

FOR APPROVAL PUBLIC OPEN SESSION

**TO:** Academic Affairs Committee

**SPONSOR:** Amrita Daniere, Vice-Principal Academic and Dean

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**DATE:** January 8, 2019 for January 15, 2019

AGENDA ITEM: 4

#### **ITEM IDENTIFICATION:**

Major Modification: New Freestanding Minor in Environmental Law & Policy

### JURISDICTIONAL INFORMATION:

Under section 5.6 of its terms of reference, the Academic Affairs Committee is responsible for "major and minor modifications to existing degree programs. All major modifications shall be reported annually for information to the appropriate body of Governing Council".

#### **GOVERNANCE PATH:**

1. Academic Affairs Committee [For Approval] (January 15, 2019)

#### PREVIOUS ACTION TAKEN:

No previous action was taken on this proposal.

#### **HIGHLIGHTS:**

This is a proposal to introduce a new freestanding Minor program in Environmental Law and Policy that will provide students a solid footing in the environmental issues, ethical principles, practices, and case studies relevant to legal, political, and social applications, both in Canada and internationally.

The administrative "home" for this program will be the Department of Geography and Programs in Environment at UTM. Although the program will resonate with their existing programs, the Minor program's interdisciplinary scope will appeal to students from a variety of disciplinary backgrounds and respond to a longstanding interest in environmental law and policy.

The areas of interest specifically targeted are environmental law and environmental policy. The Environmental Careers Organization (ECO) Canada, cites environmental law as "a legal specialty that deals specifically with provincial and federal environmental legislation. environmental law programs are rare at the undergraduate level, more universities in both Canada and the U.S. offer undergraduate programs and courses in some aspect of environmental policy. Many UTM grads go on to graduate programs and professions in environmental law- and policy-related fields, and this Minor program will provide them with a competitive edge in these areas. However, the program is also committed to ensuring that students from any background will have the opportunity to study this field. As such, the program does not only signal a career in environmental law but also in politics, governmental agencies, conservation authorities, non-governmental organizations, environmental non-governmental organizations, and industry corporations.

### FINANCIAL IMPLICATIONS:

There are no net implications for the campus' operating budget.

### **RECOMMENDATION:**

Be It Resolved,

THAT the proposed new freestanding Minor in Environmental Law & Policy, offered by the Department of Geography – Programs in Environment, recommended by Vice-Principal, Academic & Dean, Professor Amrita Daniere, and described in the proposal dated December 3, 2018, be approved, effective September 1, 2019.

### **DOCUMENTATION PROVIDED:**

Major Modification Proposal: New Freestanding Minor Program: Environmental Law & Policy

# University of Toronto Major Modification Proposal:

### New Freestanding Minor Where There is No Existing Specialist or Major

What is being proposed:	New Freestanding Minor program: Environmental Law & Policy (HBA)
Department/unit (if applicable):	Department of Geography – Programs in Environment
Faculty/academic division:	University of Toronto Mississauga (UTM)
Faculty/academic division contact:	Andrew Petersen, Acting Vice-Dean Teaching and Learning vdteachlearn.utm@utoronto.ca  Rosa Ciantar, Acting Program & Curriculum Officer rosa.ciantar@utoronto.ca
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Version date:	December 3, 2018

### 1 Summary

This is a proposal to introduce a new freestanding Minor program in Environmental Law and Policy within the Department of Geography at the University of Toronto Mississauga. This proposed Minor will enhance the suite of Environment programs offered within the Department of Geography. Currently Geography offers programs in Environmental Management (including a specialist, major, and Minor program that contributes to an Honours Bachelor of Arts degree) and Environmental Science (including a specialist, major, and Minor program that contributes to an Honours Bachelor of Science degree). The goal of this new Minor program is to give students a **solid foundation in the** 

environmental issues, ethical principles, practices, and case studies relevant to legal, political, and social applications, both in Canada and internationally.

Relationship to other programs: The administrative "home" for this program will be the Department of Geography and Programs in Environment at UTM. The program will resonate with existing programs in the Department, but we feel that it has the potential to appeal to students from a variety of disciplinary backgrounds, particularly Political Science. In addition to courses from Geography (GGR) and Environment (ENV) here at UTM, the program draws on other UTM courses from Political Science (POL), Economics (ECO), and Philosophy (PHL), as well as one course option from the School of Environment on the St. George campus (UTSG). All of these units were consulted in the preparation of this proposal.

This will be the first undergraduate program specifically focused on the topic of Environmental Law and Policy at the University of Toronto. Therefore, there will be no overlap with any existing Minor program at UTM (and UofT as a whole<sup>1</sup>). Additional details of comparable programs are discussed below, in Academic Rationale.

**Impetus for its development:** Our existing two Minor programs in Environment at UTM are in the areas of Environmental Management and Environmental Science. They serve an important purpose within our core programs, and they are well-subscribed; however, both of the existing Minor programs are quite broad in focus. By contrast, the proposed Minor in Environmental Law and Policy will be more targeted to appeal to specific student interests in law and policy, as well as taking advantage of core strengths of our Environment faculty at UTM. In a poll of first-year Environment students, Environmental Law and Policy was identified by over 40% of the survey respondents as an area of significant interest (see Section 2 Need and Demand for details).

**Distinctive elements:** The proposed Minor program in Environmental Law and Policy will be unique in its academic focus across all three UofT campuses, as no other undergraduate program currently offers students the chance for focused study in Environmental Law and Policy. Undergraduate programs in Environmental Law and/or Policy are rare in Canada and this new Minor would begin to fill this gap.

### 2 Effective Date

September 1, 2019

### 3 Academic Rationale

A freestanding Minor Program in Environmental Law and Policy is being proposed to complement the current program offerings of the Program in Environment within the Department of Geography. The goal of this new Minor program is to give students a solid foundation in the environmental issues,

<sup>&</sup>lt;sup>1</sup> UTSG Programs <a href="https://fas.calendar.utoronto.ca">http://www.utsc.utoronto.ca/registrar/unlimited-and-limited-programs</a>

ethical principles, practices, and case studies relevant to legal, political, and social applications, both in Canada and internationally. This program will respond to a longstanding interest in Environmental Law among our Environment students, while also appealing to students from other disciplines, especially Geography, Political Science, and Sociology. As some course requirements of this program will draw from other UTM disciplines and departments (such as Political Science, Historical Studies, and Philosophy), students in these areas will find this new Minor attractive.

The areas of interest specifically targeted in this new Minor program are environmental law and environmental policy. The Environmental Careers Organization (ECO) Canada, the federal-level sector council for the Environment sector in Canada, cites environmental law as "a legal specialty that deals specifically with provincial and federal environmental legislation... Environmental lawyers act as both advisors and legal advocates in the protection of the environment and natural resources. As advisors, they counsel clients on their legal rights and obligations with respect to the environment. As legal advocates, environmental lawyers can work for the prosecutor's office or in private practice representing clients in criminal cases where charges have been laid as a result of environmental infractions." ECO Canada further defines environmental policy analysis as addressing "how environmental concerns are approached from an organizational or government perspective. Environmental policies analysts review and analyze trends and impacts in order to develop environmental policies. They work both in the private sector, establishing environmentally responsible business practices, and in the public sector, advising decision-makers and developing regulations. Environmental policy analysts face the ongoing challenge of creating policies, rules, and statutes that balance environmental concerns with the needs of consumers, businesses, and governments."

The new proposed Minor program in Environmental Law and Policy is intended to address these two areas of interest, specifically, but is broadly applicable. According to ECO Canada, places where graduates with expertise in environmental law and environmental policy analysis can find employment are not limited to the legal professions, but also include<sup>4</sup>:

- Federal, provincial/territorial, and municipal governments
- Land-use and conservation agencies
- Industry, including manufacturing, forestry, oil and gas, and mining
- Private law firms
- Environmental consulting firms
- Colleges, universities, and research institutes
- Large firms in other industries, for example oil and gas, mining, and manufacturing
- Insurance companies
- Not-for-profit, non-governmental, and international organizations

<sup>&</sup>lt;sup>2</sup> ECO Canada http://www.eco.ca/career-profiles/environmental-lawyer/

<sup>&</sup>lt;sup>3</sup> ECO Canada http://www.eco.ca/career-profiles/environmental-policy-analyst/

<sup>&</sup>lt;sup>4</sup> ECO Canada <a href="http://www.eco.ca/career-profiles/environmental-policy-analyst/">http://www.eco.ca/career-profiles/environmental-policy-analyst/</a> and <a href="http://www.eco.ca/career-profiles/environmental-policy-analyst/">http://www.eco.ca/career-profiles/environmental-policy-anal

With regard to comparator programs from the University of Toronto, the School of the Environment at UTSG<sup>5</sup> offers two collaborative undergraduate programs that are peripherally related to our proposed Minor. Their Environmental Ethics Program (offered as a major and a Minor), is significantly different in its core focus. The program explores "how value judgments and worldviews affect environmental decision-making" and is thus much more centrally focused on philosophy and ethics. Their Minor Program in Environment and Energy addresses some policy issues but with a focus on scientific and technological aspects; it overlaps very little with our proposed program's more targeted focus on principles and practices in legal, political, and social settings.

With regard to comparator programs, undergraduate programs focusing on environmental law (i.e., those NOT leading to a JD degree), in particular are rare in Canada. At the University of Toronto, the Faculty of Law offers courses and a program in environmental law leading to the JD degree<sup>7</sup>, which is a professional second-entry undergraduate program that trains students to become lawyers (see, for example, Certificate in Environmental Studies<sup>8</sup>; this program is open only to students enrolled in the JD program).

Where environmental law programs are rare at the undergraduate level, more universities in both Canada and the U.S. offer undergraduate programs in some aspect of environmental policy, typically as part of their School or Centre or Department of Environmental Studies or Natural Resource Management. Many universities offer undergraduate courses focusing on some aspect of environmental policy.

### For example,

- Wilfred Laurier University offers an undergraduate degree in Social and Environmental Justice.
   This program differs quite a bit from the proposed new program in its core purpose, which is to "examine topics such as poverty and policies to reduce income inequality, climate change and sustainable communities, and citizens' roles in a democratic society."9
- UBC offers undergraduate programs in Resource Management and Environmental Studies; these programs have a very different focus from our proposed program, which is not intended to be a resource management program (although some aspects of resource management will be considered).
- The University of Guelph offers an undergraduate program in Environmental Economics and Policy; so does the University of Alberta. Environmental Economics is included in our proposed program as an upper-level elective, but not as a core focus.
- York University offers a JD Environmental Law program through Osgoode Hall, and jointly with the Faculty of Environmental Studies. Like the JD program at the University of Toronto, this

<sup>&</sup>lt;sup>5</sup> https://www.environment.utoronto.ca/undergraduate/programs/

<sup>&</sup>lt;sup>6</sup> UT FAS https://fas.calendar.utoronto.ca/environmental-ethics-minor-arts-program-asmin1107

<sup>&</sup>lt;sup>7</sup> UT Faculty of Law <a href="https://www.law.utoronto.ca/focus-area/environmental-law/environmental-law-program-components">https://www.law.utoronto.ca/focus-area/environmental-law-program-components</a> and <a href="https://www.law.utoronto.ca/focus-area/environmental-law">https://www.law.utoronto.ca/focus-area/environmental-law</a>

<sup>&</sup>lt;sup>8</sup> UT Faculty of Law Studies <a href="https://www.law.utoronto.ca/academic-programs/jd-program/combined-programs/jdcertificate-in-environmental-studies">https://www.law.utoronto.ca/academic-programs/jd-program/combined-programs/jdcertificate-in-environmental-studies</a>

<sup>&</sup>lt;sup>9</sup> Wilfred Laurier University <a href="https://www.wlu.ca/programs/liberal-arts/undergraduate/social-and-environmental-justice-ba/index.html">https://www.wlu.ca/programs/liberal-arts/undergraduate/social-and-environmental-justice-ba/index.html</a>

would be considered a "professional undergraduate program"; in Canada, the JD does not require a previously completed bachelor's degree for admission. However, the program would not be broadly available to York University undergraduates – only to students enrolled in the JD program at Osgoode Hall.

- Johns Hopkins University offers an undergraduate program in Environmental Sciences and Policy. This program, which operates through the Department of Earth and Planetary Sciences, is more focused on policy aspects of applied science and technology, compared to the proposed program.
- Cornell University offers an undergraduate program in Resource Policy and Management; again, the focus is different, in that the proposed new program is not intended to focus specifically on natural resource management.
- Duke University offers a number of undergraduate courses in Environmental Law, associated
  with the Law School and the Nicholas School of the Environment. The University also offers an
  undergraduate program in Environmental Sciences and Policy, which is firmly grounded in
  science, having grown from a forestry background.

In summary, there are existing undergraduate programs elsewhere in Canada with similar or related core foci on environmental policy, but much less commonly on environmental law. There are no comparable programs that we can find at the University of Toronto aside from the JD professional undergraduate program, which is a second-entry undergraduate program which trains students to be lawyers. So far we have not found any programs at the undergraduate level with exactly the same focus as our proposed program, either in Canada or in the United States.

### 4 Need and Demand

This program will fill a need and demand for community members with knowledge and awareness of environmental issues and their legal, political, and social impacts. As discussed previously, there are currently no undergraduate programs at the University of Toronto that focus specifically on this subject area, even though many UTM grads go on to graduate programs and professions in environmental lawand policy-related fields.

In 2017, an anonymous poll was carried out among 750 students enrolled in ENV100Y5 Environment. The students came from a wide range of academic backgrounds in Science, Social Science, and Humanities. (Students with a pre-existing interest in environment-related disciplines are in the minority among students enrolled in ENV100Y5; many students from other disciplines take the course to fulfill their Science distribution requirement, so a broad range of academic backgrounds and interests is represented.) Student were presented with a list of possible focal areas for new Minors and asked to choose those that would be of specific interest to them. Over 40% of the respondents said that a Minor program in Environmental Law and Policy would be of interest to them. (Environmental Law and Policy was the second most-chosen topic, after Sustainability and similar to Arctic and Northern Studies in the level of interest.) At upper-year levels, as another example, in the JEG400Y/401Y Environmental

Internship course there is annual competition for the few available environmental law internship placements.

Students in our existing Environmental Management, Environmental Science, and Geography programs have confirmed their interest in this program. The Chair of Political Science (UTM) also has confirmed that there is significant interest in a program in with a law focus among students in Political Science. This is especially true for those involved in the Political Science and Law Association (PSLA), the Department's student group, which has a lot of student participants who are interested in law school and looking for opportunities to gain skills and expertise in law and policy. We also anticipate some interest among Sociology and Criminology students with an interest in the environment and environmental law. The program may also appeal to students in Economics, Philosophy, and other program areas.

Many UTM grads have an interest in working in the legal professions, but we believe that Environmental Law and Policy should be accessible to anyone – not just those who are planning a career in law. This Minor is committed to ensuring that students from any background will have the opportunity to study this field. The program, we believe, can be a precursor to a career not only in environmental law but also in politics, governmental agencies, conservation authorities, non-governmental organizations (NGOs), environmental non-governmental organizations (ENGOs), and industry corporations. As well, many of our students have a longstanding interest in conservation and resource management. While natural resource management is not the central focus of the proposed program, it nevertheless will be relevant to students with any of those interests, or with interests in environmental ethics and social justice.

Relevant employment opportunities exist. At time of writing, Workopolis has 689 job postings in Canada related to Environmental Law, and over 4000 postings (more than 2000 full-time) that contain the key words "Environmental Policy." LinkedIn has 54 Environmental Law postings, currently. GoodWork Canada (an environment and social justice job posting site) currently has 17 postings that respond to the key words "environment, law, policy", including Senior Manager, Program Governance & Performance for Federation of Canadian Municipalities' Green Municipal Fund; and Manager, Development & Strategic Partnerships for the David Suzuki Foundation. ECO Canada states that, "Environmental lawyers who have just passed their bar admission course make between \$60,000 and \$75,000 per year in Canada. An environmental lawyer with several years of experience and education can make an average of \$172,000 per year."

### 5 Admission/Eligibility Requirements

The proposed Minor in Environmental Law and Policy will be a Type 2 subject POSt with enrolment limited to students who have completed ENV100Y5 (The Environment) with a final course grade of 60% of higher. This admission standard is consistent with the requirements of the two existing Environment Minor programs (Environmental Management and Environmental Science) in the Department of Geography at UTM. Because of the anticipated wide appeal of this program, students from varied backgrounds and disciplines will be encouraged to apply. Given the strong enrolment numbers that are

consistently seen in ENV100Y5 (approx. 1300 students per academic year, comprising 900-1000 in Fall-Winter and 400 in Summer), the foundational course for the new program, strong interest and enrolment numbers are expected.

The existing Minor programs in Environment at UTM, Environmental Management and Environmental Science, were introduced in 2009-10. Since then (over the past 8 yeas), enrolments in those programs have grown to 73 (ERMIN1425) and 103 (ERMIN1061), respectively. We do not anticipate that enrolments in the new Minor program in Environmental Law and Policy would be higher than enrolments in the two existing Minor programs. Based on our experience with those programs, enrolments will most likely start out small (perhaps even single digits in the first year or two) and increase steadily after that. It is possible that enrolments could be comparable to those of the existing Minor programs after 5 years or so. We anticipate that growth in our other Minor programs (Environmental Management and Environmental Science) may slow down, once this new program becomes available; however, it will be possible for students to combine Environmental Law & Policy with other Environment programs, so we do not anticipate a detrimental effect.

### 6 Requirements for the Minor

The proposed Minor in Environmental Law and Policy will comprise 4.0 full course equivalents (FCE). Within the 4.0 FCE, students will be required two take 2.5 FCE of 'core' courses and then complete the remaining 1.5 FCE through elective course options. All of the courses – both required core courses and optional elective courses – are already existing and offered at UTM; no new course offering will be needed.

In the first year, students must complete the **foundational entryway course** ENV100Y5 The Environment to gain admission to the Minor program (see Admission Requirements, above). In this course, students will be introduced to the field of environmental study, as well as to core concepts in the discipline that will be reinforced in upper year courses of the program. The course provides a scientific foundation in the functioning of the natural environment but is fully accessible to non-science-focused students.

ENV100Y5 also serves as the prerequisite for program's **core course requirements** ENV201H5 Environmental Management and JPE250Y5 Environmental Politics in Canada. ENV201H5 is an important core course for this program because it introduces students to concepts and tools for managing environmental challenges, including legal instruments such as environmental assessment, and social approaches such as stakeholder consultation. JPE250Y5 provides a broad foundation on the legal and policy tools for dealing with environmental issues, both domestically and globally. Students consider legal and policy aspects of issues such as climate change, biodiversity, drinking water, land use, and the degradation of natural resources.

Important note about JPE250Y5: Calendar changes have been proposed which will change this joint course JPE250Y5 into two half-courses: JPE250H5 Environmental Law and JPE251H5 Environmental Policy. This will be a very strong modification in the context of this new proposed program, as it will provide two very targeted core courses at the 2<sup>nd</sup>-year level. The Department of Political Science and

the Programs in Environment (within the Department of Geography) are in agreement and are jointly proposing these changes. The proposed Minor is <u>not</u> dependent upon the approval of these curriculum changes, but the changes – if approved – will be beneficial for the program.

Upon completion of the 2.5 FCE core courses, students will have achieved the prerequisites for most of the upper-level elective course options available to them, to complete the Minor program. To ensure depth of knowledge, students must complete at least 1.0 FCE at the 300- or 400-level from the elective course list.

Upper-level elective course options provide both breadth and depth, including options from Environment (ENV310H5 The Sustainability Imperative; ENV311H5 Environmental Issues in the Developing World; ENV393H5 Environmental Assessment; and ENV430H5 Advanced Environmental Law and Policy); Geography (GGR318H5 Political Geography and GGR329H5 Environment and the Roots of Globalization); Historical Studies (HIS318H5 Canadian Environmental History: Contact to Conservation and HIS319H5 Canadian Environmental History: Conservation to the Modern Environmental Movement); Economics (ECO373Y5 The Environment: Perspective from Economics and Ecology); Philosophy (PHL247H5 Critical Reasoning and PHL271H5 Ethics and the Law); and Political Science (POL346Y5 Urban Politics).

In addition, three joint courses from Environment and Political Science are included as upper-level options (JEP351H5 Comparative Environmental Policy; JEP356H5 Environmental Justice; JEP452H5 Politics and Policy of Wildlife Conservation). One course from the School of Environment at the St. George campus (ENV422H1 Environmental Law) has been listed as a course option to add flexibility, although the Minor program can be completed entirely at UTM.

This suite of elective courses provides depth, breadth, and the opportunity to gain both conceptual and practical knowledge of crucial legal and policy tools for environmental management and problem-solving. The main focus of the elective options is in the Social Sciences; however, because of the interdisciplinary nature of this program, courses from several cognate units as well as options in Humanities, have been included to provide breadth and depth.

Please see **Appendix A** for proposed calendar copy.

Please see **Appendix B** for a full list of the course numbers, titles, and descriptions.

# 7 Program Structure, Learning Outcomes and Degree-Level Expectations (DLEs)

The following Learning Outcomes are addressed by the required courses in the proposed new Environmental Law and Policy Minor program. Additional LOs may or may not be addressed by upper-level elective courses, depending on the course selections made by individual students.

#### Depth and Breadth of Knowledge:

 Acquire key environmental concepts and theories from natural and social science perspectives to examine the interaction of humans and the environment.

- Synthesize information from a variety of environmental sub-disciplines to explore the complexity of real-world situations.
- Ground theoretical knowledge in local to global case studies within a systems framework.

#### **Knowledge of Methodologies:**

- Locate, evaluate, and integrate literature relevant to environmental questions.
- Select and apply appropriate quantitative, qualitative and/or practical methods to address a specific problem or objective.
- Critically assess multiple perspectives on environmental systems.

### **Application of Knowledge:**

• Examine how environmental research shapes public policy and governance structures.

#### **Communication Skills:**

• Develop and effectively communicate well-researched arguments via a variety of communication methods including written, oral, graphical, and quantitative approaches.

### Awareness of Limits of Knowledge:

• Critically assess the limits of data in order to evaluate the legitimacy of arguments based upon said data.

### **Autonomy and Professional Capacity:**

- Practice ethical and social responsibility when addressing environmental issues.
- Model collaborative professional behaviour through positive and constructive interactions with peers in both informal and formal group settings.

In the table below, the contribution of the proposed Minor program to the achievement of each of the Undergraduate Degree-Level Expectations is explored through the lens of these LOs. The table explains how the UDLES and LOs are understood and interpreted in the context of the proposed program, and how the program design, structure, and course content will support the achievement of the UDLES.

Degree-Level Expectations	Program Learning Outcomes*	How the Program Design/Structure Supports the Degree-Level Expectations
1. Depth and Breadth of Knowledge	Breadth of knowledge is understood in the proposed Minor as a demonstration of exposure to and understanding of a wide range of concepts in environmental law, justice, and policy.  Depth of knowledge is understood in the proposed Minor as an exploration of both the theory and applications of environmental law, policy, and justice at a level more advanced than is typical in first- and second-year courses.  Both of these Learning Objectives require students to integrate key	In terms of <b>breadth</b> , students will acquire a foundation in environmental science (ENV100Y5), environmental management (ENV201H5), and legal and policy theory (JPE250Y5). They will then go on to complete required core courses that explore the theory of environmental law, policy, and justice in a range of applications across the disciplines.  The program structure will require students to integrate key concepts and theories from across disciplines in Science, Social Science, and Humanities; and to synthesize information from a variety of data sources. The inclusion of HUM courses (in Historical Studies and Philosophy) extends the breadth of the program.

concepts and theories from science, The structure of the program provides the scientific foundation first, in ENV100Y5; our social science, and humanities; and to synthesize information from a variety premise is that an understanding of how our of data sources, applying it to realplanet functions is crucial for those who will world problems of law and policy, produce environmental policy and apply both locally and globally. environmental law. Core course JPE250Y5 (to become JPE250H5 and 251H5) provide the foundation in law and policy. Students then consider the role of both scientific information and social considerations in an environmental management context, in ENV201H5. With regard to **depth**, it will not be possible to complete the Minor program without completing at least 1.0 FCE (out of 4.0) 300-400 level courses. Only one 100-level course is included in the Minor (ENV100Y5), so much of the work in the program will be carried out at a more advanced level. Upper-level course options bring a deeper consideration of the legal and policy aspects of local and global issues. Many of the courses involved in this program utilize case studies to help student ground theoretical knowledge in practical applications. 2. Knowledge of Knowledge of methodologies is Students in this program will demonstrate their Methodologies understood in the Minor as the knowledge of research methodologies through a ability to locate, evaluate and wide variety of course-based work, including integrate literature relevant to both the preparation and analysis of policy questions and problems of statements (e.g., in ENV430H5, ENV311H5); environmental law and policy; and to stakeholder simulations (e.g., in ENV201H5 and critically assess multiple ENV393H5); comparison of issues of perspectives on issues of conservation and environmental justice through environmental law, policy, and the use of Canadian and international case justice - from local to national to studies (e.g., in JEP356H); and many other international; from scientific to applications. social and economic; and from a They will demonstrate these skills through wide range of stakeholders. evaluative/summative assessments such as written policy briefs, term papers, critical reading responses, etc. Specific examples are provided in the next section. 3. Application of Application of knowledge is Not all students in this Minor will have the Knowledge understood in the Minor as opportunity or desire to take a fully experiential course (only one EXP course is included in the demonstrating an understanding of how research shapes public policy program). However, we view the study of and governance structures; and the environmental law, justice, and policy as capacity to integrate knowledge fundamentally – an exercise in applying concepts gained in the classroom with to practical situations; integrating different knowledge gained through practical perspectives; understanding how theory influences policy and practice; and finding or

	earning opportunities to enhance problem-solving abilities.	designing viable solutions to problems. Virtually every course in this Minor will require students to demonstrate the ability to apply basic concepts to practical problem-solving.  For example, in POL346Y5 students engage with important policy issues facing contemporary cities, such as globalization, sustainability,
		immigration, and regionalism. It is crucially important to continue to develop the outward-focused nature of the University in the context of the city, and this has been a major focus of the University of Toronto in recent years.
Skills Minor Geographics Geographics always stude comm	In the Environmental Law & Policy Minor, and in the Department of Geography and Programs in Environment generally, we are	Several of the required courses for the Minor involve <b>oral presentations</b> of some type, ranging from individual talks to group presentations to poster sessions.
	always aware of the need to provide students with opportunities to communicate by written, oral, graphical, and quantitative means.	Some courses also involve interpretation of spatial or quantitative data; for example, in ENV311H5 students undertake a guided exploration of online data sources on human development in the context of the developing world. Many of the courses require students to share their findings verbally in discussion groups and tutorials.
		However, written skills are generally more central in most of the courses required for this Minor program. Students are asked to prepare policy briefs and study plans; make policy recommendations; write term papers; critically analyze policies; provide written interpretations; and many other writing-focused activities. Specific examples are provided below.
5. Awareness of Limits of Knowledge	In the Environmental Law & Policy Minor, awareness of the limits of knowledge is understood as the ability to critically assess both data and data sources, in order to evaluate the legitimacy of arguments based upon the data.	Essentially <u>all</u> of the required courses in the Minor involve the <b>discovery</b> , <b>evaluation</b> , and <b>critical assessment of data in a variety of forms and from a range of sources</b> . Critical analysis, particularly acknowledging the limits of data, is crucial to the understanding and application of concepts related to environmental law, policy, and justice, which are prone to multiple interpretations.
		In PHL247H5 and PHL271H5, students are specifically introduced to the tools of <b>critical reasoning</b> and their application to ethics and law. In ENV452H5, students prepare a recovery plan for an endangered species, and must assess the available scientific data about the species, its

		habitat, and its threats, identifying whether there are data gaps that must be filled before effective policy can be created.
6. Autonomy and Professional Capacity	In the context of environmental law, policy, and justice, an understanding of ethical and social issues is critical to finding applications, solutions, and pathways that are equitable locally and internationally, intragenerationally and intergenerationally. It is also important for students to learn and practice collaborative and consultative approaches to problem-solving.	Courses such as ENV201H5 Environmental Management; ENV310H5 The Sustainability Imperative; ENV311H5 Environmental Issues in the Developing World; JEP356H5 Environmental Justice; and, in fact, most of the courses in the proposed Minor address fundamental questions about ethics, equity, justice, and differing social perspectives. Some courses, such as ENV393H5 and ENV430H5, allow students to acquire specific professional skills in fields related to practical applications of environmental law and policy.  The practice of effective collaboration and consultation is also a major theme in several of the program's course options. In ENV393H5, for example, students work in teams as environmental consultants (described in greater detail, below). Team work, group problemsolving, and mutually respectful engagement around controversial and difficult issues are important themes in several other courses, including ENV201H5, ENV311H5, ENV430H5, and GGR426H5.

### 8 Assessment of Teaching and Learning

**Teaching methods** within the program's core and elective courses include but are not limited to: seminars; lectures (both online and in-person); small-group tutorials; experiential projects; group projects; guest speakers; games and simulations; discussions using a variety of formats; "think-pair-share" and other breakout formats; case studies; collaborative learning; videos; problem-based learning; podcasts; debates; field work; field trips; and team teaching.

Assessment and feedback methods in the program's core and elective courses include but are not limited to: quizzes and tests with a variety of question types (both online and in-person; formative and summative); final examinations; peer feedback; critical book reviews; scaffolded term papers and case studies; policy briefs; critical reading responses; participation in tutorials and online discussions; and other types of assignments, both quantitative and qualitative.

These are consistent with (and a sub-set of) the teaching and assessment methods defined at the program level by the Department of Geography, and they are consistent with the requirements of UDLES.

**Specific examples** are provided here to illustrate some learning activities, content delivery, formative and summative assessments, and feedback mechanisms that address each of the identified Learning

Objectives and Outcomes, in the proposed program's required courses. **These are not exhaustive** – there are many other examples of innovative teaching, feedback, and assessment tools that will help us achieve the Learning Objectives that we have established for this program.

### **Depth and Breadth of Knowledge:**

- Acquire key environmental concepts and theories from natural and social science perspectives to examine the interaction of humans and the environment.
  - This Learning Outcome speaks to the fundamental course theme and over-arching goal of ENV100Y5 Environment, which is to examine the interactions of humans and the environment.
     Students are introduced to a wide range of natural science concepts, processes, and theories, and encouraged to consider them within the social, political, legal, and economic framework of our country and local area.
  - Students are particularly urged to consider the differences and synergies between environmental science, a scientific undertaking that aims for objectivity; and environmental activism or environmentalism, a social advocacy movement. In this course, formative assessments help students test their knowledge of lecture content and readings on an ongoing basis throughout the course. Periodic online discussions and live chat sessions allow students to ask questions and receive instant feedback. On the Term Test and Final Exam, students are challenged to synthesize information from the entire course (72 weeks), bringing their expertise to bear on real-world, scenario-based problems.
  - For example, in the 2018 April Final Exam in ENV100Y5, students were given a "Chemical Exposure Diagram" from Health Canada (<a href="https://www.canada.ca/en/health-canada/services/home-garden-safety/measuring-your-exposure-chemicals.html">https://www.canada.ca/en/health-canada/services/home-garden-safety/measuring-your-exposure-chemicals.html</a>):
    - The rest of the exam required students to apply their knowledge of environmental systems, cycles, processes, materials, and management from the course lectures and readings, in responding to questions about the graphic and what it means for the health of both people and the environment. Question formats included written-answer, definitions, matching, interpretation of diagrams, and drawing of diagrams.
- Synthesize information from a variety of environmental sub-disciplines to explore the complexity of real-world situations.
  - This Learning Objective is addressed in several core program courses. For example, students in ENV201H5 Environmental Management role-play to develop a locally-based management plan for whitetail deer. They are challenged to incorporate a range of information (from scientific and other sources) into the management plans. Through background research on their assigned roles, they also must seek to understand a variety of different perspectives and positions on wildlife management. Some of these perspectives are conflicting, and students must figure out how to apply the relevant information appropriately, to devise an effective management plan while reconciling the conflicting positions in the simulation.
  - In ENV393H5 Environmental Assessment, students work in consulting teams to prepare a study plan for a "Terms of Reference" document for Environmental Assessment, as implemented in the Canadian legal system. This requires synthesis of information from a wide variety of sources,

as a brief history and description of the proposed undertaking. The document includes a discussion of the legislative approvals required for this undertaking, and how the project/assessment would aid in meeting those requirements; a description of the environmental criteria the team selected for future study, and why you they chose those criteria; a work plan for how they would undertake the assessment of these criteria in their future study (including data collection, analysis, evaluation, and presentation of results); and a plan for how the public should be consulted as part of the study.

This major assignment represents the culmination of the course, as students are required to draw upon depth and breadth of conceptual knowledge, as it would be applied to a practical, problem-solving situation. The document forces consideration of all aspects of EA, as it is the document that sets out the terms for how the EA must be conducted. As such, students need to show knowledge of EA methodology, apply their knowledge, state known unknowns, create a professional document, and communicate their work with the rest of their group members.

- Ground theoretical knowledge in local to global case studies within a systems framework.
  - Case studies are used in a number of the program courses, including but not limited to ECO373Y5 The Environment: Perspectives from Economics and Ecology. The course examines "alternative criteria and objectives for environmental policy" and its implementation, through the use of case studies.
  - Global perspectives are central to ENV311H5, in which students consider case studies from around the world to illustrate environmental challenges such as waste management, climate change, and transportation. In tutorials, they grapple with questions such as how to prioritize international aid spending on issues where it will have the greatest beneficial impact.

### **Knowledge of Methodologies:**

- Locate, evaluate, and integrate literature relevant to environmental questions.
  - o In JEP452H Politics and Policy of Wildlife Conservation, students are asked to research and write a recovery plan for an endangered species that does not currently have a recovery plan in place. This meets many of our Learning Objectives, including locating, evaluating, and integrating relevant literature; critically assessing the limits of data; and developing communications skills. For example, students have to look at all known information about their species (biological knowledge, Aboriginal knowledge, local knowledge, etc.) and decide what policy and economic incentives are necessary. They also use graphical approaches to portray their results (in addition to written formats).
- Select and apply appropriate quantitative, qualitative and/or practical methods to address a specific problem or objective.
  - o In ENV430H5 Environmental Law, students work in teams to examine and propose legal and policy solutions for a current environmental issue. They are responsible for choosing legal and policy tool and explaining why those tools are the best choices for addressing that particular environmental issue. Their specific task is to convince the Minister in charge of that topic area that their proposed path is the best approach for mitigating the environmental challenge.

- Critically assess multiple perspectives on environmental systems.
  - o In GGR426H5 The Geographies of Human Rights, students examine local, national, and global aspects of human rights enforcement and violation. By examining specific case studies, they consider how so-called 'universal' human rights are articulated and practiced differently in different places. This necessitates an open and honest exchange of views in the classroom, and students are invited to interrogate their most cherished beliefs about what justice 'is' and what it ought to be. The instructor explicitly creates a learning environment in which topics and discussions are approached with an open mind and respect for each other. The classroom is designated as a safe space, characterized by mutual respect, and tolerance of differences.
  - In ENV201H5, ENV393H5, ENV311H5, and other program courses, students role-play to develop an understanding of the different perspectives that various stakeholders bring to environmental problems and how these perspectives can or should affect proposed legal and policy solutions. For example, in ENV311H5 students take on various "personae" (such as a pregnant woman, a child, or a young man carrying his retail wares on a bicycle); a panel then considers urban transportation policy in light of the challenges faced by these various characters. This also brings to light the economic and social justice side of transportation policy.

### **Application of Knowledge:**

- Examine how environmental research shapes public policy and governance structures.
  - This objective is central to JPE250Y5 (to become (JPE250H5 and JPE251H5). Students specifically examine legal and policy instruments, approaches, and issues, including regulation and property rights; the politics of agenda-setting; sustainable development; science in politics; the impact of federalism; and global influences on domestic policy-making in the environmental context. These themes are further developed in upper-level courses such as ENV430H5 and POL346H5.
  - The inclusion of ECO373Y5 The Environment: Perspectives from Economics and Ecology is important to the program because it brings economics into the consideration of the factors that shape environmental policy. This course has ECO prerequisites and won't be available to every student in the Minor program, but those with appropriate background in Economics will benefit greatly from this perspective.

#### **Communication Skills:**

- Develop and effectively communicate well-researched arguments via a variety of communication methods including written, oral, graphical, and quantitative approaches.
  - Communication is crucial for professions in the legal and policy-related sectors. Oral, written, quantitative, and graphical communications are all taught and assessed in the program courses. Probably the least-emphasized of these is graphical communication (although students in ENV393H5 and ENV311H5 do use both graphical and spatial communications for their major projects).
  - ENV201H5 is supported by a Writing Initiative grant from the Dean's Office. Students receive
    individualized training and feedback on their written submissions (and teaching assistants

receive specialized training, as well). Writing-focused tutorial activities include Reverse Outlining; Descriptive Writing; Writing About Quantitative Data; and Argumentative Writing.

### Awareness of Limits of Knowledge:

- Critically assess the limits of data in order to evaluate the legitimacy of arguments based upon said data.
  - Critical thinking and, particularly, the ability to evaluate data are central to problem-solving in legal and policy contexts. These are well represented in the program courses. See, for example, the description of the major assignment in ENV393H5 Environmental Assessment, in which students prepare a study plan for a Terms of Reference document in the EA process. As part of this exercise, students must determine and state the knowledge gaps and known unknowns that could affect the implementation of their plan.
  - In PHL247H5, PHL271H5, and ENV430H5 students are specifically introduced to the tools of critical reasoning and their application to ethics and law.
  - In ENV452H5, students prepare a recovery plan for an endangered species; in the process, they
    must assess the available scientific data about the species, its habitat, and its threats, identifying
    whether there are data gaps that must be filled before effective policy can be created.

### **Autonomy and Professional Capacity:**

- Practice ethical and social responsibility when addressing environmental issues.
  - Students in JEP356H5 Environmental Justice consider questions such as "Why are First Nations in Canada less likely to have access to safe drinking water?" and "Why are industrial plants often in low-income neighborhoods?" The course first critically examines the theories and foundations of environmental justice, and then utilizes a case study approach to understanding how environmental justice has shaped modern society.
  - A major content theme of ENV311H5 Environmental Issues in the Developing World is the intersection of environment, social justice, equity, and human development. For example, students in the course consider the ethical aspects of global climatic change and its differential impacts on the poor and the Global South. Students are asked to write a policy brief, outlining the interconnections between environmental and social, economic, and political issues in the Global South. They are asked to choose a problem at this intersection and propose possible solutions. They first select an issue, research it, and then present their findings and recommendations as if writing to the Secretary-General of the United Nations or another world leader.
  - GGR426H5 The Geographies of Human Rights (discussed above) is another course in which the
    ethical treatment of controversial and challenging issues is emphasized. In ENV201H5 and
    ENV393H5, as well, stakeholder consultation and conflict resolution are emphasized as tools for
    sustainability and environmental management.
- Model collaborative professional behaviour through positive and constructive interactions with peers in both informal and formal group settings.

- As described above, students in ENV430H5 work in teams to propose legal and policy solutions for environmental problems. This requires collaborative work and cooperation among team members.
- Similarly, students in ENV393H5 work in collaborative teams to prepare the study plan for the final course assessment.
- O In addition to these more formal collaborations, students in ENV393H5, ENV201H5, and several other program courses work collaboratively in informal, tutorial-based setting. For example, in ENV311H5 student participate in a number of debates and problem-solving exercises in tutorials. One example is the "Dragon's Den" for Green Initiatives. Students research locally-based solutions for environmental problems. In teams, they select what they believe to be the solutions; these are presented to the "Dragons," a group of students who determine which of the informal presentations is most convincing, and thus which of the proposed solutions should be "funded."
- The active learning debate and discussion formats used in ENV311H5 include but are not limited to "snowball" discussion groups; mini-debates and triangle debates; world cafés; panels; and small-group and plenary discussions.

### 9 Consultation

The Chairs of the following academic units at UTM were consulted: Political Science, Economics, Historical Studies, Geography, and Philosophy, as well as the Programs in Environment. The Geography Department was consulted deeply, as this program will be housed in the department.

The Office of the Dean (perticularly Yen Du, Program and Curriculum Officer) was consulted.

Professor Shashi Kant (Director, Master of Science in Sustainability Management program, Institute for Management of Innovation) was consulted.

Permissions have been sought and received from the individual instructors of required and elective courses, including instructors who are not being asked for any administrative input into the program.

On the St. George campus, the School of Environment (SoE) was consulted; the SoE faculty discussed the proposal in detail and their suggested changes were incorporated. The Faculty of Arts and Science was consulted with respect to the inclusion of an optional course.

The Faculty of Law was provided a copy of the proposal and asked for comments or concerns; no issues were raised.

### 10 Resources

Resource implications for this proposed Minor program will be minimal as all courses are existing. Course enrolment increases will likely occur but they will be staggered over a period of five years as the

first few cohorts move through the program and until a steady state is reached. Additional teaching assistant (TA) support will be provided as needed based on course enrolment numbers, as per the TA allotments previously determined for the courses.

This proposed program will be administered by staff in the Department of Geography in conjunction with the existing Programs in Environment. While there may be an increase in time needed for staff to process program admissions, graduation requests, and advise students; this is expected to be minimal and additional staffing resources will not be required. The main impact will be on the Academic Counselor, who may need to provide additional advising to students interested in the program.

### 10.1 Faculty Requirements

The Environmental Law and Policy Minor will draw from the expertise and strength of Environment faculty members as well as faculty from the broader Department of Geography, and faculty members from the departments of Economics, Historical Studies, Philosophy, Political Science, and the School of Environment. Table 1 below provides a detailed list of faculty members who will contribute to the program as course instructors (either core or elective courses). Part-time, contractually-limited, and stipend instructors are not listed in this table.

**Table 1: Detailed List of Committed Faculty** 

Faculty Name and Rank	Home Unit	Area(s) of Specialization
Monika Havelka, Ph.D. Associate Professor, Teaching Stream and Director, Environment Programs	Geography (ENV) UTM	Ecology; restoration ecology; statistics and research methods; field courses; environmental science
Barbara Murck, Ph.D. Professor, Teaching Stream	Geography (ENV) UTM	Sustainability; environmental management; environmental science; experiential and online learning; international development
Andrea Olive, Ph.D. Associate Professor	Geography (ENV) and Political Science UTM	Environmental policy, especially species at risk conservation, natural resource extraction, and Canada-US environmental relations
Tenley Conway, Ph.D. Associate Professor	Geography (ENV) UTM	Human-environmental interactions in urban, suburban, and exurban landscapes; environmental geography; urban forestry; landscape ecology; food systems
Laurel Besco, Ph.D. Assistant Professor	Geography (ENV) UTM & MScSM Program (IMI, UTM)	Environmental law and policy; sustainable tourism; green economy; corporate sustainability
Varouj Aivazian, Ph.D. Professor	Economics and Management, UTM and Rotman School of Management	Financial economics; law and economics; sustainability and environmental economics; and the environmental implications of trade agreements, including NAFTA Chapter 11

Pierre Desrochers, Ph.D. Associate Professor	Geography UTM	Economic development and globalization; technological innovation; business-environment interface; energy policy; food policy
Joseph Leydon, Ph.D. Associate Professor, Teaching Stream	Geography, UTM	Regional geography of North America; Colonial North America and the Caribbean; population dynamics; retail analysis and consumer behaviour
Sara Hughes, Ph.D. Assistant Professor	Political Science, UTM	Urban politics, policy, and governance, water policy, and climate change policy; how political interests, institutions, and environmental problems interact at the urban scale, and the social and environmental outcomes they generate
Nicole Laliberté, Ph.D. Assistant Professor, Teaching Stream	Geography, UTM	Feminist geopolitics; anti-oppression pedagogies; geographies of emotion; indigenous geographies
Amy Mullin, Ph.D. Professor	Philosophy (UTM)	History of philosophy, feminist philosophy (philosophy of care, conceptions of the self), and aesthetics (art, imagination and morality)

### 10.2 Space/Infrastructure

There are no special or unique space or infrastructure requirements for this Minor program.

### 11 UTQAP Process

The UTQAP pathway is summarized in the table below.

Steps	Approvals
Development/consultation with the unit	August 2017
Consultation with Dean's office	September 2017
Consultation with VPAP	October 2018
UTM AAC	January 2019
AP&P—reported annually	Cycle 6, May 2019
Report to Ontario Quality Council	July 2019

### Appendix A: Program's Calendar Listing

### **Minor Program ERMINXXXX**

### **Environmental Law and Policy (Arts)**

**Limited Enrolment** — Enrolment in this program is limited to students who have completed ENV100Y5 with a mark of 60% or higher.

4.0 credits are required, with at least 1.0 credit at the 300-400 level.

First Year	ENV100Y5Y5
Higher Years	ENV201H5; JPE250Y5*
	1.5 additional credits from: ECO373Y5; ENV310H5, ENV311H5, ENV393H5, ENV430H5; ENV422H1; GGR318H5; GGR329H5; GGR426H5; HIS318H5, HIS319H5; JEP351H5, JEP356H5, JEP452H5; PHL247H5, PHL271H5; POL346Y5

**NOTE:** Be sure to look ahead and plan to complete the prerequisites for any upper-level elective courses that are of interest to you. The ENV upper-level course electives typically rely only on the program's core courses as prerequisites, but upper-level electives from other departments could have different prerequisites, so be sure to check the Calendar listings for these courses and their prerequisites.

<sup>\*</sup>Proposed calendar change to JPE251H5 and JPE252H5 (replacing JPE250Y5), effective September 2019, to be incorporated.

### **Appendix B: Detailed List of Courses**

### **Core Courses:**

### **ENV100Y5 Environment (SCI)**

This introductory environmental science course examines large-scale features of Earth, natural hazards, Earth's climate and weather systems, energy and mineral resources, human population growth, extinction and biodiversity, environmental toxins, vanishing soils and expanding deserts, forests, urban environmental management, and food resources. Interdisciplinary interaction among Science, Social Science, and Humanities is a major theme. [72L]

### **ENV201H5 Environmental Management (SSc)**

Environmental management builds on topics discussed in ENV100 and GGR111/112, by focusing on conceptual frameworks and specific tools that can be used to formulate environmental management goals and support decision-making. Case studies will be used throughout to highlight different approaches, focusing primarily on Canadian examples. Topics include ecosystem and adaptive management, environment impact assessments, and the role of stakeholders. [24L 12T] Exclusion: GGR234H5 Prerequisite: GGR111H5 and GGR112H5 (formerly GGR117Y5) or ENV100Y5

### JPE251H5 Introduction to Canadian Environmental Law and Policy I \*(SSc)

This course serves as an introduction to environmental policy and law in Canada. The primary intent is to provide an overview of the political context in which environmental policy and law is made and implemented. The emphasis in this course will be on environmental policy. The course begins with an outline of the Canadian parliamentary system and policymaking process. A series of case studies, from biodiversity to climate change, are then explored as a way to see the policy process in action.

Exclusion: JPE 250Y5, POL 250Y5, ENV 250Y5, ENV320H1

Prerequisite: 3.5 credits JPE/POL/ENV

### JPE252H5 Introduction to Canadian Environmental Law and Policy II \* (SSc)

This course builds on the themes and concepts introduced in JPE251H5. The primary intent is to provide an overview of the political context in which environmental policy and law is made and implemented. The emphasis in this course will be on environmental law.

Exclusion: JPE 250Y5, POL 250Y5, ENV 250Y5, ENV 320H1

Prerequisite: JPE 251H5

\*These courses exist currently as **JPE250Y5** Canadian Environmental Politics. The Department of Political Science and Programs in Environment have agreed to implement changes to split the course into two half-courses, one focusing on Environmental Law and the other on Environmental Policy. These changes will be very beneficial for the Environmental Law and Policy Minor. The changes have been brought forward to the curriculum process approved and will appear in the 2019-20 Academic Calendar.

### **Elective Courses:**

### ECO373Y5 The Environment: Perspectives from Economics and Ecology (SSc)

The course examines the basic principles of environmental economics and ecology and the interaction between ecological and economic factors. It assesses alternative criteria and objectives for environmental policy. Problems associated with the implementation of environmental policy are analyzed and examined through case studies. [48L, 24T] Exclusion: ECO313H1,373H5 Prerequisite: ECO100Y5 (63%), ECO200Y5/204Y5/206Y5, or by permission of instructor. Recommended Preparation: ENV100Y5

### **ENV310H5** The Sustainability Imperative (SSc)

The United Nations Commission on Environment and Development popularized the term sustainable development in its 1987 report, *Our Common Future*. How far have we come since then, as a global community, in implementing sustainability as a model for development? In this course we will examine the history, measurement, and present-day models and applications of the concepts of sustainability and sustainable development in both the public and private spheres. [24L, 12T] Prerequisite: 10 credits including ENV100Y5 and ENV201H5

### **ENV311H5** Environmental Issues in the Developing World (SSc)

The Earth is one, but the world is not. We all depend on one biosphere for sustaining our lives. Yet each community, each country, strives for survival and prosperity with little regard for its impact on others. These are the opening words from the report of the UN World Commission on Environment and Development, which first popularized the concept of sustainable development. In this course we examine 'environment' and 'development' and 'human well-being' as inseparable challenges. We consider global, regional, and local environmental problems from the perspectives of developing nations, and investigate the economic, social, and political roots of these problems. [24L, 12T] Exclusion: ENV345H5 Prerequisite: Any 8.0 credits.

### **ENV393H5 Environmental Assessment (SSc)**

The course focuses on the methodologies for measuring and predicting the impact of development on the bio-physical and socio-economic environments. Topics include environmental assessment, law and institutions, environmental mediation, monitoring, mitigation, evaluation, risk assessment. The types of impact assessment (IA) methods examined vary from year to year (e.g. economic IA, ecological IA). [24L, 6P] Prerequisite: ENV100Y5

#### **ENV422H1 Environmental Law (SSc)**

An introduction to environmental law for students in Environmental Studies; legal methods available to resolve environmental problems and the scope and limits of those methods; common law and statutory tools as well as environmental assessment legislation; the problem of standing to sue and the limits of litigation.

**Prerequisite:** (ENV221H1, ENV222H1), and completion of at least 12 FCE of courses; or permission of the Undergraduate Associate Director.

#### ENV430H5 Advanced Environmental Law and Policy\* (SSc)

As the world grapples with increasingly complex environmental challenges, decision makers must find ways to adequately address them. There are many different instruments and tools which can be applied to environmental problems. Whether they are successful can depend on the political, policy, and legal context as well as the compatibility of the instrument chosen with the environmental problem it is directed at. This course will look at the "toolbox" of legal instruments and policy tools from both a theoretical and practical perspective. It will help students understand the advantages and disadvantages of the different options as well as how they can and are being used to deal with different environmental problems. [24L, 12T] Prerequisite: 14 credits, GGR111H5 + GGR112H5 (formerly GGR117Y)/ENV100Y5/PI Recommended Preparation: JPE250Y5

\*The name of this course is currently Environmental Law, but it will be changed to Advanced Environmental Law and Policy, to differentiate it from the new core Environmental Law course, JPE250H5, and Environmental Policy course, JPE251H5, which will then become prerequisites for this course in place of JPE250Y5.

### **GGR318H5** Political Geography (SSc, EXP)

Political geography is concerned with the spatial expression of political entities and events. It involves analysis at a variety of scales ranging from the local to the global. The control and manipulation of territory and the imposition of political boundaries and political ideas are central to this analysis. The course provides discussion on nation building, the emergence of the state system, theories on the state, and the role of the state as provider of services and regulator of activities, and electoral geography and governance. This course fulfills 1 field day. [24L] Prerequisite: 9.0 credits Recommended Preparation: GGR111H5 and any two of the following: GGR202H5, GGR207H5, GGR208H5, GGR209H5, GGR278H5

### GGR329H5 Environment and the Roots of Globalization (SSc)

A critical discussion of how geographical factors, such as landscape, flora and fauna, might help explain why history unfolded differently on different continents. How geography might have impacted the development of agriculture, complex technologies, writing, centralized government and how, in the process, it has shaped the current world economic map. [24L] Prerequisite: Any 8.0 credits

### **GGR426H5** The Geographies of Human Rights (SSc)

This course examines the promises, problems and paradoxes of human rights. We will study the local, national and global aspects of human rights enforcement and violation. By examining specific case studies, we shall examine how so-called 'universal' human rights are articulated and practiced differently in different places. Throughout this course, we shall explore human rights as means of empowerment as well as oppression. [24L] Prerequisite: Completion of third-year requirements for any Specialist or Major program in ENV or GGR or PI Recommended Preparation: GGR202H5, GGR208H5, GGR313H5

### HIS318H5 Canadian Environmental History: Contact to Conservation (HUM)

This course focuses on the interaction of people and the environment. Themes include environmental change as a result of: European exploration and settlement; the transfer of animals, plants and diseases; the impact of contact and the "Columbian exchange" on indigenous peoples; the fur trade; the lumber industry; the destruction of the bison, the reserves system, and immigrant settlers in the

West; the emergence of the conservation movement in Canada. [24L] Exclusion: HIS318Y5, HIS318Y1 Prerequisite: 8.0 credits Recommended Preparation: HIS101H5, HIS261H5/ HIS263Y5

## HIS319H5 Canadian Environmental History: Conservation to the Modern Environmental Movement (HUM)

This course focuses on the interaction of people and the environment in the 20th Century. Themes include the environmental impact of industrialization, urbanization, and the revolution in transportation, and of resource development in the mining, oil, and gas industries; the destruction and preservation of wildlife; parks and the wilderness idea; the modern environmental movement; the contested world of modern agriculture and the food industry; the collapse of the fisheries; Canadian public policy, environmental law, and Canada's international role concerning the environment. [24L] Exclusion: HIS318Y5, HIS318Y1 Prerequisite: 8.0 credits Recommended Preparation: HIS101H5, HIS263Y5/ HIS318H5

### JEP351H5 Comparative Environmental Politics (SSc)

This course is an introduction to comparative environmental policy. The main focus of the course will be Canada-US-Mexico comparative policy around climate change, biodiversity, water resources, and pollution. Other countries may be examined as larger themes related to sustainable development and environmental justice will be covered in detail. [24L] Exclusion: ENV351H5 Prerequisite: 9.0 credits, ENV250Y5 Recommended Preparation: This course is recommended for students with an interest in comparative politics and policy. Previous courses in comparative and international political science, geography, and sociology will be an asset.

#### JEP356H5 Environmental Justice (SSc)

Environmental Justice is about the fair treatment of all people in the creation and implementation of environmental policies. It also provides a critical framework to analyze and understand inequalities of an environmental kind. These inequalities are often based around identities of race, class and gender, such that marginalized groups are made to bear the burden of environmental externalities like pollution. Why are First Nations in Canada less likely to have access to safe drinking water? Why are industrial plants often in low-income neighborhoods? After critical examinations of the theories and foundations of environmental justice, this course uses a case study approach to understanding the concepts and the ways in which it has shaped modern society. [24L, 12T] Prerequisite: 8.5 credits

### JEP452H5 Politics and Policy of Wildlife Conservation (SSc)

This course is an in-depth analysis of conservation policy in Canada. The course begins with an overview biodiversity crisis facing the planet and then moves to an overview of Canada's approach to managing biodiversity across the country. We will carefully examine the federal Species at Risk Act as well as the provincial and territorial wildlife legislation. The remaining of the course will be aimed at making improvements to the Canadian strategy. During the course of the semester, the students will focus on the recovery of endangered species in Canada through the development of a recovery strategy for a specific species. [24L] Exclusion: ENV452H5 Prerequisite: ENV100Y5, ENV250H5

### PHL247H5 Critical Reasoning (HUM)

The course covers the area of informal logic--the logic of ordinary language. Topics include: criteria for the critical assessment of arguments as strong or merely persuasive; different types of argument and

techniques of refutation; their use and abuse. [36L] Exclusion: PHL145H5, TRN200Y1 Prerequisite: None

### PHL271H5 Ethics and the Law (HUM)

Moral issues in the law, such as civil liberties and police powers, censorship, civil disobedience, the death penalty, inequality, paternalism and the constitutional protection of human rights. Case studies from Canadian law. [24L, 12T] Exclusion: PHLB11H3 Prerequisite: PHL101H5/ PHL102H5/ PHL103H5/ PHL105Y5/ PHL113H5 (may be taken as a corequisite) or 4.0 credits.

### POL346Y5 Urban Politics (SSc)

This course examines urban politics and policy problems in both a Canadian and comparative context. Students will be introduced to the key theories and concepts of urban politics scholarship as well as the important policy issues facing contemporary cities such as globalization, sustainability, immigration, and regionalism. [48L] Exclusion: POL 349Y1 Prerequisite: Any 2.0 POL credits

Major Modification Proposal: New Freestanding Minor Where There is No Existing Specialist or Major