Environment and Society

The goal of the Environment and Society Program is to inspire and prepare students to become leaders in the quest for a sustainable world.

Since the turn of the 21st century, global scientific assessments have demonstrated that human activity is having far-reaching negative effects on the Earth system. Biologists propose that the Earth is experiencing the Sixth Mass Extinction. Climate scientists warn that we are approaching a global warming tipping point that, if crossed, will result in dangerous climate change. Some propose that we have entered a new geologic epoch called The Anthropocene, the age in which humans have become the dominant force changing the face of the Earth. These changes are the result of complex interactions between human societies and the natural world in which we are embedded.

Through the Environment and Society Program, students come to understand the social structures that are driving these Earth system changes, and the worldviews that underpin them. They also discover how power is exercised to maintain the status quo, and how they themselves can become change agents.

Major in Environment and Society

Environment and Society is offered as a double Major. Students choosing Environment and Society as their Major will also complete a second Major in another field of study. Because Environment and Society studies are interdisciplinary, any discipline that a student may choose would complement their ENVS program. ENVS electives offered by other departments may count both for the ENVS Major and for the Major in that department.

Note that not all courses are offered every year. Students should consult with the ENVS program coordinator to plan their program of studies.

The Major in Environment and Society will consist of 36 credit hours distributed as follows:

A. Required Environment and Society Courses

ENVS 1013	Understanding Environmental Problems
ENVS 1023	Environmental Praxis I: Thinking Globally, Acting Locally
ENVS 2023	Perspectives on Human-Nature Relations
ENVS 2113	Ecological Literacy
ENVS 3013	Global Environmental Politics OR
ENVS 3043	Canadian Environmental Law and Policy
ENVS 3023	Environmental Praxis II
ENVS 4003	Capstone Seminar in Environment and Society

B. Research Methods (3 credit hours)

ENVS 3113 Research Methods or an approved research methods course in the student's second Major.

C. Electives - 12 credit hours from the following. Several courses are cross-listed with other departments. The department that offers the course is shown in parentheses.

ANTH 2033	Indigenous Lifeways in Canada
COPP 2023	Policymaking in the Info Age
COPP 3033	Public Policy and the Media
CRIM 2743	Social Protest in Canada

ECON 3333 Perspectives on Underdevelopment

ENVS 1503 Principles of Biology I (BIOL)

FNVS 1513 Principles of Biology II (BIOL)

Foundations of Leadership (CBEL 2023) ENVS 2033

ENVS 2043 Sustainability Communications

ENVS 2123 Critical Food Studies

FNVS 2133 Religions and Ecology (RELG)

ENVS 2163 Envisioning Environmental End-Times (ENGL) ENVS 2203 Community Economic Development (ECON)

ENVS 2213 Society and Ecology (SOCI)

ENVS 2243 Health and Sustainability I: Introduction

ENVS 2253 The Ethics of Sustainability: Thinking, Acting Green (PHIL)

ENVS 2263 Understanding Sustainability

ENVS 2313 **Energy and Society**

ENVS 2333 Ecological Economics (ECON)

ENVS 2413 Social Dimensions of Climate Change ENVS 2443 Environmental Psychology (PSYC) FNVS 3033 Nonprofit Management (BUSI 3023) ENVS 3043

Canadian Environmental Law and Policy

ENVS 3053 Sustainability Auditing and Reporting

ENVS 3103 Political Parties and Elections in Canada (POLS) FNVS 3123 The Canadian Constitution: Federalism (POLS)

ENVS 3133 Regenerative Food Systems

ENVS 3143 Sustainability Theory

ENVS 3153 Applied Leadership (CBEL 3023) ENVS 3213 Media and Politics in Canada (POLS)

ENVS 3233 **Environment and Human Rights (HMRT)**

ENVS 3243 Health and Sustainability II: Planetary Health

ENVS 3323 Hunter-Gathers in the Modern World (ANTH)

Environmental Economics (ECON 3323) ENVS 3333 ENVS 3406 Field Course in Art and Ecology (FNAR)

ENVS 3413 Political Economy of Climate Change

ENVS 3443 Psychology of Human-Nature Connections (PSYC)

Sustainable Community Transitions ENVS 3613

ENVS 3703 Toxic In/Justice: Green Criminology (CRIM)

ENVS 3723 Human Ecology (ANTH)

ENVS 4103 Work-Study Project

ENVS 4443 Seminar - Environmental Psychology (PSYC)

INTR 3003 Community-based Internship Journalism and the Natural World JOUR 3333 NATI 2203 First Nations Arts and Sciences

Natural Resources and First Nations of the Maritimes NATI 2233

NATI 3203	Native Philosophy
NATI 3223	Native Environmental Ethics and Ecology
NATI 3703	Indigenous and Western Economics and the Idea of Development
NATI 3923	Territorial Claims
RELG 2433	Christianity and Ecology
SOCI 3123	Social Movements, Activism, Change
SOCI 3293	Animals in Society
SOCI 3693	Discourse and Society

Other courses may qualify as electives. Please consult with the ENVS coordinator.

Minor in Environment and Society

The Minor in Environment and Society will consist of 18 credit hours distributed as follows:

A. Required Environment and Society Courses - 6 credit hours

ENVS 1013 Understanding Environmental Problems
ENVS 2023 Perspectives on Human-Nature Relations

B. Electives - 12 credit hours from list "A", "B" or "C" in the Majors category.

Honours in Environment and Society

An Honours in Environment and Society may be arranged as an Interdisciplinary Honours. Students interested in this should consult with the ENVS Program Coordinator, the Coordinator of Interdisciplinary Studies, and the Interdisciplinary Studies section of the STU Academic Calendar.

ENVS-1013. Understanding Environmental Problems

Earth systems science reveals that the environmental conditions that supported the development of human civilization over the past 10,000 years are becoming increasingly destabilized. This course introduces students to the Earth's regulatory systems such as climate, nitrogen and phosphorus flows, forests, oceans and biodiversity, and the social structures and processes that are interfering with them. Students will come to understand that environmental problems cannot be solved by individual behavioural changes; solutions will require collective action to achieve systemic change.

ENVS-1023. Environmental Praxis I: Thinking Globally, Acting Locally

Praxis can be understood as reflection and action for social change. Drawing on learning in ENVS 1013, students will investigate how global environmental problems are manifested at the local level. They will then develop local action strategies to effect change in those systems. This approach will foster citizenship skills and empower students in the face of global problems. This course will qualify for the STU Experiential Learning Certificate. Prerequisite: ENVS 1013.

ENVS-1503. Principles of Biology I (BIOL)

This course introduces students to the study of life. Topics include the scientific method, biological molecules, cell structure and function, energy flow, respiration, and photosynthesis.

ENVS-1513. Principles of Biology II (BIOL)

This course examines mitosis, meiosis, and genetics. Surveys the structure, function, and evolution of the kingdoms of life. Discusses the basics of ecology, culminating in ecological interactions and the impact of humans on the planet.

ENVS-2023. Perspectives on Human-Nature Relations (HMRT 2243)

Social systems are constructed on a set of dominant beliefs, assumptions and values that are largely unexamined but shape the way societies perceive and interact with the natural world. In this course, students examine the dominant perspectives that give rise to environmental degradation, as well as alternative paradigms offered by Green, eco-justice, global south, sustainability, and indigenous movements. Students also engage with political, economic, and cultural theories of environmental change. Prerequisite: ENVS 1013 or permission of the instructor.

ENVS-2033. Foundations of Leadership (CBEL 2023)

This course builds a foundation for understanding the field of leadership and how it can apply in the lives of students. Theories and models of leadership, including historical, contemporary, and critical, will be explored. The course promotes leadership as a process rather than a position. It has practical and community-based elements to develop leadership skills, style, and identity in community settings. Throughout the course students reflect on personal experiences and real-life examples through the lens of the theories covered in the course to develop their own leadership philosophy.

ENVS-2043. Sustainability Communications

The public sphere is filled with competing visions, agendas and styles of speaking about the critical social ecological issues facing our world such as climate change, ecosystem destruction and chemical pollution. This course examines how communication shapes our perceptions of sustainability issues; introduces various media platforms and public forums that are used for communicating about sustainability issues; analyzes the communicative strategies of various actors (scientists, corporate lobbyists, environmentalists, ordinary citizens) in trying to influence decision makers; and prepares students to participate in conversations and debates about sustainability issues in their communities. Prerequisite: ENVS 1013 or permission of the instructor.

ENVS-2113. Ecological Literacy

This field-based course introduces students to the connections between human and ecological systems in Grand Lake Lowlands ecoregion where Fredericton is located, including the cycling of water, materials, energy and wastes, and the implications of these flows for sustainability. Students will also engage with the literary tradition of nature writing. The course includes field trips to various sites in the Fredericton region, with the possibility of an extended weekend field trip. A small course fee may apply to cover field trip costs. The course qualifies as an experiential learning course.

ENVS-2123. Critical Food Studies

Everyone eats, and by eating we are all connected to a global system of industrialized food production and local networks of distribution and waste management. The system outputs include ecological devastation, food insecurity, poor health, and precarious rural economies. As individuals, we are embedded in various food cultures that either bolster the system or are threatened by it. Drawing from political ecology, political economy, sociocultural and health perspectives, this course takes a critical look at food systems and our relationship to

them, including Indigenous and Global South perspectives, and practices of and movements for food sustainability, security, and sovereignty. Prerequisite: Must have completed 27 credit hours of coursework.

ENVS-2133. Religion and Ecology (RELG)

Many religious traditions display a variety of stances towards the environmental crisis, ranging from indifference to reform. Through critical and comparative study, this course explores religious approaches to ecology in a variety of traditions. Topics may include environmental stewardship, deep ecology, ecoliberation, ecofeminism and ethnic indigenous ecology.

ENVS-2163. Envisioning Environmental End-Times (ENGL)

It may be impossible to represent the scale, timespan, and complexity of climate change. And yet, as a direct corollary, scientists and storytellers have made myriad attempts: avant-garde poetry, apocalyptic film, realist novels, abstract sculpture, and heat maps, among other forms. This course explores how these media experiments have tried and failed to represent the reality of environmental collapse, and considers the consequences for our understanding of language, truth, and the planet's very existence. (Post-1800.)

ENVS-2203. Community Economic Development (ECON)

A course which explores the theory and practice of community economic development. It will include the examination of case studies of successful community economic development. The focus will be on the appropriateness and applicability of the model to the Maritimes.

ENVS-2213. Society and Ecology (SOCI)

This course is an introduction to the sociological study of environmental problems and the issues they raise, using C. Wright Mills' notion of the 'sociological imagination.

ENVS-2243. Health and Sustainability I: Introduction

Good health and wellbeing depend on clean air and water, nutritious food, functioning ecosystems, a stable climate, peace, and security. Conversely, pollution, climate change, ecological destruction, and conflict have devastating health impacts, especially for the most vulnerable populations. Using a public health framework. this course introduces the concept of ecological determinants of health and their intersection with social conditions and population health. This includes examining the roots of the COVID-19 pandemic. This course is open to all students with 27 credit hours of completed course work.

ENVS-2253. The Ethics of Sustainability: Thinking, Acting Green (PHIL)

An historically-conscious analysis of various normative stances in environmental ethics integrated with a sustained consideration of how to apply this ethical theory to modern life. Topics may include deep and shallow ecology, biocentrism, eco-feminism, environmental justice, environmental virtue ethics, the ambiguous role of technology in the environmental crisis, the ethics of the green economy, the ethics of green public policy, a survey of various locally-employed environmental initiatives. Recommended preparation: PHIL 2213.

ENVS-2263. Understanding Sustainability

This survey course introduces the concept of sustainability as encompassing three dimensions —ecological, socio-economic, and personal — and explores the societal changes necessary to achieve sustainability. Prerequisite: ENVS 1013 or permission of the instructor.

ENVS-2313. Energy and Society

This course examines energy systems (oil, gas, coal, hydroelectric, nuclear, and renewable) both historically and in the contemporary world, in terms of environmental and economic impacts, theories of technological change in their creation, deployment, and decommissioning, as well as public policy issues.

ENVS-2333. Ecological Economics (ECON)

Starting from the understanding that the economy is a subsystem of the ecological lifesupport system, the course utilizes a transdisciplinary approach (ecological, social and economic) to examine the problems of scale, equity, and efficiency in contemporary human social formations. The course will also discuss the distinctive policy implications of ecological economics. No prerequisite required.

ENVS-2413. Social Dimensions of Climate Change

This course will introduce liberal arts students to the scientific basis of the problem of climate change, the social systems and dynamics at the root of the problem, and the measures necessary to avoid climate breakdown. There is no prerequisite for this course.

ENVS-2443. Environmental Psychology (PSYCH)

Human behaviour is at the heart of a wide range of such environmental problems as global warming, ozone depletion, pollution, species extinction, deforestation, and population growth. This course emphasizes the positive role that psychology can play in supporting those human values, attitudes, and behaviour that will help to resolve these crises and advance the attainment of a sustainable future.

ENVS-3013, Global Environmental Politics

The modernist view is that knowledge leads to rational decisions. From an environmental perspective, however, this idea is seriously challenged. Never has society known so much about ecological and climate change; yet collective responses to these changes have failed to reverse the downward trends. This course examines this dynamic by examining the politics of the environmental crisis, and in particular the power struggles between those resisting change and those promoting alternative visions of a sustainable society. We consider how those alternative visions translate into public policy and how citizens can engage to make this happen. Prerequisite: Must have completed 30 credit hours of coursework.

ENVS-3023. Environmental Praxis II. (HMRT 3223)

This course explores how alternative visions of the future translate into political action at the international, national, provincial, community, and personal levels. This involves an analysis of alternative theories of the nature of social change. A component of this course may be service learning. Prerequisites: ENVS 1013, ENVS 1023 and ENVS 2023, or permission of the instructor.

ENVS-3033. Nonprofit Management (BUSI 3023)

The course introduces students to the specific issues that arise in managing nonprofit organizations. Topics covered include strategic planning, accountability, board governance, financial planning, fund raising, and human resources.

ENVS-3043. Canadian Environmental Law and Policy

To a great extent, the state of the natural environment in Canada depends on laws and policies adopted by municipal, provincial and federal governments. This course introduces students to these systems of government, the processes by which environmental laws and policies are developed, and the power relations that shape the outcomes. Topics include endangered species, toxic chemicals, plastics and global warming. Prerequisite: students must have completed 30 credit hours of courses before enrolling in this course.

ENVS-3053. Sustainability Auditing and Reporting

This course refers to standards and methods for analyzing and reporting on the ecological and social sustainability of an organization or business. This course examines principles and design of various auditing and reporting frameworks, theories of sustainability reporting and behaviour change, and design and implementation of action plans. Student projects will involve hands-on experience with an audit or action plan as appropriate.

ENVS-3103. Political Parties and Elections in Canada (POLS)

Canada's major national parties are examined in regard to their historical evolution, internal structure, ideological orientation, and public image and reputation. Trends in voting behaviour are discussed, as are the implications of voting patterns in Canada. Distinctive provincial political parties (such as the Parti Quebecois) are also considered.

ENVS-3113. Research Methods

This course introduces the idea of research for sustainability, the application of social science research methods to assist the transition to a sustainable society. Methods such as participatory action research, case studies, interviewing, surveys, and critical policy analysis are examined in the context of real research projects at the community, institutional and sectoral levels. Prerequisite: ENVS 2263

ENVS-3123. The Canadian Constitution: Federalism (POLS)

This course will focus on the manner in which the evolution of constitutional law has shaped the Canadian federal system. The course will proceed primarily by means of class discussion of leading constitutional decisions and by student presentations.

ENVS-3133. Regenerative Food Systems

This course explores the traditional and scientific knowledge systems embedded in industrial and sustainable food production systems, how food systems shape cultural relationships with food, and the practical application of sustainable food production models.. Prerequisite: ENVS 2123 or by permission of the instructor.

ENVS-3143. Sustainability Theory

The concept of sustainability is grounded in systems theory, which understands our current reality as emerging from the interaction of multiple social and ecological systems. Other social science theories that deal with behaviour, values, culture, identity, trust, public participation, and accountability help to illuminate what is going on within those systems. This course introduces students to these theoretical tools which help us to understand why current social systems are unsustainable, and how we can construct a sustainable future. Prerequisite: ENVS 2263

ENVS-3153. Applied Leadership (CBEL 3023)

Emphasis in this course is on the practice of leadership, development of leadership skills, and critical reflection on applied leadership. This course involves an applied leadership project in an organization of the student's choosing, during which they explore the roles, responsibilities and challenges involved in effective leadership. Class time includes group discussion of core concepts, reflections on the leadership project, and learning activities designed to develop leadership skills, including team-building strategies, conflict management, strategic planning, change management, and inclusive leadership. Students assess their own leadership skills and style and complete a leadership portfolio. This is an ideal course for students in leadership roles on campus or in the community or aspiring to develop their leadership capacity.

ENVS-3213. Media and Politics in Canada (COPP 3033, POLS)

This course will examine the role of media in Canadian politics and government. It will examine the effect of media on policy agenda setting and public opinion, and how political elites seek to use media to advance political goals. Prerequisite: POLS 1013, or permission of the instructor.

ENVS-3233. Environment and Human Rights (HMRT)

This course will explore the impact of climate change and environmental degradation on the realization of human rights, focusing on those in the economic, social, and cultural realm, including the right to a clean environment, clean air, water, food, and health. The long-term impact of climate change will also be examined in the context of trends in migration and human security. Prerequisite required: HMRT 1003.

ENVS-3243: Health and Sustainability II: Planetary Health

In recent years, public health and health promotion experts have introduced the concept of Planetary Health which stresses the crucial links between physical and mental wellbeing and the state of the planet. Building on concepts learned in ENVS 2243, this course introduces students to the planetary health framework for health promotion and advocacy. This framework provides a systems-based analysis of the environmental drivers of mental and physical illness and proposes system changes that would result in healthy people and a healthy planet. Prerequisite: ENVS 2243.

ENVS-3323. Hunter-Gatherers in the Modern World (ANTH)

This course begins by exploring the definitions of hunter-gatherers and by examining what sets them apart from other peoples. Early evolutionary views of hunter-gatherers are contrasted with current research on the diverse economic foundations of hunter-gatherer societies. The course covers questions of identity, property rights, gender, modes of production, and distribution of resources, drawing upon examples from various geographical areas. Prerequisite: ANTH 1013.

ENVS-3333. Environmental Economics (ECON 3323)

An examination of the relationship between the ecological system, economics, and institutions. Topics covered may include such issues as technological choice, steady state economics, limits to growth, the adequacy of the market mechanism, world food supplies, the economics of conservation, and alternative futures.

ENVS-3413. The Political Economy of Climate Change

The course explores the systemic economic and political relationships which have created the problem of global climate change and its associated impacts for humanity. There is no prerequisite for this course.

ENV- 3443. Psychology of Human-Nature Connections (PSYC)

This course focuses on examining human connection to nature. The course includes in-class and outdoor experiential learning components. Topics may include: the role of nature in relation to health and psychological well-being, social and community aspects of human-nature interaction, and a critical examination of natureoriented therapeutic approaches. Pre-requisites: PSYC 2023 (Intro to Research Methods)

ENVS-3613. Sustainable Community Transitions

At the heart of sustainability transition is the communities within which people live. Housing, mobility, food, energy, recreation, culture, health care, education, child and elder care, and livelihoods all take place in community. This course looks at the changes that communities can make in these systems to bring them in line with the goals of social equity, economic resilience, and ecological sustainability. There are experiential learning components. Prerequisite: ENVS 0 2263

ENVS-3703. Toxic In/Justice: Green Criminology (CRIM)

This course is designed to study harms against the environment writ large, and actions designed to protest and protect against those harms. Topics include environmental pollution in nature, home and workplace; relevant law and policy; corporate crimes against humanity; and, environmental protest and justice movements. Prerequisites: CRIM 1013 and CRIM 1023 or permission of the instructor.

ENVS-3723. Human Ecology (ANTH)

Since its beginning, anthropology has been interested in the relationship between people and the geographical setting where cultures develop. The history of the discipline is full of contrasting examples in which nature and culture are used, within different conceptual and methodological frames, to explain cultural change, social structure, cultural development, and landscape history, among other topics. The main objective of this course is to explore such different approaches using examples from different biogeographical regions. Prerequisite: None.

ENVS-4003. Capstone Seminar

This is a required course for the Major in Environment & Society which is designed to integrate the entire program of study. The seminar will focus on developing a multidisciplinary understanding of a selection of environmental issues as determined by student and faculty interests. Issues considered will include ecological damage, social origins, and alternative approaches to addressing problems. Prerequisites: ENVS 3013 and ENVS 3023 or permission of the instructor.

ENVS-4103. Work-Study Project

This is a course in experiential learning for students in the final year of their Major in ENVS. Students will work with a non-profit organization which is actively involved in addressing environmental problems. Each student's activities will be designed under the direction of a faculty supervisor in consultation with the student and the work-place mentor. Enrolment is subject to the approval of the Coordinator of the Environment and Society program.

ENVS-4443. Seminar: Environmental Psychology (PSYC)

Building upon PSYC 2443 Environmental Psychology, this seminar explores in greater detail the contributions psychology can make to the resolution of a broad range of environmental crises. The course will examine key values, attitudes, and behaviours that would support a sustainable future, and the contributions that psychology can make to the promotion of a sustainable future. Prerequisite: PSYC 2013 and 2023 or permission of the instructor.

NOTE: Not all courses listed are offered each year. Please consult with the Department Chair for more information about current and planned course offerings.