 430). 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 a 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 graduation assessment.

Grade point equivalencies and averages

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

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

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.

Use the GPA Calculator tool to compute your GPA laps.yorku.ca/student-resources/gpacalculator

Note: E and F grades are failures and will be included in the calculation of your GPA

Requests for reappraisal of final grades

Students may, with sufficient grounds, request that a final grade in a course be reappraised. 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 (RN 430). 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. The decision of the department/school may be appealed to the Faculty only on grounds of procedural irregularity or new evidence.

The grade reappraisal policy can be found here:

myacademicrecord.students.yorku.ca/gradereappraisal-policy

Deferred standing and petitions

Under unusual circumstances (e.g., 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 the Department of Geography Undergraduate Program Office (RN 430). 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. 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.

Deferred standing agreement forms can be downloaded from here:

Academic petitions are paperless; please follow the directions here:

laps.yorku.ca/office-of-the-facultycouncil/undergraduate-academic-petitions

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.

The Senate policy on academic honesty is found here:

secretariatpolicies.info.yorku.ca/policies/academichonesty-senate-policy-on

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. You will also be asked to answer Core Institutional Questions that focus on the course as a structured learning experience rather than on individual instructors.

Email address

York's email service for Undergraduate students has moved to Google Apps for Education[™]. The new Google Apps at York service will provide students with the latest web-based communication and collaboration tools such as Google Email, Calendar, Drive, and Docs with unlimited storage!

How do I get it?

All new students get a Google Apps account automatically when they activate their **Passport York** account via Manage My Services. Email address format is username@my.yorku.ca.

How to access it?

Access to Google Apps at York requires Passport York login credentials, same account used for Manage My Services or Add/Drop courses system and it can be accessed through:



Access Google Mail – mail.my.yorku.ca



Access Google Drive/Docs-drive.my.yorku.ca



 ${\it Access\,Google\,Calendar-calendar.my.yorku.ca}$

Mail setup instructions for computers and mobile devices:

google.info.yorku.ca

Facilities

Geographic Resource Centre (GRC)

The Geographic Resource Centre is located in RS 403 and houses 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 Officeand 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 GRC is open Monday through Friday and is available by telephone at 416-736-2100 x22419 or by email at lapsgrc@yorku.ca.

Map library

The Map Library is located in Room 102 of the Scott Library and contains a variety of material for your use including 94,000 maps plus 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 Torontocentered region. The library also collects electronic atlases and digital geospatial data.

The telephone number for the Map Library is 416-736-2100 x33353 and the hours of operation are posted in the Map Library.

GIS lab - undergraduate computing laboratory

The undergraduate computing laboratory (RN 302) is equipped with 31 PC workstations, each running Windows, and a suite of software required in our courses (e.g., ArcGIS, Geomatica Focus, R, SPSS, Microsoft Office, Acrobat).

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 RN 302.

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 LUM 105. This 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 CLH 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 Department of Geography committees

Students participate in the governance of the Department of Geography through 4 appointed members to the 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 late summer or early fall.

Student members of the committee are Geography or Environmental Science 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 UPC. Students interested in participating on the UPC should contact the Undergraduate Program Director.

Geography and Environmental Science society at York (GESS@Y)

The Geography and Environmental Science Society at York, GESS@Y, is an organization for geography and environmental science students at all year levels, within any combination of major or minor, or any student with a general interest in geography. Students meet regularly to share ideas, organize events, make new friends, have fun, and act as geographic ambassadors.

The goal of this student association is to ensure that members have access to information about the Department, 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 or by contacting any of the executive members 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 in the Faculty of Liberal Arts & Professional Studies. This bursary is awarded annually to one or more undergraduate students who meet the followingcriteria:

- A high GPS 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 at least \$500 (depending on investment returns). To apply for this bursary, please complete an application form and submit to the address below by 1 November.

Department Chair

Department of Geography, RN 430, York University

4700 Keele Street Toronto, Ontario, M3J 1P3

Download the John Warkentin Bursary application form here:

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 & 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 awarded 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 or 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 & 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 or 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

Two students will be awarded \$250 each for achieving the highest grades in each of our three first year courses (AP/GEOG 1000 6.0, AP/SC/GEOG 1400 6.0, and AP/GEOG 1410 6.0). This award is sponsored by the York University Geography Alumni Network.

Accessing help on campus

	Your Concern	Where to go for Help				
onal	Personal issues and concerns, study skills,	Counselling & Disability Services www.yorku.ca/cds/mhds/index.html BCSS N110, 416-736-5297				
Pers	special accommodations	Physical, Sensory and Medical Disability Services RN 108, 416-736-5140				
		Faculty of Liberal Arts & Professional Studies Student Academic Advising Services (SAAS) CC 103, 416-736-5022				
	what course I need to take next year?	Faculty of Science and Engineering Academic Services LUM 352, 416-736-5085				
nic	I need to contact a Course Director or the Undergraduate Program Director	Department of Geography RN 430, 416-736-5107				
Acader	English is my second language and I would like academic support or I need some help with writing skills	Writing Department www.yorku.ca/laps/writ/centre RS 329, 416 736 5134				
	Interested in participating in an exchange program?	York International yorkinternational.yorku.ca YL 200, 416-736-5177				
	Requesting transcripts, Trouble with York Enrolment System, Petitions, and applying to graduate?	Registration Services Bennett Centre for Student Services 416-736-5262				
Financial	Looking for financial support, scholarship and bursary information, and OSAP eligibility?	Student Financial Services sfs.yorku.ca BCSS, 416-872-9675				

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 Credits)

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

Bachelor's Honours Degrees (120 Credits)

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

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

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 (WC 128).

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 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 Geoinformatics (e.g., GIS, Remote Sensing, GPS, Cartography, Statistics). An introductory course in Geography that fulfills this requirement is: AP/SC/GEOG 2340 3.00 Geoinformatics: Introduction.

Geography Theme Areas

The City



In a world where over 50% of the population lives in urban areas, cities play a significant role in shaping the social, cultural, economic, political, and environmental conditions of 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 Department of Geography 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, and 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 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 from a variety of perspectives.

Students 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 coding of difference are produced, resisted, and re-formulated. We consider ways in which practices of inclusion and exclusion are politically institutionalized through concepts of citizenship and national identity. In society, 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 19-21st century North American cities

We offer opportunities to study the concepts of identity and difference at scales from local to global, and at individual and group levels. We trace the ways in which nation-states such as Canada, and their institutions, authorize and regulate identities within their borders. We explore these concepts in both past and present contexts. 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.

However, 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.

We investigate 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.

Undergraduates interested in State, Empire, and Power are provided opportunities to explore the subject from their earliest undergraduate course work 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 post-colonialism, and how it all comes together on the world stage in the form of geopolitical maneuverings. Students embarking 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 deserts. 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) in the world
- Longest 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 Niño 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 handson research experience while collecting field data for their own specific projects. At York, special funding programs exist to assiststudents 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 forests
- 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 theme areas

Course Code Ci		Credits	Course Title	BÊ∎	\Rightarrow	4	.	Ŋ	1			
AP		GEOG	1000	6.00	Introduction to World Geography	\checkmark	\checkmark	\checkmark	\checkmark			
AP	SC	GEOG	1400	6.00	Physical Geography					~	\checkmark	
AP		GEOG	1410	6.00	Human Geography	\checkmark	\checkmark	\checkmark	\checkmark			
AP		GEOG	2030	3.00	Global Environmental Change		\checkmark					
AP		GEOG	2060	3.00	Historical Geography			\checkmark	\checkmark			
AP		GEOG	2070	3.00	Empire, State, & Power: An Introduction to Political				\checkmark			
AP		GEOG	2075	3.00	Everyday Life: Introduction to Cultural Geography			\checkmark				
AP		GEOG	2105	3.00	Money, Power, & Space: Introduction to Economic		\checkmark					
AP		GEOG	2220	6.00	Urban Geography	\checkmark						
AP		GEOG	2305	3.00	Identities: Introduction to Social Geography	\checkmark		\checkmark				
AP		GEOG	2310	6.00	Introduction to Refugee and Migration Studies			\checkmark				
AP	SC	GEOG	2340	3.00	Geoinformatics: Introduction							\checkmark
AP	SC	GEOG	2400	6.00	The Hydrosphere						\checkmark	
AP	SC	GEOG	2420	3.00	Introductory Statistical Analysis in Geography							\checkmark
AP	SC	GEOG	2500	3.00	Introduction to Vegetation and Soils						\checkmark	
AP	SC	GEOG	2600	3.00	Geomorphology I						\checkmark	
AP	SC	GEOG	2610	3.00	Geomorphology II						\checkmark	
AP		GEOG	3010	6.00	Geography of Canada				✓			
AP		GEOG	3020	6.00	Geographical Transformation of the Caribbean Islands		\checkmark		\checkmark			
AP		GEOG	3040	3.00	Urban Environmental Justice	\checkmark						
AP		GEOG	3050	3.00	Nature, Power and Society		\checkmark		\checkmark			
AP		GEOG	3060	3.00	Post-Colonial Geographies			✓	✓			
AP		GEOG	3070	6.00	Gender, Migration and Population		\checkmark	\checkmark	✓			
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	\checkmark	\checkmark		\checkmark			
AP		GEOG	3140	3.00	Retailing, Shopping, Society and Space	\checkmark	\checkmark					\checkmark
AP	SC	GEOG	3200	3.00	Terrestrial Ecosystems						\checkmark	
AP		GEOG	3220	6.00	Advanced Urban Geography	\checkmark						
AP		GEOG	3250	3.00	Environmental Perception and Disasters		\checkmark			\checkmark		
AP		GEOG	3300	3.00	Space/Place			\checkmark				

	Coui	rse Cod	e	Credits	Course Title	Offered	Ĥ			**	۹.	1	
AP	SC	GEOG	3340	3.00	Geoinformatics: GIS I	\checkmark							✓
AP	SC	GEOG	3360	3.00	Morphogenesis of Soils	\checkmark						✓	
AP		GEOG	3370	3.00	Critical Geographical Perspectives on Development			✓					
AP		GEOG	3400	3.00	Dimensions of Difference				\checkmark				
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	\checkmark						✓	
AP	SC	GEOG	3510	3.00	Methods of Sediment	✓						✓	
AP		GEOG	3520	3.00	Designing and Conducting Research in Geography	\checkmark							
AP	SC	GEOG	3540	3.00	Field Studies in Physical Geography	\checkmark						\checkmark	
AP		GEOG	3590	3.00	Conservation in Canada			✓		\checkmark			
AP		GEOG	3600	3.00	Nations and Nationalisms				\checkmark	\checkmark			
AP		GEOG	3650	6.00	Wired Cities: Community, Tech. and Urban Places		\checkmark						
AP	SC	GEOG	3700	3.00	Disaster! Earth's Extreme Events	\checkmark					\checkmark		
AP		GEOG	3710	3.00	Society, Space and Environment in South Asia			\checkmark		\checkmark			
AP		GEOG	3730	6.00	Comparative Urban Development		\checkmark						
AP		GEOG	3750	3.00	Africa: Impoverishment of a Continent			✓		\checkmark			
AP		GEOG	3760	3.00	The Philippines: Geographical Perspectives on Global	\checkmark		\checkmark					
AP		GEOG	3770	3.00	Housing Policy		~						
AP		GEOG	3800	3.00	Geographies of Work		\checkmark		\checkmark				
AP	SC	GEOG	3900	3.00	Physical Geography of the City		\checkmark					✓	
AP		GEOG	4000	6.00	Honours Thesis	\checkmark							
AP		GEOG	4020	3.00	The Caribbean Islands since 1492			\checkmark	\checkmark	\checkmark			
AP		GEOG	4040	6.00	Urban Historical Geography	\checkmark	\checkmark						
AP		GEOG	4050	3.00	Nature Neoliberalism Political Ecology			\checkmark		\checkmark			
AP		GEOG	4051	3.00	Comparative Politics of Environment and Development			\checkmark					
AP		GEOG	4060	3.00	Historical Geographies of Gender & Sexuality				\checkmark				
AP		GEOG	4090	3.00	Urban Identities	\checkmark	\checkmark		\checkmark				
AP		GEOG	4095	3.00	Aboriginal Space and the City		\checkmark		\checkmark	\checkmark			
AP		GEOG	4130	3.00	Planning Suburbs		\checkmark						

	Coui	rse Cod	e	Credits	Course Title	Offered	Ê	(**	ŗ	1	
AP		GEOG	4150	3.00	Foodscapes & Agri-scapes: Geographical Perspectives	\checkmark		\checkmark					
AP		GEOG	4170	3.00	Immigration, Ethnicity and Race in Modern Cities		\checkmark		\checkmark				
AP	SC	GEOG	4180	3.00	Laboratory Analysis of Ecological Materials							\checkmark	
AP		GEOG	4190	3.00	Geographies of the Ethnic Economy		\checkmark		\checkmark				
AP	SC	GEOG	4200	3.00	Water Quality and Stream Ecosystems	\checkmark						\checkmark	
AP	SC	GEOG	4205	3.00	Climatology of High Latitudes						\checkmark	✓	
AP	SC	GEOG	4210	3.00	Hydrometeorology	✓						✓	
AP	SC	GEOG	4215	3.00	Ecological Climatology	\checkmark						\checkmark	
AP		GEOG	4220	3.00	Geographies of Industry: Neoliberal Era			✓					
AP		GEOG	4240	3.00	The Planning of Urban Public Facilities		\checkmark						✓
AP		GEOG	4250	3.00	Imagined Landscapes				\checkmark	\checkmark			
AP		GEOG	4260	3.00	Applied Transportation Geography		\checkmark	\checkmark					
AP		GEOG	4280	3.00	Imagining Toronto: Literary Geographies of a City		\checkmark						
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	✓					\checkmark	\checkmark	
AP	SC	GEOG	4340	3.00	Geoinformatics: GIS II	\checkmark							✓
AP		GEOG	4380	3.00	Urban Social Policy	\checkmark	\checkmark		\checkmark	\checkmark			
AP		GEOG	4395	3.00	Asia-Pacific Dev. Geographical Perspectives			\checkmark		\checkmark			
AP	SC	GEOG	4400	3.00	Physical Hydrology and Water Resources							\checkmark	
AP	SC	GEOG	4410	3.00	Desert Ecosystems	\checkmark					\checkmark	\checkmark	
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		\checkmark						
AP		GEOG	4610	3.00	Geopolitics					✓			
AP		GEOG	4700	3.00	The Critical Geographies of Education		\checkmark		\checkmark	\checkmark			
AP		GEOG	4750	3.00	Geography of Disabilities		\checkmark		\checkmark				
AP		GEOG	4800	3.00	Geographies of Organized Labour		\checkmark		\checkmark				
AP		GEOG	4850	3.00	The State, Civil Society and Development			\checkmark		\checkmark			
AP		GEOG	4880	3.00	Spaces of Conflict, Violence, and Power	\checkmark			\checkmark				
AP		GEOG	4900	3.00	Public Space	\checkmark	\checkmark						

Degree and program checklists

Bachelor of Arts (BA) – Geography (90 Credits)

GENERALEDUCATIONREQUIREMENT		
Course Number		Credit
HUMA (6 - 9 credits)		
SOSC (6 - 9 credits)		
NATS (6 credits)		
	Total credits for this section:	/21
GEOGRAPHYMAJORREQUIREM	ENTS	
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		
	Total credits for this section:	/30
OURSES OUTSIDE THE MAJOR (CANNOT BE GEOG COURSES)		
18 non-Geography credits		
	Total credits for this section:	/18
REE CHOICE COURSES (CAN BE ANYTHING INCLUDING EXTRA GEOG COURSES)		
21 free choice credits of which 6 must be at the 3000 or 4000 level		
	Total credits for this section:	/21
TOTALCREDITS:		/90

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).

Bachelor of Arts (BA) Honours – Geography Major (120 Credits)

GENERALEDUCATIONREQUIREMENT		1
Course Number		Credit
HUMA (6 - 9 credits)		
SOSC (6 - 9 credits)		
NATS (6 credits)		
	Total credits for this section:	/21
GEOGRAPHYMAJORREQUIREMEI	NTS	
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 3520 3.00		
AP/GEOG 4520 3.00 and 12 GEOG credits at the 4000 level		
AP/GEOG 3540 3.00 and 15 GEOG credits at the 4000 level		
15 Geography credits at or above the 2000 level		
	Total gradits for this socian	110
	Total creats for this section:	748
REDITS OUTSIDE THE MAJOR (CANNOT BE GEOG COURSES)		<u>г </u>
18 non-Geography credits.		
	-	-
	Total credits for this section:	/18
FREE CHOICE CREDITS (CAN BE ANYTHING INCLUDING EXTRA GEOG COURSES)		-
33 free choice credits, 3 credits of which must be at the 4000 level.		
	Total credits for this section:	/33
	-	/120
IUIALCREDIIS:		/120

Residency requirement: a minimum of 30 course credits and at least 50% (or 354 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 Arts (BA) Specialized Honours – Geography Major (120 Credits)

GENERALEDUCATIONREQUIREMENT		
Course Number		Credit
HUMA (6 - 9 credits)		
SOSC (6 - 9 credits)		
NATS (6 credits)		
	Total credits for this section:	/21
GEOGRAPHYMAJORREQUIREMEN	TS	
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 3520 3.00		
AP/GEOG 4520 3.00 and 12 GEOG credits at the 4000 level		
OR		
AP/GEOG 3540 3.00 and 15 GEOG credits at the 4000 level		
27 Geography credits at or above the 2000 level		
	Total credits for this section:	/60
COURSES OUTSIDE THE MAJOR (CANNOT BE GEOG COURSES)		
18 non-Geography GEOG credits		
	Total credits for this section:	/18
FREE CHOICE COURSES (CAN BE ANYTHING INCLUDING EXTRA GEOG COURSES)	-	
21 free choice credits, three of which must be at the 4000 level		
	Total credits for this section:	/21
TOTALCREDITS:		/120

Residency requirement: a minimum of 30 course credits and at least 50% (or 360 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

GENERALEDUCATIONREQUIREMENT		
Course Number		Credit
HUMA (6 - 9 credits)		
SOSC (6 - 9 credits)		
NATS (6 credits)		
	Total credits for this section:	/21
GEOGRAPHY REQUIREMENTS		
AP GEOG 1400 6.00		
AP/GEOG 1000 6.00 or AP/GEOG 1410 6.00		
AP/GEOG 2420 3.00		
AP/GEOG 2220 6.00		
AP/GEOG45203.00		
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		
43803.00		
	Total credits for this section:	/36
AP/SOSC 2710 9.00 (will be counted as a 6 credit course) or AP/SOCS 2730 6.0 AP/SOSC 3700 6.00		
AP/SOSC 4700 6.00 or 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		
	Total credits for this section:	/36
COURSES OUTSIDE THE MAJOR (CANNOT BE GEOG or URBAN STUDIES COURSES)	-	
18 Credits		/18
REE CHOICE (CAN BE ANYTHING INCLUDING GEOG OR URBAN STUDIES COL	IRSES	
9 Credits		
	Total credits for this section:	
TOTALCREDITS:		/120

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
Bachelor of Arts (BA) – Double Major (120 Credits)

GENERALEDUCATIONREQUIREMENT		
Course Number		Credit
HUMA (6 - 9 credits)		
SOSC (6 - 9 credits)		
NATS (6 credits)		
	Total credits for this section:	/21
GEOGRAPHYMAJORREQUIREMENTS		
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 3520 3.00		
AP/GEOG 4520 3.00 and 12 GEOG credits at the 4000 level		
OR		
AP/GEOG 3540 3.00 and 15 GEOG credits at the 4000 level		
15 Geography credits at or above the 2000 level		
		-
	Total credits for this section:	/48
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.		
		(
	Total credits for this section:	/42
FREE CHOICE COURSES (CAN BE ANYTHING INCLUDING EXTRA GEOG COURSES)		1
9 free choice credits.		
	Total and the familie and the	10
	i otal creats for this section:	/9
TOTALCREDITS:		/120

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+).

Bachelor of Arts (BA) Major/Minor – Geography Major (120 Credits)

GENERALEDUC ATIONREQUIREMENT		
Course Number		Credit
HUMA (6 - 9 credits)		
SOSC (6 - 9 credits)		
NATS (6 credits)		
	Total credits for this section:	/21
GEOGRAPHYMAJORREQUIREMENTS		
AP GEOG 1400 6.00		
AP/GEOG 1000 6.00 or 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		
AP/GEOG 4520 3 00 and 12 GEOG credits at the 4000 level		
OB		
AP/GEOG 3540 3.00 and 15 GEOG credits at the 4000 level		
15 Geography credits at or above the 2000 level.		
	Total credits for this section:	/48
MINOR REQUIREMENTS (CHECK REQUIREMENTS WITH MINOR DEPARTMENT)		
24 credits from the minor – check with Minor department to ensure		
you are taking the required courses		
Caradite from the minor at the 4000 lovel sheek with minor to		
o credits from the minor at the 4000 level – check with minor to		
ensure you are taking the required course		
	Total credits for this section:	/30
	rotarcicalis joi tins section.	<i>y</i> 30
21 free choice credits		1
	Total credits for this section:	/21
		r

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+).

Bachelor of Arts (BA) Major/Minor – Geography Minor (120 Credits)

SENERALEDUCATIONREQUIREMENT		
CourNumber		Credit
HUMA (6 - 9 credits)		
SOSC (6 - 9 credits)		
NATS (6 credits)		
	Total credits for this section:	/21
GEOGRAPHYMINORREQUIREMENT	S	
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.		
	Total credits for this section:	/30
	-	[
VIAJOR REQUIREMENTS (CHECK REQUIREMENTS WITH MAJOR DEPARTMENT)		1
denartment regarding their requirements		
12 credits from the Major department at the 4000 level. Check with		
the Major department regarding their requirements		
	Total credits for this section:	/42
REE CHOICE COURSES (CAN BE ANYTHING INCLUDING EXTRA GEOG COURSES)		-
27 free choice credits		
	Total cradits for this saction:	/27
	roturcreaits jor this section.	Y 2 /

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+).

International Bachelor of Arts (iBA) – Geography Major (Honours iBA) (120 Credits)

GENERALEDUCATION REQUIREMENT		
Course Number		Credit
HUMA (6 - 9 credits)		
SOSC (6 - 9 credits)		
NATS (6 credits)		
	Total credits for this section:	/21
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 3520 3.00		
AP/GEOG 4520 3.00 and 12 GEOG credits at the 4000 level		
OR		
AP/GEOG 3540 3 00 and 15 GEOG credits at the 4000 level		
15 Geography credits at or above the 2000 level		
	Total credits for this section:	/48
		<u>/ ···</u>
18 credits in a modern language offered by York University including the		1
Advanced Luniversity-level course in the chosen language		
		/18
INTERNATIONALLYORIENTEDCREDITS		1
12 credits of internationally-oriented courses chosen outside Geography		
	Total credits for this section:	/12
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).		
	Total credits for this section:	/21
	-	/120
IUTALCREDITS:		/120

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+).

International Bachelor of Arts (iBA) Specialized Honours – Geography Major (Specialized Honours iBA) (120 Credits)

Course Number Credit HUMA (6.9 credits)	GENERALEDUCATION REQUIREMENT			
HUMA (6 - 9 credits) Introduced by the section of	Course Number		Credit	
SOSC (6 - 9 credits) Total credits for this section: /21 GEOGRAPHYMAJOR REQUIREMENTS AP GEOG 1400 6.00 AP/GEOG 2340 0.00 AP/GEOG 2340 3.00 AP/GEOG 230.00 Image: Colspan="2">Colspan="2"	HUMA (6 - 9 credits)			
NATS (6 credits) Total credits for this section: /21 Total credits for this section: /21 Colspan="2">Total credits for this section: /21 AP GEOG 1400 6.00 AP/GEOG 1000 6.00 or AP/GEOG 1240 6.00 AP/GEOG 2420 3.00 AP/GEOG 2420 3.00 AP/GEOG 2420 3.00 AP/GEOG 3240 3.00 or AP/GEOG 3320 3.00, AP/GEOG 3340 3.00, AP/GEOG 3240 3.00 or AP/GEOG 3520 3.00 AP/GEOG 4520 3.00 and 12 GEOG credits at the 4000 level DR AP/GEOG 3540 3.00 and 12 GEOG credits at the 4000 level DR AP/GEOG 3540 3.00 and 13 GEOG credits at the 4000 level Image: Colspan="2">Image: Colspan="2">Image: Colspan="2">Image: Colspan="2">Colspan="2" Colspan="2" Colspan="2" Colspan="2" Colspan="2" Colspan="2" <td col<="" td=""><td>SOSC (6 - 9 credits)</td><td></td><td></td></td>	<td>SOSC (6 - 9 credits)</td> <td></td> <td></td>	SOSC (6 - 9 credits)		
Total credits for this section: [21 GEOGRAPHYMAIORREQUIREMENTS AP GEOG 1400 6.00 AP/GEOG 21400 6.00 AP/GEOG 2340 3.00 AP/GEOG 2340 3.00, AP/GEOG 3340 3.00, AP/GEOG 3340 3.00, AP/GEOG 3250 3.00 AP/GEOG 2520 3.00 and 12 GEOG credits at the 4000 level AP/GEOG 3540 3.00 and 12 GEOG credits at the 4000 level OR AP/GEOG 3540 3.00 and 15 GEOG credits at the 4000 level Image: Colspan="2">Colspan="2"Colspan="2">Colspan="2">Colspan="2"Cols	NATS (6 credits)			
GEOGRAPHYMAJOR REQUIREMENTS AP GEDG 1400 6.00 AP/GEDG 1400 6.00 AP/GEDG 2420 3.00 AP/GEDG 2420 3.00 Three credits chosen from AP/GEDG 320 3 0.0, AP/GEDG 3340 3.00, AP/GEDG 340 3.00, AP/GEDG 3440 3.00 and AP/GEDG 3520 3.00 AP/GEDG 4520 3.00 and 12 GEDG credits at the 4000 level OR AP/GEDG 3540 3.00 and 15 GEDG credits at the 4000 level AP/GEDG 3540 3.00 and 15 GEOG credits at the 4000 level 15 credits in Geography at or above the 2000 level		Total credits for this section:	/21	
AP GEOG 1400 6.00 AP/GEOG 1400 6.00 AP/GEOG 1000 6.00 or AP/GEOG 1410 6.00 AP/GEOG 2420 3.00 AP/GEOG 4320 3.00 AP/GEOG 340 3.00, AP/GEOG 3340 3.00, AP/GEOG 3340 3.00, AP/GEOG 340 3.00, AP/GEOG 3540 3.00 and 12 GEOG credits at the 4000 level AP/GEOG 4520 3.00 and 12 GEOG credits at the 4000 level OR AP/GEOG 3540 3.00 and 15 GEOG credits at the 4000 level AP/GEOG 3540 3.00 and 15 GEOG credits at the 4000 level 15 credits in Geography at or above the 2000 level Image: Comparison of the section of the	GEOGRAPHYMAJOR REQUIREMENTS			
AP/GEOG 1000 6.00 or AP/GEOG 1410 6.00 AP/GEOG 2420 3.00 AP/GEOG 2420 3.00 Intere credits tossen from AP/GEOG 2340 3.00, AP/GEOG 3340 3.00, AP/GEOG 3340 3.00, AP/GEOG 3340 3.00 or AP/GEOG 3520 3.00 AP/GEOG 4520 3.00 and 12 GEOG credits at the 4000 level OR AP/GEOG 3540 3.00 and 15 GEOG credits at the 4000 level Image: Comparison of the experiment of the exp	AP GEOG 1400 6.00			
AP/GEOG 24203.00 Impresented is chosen from AP/GEOG 2340 3.00, AP/GEOG 3340 3.00, AP/GEOG 3340 3.00, AP/GEOG 3340 3.00, AP/GEOG 3520 3.00 AP/GEOG 4520 3.00 and 12 GEOG credits at the 4000 level OR AP/GEOG 4520 3.00 and 15 GEOG credits at the 4000 level Impresented is in Geography at or above the 2000 level 15 credits in Geography at or above the 2000 level Impresented is in Geography at or above the 2000 level 15 credits in a modern language offered by York University, including the Advanced I university-level course in the chosen language Impresented is in the chosen language 18 credits of internationally-oriented courses chosen outside Geography Impresented is in the section: /18 12 credits of internationally-oriented courses chosen outside Geography Impresented is in the section: /12 12 credits of internationally-oriented courses chosen outside Geography Impresented is internationally-oriented courses chosen outside Geography Impresented is internationally or internationally or internationally or internationally courses the outside the major to satisfy the language requirement at one of York University's exchange partners Impresented is internationally or intene decourses requirement and/or the internationally or	AP/GEOG 1000 6.00 or AP/GEOG 1410 6.00			
Three credits chosen from AP/GEOG 3240 3.00, AP/GEOG 3340 3.00, AP/GEOG 3403 0.00 and 12 GEOG credits at the 4000 level AP/GEOG 4520 3.00 and 12 GEOG credits at the 4000 level AP/GEOG 4520 3.00 and 15 GEOG credits at the 4000 level AP/GEOG 3540 3.00 and 15 GEOG credits at the 4000 level Image: Comparison of the text of the text of text of the text of text of the text of t	AP/GEOG 2420 3.00			
AP/GEOG 3440 3.00 or AP/GEOG 3520 3.00 AP/GEOG 4520 3.00 and 12 GEOG credits at the 4000 level OR AP/GEOG 3540 3.00 and 15 GEOG credits at the 4000 level 15 credits in Geography at or above the 2000 level	Three credits chosen from AP/GEOG 2340 3.00, AP/GEOG 3340 3.00,			
AP/GEOG 4520 3.00 and 12 GEOG credits at the 4000 level AP/GEOG 3540 3.00 and 15 GEOG credits at the 4000 level AP/GEOG 3540 3.00 and 15 GEOG credits at the 4000 level Image: Comparison of the 2000 level 15 credits in Geography at or above the 2000 level Image: Comparison of the 2000 level Total credits for this section: /48 LANGUAGE STUDY CREDITS 18 credits in a modern language offered by York University, including the Image: Comparison of the chosen language Advanced I university-level course in the chosen language Image: Comparison of the chosen language 12 credits of internationally-oriented courses chosen outside Geography Image: Comparison outside Geography INTERNATIONALEXCHANGE One full term abroad as a full-time student at one of York University's exchangepartners COURSES OUTSIDE THE MAJOR (CANNOT BE GEOG COURSES) 21 credits (Note: for Specialized Honours IBA, course taken outside the major requirement student at one of York University's exchangepartners COURSES OUTSIDE THE MAJOR (CANNOT BE GEOG COURSES) 21 credits (Not: for Specialized Honours IBA, course taken outside the major 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) Image: Course for this section: /21 <td col<="" td=""><td>AP/GEOG 3440 3.00 or AP/GEOG 3520 3.00</td><td></td><td></td></td>	<td>AP/GEOG 3440 3.00 or AP/GEOG 3520 3.00</td> <td></td> <td></td>	AP/GEOG 3440 3.00 or AP/GEOG 3520 3.00		
OR AP/GEOG 3540 3.00 and 15 GEOG credits at the 4000 level	AP/GEOG 4520 3.00 and 12 GEOG credits at the 4000 level			
AP/GEOG 3540 3.00 and 15 GEOG credits at the 4000 level 15 credits in Geography at or above the 2000 level 15 credits in Geography at or above the 2000 level Total credits for this section: /48 LANGUAGE STUDY CREDITS 18 credits in a modern language offered by York University, including the Advanced I university-level course in the chosen language INTERNATIONALLYORIENTEDCREDITS 12 credits of internationally-oriented courses chosen outside Geography INTERNATIONALLYORIENTEDCREDITS 12 credits for this section: /12 INTERNATIONALEXCHANGE One full term abroad as a full-time student at one of York University's exchangepartners COURSES OUTSDET HE 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. Students who are completing a double major or major/minor are deemed to have fulfilled this requirement) Total credits for this section: /21 TOTAL CREDITS: /220	OR			
IN FOURIE RECORD TO ADDUCT THE DOCISION IS credits in Geography at or above the 2000 level Image: Total credits for this section: IA gredits in a modern language offered by York University, including the Advanced I university-level course in the chosen language IMTERNATIONALLYORIENTEDCREDITS 12 credits of internationally-oriented courses chosen outside Geography INTERNATIONALLYORIENTEDCREDITS 12 credits of internationally-oriented courses chosen outside Geography INTERNATIONALLYORIENTEDCREDITS 12 credits for this section: 12 credits (Note: for Specialized Honours iBA, courses taken outside the major to satisfy the language requirement and/or the internationally-oriented courses taken outside the major requirement. Students who are completing a double major or major/minor are deemed to have fulfilled this requirement) Total credits for this section: /21 Total credits for this section: /21	AP/GEOG 3540 3 00 and 15 GEOG credits at the 4000 level			
Total credits for this section: /48 LANGUAGE STUDY CREDITS 18 credits in a modern language offered by York University, including the Advanced I university-level course in the chosen language /18 INTERNATIONALLYORIENTEDCREDITS 12 credits of internationally-oriented courses chosen outside Geography Total credits for this section: /12 INTERNATIONALEXCHANGE One full term abroad as a full-time student at one of York University's exchangepartners 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 and/or the internationally- oriented courses requirement and so the used to satisfy the outside the major to satisfy the language requirement and/or the internationally- oriented courses requirement and/or the internationally- oriented courses requirement and so the 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) Total credits for this section: /21 TOTAL CREDITS: /21	15 credits in Geography at or above the 2000 level			
Total credits for this section: /48 Total credits for this section: /48 LANGUAGE STUDY CREDITS 18 credits in a modern language offered by York University, including the Advanced I university-level course in the chosen language /18 Market State	1) creates in deography at or above the 2000 level			
Total credits for this section: /48 Total credits for this section: 18 credits in a modern language offered by York University, including the Advanced I university-level course in the chosen language 18 credits in a modern language offered by York University, including the /18 Advanced I university-level course in the chosen language /18 12 credits of internationally-oriented courses chosen outside Geography /18 Total credits for this section: 12 credits of internationally-oriented courses chosen outside Geography /12 Outer Internationally-oriented courses chosen outside Geography Courses a full-time student at one of York University's exchange partners COURSES OUTSIDE THE MAIOR (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 and/or the internationally- oriented courses requirement and slo 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) /21 Total credits for this section: /21 Total credits for this section: /21				
Total credits for this section: /48 Total credits for this section: /48 LANGUAGE STUDY CREDITS 18 credits in a modern language offered by York University, including the Advanced I university-level course in the chosen language				
Total credits for this section: Total credits for this section: V48 LANGUAGE STUDY CREDITS 18 credits in a modern language offered by York University, including the Advanced I university-level course in the chosen language INTERNATIONALLYORIENTEDCREDITS 12 credits of internationally-oriented courses chosen outside Geography INTERNATIONALLYORIENTEDCREDITS 12 credits of internationally-oriented courses chosen outside Geography INTERNATIONALEXCHANGE 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)				
Total credits for this section: /48 LANGUAGE STUDY CREDITS 18 credits in a modern language offered by York University, including the Advanced I university-level course in the chosen language /18 Advanced I university-level course in the chosen language /18 INTERNATIONALLYORIENTEDCREDITS 12 credits of internationally-oriented courses chosen outside Geography INTERNATIONALEXCHANGE One full term abroad as a full-time student at one of York University's exchangepartners 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 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) Total credits for this section: /21 TOTAL CREDITS: /120				
Intervention of the section of the sec		Total credits for this section:	/48	
18 credits in a modern language offered by York University, including the Advanced I university-level course in the chosen language /18 INTERNATIONALLYORIENTEDCREDITS 12 credits of internationally-oriented courses chosen outside Geography INTERNATIONALEXCHANGE One full term abroad as a full-time student at one of York University's exchangepartners 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) TOTAL CREDITS: /120		rotarcicans joi tins section.	7-10	
Advanced I university-level course in the chosen language Advanced I university-level course in the chosen language INTERNATIONALLYORIENTEDCREDITS 12 credits of internationally-oriented courses chosen outside Geography INTERNATIONALEXCHANGE One full term abroad as a full-time student at one of York University's exchangepartners 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) Total credits for this section: /21 TOTAL CREDITS: /120	18 credits in a modern language offered by York University, including the			
INTERNATIONALLYORIENTEDCREDITS 12 credits of internationally-oriented courses chosen outside Geography Total credits for this section: /12 INTERNATIONALLYORIENTEDCREDITS 12 credits of internationally-oriented courses chosen outside Geography Total credits for this section: /12 INTERNATIONALEXCHANGE One full term abroad as a full-time student at one of York University's exchangepartners 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) Total credits for this section: /21 Total credits for this section: /21	Advanced Luniversity, level course in the chosen language			
INTERNATIONALLYORIENTEDCREDITS 12 credits of internationally-oriented courses chosen outside Geography 12 credits of internationally-oriented courses chosen outside Geography Total credits for this section: /12 Total credits for this section: /12 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 and/or the internationally-oriented courses 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) Total credits for this section: /21 TOTAL CREDITS:	Auvanceur university-lever course in the chosen language			
INTERNATIONALLYORIENTEDCREDITS 12 credits of internationally-oriented courses chosen outside Geography 12 credits of internationally-oriented courses chosen outside Geography Total credits for this section: /12 Total credits for this section: /12 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) Total credits for this section: /21 TOTAL CREDITS: /120				
INTERNATIONALLYORIENTEDCREDITS 12 credits of internationally-oriented courses chosen outside Geography 12 credits of internationally-oriented courses chosen outside Geography Total credits for this section: /12 INTERNATIONALEXCHANGE 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) Image: Course for this section: Total credits for this section: /21 TOTAL CREDITS:				
INTERNATIONALLYORIENTEDCREDITS /18 12 credits of internationally-oriented courses chosen outside Geography				
INTERNATIONALLYORIENTEDCREDITS 12 credits of internationally-oriented courses chosen outside Geography 13 12 credits of internationally-oriented courses chosen outside Geography 14 12 12 credits for this section: 12 12 14 15 15 15 15 15 15 15 15 15 15 15 15 15			/10	
INTERNATIONALLYORIENTEDCREDITS 12 credits of internationally-oriented courses chosen outside Geography 12 credits of internationally-oriented courses chosen outside Geography Total credits for this section: 12 Total credits for this section: 12 INTERNATIONALEXCHANGE One full term abroad as a full-time student at one of York University's exchangepartners 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) Total credits for this section: 21 TOTAL CREDITS: /120			¹⁰	
12 credits of internationally-oriented courses chosen outside Geography	INTERNATIONALLYORIENTEDCREDITS			
Total credits for this section: /12 Total credits for this section: /12 INTERNATIONALEXCHANGE 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) Total credits for this section: /21 TOTAL CREDITS:	12 credits of internationally-oriented courses chosen outside Geography			
Total credits for this section: /12 INTERNATIONALEXCHANGE 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) Total credits for this section: /21 TOTAL CREDITS:				
Total credits for this section: /12 INTERNATIONALEXCHANGE One full term abroad as a full-time student at one of York University's exchange partners				
INTERNATIONALEXCHANGE One full term abroad as a full-time student at one of York University's exchangepartners 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) Total credits for this section: /21 TOTAL CREDITS: /120		Total cradits for this soction.	/17	
INTERNATIONALEXCHANGE 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) Total credits for this section: /21 TOTAL CREDITS: /120		Total creats for this section.	/12	
One full term abroad as a full-time student at one of York University's exchangepartners 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) Total credits for this section: /21 TOTAL CREDITS: /120	INTERNATIONALEXCHANGE			
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) Total credits for this section: /21 TOTAL CREDITS: /120	One full term abroad as a full-time student at one of York University's			
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) Total credits for this section: /21 TOTAL CREDITS: /120	exchange partners		Į	
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) Total credits for this section: /21 TOTAL CREDITS: /120				
Inagor to satisfy the anguage 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) Total credits for this section: /21 TOTAL CREDITS: /120	21 creaits (Note: for Specialized Honours IBA, courses taken outside the			
major requirement. Students who are completing a double major or major/minor are deemed to have fulfilled this requirement) Total credits for this section: /21 TOTAL CREDITS: /120	major to satisfy the language requirement and/or the internationally-			
major/minor are deemed to have fulfilled this requirement) Total credits for this section: /21 TOTAL CREDITS: /120	oriented courses requirement can also be used to satisfy the outside the			
Total credits for this section: /21 TOTAL CREDITS: /120	major requirement. Students who are completing a double major or major /minor are doomed to have fulfilled this requirement)			
Total credits for this section: /21 TOTAL CREDITS: /120	ווומיסוי אווויטי מרב עבבווובע נט וומיצ ועווווובע נוווג ופקעורפווופונן			
Total credits for this section: /21 TOTAL CREDITS: /120			(0.1	
TOTAL CREDITS: /120		Total credits for this section:	/21	
	TOTAL CREDITS:		/120	

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+).

Bachelor of Science and Engineering (BSc) – Geography (90 Credits)

FACULTY OF SCIENCE AND ENGINEERING GENERAL EDUCATION REQUIREMENT		
		Credit
non-science requirement: 12 credits;		
well excellent sin and the former CC/MATH 4FOF COD, CC/MATH 4042,200, CC/MATH		
1014 3 00 SC/MATH 1025 3 00 SC/MATH 1300 3 00 SC/MATH 1310 3 00		
1014 5.00, 50, WATT 1025 5.00, 50, WATT 1500 5.00, 50, WATT 1510 5.00,		
Note: 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.		
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;		
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.		
	Total credits for this section:	/27
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		
	Total credits for this section :	/12
GEOGRAPHYCORE		
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		
	Total credits for this section:	/15
3000/4000 LEVEL SC/GEOG	T	-
12 SC/GEOG credits at the 3000/4000 level		
	Tatal wadite fauthie as sticks	(1)
	Total creats for this section:	γ12
		ſ
credits in science disciplines outside the major, of which 3 credits must be		
at the 2000 level of above, which may include:		
science credits in the General Education requirements that are not in the		1
maior: and		1
science credits required by the major that are not in the major discipline		1
seche creates required by the major that are <u>not in the major discipline</u> .		
	Total gradits for this section:	/24
	iotal creats for this section:	/24

TOTAL CREDITS:

/90

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.

Bachelor of Science (BSc) Honours – Specialized Honours Program (120 Credits)

		Cualit
• non-science requirement: 12 credits;		Credit
 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; 		
Note: 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.		
• 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;		
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.		
	Total credits for this section:	/27
SC/GEOG 1400 6.0 (should be taken in year 1)		
AP/GEOG 1410 6.00 or AP/GEOG 1000 6.00		
3.00, LE/EATS 1010 3.00 and LE/EATS 1011 3.0, SC/PHYS 1410 6.00 or SC/PHYS 1010 6.00		
GEOGRAPHYCO	RE	
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		
}	Total credits for this section:	15
AP/GEOG 3340 3.0		
2	Total credits for this section:	/36
6 non-Geography credits at or above the 2000 level		
	Total credits for this section:	/6
		70
18-21 credits to satisfy minimum credit totals noted below.		
	Total credits for this section:	/18-21

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 3.0; 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.**

Certificates

Geographic Information Systems and Remote Sensing

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/GEOG24203.00
- AP/SC/GEOG33403.00
- AP/SC/GEOG 3440 3.00 (EN/ENVS 3521 3.00)
- AP/SC/GEOG43403.00
- 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.

Urban Studies

To qualify for the 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.

Contact the Department of Social Science for additional information:

urst.sosc.laps.yorku.ca

Course requirements for the general certificate are as follows:

- AP/SOSC 2710 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 the coordinator of the General Certificate in Urban Studies

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. 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.

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 3.0 0 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

Refugee and Migration Studies

The General 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. For details, see the Department of Equity Studies. For purposes of meeting certificate requirements, all nine-credit general education (foundation) courses will count as six credits.

Students must choose one of the following certificate options below and are not permitted to combine the requirements of each option.

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 for details of the undergraduate certificate minimumstandards.

Option 1: Direct Entry or Concurrent Requirements: 30 credits including:

Prerequisites for core requirements:

- A 1000-level six-credit social science course
- Corerequirements:
 - AP/MIST 2000 6.00 (cross-listed to: AP/GEOG 2310 6.00) (in the event that AP/MIST 2000 6.00 is not offered, please contact the undergraduate program director of the Department of Equity Studies for a substitute course);
 - 18 credits from the following list: AP/HIST 3581 6.00, AP/HIST 4053 6.00, AP/MIST 3620 6.00 (cross-listed to: AP/POLS 3565 6.00), AP/MIST 3580 6.00, AP/MIST 3370 6.00, AP/GL/GWST 3801 6.00), AP/GL/GWST 3502 6.00 (cross-listed to: GL/SOSC 3602 6.00).

Option 2: Concurrent Only

Requirements: 24 credits including:

- AP/SOSC11309.00;
- 18 credits in core courses chosen from the following: AP/ANTH 3410 6.00, AP/GEOG 4370 3.00, AP/HIST 4505 6.00(cross-listed to: GL/HIST 4220 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/GWST 4802 3.00 (cross-listed to: AP/POLS 4245 3.00).

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.

1000 LEVEL COURSES

AP GEOG 1000 6.00

🏥 🖞 👬 🗘

The World Today: An Introduction to World Geography

This course asks you to think critically and geographically about the world in which we live and provides context for understanding contemporary social, political, economic, and ecological changes and how you fit into these larger processes.

Expanded Course Description

In addition to focusing on pressing issues particular to individual regions, we stress a variety of topics including race and ethnicity, economic inequality, indigenous peoples, migration, colonialism, climate change, globalization, protest movements, food politics, conservation, and the politics of energy. The course draws upon powerful geographic concepts to examine these topics and link you-as a student, a consumer, a citizen, a worker and a traveler-to the changing world around you.

Format:	2h Lecture + 1h Tutorial per week
Notes:	First year award

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 Course 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

Format:	2 1h Lecture per week + 3h Lab bi-weekly
Notes:	First year award

AP GEOG 1410 6.00



HUMAN GEOGRAPHY

An introduction to the study of human geography which puts emphasis on geographical aspects of population, culture, society and economy. Detailed examples are studied in tutorials.

Expanded Course 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.

Format:	2 1h Lecture + 1h Tutorial per week
Notes:	First year award

2000 LEVEL COURSES

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.

Expanded Course Description

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.

Format:	Online Lecture + 2h Tu	torial per week

AP GEOG 2060 3.00



HISTORICALGEOGRAPHY

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.

Expanded Course Description

Format: 3H Lecture per week

EMPIRE, STATE & POWER: AN INTRODUCTION TO POLITICAL GEOGRAPHY

This course explores the reciprocal links between geography and political processes at the global, national and local levels. Political geography asks us to understand the historical and contemporary relationships between power and space, focusing on empires, nations, states, territory, and borders. More broadly, the course highlights the importance of space and place for processes of domination.

Expanded Course 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.

Format:	3h Lecture

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 Course 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.

Format: 3h Lecture per week

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.

Expanded Course Description

Format:	3h Lecture per week

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 siginificant 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 a necessary general survey of the characteristics of urban processes and patterns, urban systems and structure, and urban social issues from a geographical perspective.

Expanded Course Description

Format: 3h Lecture per week

AP GEOG 2305 3.00

INDENTITIES: 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 Course Description

Throughout this course, emphasis is placed on a critical reading and analysis of the production, reproduction and mediation of identities though 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.

Format: 3h Lecture per week



C 00

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.

Expanded Course Description

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-listings:	0
Recommendations:	al science
Format:	3h Lecture Per Week

AP SC GEOG 2340 3.00

GEOINFORMATICS: INTRODUCTION

Geoinformatics integrates computer science, geosciences, engineering, and cartography such that the geographical context of phenomena can be measured, quantified, presented, and analyzed. Geographic position forms a critical component in a new information infrastructure. This course introduces the historical context to geoinformatics by tracing some of the more important historical developments before examining many contemporary sub-domains of the discipline.

Expanded Course 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 geographical analysis, this course will provide a foundation to geoinformatics and basic computer cartography, forming an ideal precursor to GIS and remote sensing courses at the upper level. Computers will be used in the lab sessions and basic computer skills are a prerequisite. Some fieldwork on campus is required.

Exclusions:	AP/SC/GEOG2350 3.00
Format:	2h Lecture + 2h Lab per week



•.....

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 Course 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.

		•	-	 _
Format:	2h Lecture + 2h Lab per week			

3.00 INTRODUCTION TO STATISTICAL ANALYSIS IN GEOGRAPHY

2420

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 Course Description

GEOG

AP

SC

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.

Exclusions:	AP/ECON 2500 3.00, AP/POLS 3300 6.00, AP/SOCI 3030 6.00, HH/KINE 2050 3.00, HH/KINE 3150
Droroquicitos	SC/MATH 2565 3.00, SC/MATH 2570 3.00, AK/ADMS 3320 3.00
Prerequisites.	
Format:	2h Lecture + 2h Lab per week

AP SC GEOG 2500 3.00

INTRODUCTION TO VEGETATION AND SOILS

This course integrates key topics in soil science (pedology), biogeography, and terrestrial ecosystem ecology to provide an introduction to the structure and functioning of vegetation and soil systems at both local and global scales. Methods of field sampling and laboratory analyses will be emphasized in labs.

Expanded Course Description

This course explores the structure, function, and dynamic nature of vegetation and soil systems across the major global biomes (e.g. deserts, rainforests). We will examine the role of climate, topography, and time in structuring terrestrial ecosystems at different spatial scales (from local to global), and the role humans play in disrupting ecosystem processes. Students will learn about the formation and development of soils, their physical, chemical, and biological properties, and the ecosystem services that soils provide (e.g. flood regulation, food provision). We will discuss the relationship between plants and environmental factors in order to explain patterns in the distribution of vegetation. Students will also learn about how soils and plants interact to control the cycling of water, carbon, and nutrients in terrestrial ecosystems, in order to apply this learning towards environmental sustainability initiatives. Laboratory exercises are designed to provide students with hands-on experience sampling and describing soils and vegetation in the field and in the lab.

Prerequisites:	AP/SC GEOG 1400 6.00 or a 1000 level science course
Format:	2h Lecture + 2h Lab per week

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 Course Description

The course starts with a brief survey of the history of geomorphological thought and the development of geomorphology as a science. It then surveys modes of formulating significant geomorphological questions and predominant types of investigation. The course then concentrates on basic principles and fundamental concepts in geomorphology. The course is process-oriented. The main topics addressed include the systems approach, energy flows, plate tectonics, volcanicity, weathering, slope forms and materials, drainage basins and hydrology, glacial, fluvioglacial, periglacial processes and landforms, coastal and desert geomorphology. The course is a prerequisite for Geomorphology II which looks at more fundamental processes such as entrainment of sediment, transport and deposition in greater detail.

Prerequisites:	AP/SC GEOG 1400
Format:	3h Lecture per weel

AP SC GEOG 2610 3.00



GEOMORPHOLOGY II

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.

Expanded Course Description

Prerequisites:	AP/SC/GEOG 2600 3.00 or Permission from instructor
Recommendations:	AP/SC/GEOG 2340 3.00
Format:	2h Lecture + Online Assignments

3000 LEVEL COURSES

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 Course 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.

Prerequisites:	AP GEOG 1400 6.00 or AP/SC GEOG 1410 6.00
Format:	3h Lecture per week
Notes:	George Michie Memorial Scholarship

AP GEOG 3020 6.00

GEOGRAPHICAL TRANSFORMATION OF THE CARIBBEAN

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 Course 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.

Exclusions:	AP/GEOG 2020 6.00
Format:	3h Lecture per week

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.

Expanded Course Description

Prerequisites:	AP GEOG 1400 6.00 or AP/SC GEOG 1410 6.00
Format:	3h Lecture per week







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 Course 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.

Format:	3h Lecture per week
---------	---------------------

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.

Expanded Course Description

Format:	3h Lecture per week

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.

Expanded Course Description

The interrelationships between gender, population, migration, and development constitute the crux of this course. What are the main issues concerning mortality, fertility, and migration in both the global North and South? What are the major socio-economic and geographic trends in global population dynamics? To what extent is the socioeconomic development of a country influenced by its population and migration variables? What are the gender dimensions of national population and immigration policies? What are the leading theories of migration? These are just a handful of the topics covered in AP/GEOG 3070. The course explores the relationships between population and the global crises of poverty, economic inequality, and the oppression of women, and highlights the contradictions in the socio-economic realities that affect the human condition across the globe. Among other things, students will learn about the characteristics of human population across the globe, paying special attention to the factors responsible for the spatial variations in the key components of population—i.e., mortality, fertility, and migration. With gender as the overarching theme, the course places the differential perspectives of women and men at the center of most of the class discussions.

Prerequisites: 3h Seminar per week





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.

Expanded Course Description

Lecture per week

AP GEOG 3081 3.00

HISTORICAL GEOGRAPHIES OF MODERN IRELAND

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.

Expanded Course Description

Exclusions:	AP/HIST 3460 6.00
Format:	3h Lecture per week

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 Course 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 Traid; 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.

Format: 3h Lecture per week





AP GEOG 3140 3.00

RETAIL, SHOPPING, SOCIETY AND SPACE

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 Course 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:	AP/GEOG 1000 6.00 or AP/GEOG 1410 6.00
Format:	Lecture and Computer Lab

AP SC GEOG 3200 3.00

TERRESTRIALECOSYSTEMS

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.

Expanded Course Description

Prerequisites:	AP/SC/GEOG 1400 6.00 or ES/ENVS 2420 3.00 or SC/BIOL 2050 4.00.
Format:	3h Lecture per week

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. 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.

Expanded Course Description

Prerequisites:	AP/GEOG 2220 6.00
Format:	3h Lecture per week







AP GEOG 3250 3.00



ENVIRONMENTAL PERCEPTION AND DISASTERS

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.

Expanded Course Description

Format:		3h Lecture per week	
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.

Expanded Course Description

Format:		3h Lect	ure per week		
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 Course Description

The purpose of the course is to introduce students to the basic concepts, tools, and data structures used in GIS. The lectures will review technical aspects, examine various case studies and discuss critical perspectives of using GIS and the increasingly central role of this technology in virtually all aspects of modern life. 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. Assignments enable students to experience a broad cross-section of methods that they can further implement in their own research investigations using GIS. Assignments culminate in a final project centered on the students' areas of interest (e.g., social, political, economic, planning, health, or environment). All students will gain extensive hands-on experience using ArcGIS software. Key topics will include vector and raster data models, cartographic models, data input, cartography, data storage, errors and editing, elementary spatial analysis, ethics, privacy, and confidentiality.

Exclusions:	ES/ENVS 3520 3.00, AP/AS/SC GEOG 3180 3.00
Prerequisites:	AP/SC/GEOG 2420 3.00
Recommendations:	AP/SC/GEOG 2340 3.00
Format:	2h Lecture + 2h Lab per week

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.

Expanded Course Description

Format:	Lecture, Labwork and Fieldwork

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.

Expanded Course Description

Prerequisites:	AP/GEOG 1000 6.00 or AP/GEOG 1410 6.00 or Permission from instructor
Format:	3h Lecture per week

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.

Expanded Course Description

Format: 3h Lecture per week

AP SC GEOG 3421 3.00

INTERMEDIATE STATISTICAL METHODS IN GEOGRAPHY

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.

Expanded Course Description

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.
Prerequisites:	AP/SC/GEOG 2420 3.00 or equivalent
Format:	2h Lecture + 2h Lab per week

B

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 Course 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-listings:	ES/ENVS 3521 3.00
Prerequisites:	AP/SC/GEOG 2420 3.00 or Permission from instructor
Recommendations:	AP/SC/GEOG 2340 3.00
Format:	2h Lecture + 2h Lab per week

AP GEOG 3490 3.00

AP/GEOG 3490 3.00 - MAKING CANADA

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 Course 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.

Format:	3h Lecture per week

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.

Expanded Course Description

Cross-listings:	SC/BIOL 3500 3.00
Prerequisites:	AP/SC/GEOG 2500 3.00 or SC/BIOL 2050 4.00
Format:	2h Lecture + 2h Lab per week





AP SC GEOG 3510 3.00

N.B

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.

Expanded Course Description

Format:	3h Lecture per week

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 Course 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.

Exclusions:	AP/GEOG 3740 3.00
Format:	3h Lecture per week

AP SC GEOG 3540 3.00

GEOINFORMATICS: REMOTE SENSING I

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 Course 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.

Format:	2h Lecture + 2h Lab per week. A 3 – 4 day field trip.
	or AP/SC GEOG 2600 3.00 or permission of instructor
Prerequisites:	AP/SC/GEOG 2420 3.00 and one of AP/SC GEOG 2400 6.00, AP/SC GEOG 2500 3.00

AP GEOG 3590 3.00

(⊅

CONSERVATION IN CANADA

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.

Expanded Course Description

Format: 3h Lecture per week		3h Lecture per week	
			× 45
AP	GEOG	3600 3.00	

NATIONS AND NATIONALISM

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.

Expanded Course 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.

Format: 3h Lecture per week



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 Course 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.

Format:	Online
Notes:	CourseWebsite:http://www.yorku .ca/lcode/wiredcities/

AP SC GEOG 3700 3.00

DISASTER! EARTH'S EXTREME EVENTS

Geographical perspectives on the physical processes behind extreme natural events (volcanoes, tsunami, 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.

Expanded Course Description

Prerequisites:	AP/SC GEOG 2600 3.00
Format:	3h Lecture per week

AP GEOG 3710 3.00

SOCIETY, SPACE AND ENVIRONMENT IN SOUTH ASIA

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.

Expanded Course Description

Prerequisites:	AP/GEOG 1000 6.00 or AP/GEOG 1410 6.00 or AP/SC/GEOG 1400 6.00, or	
	permission of instructor.	
Format:	3h Lecture per week	

COMPARATIVE URBAN DEVELOPMENT

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.

Expanded Course Description

Cross-listings:	AP/SOSC 3730 6.00
Format:	3h Lecture per week
Notes:	This course is administered through the Department of Social Science

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.

Expanded Course Description

Format:	3h Lecture per week
i ormat.	Shi Lecture per week

AP GEOG 3760 3.00

THE PHILIPPINES: GEOGRAPHICAL PERSPECTIVES ON GLOBAL INTEGRATION

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.

Expanded Course Description

Format:3h Lecture per week

AP GEOG 3770 3.00

HOUSING POLICY AND INCOME SECURITY POLICY

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.

Expanded Course Description

Cross-listings:	AP/SOSC 3770 3.0
Format:	3h Lecture per week











N.C.S

BL−

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 Course 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.

AP SC GEOG 3900 3.00

PHYSICAL GEOGRAPHY OF THE CITY

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.

Expanded Course Description

Format: 3h Lecture per week

4000 LEVEL COURSES

AP SC GEOG 4000 6.00

HONOURS THESIS

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.

Expanded Course Description

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).

Prerequisites:	84 credits passed.
Notes:	Only thesis topics in physical geography are eligible for Science (SC) credit

AP GEOG 4020 3.00



PROCESSES OF GEOGRAPHIC CHANGE: THE CARIBBEAN ISLANDS SINCE 1492

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 Course 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 3020 6.00 is recommended.
Format:	3 h Lecture per week
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 Course 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.

Prerequisites:	72 credits successfully completed and one of AP/GEOG 1410 6.00, AP/HIST 2600 6.00
Format:	3h Lecture per week

AP GEOG 4050 3.00

NATURE, NEOLIBERALISM AND POLITICAL ECOLOGY

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.

Expanded Course Description

Prerequisites:	P/GEOG 3050 3.00 or permission of	
		0

킰

AP GEOG 4051 3.00

COMPARATIVE POLITICS OF ENVIRONMENT AND DEVELOPMENT

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.

Prerequisites:	72 credits successfully completed and AP/GEOG 3050 3.00 or permission of the
	instructor
Format:	3h Lecture per week

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 Course 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.

Prerequisites:	72 credits successfully completed
Format:	3h Seminar per week

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 Course 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.

Prerequisites:	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 permission of instructor
Format:	3h Seminar per week



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 Course 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 people have responded to this process. An interdisciplinary course, it draws on Geography, History and Native Studies, among others.

Prerequisites:	72 credits successfully completed
Format:	3h Seminar per week

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.

Expanded Course Description

Format:	3h Seminar per week

AP GEOG 4150 3.00

Ŋ

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.

Prerequisites:	84 credits completed
Format:	3h Seminar per week



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 Course 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:		P/GEOG 1000 6.00 or AP/GEOG 1410
	-	hird-year Honours students with 78
		er courses may enrol
Format:	Lecture and discuss ion periods	

AP SC GEOG 4180 3.00



LABORATORY ANALYSIS OF ECOLOGICAL MATERIALS

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.

Expanded Course Description

Prerequisites:	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/BIOL 2050 4.00.
Format:	4h Lecture/Lab hours, 3 additional lab hours

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-politico, 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:		EOG 2100 6.00, AP/GEOG 2105 3.0, r permission of instructor
Format:	3h Lecture/Seminar/disc ussion per week	

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.

Expanded Course Description

Prerequisites:	AP/SC/GEOG 1400 6.00, ES/ENVS 2410 3.00, or SC/BIOL 2050 4.00
Format:	2h Lecture per week, 2h lab bi-weekly

AP SC GEOG 4205 3.00

CLIMATOLOGY OF HIGH LATITUDES

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.

Expanded Course Description

Prerequisites:	54 credits successfully completed, including AP/SC/GEOG 2400 6.00 or permission of
	the Instructor.
Format:	3h Lecture per week

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.

Expanded Course Description

Prerequisites:AP/SC/GEOG 2400 6.00Format:3h Lecture per week, one full-day lab session



 $\Delta | \Delta$





ECOLOGICAL CLIMATOLOGY

Expanded Course Description

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 race 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 mechanism 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 Ior SC/BIOL 2060 3.00 or permission of the
_ .	Instructor.
Format:	2h Lecture + 3h Lab per week

AP GEOG 4220 3.00

GEOGRAPHIES OF INDUSTRY: NEOLIBERAL ERA

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 Course 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
Format:	3h Seminar per week

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 Course 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.

Prerequisites:	AP/GEOG 1000 6.00 or AP/GEOG 1410 6.00 or AP/SOSC 2710 9.00 or written	
	permission of the Instructor.	
Format:	3h Lecture per week	

AP GEOG 4250 3.00



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.

Expanded Course Description

Prerequisites:	72 credits successfully completed.
Format:	3h Lecture per week

AP GEOG 4260 3.00

APPLIED TRANSPORTATION GEOGRAPHY

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 Course Description

This course focuses on urban transportation planning and policy analysis. The major objective is to make students aware that: (1) travel patterns are described such that they might be understood and behavior can be explained, (2) the search for explanation should invoke some theory, which, when operationalized can be used to adjust or control a system, and (3) the policy tools carry values as well as limitations.

Prerequisites:		ne of AP/GEOG 2100 6.00 (AP/GEOG
Format:	3hLecture/Seminar/Discussions	

AP GEOG 4280 3.00

IMAGINING TORONTO: LITERARY GEOGRAPHIES OF A CITY

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 Torontobased literature are paired with critical scholarly works interrogating how places are invented, (re)presented, and (re)produced.

Expanded Course Description

Prerequisites:	84 credits successfully completed or permission of instructor
Format:	3h Seminar per week

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.

Expanded Course Description

Notes:

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.

AP SC GEOG 4310 3.00

DYNAMICS OF SNOW AND ICE

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

Expanded Course 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.

Prerequisites:	AP/SC/GEOG 2400 6.00
Format:	2h Lecture + 3h lab per week







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 Course 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

Prerequisites:	AP/SC/GEOG 3180 3.00, AP/SC GEOG 3340 3.00
Format:	2h Lecture + 2h Lab per week

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 Course 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:		ne of AP/GEOG 1000 6.00, AP/GEOG n human geography at the 2000 or
Format:	3h Lecture/Semina r per week	

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 Course 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	
Format:	2h Lecture + 1h Lab	

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 Course 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.

Prerequisites:	AP/SC/GEOG 2400 6.00
Format:	2h Lecture + 2h lab per week

	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.

т

Prerequisites:	AP/GEOG 1400 6.00	r SC/BIOL 2050 6.00

AP SC GEOG 4420 3.00

PROJECT EXPERIENCE IN GEOGRAPHY

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.

Expanded Course Description

Prerequisites:

Permission of the Instructor. Students mu st be registered in an Honours Geography Program and must have successfully com pleted at least 84 credits, including AP/SC/GEOG 3420 3.00.

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 Course 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-listings:	ES/ENVS 4521 3.00
Prerequisites:	AP/GEOG 1400 6.00 or SC/BIOL 2050 6.00 AP/GEOG 3440 3.00 or ES/ENVS 3521 3.00
	or LE/EATS 4220 3.00 or written permission of the Instructor.
Format:	2h Lecture + 2h Lab per week

AP SC GEOG 4500 3.00



NORTHERN FOREST ENVIRONMENTS

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/BIOL 2050 4.00 or permission of instructor.
Format:	2h Lecture +2h Lab per week

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.

Expanded Course Description

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.
Notes:	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 Program Office (N430 Ross) for additional details.

AP SC GEOG 4541 3.00

ADVANCED FIELD STUDIES IN PHYSICAL GEOGRAPHY

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.

Expanded Course Description

Prerequisites:	AP/GEOG 1400 6.00, AP/GEOG 2420 3.00. AP/GEOG 3540 3.00 recommended
Notes:	Priority will be given to Geography Honours and Environmental Science students
	having already completed 84 credits.

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.

AP GEOG 4605 3.00

THE GREATER TORONTO AREA – A GEOGRAPHICAL PERSPECTIVE

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.

Expanded Course Description

Prerequisites:	72 credits successfully completed or permission of Instructor.	
Format:	3h Seminar per week	

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 Course 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:		P/GEOG 1000 6.00 or AP/GEOG 1410
Format:	3h Lecture/Discussion per week	

曲、茶(

AP GEOG 4700 3.00

THE CRITICAL GEOGRAPHIES OF EDUCATION

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.

Prerequisites:	72 credits successfully completed including one of AP/GEOG 1410 6.0, AP/GEOG
	1000 6.0 or written permission of instructor
Format:	3h Seminar per week



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.

Expanded Course Description

Format:	3h Seminar per week
	or permission of instructor.
Prerequisites:	AP/GEOG 1000 6.00 or AP/GEOG 1410 6.00, and 72 credits successfully completed

AP GEOG 4800 3.00



GEOGRAPHIES OF ORGANIZED LABOUR

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 Course 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 21st century.

Prerequisites:	72 credits successfully completed.
Format:	3h Seminar per week

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 instructor	
Format:	3h Seminar per week	

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 Course 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.

Prerequisites:		ly completed
Format:	3hSeminar/Discussi	on per week

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 Course 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.

Prerequisites:	72 credits successfully completed
Format:	3h Seminar per week