

Course Title	Course #	Department	Level	Description	Type
Agricultural Economics & Marketing 1	ABIZ0440	Agribusiness and Agric Econ	UG	Introduction to key economic concepts and business principles and their application to Canadian agribusiness.	Sustainability Related
Agricultural Economics and Marketing 2	ABIZ0450	Agribusiness and Agric Econ	UG	The application of economic analysis in the study of marketing: concepts, policy, practices and institutions. Prerequisite: ABIZ 0440.	Sustainability Related
Agricultural Policy	ABIZ0710	Agribusiness and Agric Econ	UG	Review of agriculture, international trade and food safety policies affecting the production and distribution of agricultural commodities and food products.	Sustainability Related
Economics of World Food Issues and Policies	ABIZ1010	Agribusiness and Agric Econ	UG	Determinants of global food consumption, production and the factors underpinning food security and malnutrition. The importance of international trade in balancing countries' supply and demand for food, examination of trade barriers and institutions facilitating trade.	Sustainability Related
Transportation Principles	ABIZ2210	Agribusiness and Agric Econ	UG	This course is a study of demand forecasting, cost analysis, regulation of carriers, role of transport in economic development, project appraisal, and transport planning focusing upon the agricultural, agri-food and other supply chains.	Sustainability Related
Introduction to Environmental Economics	ABIZ2390	Agribusiness and Agric Econ	UG	Economics of management of water, air and land resources quality, and the economics of conservation. The economic implications of environmental standards, licensing criteria and pollution charges will be illustrated by current issues.	Sustainability Focused
Environmental Policy	ABIZ3550	Agribusiness and Agric Econ	UG	Environmental policy development and enactment in Canada; federal and provincial review processes; socio-political aspects of policy development; chemical and pesticide licensing procedures and environmental effects monitoring; environmental policy and sustainability; case studies; discussion of various policies; ethics of development, preservation and conservation; environmental risk management.	Sustainability Focused
Introduction to Agrifood Systems	AGRI1600	General Agriculture	UG	This course explores agricultural production systems with special focus on the Canadian Prairies. Students will develop scholarly, social, communication and professional skills that will enable them to be successful in the application of technical knowledge to food production challenges.	Sustainability Related
Introduction to Toxicology	AGRI2180	General Agriculture	UG	A survey of general principles underlying the effects of toxic substances on biological systems, including history, scope and applications of toxicology, the mechanisms of toxic action, and some major types of toxicants.	Sustainability Related
Indigenous Issues in Food Systems	AGRI2300	General Agriculture	UG	An overview of the historical and contemporary relationships between food systems and Indigenous people. The course will provide background to allow students to craft their own solutions to food system issues faced by Indigenous people.	Sustainability Related
Current Issues in Agricultural Systems	AGRI4100	General Agriculture	UG	Integration of current issues in agricultural systems including land, plant, and animal systems, coupled to the food and nutrition needs of society. Emphasis on ethics, equity, economics, and professional approaches to challenges in food systems using case studies, teamwork and scientific communication to specialists and the public.	Sustainability Related
Animal Health	ANSC0600	Agribusiness and Agric Econ	UG	This course will discuss the common livestock and poultry diseases of the prairie provinces. Emphasis will be placed on prevention through management and health programs but treatment of specific diseases will be addressed. Animal welfare as it relates to commercial animal production will be discussed.	Sustainability Related

Grassland Agriculture: Plant, Animal and Environment	ANSC4410	Animal Science	UG	Inter-relationships between the biological components of grassland agriculture as they relate to forage production on the Canadian Prairies. Topics include utilization by wild and domestic animals, plant community relationships and role of forages in multiple land use planning.	Sustainability Related
Animal Microbiome and Health	ANSC4600	Animal Science	UG	Throughout this course, we will introduce the principles of microbiome research in relation to animal health and performance, as well as the environmental footprint of livestock production systems. Topics may include current techniques used for the study of complex host-associated microbial communities, the role of microbiota in gut health, epithelial barrier, and colonization resistance against pathogens, strategies used to modify the microbiome of livestock for improved production and disease resilience, and the use of microbiome therapeutics as an alternate to conventional antimicrobials and growth promoters. Furthermore, we will analyze the One Health concept, specifically examining its connection to the environmental footprint of livestock production, encompassing areas like greenhouse gas emissions and the emergence of antimicrobial resistance.	Sustainability Related
Socio-Cultural Anthropology	ANTH1220	Anthropology	UG	The comparative study of human societies and cultures, including language, economic and political organization, family and kinship, ritual and belief systems, cultural stability and change.	Sustainability Related
Plagues and People	ANTH2240	Anthropology	UG	Examines selected plagues in evolutionary, ecological, and epidemiological context, and considers the complex biological, social, and economic repercussions for human populations. Foci include past, present, and emerging infectious disease epidemics.	Sustainability Related
Ecology, Technology and Society	ANTH2430	Anthropology	UG	Ecological analysis of the interplay of socio-political and technological processes in different types of societies. Focus upon the ecological side-effects and selected technologies, economic mechanisms and political institutions.	Sustainability Related
Media Anthropology	ANTH2470	Anthropology	UG	This course focuses on media production and dissemination and on images of the world created by media. Media practices and products are addressed in relation to the formation of social relations and identities, the shaping of peoples' sense of time and space, and media's role in the construction of communities and in processes of socio-economic and cultural change.	Sustainability Related
Anthropology of Illness	ANTH2560	Anthropology	UG	Critical examination of illness, health, and disease from a biocultural perspective. Students will learn about cross-cultural variations in how health is understood and study links between health and evolutionary and environmental factors.	Sustainability Related
Evolution and Human Diversity	ANTH2860	Anthropology	UG	An introduction to the interacting roles of heredity, culture and environment in human families and populations. Introduces the biological bases for variation within/between human populations.	Sustainability Related
Anthropology of Food	ANTH3200	Anthropology	UG	Considers the diversity of ways that anthropologists have used food as a productive entry point for understanding culture, society, and relations with the environment. The course will survey highpoints in the history of the anthropology of food and address current topics such as food security and food movements.	Sustainability Related
Anthropology and Contemporary Social Issues	ANTH3380	Anthropology	UG	Anthropological perspectives on poverty, social accountability, colonialism, racism, education, ecological degradation and violence.	Sustainability Related
Anthropological Perspectives on Globalization and the World-System	ANTH3750	Anthropology	UG	An anthropological perspective on the modern world-system and the expansion of capitalism into peripheral areas of the world; the transformation of indigenous societies and cultures; the rise of ethnic conflict, protest and resistance; and a comparative examination of selected global and transnational processes.	Sustainability Related

Public Anthropology with Youth: Critical Decolonizing Pedagogies	ANTH4780/7900	Anthropology	UG/G	The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.	Sustainability Related
Human Adaptability	ANTH4860	Anthropology	UG/G	Topics in biological anthropology which will vary depending on the needs of students and the interest of the instructor. Prerequisite: written consent of instructor or department head. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.	Sustainability Related
Urban Ecology in City Planning	ARCG7080	Architecture Interdisciplinary	G	Topics in Environmental Processes II	Sustainability Related
Precision Agriculture - Technological Tools for Decision Making	BIOE0222	Biosystems Engineering	UG	Precision agriculture is a philosophy of agricultural management that has been enabled by modern technology. This course will examine both the technology and the techniques that can be used to improve the efficiency of agricultural operations by decreasing costs, increasing profits, and decreasing hazards to the environment.	Sustainability Related
Agricultural Buildings and Environments	BIOE0700	Biosystems Engineering	UG	Factors that impact the practicality of farm buildings. Components of buildings, including materials and construction techniques. Techniques of maintaining building environments to facilitate production and/or storage.	Sustainability Related
Impact of Engineering on the Environment	BIOE2480	Biosystems Engineering	UG	Students will gain an understanding of overall sustainability of industrial activities, life-cycle and risk assessment techniques for sustainability, and design improvements to enhance environmental performance of engineered systems. This course will introduce basic methodologies for conducting environmental impact assessments, including physical, chemical, ecological, social and economic impacts.	Sustainability Focused
Management of By-Products from Animal Productions	BIOE4590	Biosystems Engineering	UG	(Lab required) Topics covered include solid and liquid manure, manure characteristics, manure collection, storage, land application and utilization, biological treatment, design of equipment and facilities for manure handling. Environment issues, such as odour and water pollution associated with manure management will also be discussed.	Sustainability Related
Remediation Engineering	BIOE4620	Biosystems Engineering	UG	(Lab required) The theoretical basis for the engineering design of different remediation technologies to treat contaminated soil and groundwater will be introduced. Methods for site characterization, monitoring of progress in remediation, and modeling of the remediation process will be presented. Different methods such as soil washing, air sparging, bioremediation, phytoremediation, constructed wetlands, electrokinetic remediation, reactive barriers will be discussed.	Sustainability Related
Grain Storage	BIOE7110	Biosystems Engineering	G	A synthesis of major aspects of the storage of grain including: abiotic and biotic characteristics of stored grain bulks, regional variables, grain pressure theories, methods of controlling deterioration, and health hazards.	Sustainability Related
Bioresource Engineering and Sustainability	BIOE7350	Biosystems Engineering	G	Students will gain an understanding of overall sustainability of industrial activities, energy usage, and resource depletion. Course topics will include: environmental emissions (as it relates to air and water pollution, solid and hazardous wastes, noise and traffic impacts); life-cycle assessment and related techniques for evaluating sustainability; design improvements to enhance environmental performance of engineered systems; and methodologies for assessing social and economic impacts of new developments.	Sustainability Focused
Biology: Biological Diversity and Interaction	BIOL1010	Biological Sciences	UG	An introduction to biological diversity including prokaryotes, protists, fungi, plants and animals; the form and function of plants and animals and basic concepts of ecology. May not be used for credit in a Major or Honours program in the Biological Sciences.	Sustainability Related

Economic Plants	BIOL1300	Biological Sciences	UG	A survey of economically important plants and their products. The history of plant use, plants in folklore and medicine, fermentation and viticulture, domestication of plants, and forestry are the major topics covered. Chemical, structural, and nutritional aspects of plant products are also discussed.	Sustainability Related
The State of the Earth's Environment: Contemporary Issues	BIOL1340	Biological Sciences	UG	A presentation of contemporary environmental issues focusing on the scientific basis of problems caused by the growth of human population, use and depletion of resources, pollution, and damage to the environment. The current state of our knowledge bases will be discussed, along with improvements in them that may be necessary. The course will consider needs for action, priorities, and opportunities.	Sustainability Related
Principles of Ecology	BIOL2300	Biological Sciences	UG	Principles of ecology at the individual, population, community, and ecosystems levels.	Sustainability Related
Introductory Toxicology	BIOL2380	Biological Sciences	UG	A survey of general principles underlying the effects of toxic substances on biological systems, including consideration of the history, scope and applications of toxicology, the mechanisms of toxic action, and some major types of toxicants.	Sustainability Related
Introductory Ecology	BIOL2390	Biological Sciences	UG	The course involves a study of the interrelationships of living organisms (including human) with each other and with their environment. It is not normally acceptable as a prerequisite to other courses in ecology.	Sustainability Related
Foundations of Population Ecology	BIOL3310	Biological Sciences	UG	The study of living populations, through experimentation and theory, will be examined. Topics investigated will include population regulation, competition, predation, disease, harvest, nonlinear and spatial dynamics and individual based models. Concepts and methods are reinforced through tutorials and evaluated by assignments and examinations.	Sustainability Related
Community Ecology	BIOL3312	Biological Sciences	UG	Lectures and laboratories emphasizing the structure and function of terrestrial biotic communities with emphasis upon selected Manitoba situations.	Sustainability Related
Boreal Ecology	BIOL3318	Biological Sciences	UG/G	A survey of ecological factors in the formation, evolution, and survival of northern biota.	Sustainability Related
Wetland Ecology	BIOL3372	Biological Sciences	UG/G	Lectures and field exercises examine the biotic (algae, macrophytes, invertebrates, and vertebrates) and abiotic (hydrology, nutrient cycling) properties of Manitoba's wetlands. Various wetland types, including prairie potholes, peatlands, and coastal marshes will be considered in lectures and field work.	Sustainability Related
Biology of Fishes	BIOL4210	Biological Sciences	UG/G	Lectures survey organ systems, life history, and the population biology of fishes. The ecological analysis of fish communities is addressed through a field trip and a series of workshops on the analysis of field data. Evaluation is based upon work related to the field trip and examinations based upon the lecture material.	Sustainability Related
Systematics and Biogeography of Fishes	BIOL4212	Biological Sciences	UG/G	A study of the evolutionary history, interrelationships and distribution patterns of the fish-like vertebrates. Laboratories will cover the identification of the major groups of fish-like vertebrates.	Sustainability Related
Biology of Mammals	BIOL4218	Biological Sciences	UG/G	Structure, classification, evolution, life histories, biogeography and ecology of mammals, including conservation. Techniques of studying mammals. Identification of the mammals of Manitoba.	Sustainability Related

Marine Biodiversity	BIOL4220	Biological Sciences	UG/G	Examines key ecological principles governing the maintenance of marine biodiversity, particularly in northern ecosystems. Topics include the definitions and global patterns of biodiversity and the ecological mechanisms influencing changes in these patterns in the context of applied population, community and ecosystem ecology. The course will also emphasize practical solutions, including fisheries' harvest models and marine protected areas.	Sustainability Related
Evolution and Adaptation	BIOL4300	Biological Sciences	UG/G	Lectures and discussion on advances in evolutionary research. Topics will include systematics, evolutionary genetics, evolution and development, co-evolution, mating systems, species ranges, eco-evolutionary dynamics, and evolution in society.	Sustainability Related
Arctic Field Ecology	BIOL4314	Biological Sciences	UG/G	This hands-on field course will be held in Churchill, MB. While participating in ongoing monitoring and research, students will learn techniques for estimating wildlife abundance, distribution, behaviour, and reproductive parameters.	Sustainability Related
Revegetation of Disturbed Lands	BIOL4400	Biological Sciences	UG/G	A physiological and ecological study of disturbed plant communities with emphasis on stresses associated with both mining activities and agricultural practices and processes of assisted recovery.	Sustainability Related
Comparative Animal Energetics	BIOL4460	Biological Sciences	UG/G	Energetic strategies of animals living in ecologically diverse environments. Integration of physiological, morphological and behavioural adaptations with an emphasis on vertebrate species.	Sustainability Related
Biology and Society	BIOL4650	Biological Sciences	UG/G	An exploration of the intersection of biology with society and the societal implications of research in areas such as genetics, biotechnology, ecology and evolution through lectures and tutorials. The course will examine how biological research is presented in the public sphere, and consider common public misunderstandings of the science. Students will examine some of the ethical issues that arise in the practice and application of biological sciences and develop skills in the communication and clarification of biological principles to the public.	Sustainability Related
Marine Field Ecology	BIOL4800	Biological Sciences	UG/G	Lectures, field studies and research projects on a selected topic. Course content to vary from year to year depending on instructor. Usually offered during the summer months.	Sustainability Related
Health and Health Services of First Nations, Metis and Inuit Peoples	CHSC7220	Community Health Sciences	G	Seminar-based course critically examines First Nations, Métis and Inuit health status, health care services, historical assumptions about indigenous populations, and 'pre-Canada' world events influencing European colonization of this land with resultant marginalization of original indigenous Peoples.	Sustainability Related
Health Policy and Planning	CHSC7300	Community Health Sciences	G	This course defines health policy and describes the planning and decision-making process. Case studies will be used to illustrate and critique the substance, process and outcome of policy papers that address contemporary policy issues. Prerequisite: Students outside CHS require instructor permission.	Sustainability Related
Organization and Financing of the Canadian Health Care System	CHSC7320	Community Health Sciences	G	The purpose of this course is to help students develop the knowledge and skills to understand and improve Canadian healthcare. The course provides an introduction to the way the Canadian health system is organized and financed; covers key policy issues and controversies; and examines the challenge of change. Prerequisite: Students outside CHS require instructor permission.	Sustainability Related

Cultural Perspectives on Illness and Medical Practice	CHSC7330	Community Health Sciences	G	The objective of this course is to make students aware of the ways in which disease, illness, and medical practice are socially and culturally mediated. The course will examine cultural influences on the experience and expression of illness and consider the medical practitioner's role in the development and provision of culturally responsive health care. Prerequisite: Students outside CHS require instructor permission.	Sustainability Related
Core Concepts in Public Health	CHSC7500	Community Health Sciences	G	Review the types of skills needed to work in public health. This includes relevant legislation, communication pathways, application of policy, advocacy, needs assessments, surveillance and determinants of health. Students will use these techniques in reviewing policies and programs in the health care system.	Sustainability Related
Core Concepts in Public Health II	CHSC7502	Community Health Sciences	G	Public Health is a multi-disciplinary field of inquiry and practice that addresses the social and biological dimensions of population health. This course represents part two (with CHSC 7500) of the breadth of exposure to core competencies and content areas important to public health practice. Combined with CHSC 7500, this course adds to relevant debates relating to the science and art of protecting, promoting and restoring the health of the population through organized societal activity, public health law and ethics. Students will also gain relevant introductions to health policy, health promotion, prevention and health, and so forth. Specific content for each part of the two courses will be structured in such a way to complement more advanced program offerings in these topic areas.	Sustainability Related
Problem Solving in Public Health	CHSC7510	Community Health Sciences	G	This seminar based course focuses on current issues and topics in community health to advance skills of thinking critically and communicating clearly about practical solution to public health problems. Students outside CHS require instructor permission.	Sustainability Related
Principles of Epidemiology	CHSC7520	Community Health Sciences	G	This course will introduce the basic concepts and methods of epidemiology, including the definition and measurement of health status and health determinants in populations, assessing health risks and inferring causation, and issues in the design and analysis of population health studies.	Sustainability Related
Principles of Epidemiology II	CHSC7530	Community Health Sciences	G	This course follows the Principles of Epidemiology I and discusses the applications of epidemiologic principles in public health practice, including the investigations of epidemics, disease surveillance, clinical applications, evaluation of health programs, and the planning of preventive programs. Students will also receive instruction in microcomputer applications and use of EPI-INFO software for data entry, analysis and presentation.	Sustainability Related
Public Health Field Placement	CHSC7580	Community Health Sciences	G	The aim of the field placement is to highlight the relationship between learning and application of public health principles and practice through the integration of coursework with supervised fieldwork undertaken in local, provincial, or national public health settings. It is specifically designed for MPH students who do not have extensive public health experience, or who seeks a public health experience in a setting different from their primary professional background, and is open to any MPH student seeking further public health practice experience. In addition, to meeting educational objectives (to be set in consultation with the MPH Advisory committee and the Field Placement Supervisor at the host agency), students will participate in the day-to-day activities of the host agency. The site of the field placement will be based on the student's career interests and learning needs, and be located in a public health organization or agency, or situated within a public health program or service.	Sustainability Related

Research Data Centre Research Methods Part I	CHSC7634	Community Health Sciences	G	This course will introduce the processes and methods involved in using Statistics Canada's confidential master data files at the Research Data Centre (RDC). Students will gain skills in conducting secondary analyses in order to address important health and social policy research questions.	Sustainability Related
Research Data Centre Research Methods Part II	CHSC7636	Community Health Sciences	G	A continuation of the introduction to the processes and methods involved in using Statistics Canada's confidential master data files at the Research Data Centre (RDC). Students will gain skills in conducting secondary analyses in order to address important health and social policy research questions.	Sustainability Related
Social Aspects of Aging	CHSC7710	Community Health Sciences	G	This course is an advanced seminar designed to examine current social issues in aging. The course is organized around selected topics related to aging. Where possible, the Canadian experience will be compared to international trends and diversity will be highlighted. The first section is a review of the field of gerontology, ageism, demographic trends, theoretical perspectives and methods and the second section explores contemporary social issues.	Sustainability Related
Qualitative Research Methods in Community Health Sciences	CHSC7738	Community Health Sciences	G	The purpose of this course is to provide students with fundamental knowledge on theoretically informed qualitative inquiry for applied health services and health policy research. The course will include an introduction to social theory and respective qualitative methodologies best suited for population health, health services, social and cultural determinants of health, and health policy research. By the end of the course, students will have an understanding of the principles and practices involved in: integrating theory and qualitative methods; community engagement in qualitative research, including indigenous methodologies and diverse cultural contexts; the design of a theory driven qualitative research study; various ways of generating and analyzing qualitative data; integrated Knowledge Translation; and ethics, among other topics.	Sustainability Related
Advanced Qualitative Research Methods in Community Health Sciences	CHSC7740	Community Health Sciences	G	The purpose of this seminar-based course is to provide students with advanced knowledge on transformative qualitative research methodologies, methods and analysis related to redressing health inequities from a strength-based interdisciplinary perspective. Using case study and other applied approaches students will gain knowledge and experience in: the application of critical social theories to health research; understanding processes of community, stakeholder, and partnership engagement from multiple scales and perspectives (e.g. indigenous populations locally and globally); various ways of generating qualitative data and analyzing texts consistent with selected theory; developing different products for knowledge exchange activities; and the ethics and politics inherent within the research process.	Sustainability Related
Planning Theory 1	CITY7030	City Planning	G	The principal ideas and ideals influencing planning thought and practice, ranging from rational comprehensive planning to theories of societal guidance, ethics and the human-environment interface.	Sustainability Related
Housing and Urban Revitalization	CITY7070	City Planning	G	Housing and urban revitalization in the Canadian context. Housing demand and supply, structure of the housing market, Canadian housing policy, affordability and other selected housing issues; processes and strategies related to urban decline and revitalization.	Sustainability Related

Planning Design 1	CITY7410	City Planning	G	Studio/workshop developing problemsolving techniques and design skills in an area subject to environmental, social and economic change. Preparation of a planning report comprising of research and analysis, evaluation of feasible alternative strategies and designs, synthesis and recommendations for implementation. Case studies from planning journals and planning practice in cities and regions.	Sustainability Related
Planning Design 3	CITY7430	City Planning	G	The application of urban design theories and techniques to a large scale urban area of complex land uses and community development issues. The studio is also open to advanced students in architecture, landscape architecture and interior design and develops a broad approach to multi-disciplinary problemsolving design solutions.	Sustainability Related
Environmental Engineering Analysis	CIVL3690	Civil Engineering	UG/G	Introduction to environmental engineering analysis concept; risk assessment; colloidal dispersions; mass balances, reaction kinetics and reactor design principles. Water pollution and water quality in rivers and lakes. Physical, chemical and biological unit operations and processes applied in water and/or wastewater treatment. Meteorology and air pollution; atmospheric dispersion. Solid waste management issues.	Sustainability Related
Environmental Engineering Design	CIVL3700	Civil Engineering	UG/G	Design principles are developed for water, solid/soil and air pollution control. Application of the principles in design projects which may include surface and groundwater remediation, solid waste management, landfilling, soil remediation and site assessment; municipal and industrial wastewater treatment; odour and air pollution abatement facilities.	Sustainability Related
Hydrology	CIVL3750	Civil Engineering	UG/G	Basic hydrological processes; precipitation; evapotranspiration; infiltration and runoff; analytical methods; hydrograph theory and application; application to reservoir design; project floods and flow forecasting; statistical analysis.	Sustainability Related
Environmental Systems	CIVL4180	Civil Engineering	UG/G	Development of a river water quality model; waste allocation modelling; modelling of the sites selection process; analysis of environmental impact using technical and non-technical (i.e. sociological, ethical, aesthetic) parameters.	Sustainability Related
Geotechnical Design	CIVL4220	Civil Engineering	UG/G	Site characterization; design and construction of surface footings, deep foundations, tunnels, earth and rock support systems; design and remediation of slopes; frozen soils and foundation design; geosynthetics and geofabrics in geotechnical construction; reinforced earth; geoenvironmental issues; tailing dams, clean-up, and remediation.	Sustainability Related
Geotechnical Earthquake Engineering	CIVL4232	Civil Engineering	UG/G	(Lab required) Introduction to soil dynamics and geotechnical earthquake engineering. Behavior of soil subjected to various types of dynamic or cyclic loadings; liquefaction and lateral spreading of soil; design of shallow and deep foundations. retaining structures, slopes and pavements subject to seismic loading; design code provisions.	Sustainability Related
Design of Urban Water Systems	CIVL4300	Civil Engineering	UG/G	Water supply and the design of water distribution systems. Urban hydrology and design of wastewater and stormwater collection systems. Manitoba specific applications will be discussed.	Sustainability Related

Water Resources Planning and Management	CIVL4360	Civil Engineering	UG/G	Introduction to the theory and application of water resources planning and management as a constrained optimization problem with multiple conflicting objectives. Water laws including international, inter-provincial and local regulations will be discussed. The process for planning a water resource project, including identifying the problems and opportunities, resource and demand forecasting, plan formulation and evaluation, and optimization will be discussed.	Sustainability Related
Climate Change and Civil Engineering	CIVL4500	Civil Engineering	UG/G	This course will cover contemporary topics in Civil Engineering. The specific topics and a detailed outline will be available at the time of registration prior to the start of the registration period for the session in which the course will be offered. Prerequisite: Permission of the department head.	Sustainability Related
Water Resources Systems	CIVL7090	Civil Engineering	G	The application of operations research/systems analysis techniques to water resources and urban and environmental systems.	Sustainability Related
Photochemical Purification of Water and Air	CIVL7200	Civil Engineering	G	Includes topics such as energy and the environment, solid waste management, and environmental problems in transport. Topics are studied through case histories of contemporary issues.	Sustainability Related
Environmental Engineering Laboratory	CIVL7950	Civil Engineering	G	Laboratory work in water and wastewater analysis and treatment processes related to water quality management.	Sustainability Related
Integrated Sustainable Agri-Food Systems	DAGR0910	Entomology	UG	The agri-food system encompasses how food is being produced, processed, transported, marketed and consumed. The three pillars of sustainability (economic, social and environmental) will be used to evaluate and improve agricultural sustainability, and will also be applied to the agri-food system (beyond production). Sustainable solutions are unique to each agricultural situation and require long-term thinking and evidence-based decision-making. Focus will be on the balance between food production practices and protecting the natural resources on which agriculture is reliant.	Sustainability Focused
Current Issues in Agriculture and Food	DAGR0920	Entomology	UG	The course will present current day and potential future issues facing Canada's agri-food sector. Students will be required to identify and optimize solutions to these issues, with a focus on the roles and responsibilities of farmers, other food producers and agri-food industry members. The impact of these issues on farms and the agri-food industry now and in the future will be emphasized as will the role farmers can play in in policy development in response to these issues. The course includes an opportunity for students to engage with several guest speakers from the agri-food community.	Sustainability Related
Disability Studies	DS7010	Disability Studies	G	Explores the key concepts and issues in disability studies. Includes a critical examination of models and theories of disability, Canadian and other national laws and international standards, social and economic policy, and professional and service responses.	Sustainability Related
History of Disability	DS7020	Disability Studies	G	Traces the historical development of responses to disability, by the medical/rehabilitation community, the governments, advocacy organizations and others. Canadian history will be the initial framework and the historical developments in other countries (including the UK, France, the USA, the Caribbean) will be used as a comparison.	Sustainability Related

Evaluation and Application of Research Methods in Disability Studies	DS7030	Disability Studies	G	Provides a critical evaluation of quantitative and qualitative research methodologies used in disability studies. Methods to address disability used in different disciplines as well as transformative and empowerment methodologies such as participatory action and feminist disability research will be examined.	Sustainability Related
Feminism and Disability	DS7040	Disability Studies	G	One key theme will be chosen for each year from the interests and availability of faculty. Topics could include women with disabilities, international dimensions of disability, disability policy and practice, disability organizing and other topics developed over time.	Sustainability Related
Introduction to Microeconomic Principles	ECON1010	Economics	UG	This course introduces students to the study of microeconomics. Topics include: demand and supply, price determination, market structure and resource allocation; the behaviour of consumers and firms; and market intervention by government. Selected economic topics are examined such as: welfare programs, environmental regulation, the economics of discrimination, pay equity, and taxation.	Sustainability Related
Introduction to Global and Environmental Economic Issues and Policies	ECON1220	Economics	UG	A survey of some major principles and policies characterizing the world economy and the environment.	Sustainability Related
Community Economic Development	ECON2350	Economics	UG	A study of the economic development problems of northern and native communities in Manitoba.	Sustainability Related
Economics of Gender	ECON2362	Economics	UG	This course will use both neo-classical and feminist economic theory to explore how gender differences may lead to different economic outcomes for men and women, both within families and in the marketplace. Topics covered may include gender aspects of production (both inside and outside the household), leisure, marriage and divorce, fertility, childcare, education, migration, aging and development.	Sustainability Related
Introduction to Environmental Economics	ECON2390	Economics	UG	The economics of management of water, air and land resource quality, and the economics of conservation. The economic implications of environmental standards, licensing, criteria and pollution charges will be illustrated by current issues.	Sustainability Related
Political Economy1: Production and Distribution	ECON2540	Economics	UG	A study of the theories, institutions, policies and relations of power in national and global economic society with reference to the production of market and non-market goods and services and the distribution of necessary and surplus output. Particular attention will be given to the role of the state in the regulation of markets and the distribution of surplus.	Sustainability Related
Political Economy 2: Economic Growth and Fluctuations in a Global Economic Environment	ECON2550	Economics	UG	A study of the theories, institutions, policies and relations of power in national and global economic society with reference to economic growth, international trade and finance, economic fluctuations, inflation and unemployment. Particular attention will be given to the role of the state in the regulations of macroeconomic activity.	Sustainability Related
Income Distribution	ECON2670	Economics	UG	An introduction to how income, and its accumulation as wealth, is distributed between individuals, as well as between classes of economic actors. Measures of income inequality, wealth and poverty are introduced. Empirical data and theories aimed at explaining the distribution of income and broad trends that have emerged overtime are reviewed. Redistributive policies undertaken by governments and various normative approaches to the economic analysis of income inequality are also examined, with an emphasis on modern policy options and challenges.	Sustainability Related

An Introduction to Development Economics	ECON3392	Economics	GR	The definition and major challenges of development and an introduction to theories of growth and development.	Sustainability Related
International Trade	ECON3670	Economics	UG	A study of the theory of international trade and modern trade issues including the effect of economic integration on growth, distribution, national policy and the environment.	Sustainability Related
Economic Determinants of Health	ECON3692	Economics	UG	The objective of this course is to provide an economics perspective on the epidemiological transition from infectious to chronic disease. This course will contrast the biomedical, consumer choice and political economy approaches and their policy implications.	Sustainability Related
Macroeconometrics Policy Analysis	ECON4490	Economics	UG	This readings course will vary from year to year depending on the needs of students and the interests of instructors. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different. Prerequisite: written consent of instructor.	Sustainability Related
Pedagogy for Sustainable Well-being: Science, Mathematics and Social Studies	EDUB4010	Curriculum: Teaching and Learning	UG/G	An exploration and critical reflection on theory, research, and practice in education for sustainability in science, mathematics, and social studies and the ways in which multiple literacies can assist children in consolidating their knowledge and understanding of sustainable well-being. Course offered off-campus.	Sustainability Related
PROC PRAC IN TEACH SCIENCE	EDUB7494	Curriculum: Teaching and Learning	G	An analysis of science education instructional and learning perspectives encountered in current research and curriculum in this area. Emphasis will be given to current research in science instruction such as (but not exclusive to) argumentation, problem-based and project-based learning, technological design and problem solving, scientific inquiry in the laboratory, assessment and sustainability.	Sustainability Related
Earth: A User's Guide	EER1000	Envir, Earth & Resources	UG	This course will present a multi-disciplinary introduction to the Planet Earth as both the source of essential resources and as the site of resulting negative impacts. Focus in the course will be provided by addressing important and current topics, case studies, and concepts that the well-educated citizen of the Earth should understand and will include natural and human-induced processes within a broad range of spatial and temporal scales.	Sustainability Related
Technology, Society and the Future	ENG3020	Engineering Education	UG	Impact of technology and technological change on society-past, present, future; specific technologies, e.g. construction. machine power, computers, communications, medical, military: the process of technological change; invisible effects of technology; technology and resource use; sustainable development, limits to growth and the role of technology.	Sustainability Focused
Beekeeping	ENTM0610	Entomology	UG	Introduction to beekeeping that includes economics and marketing of honey and beeswax, equipment and its construction, pollen and nectar plants, pollination, management systems, diseases and pests, honey handling, package bees, wintering of bees, etc.	Sustainability Related
Inspect Pest Management	ENTM0620	Entomology	UG	Characteristics, damage, and identification; insecticide use and safety; life histories and control of common Manitoba livestock, field and farmyard insects. General principles of pest management in agriculture will also be discussed.	Sustainability Related
World of Bugs	ENTM1000	Entomology	UG	A survey of insect biology and life styles with emphasis on insect diversity and human-insect interactions.	Sustainability Related

Veterinary and Wildlife Entomology	ENTM3160	Entomology	UG	An introduction to the insects and their relatives that affect domestic animals, pets and wildlife. Special consideration is given to life histories, insect/host interaction, evolutionary relationships, impact on host vertebrates and pest management. Not all courses are offered every year. Please contact the department regarding course availability.	Sustainability Related
Crop Protection Entomology	ENTM3170	Entomology	UG	A course for students requiring a foundation in entomology and knowledge of major insect pest groups in Western Canada. The pests and principles for their control (chemical, cultural, mechanical, physical and biological methods) are explored with emphasis on the entire ecosystem.	Sustainability Related
Introduction to Applied Entomology	ENTM3190	Entomology	UG	A course providing a foundation in applied entomology covering topics including: basic insect biology, insect pest management, insect biodiversity and the biological services provided by insects. Online lecture presentations, weekly readings and online laboratories. Prerequisites: none.	Sustainability Related
Environmental Science 1 - Concepts	ENVR1000	Environment and Geography	UG	This course will introduce students to the conceptual framework of the environment by examining its physical, biological, and social components. General topics to be considered will include ecological principles and the responses of natural and managed systems to disturbance; population growth; biodiversity and conservation; and environmental sustainability.	Sustainability Focused
Environmental Science 2 - Issues	ENVR2000	Environment and Geography	UG	This course will briefly review the major features of the structure and function of natural systems along with the degree to which these have been compromised. The main component of the course, however, will concentrate on the identification of the issues that underlie environmental degradation, while exploring alternative conditions that have the potential to reverse current trends and ultimately contribute to ecological sustainability.	Sustainability Focused
Introduction to Sustainability	ENVR2020	Environment and Geography	UG	Field and practical experience in selected topics of current interest in the Environmental Science and Studies, with the content to vary depending on the needs of students and faculty.	Sustainability Focused
Introduction to Toxicology	ENVR2180	Environment and Geography	UG	A survey of general principles underlying the effects of toxic substances on biological systems, including consideration of the history, scope and applications of toxicology, the mechanisms of toxic action, and some major types of toxicants.	Sustainability Related
Technical Communication in the Environmental Sectors	ENVR2350	Environment and Geography	UG	An introduction to technical communication skills required for environmental practitioners in research, government, and industry. The course covers technical writing and literature search techniques, business writing including reports, memos and e-mails, professional presentation skills, and fundamental internet skills. Practical experience is gained through assignments and laboratory exercises.	Sustainability Related
Environmental Chemistry	ENVR2550	Environment and Geography	UG	An introduction to the chemistry of the environment. Emphasis will be on the composition of the natural environment and the processes of natural and human-introduced chemical species that take place within it. The course will provide students with the chemical basis for understanding the environment and environmental problems.	Sustainability Related
Environmental Critical Thinking and Scientific Research	ENVR2810	Environment and Geography	UG	Course is designed to aid students in the development of a skeptical, scientific approach to thinking about environmental and geographical problems and issues, as well as applying that skepticism and critical thinking to develop well balanced research hypotheses and data collection methods.	Sustainability Related

Environment and Tourism	ENVR3000	Environment and Geography	UG	Selected topics of current interest in the Environmental Sciences and Studies. Course content to vary with each offering depending on the needs and interests of students and faculty.	Sustainability Related
Environmental Conservation and Restoration	ENVR3110	Environment and Geography	UG	Environmental conservation and restoration are introduced and approaches based on science and traditional knowledge are contrasted. An emphasis is placed on systems thinking and both local and international case studies.	Sustainability Related
Aquatic Ecosystem Services	ENVR3140	Environment and Geography	UG	This course introduces the field of Ecosystem Services, an analytical framework for evaluating the economic, cultural, and biogeochemical contributions that ecosystems make to human health and well-being. Examples will be drawn from aquatic ecosystems and cover topics such as pollution and contamination cleanup, commercial and subsistence food provisioning, climate regulation, and cultural uses in folklore, art, religion, science, and recreation. A special emphasis will be made on microbes as key drivers of aquatic ecosystems, including topics in microbial diversity, metabolism, and evolution.	Sustainability Related
Environmental Responsibilities and the Law	ENVR3160	Environment and Geography	UG	Environmental responsibilities and their legal framework in terms of policies, legislation, standards and guidelines and the tools to manage responsibility are examined through lectures, case study review and discussion. Environmental liability and due diligence are reviewed in relation to responsibilities of organizations and individuals. Strategies to manage environmental liabilities, including environmental and risk assessment, are also discussed.	Sustainability Related
Environmental Assessment	ENVR3250	Environment and Geography	UG	This course engages with the theory, principles and practices of environmental assessment as a planning and decision-making process to identify and mitigate adverse effects of development projects. Environmental assessment is defined in the context of federal and provincial legislation, and applicable standards and guidelines. Assignments involve practical experiences, case study review and basic report preparation.	Sustainability Related
Introduction to Environment and Health	ENVR3400	Environment and Geography	UG	An overview of the linkages between human health and environmental issues. The course discusses the nature of environmental hazards, human exposure and health outcomes. Major environmental and human health issues such as air pollution, hazardous substances, endocrine disruptors and products in the home are covered.	Sustainability Related
Green Building and Planning	ENVR3750	Environment and Geography	UG	An overview of the concepts and tools of Green building design and Green Planning. The course covers the history and trends in Green Building and Planning, related policies, tools and techniques. There is a strong emphasis on learning from local case-studies through seminars and field trips.	Sustainability Related
Sustainable Manitoba	ENVR3850	Environment and Geography	UG	This course explores the links in sustainability between the local and global through an interdisciplinary perspective. By looking at the ecological, social and economic aspects from a variety of disciplinary perspectives, an advanced understanding of sustainability is achieved. A broad range of perspectives is achieved through participation of guest speakers both from within and outside the university as well as excursion outside the classroom.	Sustainability Focused

Geography and Wellness	ENVR3890	Environment and Geography	UG	This course explores how human environment relations influence our mental, emotional, and physical wellbeing. Students will delve into current research in health and wellness geography and related disciplines, particularly focusing on: therapeutic landscapes, ecological loss and grief, sacred spaces, and environmental influences on mental wellbeing.	Sustainability Related
Human Dimensions and Wildlife	ENVR4000	Environment and Geography	UG/G	Selected topics of current interest in the Environmental Sciences and Studies. Course content to vary with each offering depending on the needs and interests of students and faculty. Prerequisites: Permission of department head, and 60 credit hours of university credit.	Sustainability Related
Advanced Applications in Field Readiness	ENVR4020	Environment and Geography	UG/G	Field and practical experience in selected topics of current interest in the Environmental Sciences and Studies, with the content to vary depending on the needs and interests of students and faculty. Prerequisite: Permission of department head.	Sustainability Related
Ecosystem Management	ENVR4050	Environment and Geography	UG/G	This course will provide students with an understanding of the practical applications of ecological science, environmental policy, and resource management approaches in the large-scale planning of landscapes. The course will review ecological principles and trace the historical development of the ecosystem concept. Comparisons are made to other possible environmental management approaches. The synthesis of major elements and concepts will be reinforced through case studies on the Manitoba landscape, with an emphasis on practical learning by students through field seminars and group discussions.	Sustainability Focused
Biogeography	ENVR4060	Environment and Geography	UG/G	This course will provide students with a general understanding of the historical, ecological, analytical, and conservation aspects of biogeography. The course will also have a dual focus on the principles and concepts of reasons for the distribution of plants and animals worldwide, as well as incorporating discussion on as many local (Manitoba, Canada, North America) examples as possible.	Sustainability Related
Critical Thinking and the Environment	ENVR4110	Environment and Geography	UG/G	Topical issues and responses regarding the environment including conservation, management, and policy making are critically evaluated at local, national, and global scales. Term projects emphasizing applied work with environmental organizations and researchers are presented.	Sustainability Related
Advanced Issues in Environment and Health	ENVR4400	Environment and Geography	UG/G	An evaluation of global and local environmental health issues and the assessment and management tools used to manage these risks. Case studies of environmental issues and their human health effects are covered. Students have the opportunity to work on a substantial interdisciplinary environmental health project. Prerequisite: ENVR 3400.	Sustainability Related
Thesis Project in Environmental Science and Studies	ENVR4500	Environment and Geography	UG/G	A research thesis project in any aspect of environmental science or environmental studies, chosen in consultation with the course coordinator and an appropriate supervisor, typically a faculty member. Written reports and oral presentation on the results of the thesis project will be required.	Sustainability Related
Aquatic Chemistry	ENVR4550	Environment and Geography	UG/G	An examination of biogeochemical processes affecting the distribution, speciation and bioavailability of chemical substances in the aquatic environment. The theoretical basis for the chemical behaviour of natural water systems is discussed, as well as the description of the processes involved in wastewater treatment.	Sustainability Related

Advanced Issues in Environmental Law and Policy	ENVR4650	Environment and Geography	UG/G	This course provides an in-depth review of Canadian law and policy relating to environmental protection and management. In particular, the course describes the laws governing a variety of topics related to the environment, including constitutional responsibilities, federal and provincial environmental legislation, water law, parks and protected areas, wildlife and fisheries management, species at risk, and international law including climate change.	Sustainability Related
Climate and Society	ENVR4800	Environment and Geography	UG/G	This course takes an interdisciplinary approach to explore the social causes, consequences, and necessary responses to climate change including adaptation and mitigation. It identifies key concepts and analytic approaches that assist with identifying the social, economic, political, and cultural processes that both drive climate change and influence responses. In particular, it engages with human environment relationships and the role of diverse values, identities, knowledge systems and emotions, and the differential amounts of power held across social groups. Examples will be drawn from the global North and South and at multiple scales from the local to global.	Sustainability Focused
Wildlife Management	ENVR4850	Environment and Geography	UG/G	(Lab required) This course provides students with an understanding of relevant theory and practice in wildlife management. Topical management issues will be studied, selected through consultation with government and NGOs in Manitoba. There will be field trips and lab activities.	Sustainability Related
Arch Tech 1	EVAR3004	Environmental Design	UG/G	Construction materials and structural theory in the analysis and design of simple wood-frame, masonry and light steel construction; fundamental passive energy systems and design strategies for material and energy reduction.	Sustainability Related
Architecture Design Studio 1	EVAR3008	Environmental Design	UG/G	An architectural study of the human condition in relation to the natural and built environment through design oriented research exploration, analysis, evaluation and interpretation of a selected subject of inquiry. Various ways of seeing and making are applied as tools for critical thinking to align content with modes of representation.	Sustainability Related
Architecture Design Studio 2	EVAR3010	Environmental Design	UG/G	Building upon first term explorations, architectural propositions are developed that seek to clarify relations between human inhabitation and the physical environment in a regional context. Design principles influenced by programmatic, theoretical, historical, technological material and environmental criteria are examined.	Sustainability Related
Architecture Design Studio 3	EVAR4004	Environmental Design	UG/G	This studio focuses on the broader cultural implications of social interaction and the collective inhabitation of the built and natural environments. Architecture design explorations are influenced by a thorough examination of programmatic, theoretical, historical, technological, material and environmental criteria.	Sustainability Related
Arch Tech 4: Comprehensive Design Technology	EVAR4008	Environmental Design	UG/G	A technical knowledge project-based course integrating with Arch Studio 4. Comprehensive technology issues include: site; material; energy; structures; construction; sustainability; environmental factors; building code; life safety. Student's work will include analysis, technical drawings and calculations. Corequisite: EVAR 4010 Arch Studio 4	Sustainability Focused

Architecture Design Studio 4	EVAR4010	Environmental Design	UG/G	The previous terms investigations are further developed and synthesized into a comprehensively designed environment. Architectural propositions seek to clarify specific relations between details and the overall design, through the integration of complex social, cultural, programmatic, theoretical, historical, technological, material and environmental principles, systems and criteria.	Sustainability Related
Introduction to Environmental Design	EVDS1600	Environmental Design	UG	An introduction to the philosophy and pragmatics of design and designing processes and methods. The focus will be on design as a creative, aesthetic and scientific endeavor, and will examine the challenges and roles of environmental designers in society.	Sustainability Related
History of Culture, Ideas and Environment	EVDS1660	Environmental Design	UG	Historical survey of key works from the foundations of civilization to the Enlightenment, including interdisciplinary perspectives in art, architecture, interior design, landscape architecture and urban planning considered in the physical, socio-economic, political, artistic and cultural contexts.	Sustainability Related
History of Culture, Ideas and Environment 2	EVDS1670	Environmental Design	UG	A historical survey of western movements in art, architecture, interior design, landscape architecture and urban planning considered within the physical, socio-economic, political, artistic and cultural context. An introduction to the historical influence of the art, design and culture of non-western traditions will be included. Emphasis is on works created after the Enlightenment.	Sustainability Related
Environmental Technology	EVDS1680	Environmental Design	UG	An examination of the scientific principles embodied in the natural laws which govern the science of building, landscape and environmental design in the context of sustainable development. Factors of climate, geology and natural resource systems are introduced.	Sustainability Focused
Ecology and Design	EVDS2200	Environmental Design	UG	An examination of principles of Ecology and Design works in which these tenets are considered, engaged, and/or demonstrated. Topics fundamental to the science of Ecology will theoretically structure the course content. Emphasis will be placed on understanding the forces and systems working within and between natural, social and human environments.	Sustainability Related
Materials and Assemblies	EVDS2300	Environmental Design	UG	This course provides an introduction to applied statics, construction materials and construction system assemblies for landscape, building, and interior constructions. Construction material properties and applications, including impacts on resource depletion and on sustainable building practices will be introduced along with basic strategies and methods to analyze and calculate forces in simple structures.	Sustainability Related
Natural and Human Systems	EVDS2702	Environmental Design	UG	An application of the scientific principles embodied in the natural laws which govern environmental design. Aspects of the bio-physical factors, energy, human physiology and perception, comfort, and resource management are reviewed in the context of sustainable planning and design practices.	Sustainability Focused
Design Studio 2	EVDS2900	Environmental Design	UG	An exploration of the fundamental relationships between space, form and order in the context of the built environment, from body to place. Pedagogical emphasis will be directed towards design process, cultural intentions, and environmental accountability.	Sustainability Related
Materials, Assemblies and Detailing	EVIE3004	Environmental Design	UG/G	Workshop and lecture course on materials, joinery and invention. Review of the principles of framing, bracing, and tension applied to casegoods and furniture; exploration of a variety of soft and hard materials and constructions with an emphasis on sustainability.	Sustainability Related

Interior Light and Colour	EVIE3012	Environmental Design	UG/G	This course examines interior lighting and colour theories and concepts emphasizing human and ecological issues, exploration of spatial design strategies and practices.	Sustainability Related
Human Factors and Environmental Experience	EVIE3014	Environmental Design	UG/G	Theoretical and practical issues related to human characteristics, needs, behaviours, and interactions with and within the built interior environment.	Sustainability Related
Indoor Systems 1	EVIE4002	Environmental Design	UG/G	In-depth, whole building examination of various integrated active and passive environmental controls systems. Focus on working with existing commercial building construction and environmental systems when integrating new interior design and ecological concepts and strategies. Introduction to building performance assessment, construction drawings and schedules.	Sustainability Related
Indoor Systems 2	EVIE4004	Environmental Design	UG/G	Broad exploration of a variety of contemporary and innovative building technologies and their integration with interior design. Focus on ecological, new building construction concepts and measure, delivered in the context of integrated design team processes and building systems innovation. Integration and coordination of interior architectural elements with active and passive building systems.	Sustainability Related
Ecology and Design 2	EVLU3004	Environmental Design	UG/G	This course will focus on an examination of ecological and technological perspectives on the planning, design and making of the physical environment. This will include a meshing of prediction and advocacy concerning new models of sustainable urbanization, focusing on green technology and infrastructure. Key theories and their application to landscapes at varied scales will be considered along with salient literature, current issues, design precedents and potentials for creative expression and interpretation.	Sustainability Related
Studio 3: Dwelling/Precinct/Everyday Life	EVLU3006	Environmental Design	UG/G	A studio/lecture course that examines the notion of dwelling through spatial design with a concentration at the scale of the precinct in the private to semi-private realm focusing on the needs of the individual, on spatial qualities, materials, and site design detail. Theoretical, analytical, conceptual, design, planning and communication skills in landscape and urbanism will be developed and applied in distinct projects. Emphasis is on habitat by design, issues of contested space, ecological design and sustainability.	Sustainability Related
Indigenous People & Community Planning	EVLU4006	Environmental Design	UG/G	This course will involve a critical examination of specific topics such as: health and community design; inner city environments; and Canadian community planning and design, and its contexts.	Sustainability Related
Families in Contemporary Canadian Society	FMLY1000	Community Health Sciences	UG	This course provides an introduction to issues in contemporary families from an interdisciplinary perspective. Changing and diverse family forms and experiences are reviewed. An overview of issues pertinent to family well-being, including but not limited to immigration, poverty, homelessness, racism, addiction, disability, divorce, and physical and mental illness is provided.	Sustainability Related
Introduction to Social Development	FMLY1012	Community Health Sciences	UG	This course is an introduction to social development with a particular emphasis on families and communities. Social development is concerned with the advancement of the common good, the effective management of social problems, the meeting of human needs, and the equitable distribution of society's resources. As such, this course explores the social factors and conditions that promote or hinder social development and how this affects the well-being of individual, families, and communities in contemporary societies.	Sustainability Related

Development, Conflict and Displacement	FMLY2012	Community Health Sciences	UG	The course is an introduction to development, conflict, and displacement as they affect individuals, families and communities. Specifically, this course examines the current phenomenon of induced displacement due to social conflicts, natural disasters, or uneven development in developing countries. Students will examine concepts and issues arising from induced displacement and explore community based responses to this problem.	Sustainability Related
Diversity and Families	FMLY2500	Community Health Sciences	UG	Using the theoretical frameworks of intersectionality and social ecology, this class addresses how diversity in Canada is influenced by age, gender, ability, ethnicity, race, as well as family relationships, institutions and social policies. A focus on human rights and anti-racism education is emphasized.	Sustainability Related
Fundamentals of Health Promotion	FMLY3750	Community Health Sciences	UG	This course provides an interdisciplinary life course perspective on theories and methods of health promotion. Current research, practices and policies in health promotion targeting individuals, families and communities will be critically reviewed with regard to issues of gender, culture, age, functional ability, socio-economic status, sexual orientation, and other determinants of health.	Sustainability Related
Introduction to the Development of Programs for Children and Families	FMLY3780	Community Health Sciences	UG	An introduction to the theory and practice of program development with special emphasis on programs for children and families. The course will cover techniques for conducting needs assessments, as well as the process of planning and implementing programs to address community need.	Sustainability Related
A Social Justice Perspective on Indigenous Maternal and Child Health	FMLY4606	Community Health Sciences	UG/G	This course examines the local and global challenges regarding the health care and health care needs of Indigenous peoples, with particular attention to childbearing women, new mothers, and young children. Interdisciplinary theories and methods applied to the study of Indigenous peoples are critically evaluated from Indigenous and social justice perspectives.	Sustainability Related
Food Safety Today and Tomorrow	FOOD1000	Food & Human Nutritional Sci	UG	A contemporary examination of the safety of the food supply - where, how and why problems may arise and what is and can be done to consistently achieve high quality, safe food. Controversial issues (residues, organic, biotechnology, irradiation) will be discussed in a balanced manner, and prospects for the future presented.	Sustainability Related
Current Issues in Food and Human Nutrition	FOOD4100	Food & Human Nutritional Sci	UG/G	Integration of current issues in food and human nutritional sciences. Emphasis on ethics, equity, economics, and professional approaches to challenges in food and human nutritional sciences using case studies, teamwork, and scientific communication to specialists and the public.	Sustainability Related
Food Analysis 2	FOOD4250	Food & Human Nutritional Sci	UG/G	Advanced techniques employed in the physico-chemical analysis of food products as preparation for research, development, and inspection roles in government and in industry.	Sustainability Related
Water Management in Food Processing	FOOD4260	Food & Human Nutritional Sci	UG/G	The course is devoted to the management of water and wastewater in food processing. The roles of water in food processing, recycle and reuse opportunities, treatment options for water and wastewater are presented. The course also discusses water stewardship in relation to food processing, water and wastewater regulations and implication for HACCP and ISO.	Sustainability Related
Food Safety Regulations	FOOD4500	Food & Human Nutritional Sci	UG/G	Current food safety issues; government, industry and consumers' role in organizing a safe food supply system; food laws and regulations in Canada and internationally. Preventative measures to increase food safety and sanitation will also be covered. Offered in 2005-2006 and alternate years thereafter.	Sustainability Related
Introduction to Human Geography	GEOG1280	Environment and Geography	UG	This course studies aspects of the human world: population, settlement and resources.	Sustainability Related

Introduction to Physical Geography	GEOG1290	Environment and Geography	UG	This course studies aspects of our physical environment: climate, landforms, soils and vegetation.	Sustainability Related
Social Justice in the 21st Century: Global Political Economy and Environmental Change	GEOG1700	Environment and Geography	UG	Introduces students to political economy and cultural geography through the close analysis of contemporary world events, including but not limited to instances of violent conflict, environmental change, international negotiations, political processes and events, social movements, and policy developments. A multimedia approach will advance students' understanding of geopolitical events from political economy and spatial perspectives. Specific content of the course will change year-by-year in response to developments in national and world politics.	Sustainability Related
Natural Hazards	GEOG2272	Environment and Geography	UG	Environmental hazards to human settlement and economy are examined with particular attention to meteorological, soil erosion, mass wasting, earthquake and volcanic phenomena.	Sustainability Related
Place, Populations and Mobility: Geographic Perspectives	GEOG2330	Environment and Geography	UG	An examination of the factors controlling the number and distribution of human population. Variations in fertility, mortality and mobility will be analyzed and the causes and consequences reviewed.	Sustainability Related
Geography of Natural Resources	GEOG2520	Environment and Geography	UG	An introduction to the basic concepts of the subject and the distribution of resources. Stress will be placed on Canadian resources and resource requirements but examples from other resource systems will also be used.	Sustainability Related
Weather and Climate	GEOG2540	Environment and Geography	UG	This half-course examines the nature, controls, and observations of weather and the variation of climate in time and space.	Sustainability Related
Geography of Canada	GEOG2570	Environment and Geography	UG	A regional study of Canada in which the major regions of Canada are studied with respect to geographical patterns of their physical environment, settlement, culture, economic activity, and land use.	Sustainability Related
Geography of the United States	GEOG2580	Environment and Geography	UG	A regional study of the United States in which the major regions of the United States are studied with respect to geographical patterns of their physical environment, settlement, culture, economic activity, and land use.	Sustainability Related
Geography of Culture and Environment	GEOG2630	Environment and Geography	UG	An introduction to the cultural geographic study of environment, focusing on the evolution of landscape, the creation of regions, and human relationships with nature.	Sustainability Related
Geography of Culture and Inequality	GEOG2640	Environment and Geography	UG	An introduction to the cultural geographic study of human and place inequalities, focusing on behaviour in landscape, group differences, and human identities.	Sustainability Related
Introduction to Economic Geography	GEOG2870	Environment and Geography	UG	This course introduces the field of economic geography, paying particular attention to the historical, environmental and spatial dimensions that shape the global economy and current economic order, including: wealth and poverty, production patterns and community chains, consumption and retail processes; natural resources; the state's role in economic governance; global labour; and the ways in which economic structures and processes shape gender and ethnicity. Course materials will be global in scope but will provide both a macro- and micro-economic perspective.	Sustainability Related
Geography of Canadian Prairie Landscapes	GEOG2900	Environment and Geography	UG	This course introduces students to the various geographical themes, concepts and processes within the context of the natural and anthropogenic development of the Canadian prairie region. It traces the evolution of the prairie landscape. It will focus on academic writing in the discipline.	Sustainability Related
Social Vulnerability to Natural Hazards	GEOG3272	Environment and Geography	UG	This course examines differing social vulnerability to natural hazards, before, during and after disasters, including class, gender, age, health, language, and ethnicity.	Sustainability Related

Introduction to Microclimates and Micrometeorology	GEOG3320	Environment and Geography	UG/G	This course introduces the concept of energy balance climatology and examines relationships among climate, microclimate, and environments of the Earth's surface and human-made environments. Studies include bioclimates and hydroclimates.	Sustainability Related
Introduction to Climate Change and Its Causes	GEOG3390	Environment and Geography	UG/G	The primary objective of this course is to provide students with a general understanding of the physical and astronomical factors that drive global climate change. Focus will be given to current and future climate change in the context of observations and modeling.	Sustainability Related
Urban Geography	GEOG3460	Environment and Geography	UG/G	The course studies the processes and trends of urbanization; the classification of cities; central-place theory; cities as systems; land-use patterns; social forces and factorial ecology; and urban transport problems.	Sustainability Related
Social Geography of the Environment	GEOG3640	Environment and Geography	UG/G	This course provides an intermediate-level assessment of current geographical approaches to society and environment. Students are exposed to critical realist, social constructionist, Marxist, feminist and post-Colonial traditions as they are applied to environmental and social justice, globalization and public health. It includes discussion and a community-based learning project.	Sustainability Related
Canada's Natural Environments and Landscapes	GEOG3760	Environment and Geography	UG/G	This course will vary from year to year depending on the needs of students and the interests of instructors. Prerequisite: Permission of department head.	Sustainability Related
Environment and Tourism	GEOG3770	Environment and Geography	UG/G	This course will vary from year to year depending on the needs of students and the interests of instructors. Prerequisite: Permission of department head.	Sustainability Related
Sustainable Manitoba	GEOG3850	Environment and Geography	UG/G	This course explores the links in sustainability between the local and global through an interdisciplinary perspective. By looking at the ecological, social and economic aspects from a variety of disciplinary perspectives, an advanced understanding of sustainability is achieved. A broad range of perspectives is achieved through participation of guest speakers both from within and outside the university as well as excursion outside the classroom.	Sustainability Focused
Animal Geographies	GEOG3860	Environment and Geography	UG/G	This course presents a variety of topics concerning the interactions between humans and animals, how humans influence and use animals, and the many roles animals play in human lives and environments. Animal Geographies lies at a meeting point between physical and human geography, where we must consider the blurring boundaries between what it means to be animal/human, and the implications of how animals are used and represented. A wide variety of perspectives, beliefs, and points of view will be explored.	Sustainability Related
Food Geographies	GEOG3870	Environment and Geography	UG/G	This course provides a critical examination of the geographies of food at a variety of scales, from the body to the global. The course focuses on themes in three interconnected areas: 1) food production and the global food system from farm to plate including agribusiness and alternative food production and distribution models; 2) food consumption habits and beliefs and foodways as geographically contingent material culture; and 3) food (in) security and its relationship to health and wellbeing.	Sustainability Related
Geography and Wellness	GEOG3890	Environment and Geography	UG/G	This course explores how human environment relations influence our mental, emotional, and physical wellbeing. Students will delve into current research in health and wellness geography and related disciplines, particularly focusing on: therapeutic landscapes, ecological loss and grief, sacred spaces, and environmental influences on mental wellbeing.	Sustainability Related

Biological Oceanography 1: Lower Trophic Levels	GEOG3920	Environment and Geography	UG/G	In this course, students will gain a background on the study of biological oceanography. Biological oceanography is a very active and important field of study worldwide due to the spatial coverage and biological activity of the world's oceans. This course examines the interaction of marine organisms with other biological life, as well as with the physical environment.	Sustainability Related
Ecosystem Management	GEOG4050	Environment and Geography	UG/G	This course will provide students with an understanding of the practical applications of ecological science, environmental policy, and resource management approaches in the large-scale planning of landscapes. The course will review ecological principles and trace the historical development of the ecosystem concept. Comparisons are made to other possible environmental management approaches. The synthesis of major elements and concepts will be reinforced through case studies on the Manitoba landscape, with an emphasis on practical learning by students through field seminars and group discussions.	Sustainability Related
Biogeography	GEOG4060	Environment and Geography	UG/G	This course will provide students with a general understanding of the historical, ecological, analytical, and conservation aspects of biogeography. The course will also have a dual focus on the principles and concepts of reasons for the distribution of plants and animals worldwide, as well as incorporating discussion on as many local (Manitoba, Canada, North America) examples as possible.	Sustainability Related
Geographies of Health and Health Care	GEOG4290	Environment and Geography	UG/G	This course provides an introduction to and critical examination of the geographies of health and healthcare. Topics include perceptions and determinations of health and health care; health care delivery, focusing on spatial patterns and inequities; and the relationship between environment and health, particularly impacts of environmental contamination.	Sustainability Related
Techniques in Climatology	GEOG4560	Environment and Geography	UG/G	This course will examine field and analysis techniques that form the basis of climatological research, with particular emphasis on contemporary research in the areas of microclimatology and micrometeorology. Techniques for the examination of biophysical and biogeochemical processes driving the surface exchanges of heat, water and greenhouse gases form an important component of this course. The aim of the course is to prepare the student for independent research in applied climatology and meteorology, including the affiliated fields of ecology, hydrology, oceanography, as well as other fields of atmospheric science.	Sustainability Related
Geotourism: Geology and Culture	GEOG4670	Environment and Geography	UG/G	Intensive study of selected geographic issues.	Sustainability Related
Understanding Contemporary Environmentalism: Power and Disclosure	GEOG4750	Environment and Geography	UG/G	This course will provide students with an advanced understanding of the relationships between nature and society by examining the rise of environmentalism through the past 50 years. Special attention will be paid to recent developments within the field of environmentalism and to theoretical work in the field of political ecology. Prerequisite: Permission of the Instructor,	Sustainability Related

Climate and Society	GEOG4800	Environment and Geography	UG/G	This course takes an interdisciplinary approach to explore the social causes, consequences, and necessary responses to climate change including adaptation and mitigation. It identifies key concepts and analytic approaches that assist with identifying the social, economic, political, and cultural processes that both drive climate change and influence responses. In particular, it engages with human environment relationships and the role of diverse values, identities, knowledge systems and emotions, and the differential amounts of power held across social groups. Examples will be drawn from the global North and South and at multiple scales from the local to global.	Sustainability Focused
Biogeography	GEOG7500	Environment and Geography	GR	The course will emphasize principles and approaches to understanding biogeography on a worldwide scale with specific examples from Canadian and Manitoban research. Topics discussed include the physical environment and biological interactions, effects of disturbance and climate change, the geography of biological diversity, evolution and extinction.	Sustainability Related
Understanding Contemporary Environmentalism: Power and Disclosure	GEOG7750	Environment and Geography	GR	This course will provide students with an advanced understanding of the relationships between nature and society by examining the rise of environmentalism through the past 50 years. Special attention will be paid to recent developments within the field of environmentalism and to theoretical work in the field of political ecology. Pre-requisite: Permission of Instructor.	Sustainability Related
Climate and Society	GEOG7800	Environment and Geography	GR	This course explores the causes, impacts, and responses to climate change. It identifies key concepts and analytic approaches to understand the social-ecological processes that drive climate change and influence responses. It engages with inequalities and the role of diverse relationships, values, identities, and knowledge systems. Pre-requisite: Permission of Instructor.	Sustainability Related
The Dynamic Earth	GEOL1340	Earth Sciences	UG	An introduction to dynamics of the Earth's interior and surface that created the environment in which life evolved and that continue to change the world in which people now live.	Sustainability Related
Natural Disasters and Global Change	GEOL1410	Earth Sciences	UG	Discover how and when natural disasters occur, and how to identify and recognize them. Explore the Earth processes that lead to natural disasters and global change.	Sustainability Related
Environmental Geology	GEOL2390	Earth Sciences	UG	Examination of geological processes and material as they interact with human activities, environmental planning, and management.	Sustainability Related
Geotourism: Geology and Culture	GEOL4270	Earth Sciences	UG/G	Advanced study in a selected subject in Earth sciences.	Sustainability Related
Business and Society	GMGT1010	Business Administration	UG	The course will provide overarching frameworks to examine the nature, role, and importance of business in society. Key internal operations of business organizations will be discussed (e.g. finance, marketing, operations), but the majority of the course examines the relationships that business firms must balance among key stakeholders in their external environment (i.e. government, owners, customers, communities, suppliers, future generations, etc.). Students will examine various institutional contexts (e.g. economic, political-legal, and socio-cultural) and critically think about relationships between business and society, mindfully considering alternative approaches to management. Special emphasis will be placed on contemporary social issues in business (e.g. sustainable development, corporate social responsibility).	Sustainability Focused

Strategy	GMGT7210	Business Administration	GR	Students will integrate and apply concepts from various functional areas in analyzing organizational resources and capabilities, and environmental opportunities and threats. Students will study evolving strategic management problems and practices, and examine issues of formulation and implementation.	Sustainability Related
Social Justice in the 21st Century: Global Political Economy and Environmental Change	GPE1700	Global Political Economy	UG	Introduces students to political economy and cultural geography through the close analysis of contemporary world events, including but not limited to instances of violent conflict, environmental change, international negotiations, political processes and events, social movements, and policy developments. A multimedia approach will advance students' understanding of geopolitical events from political economy and spatial perspectives. Specific content of the course will change year-by-year in response to developments in national and world politics.	Sustainability Related
Perspectives on Global Political Economy	GPE2700	Global Political Economy	UG	An interdisciplinary seminar exploring issues in political economy at the global level from the perspectives of Anthropology, History, Economics, Political Studies, and Sociology. Prerequisite: written consent of Global Political Economy coordinator.	Sustainability Related
A Survey of Global Political Economy	GPE3700	Global Political Economy	UG	Provides students with a systemic intellectual history of the field of Global Political Economy. The course delineates Global Political Economy as a distinctive scholarly tradition, discusses the separation of economics and politics, and surveys the tradition from classical political economy through historical materialism, development economics, imperialism, world systems theory, and more. Students will relate these approaches to contemporary issues in GPE such as economic and ecological crises, inequality, or corporate power.	Sustainability Related
Studies in Global Political Economy (Part A)	GPE4700	Global Political Economy	UG/G	An advanced interdisciplinary seminar that will study the effects of institutions, structures, and dynamics operating in the current global political economy. Students, working in groups, will be expected to do case studies on selected local (or regional) political economies.	Sustainability Related
Health and Health Professionals	HEAL1600	Interdisciplinary - Health	UG	Students discuss the Inter-relationship between health, health determinants, and the impact that sciences, health-science, behavioural-social sciences, and technology, have on health care and the health professions. Participants will consider their own role as health care consumers.	Sustainability Related
Introduction to Social Epidemiology	HEAL3000	Interdisciplinary - Health	UG	This course provides an overview of the basic concepts, principles and methods of social epidemiology and their applications for research and practice from a human ecology perspective. Applications to social determinants of health across the life course may include but are not limited to income and food security, early child development and others.	Sustainability Related
Integration of Health and Determinants for Communities	HEAL3600	Interdisciplinary - Health	UG	Students study, integrate and use community level determinants of population health in selected case or learning scenarios. These cases present a variety of issues in the design of health related services that are intended to benefit population health.	Sustainability Related
Integration of Health Determinants for Canada and the World	HEAL4600	Interdisciplinary - Health	UG/G	Students use selected case or learning scenarios to study the determinants of population health that depend on decision making in governmental or international agencies. The case scenarios present a variety of issues in the governance and management of population health.	Sustainability Related
Modern World History: 1800-Present	HIST1380	Global Political Economy	UG	A study of the forces which created the modern world, including industrialization, imperialism, decolonization, and the emergence of revolution and counter-revolution.	Sustainability Related

Inventing Canada	HIST2282	Global Political Economy	UG	This course examines the "invention" and "reinvention" of Canada both before and after Confederation. It examines the process of invention from a range of different perspectives: political, cultural, economic, and social.	Sustainability Related
Modern Canada	HIST2286	Global Political Economy	UG	This course addresses the history of Canada since the First World War with attention to social, political, economic, diplomatic and cultural topics such as: interwar and postwar life, struggles for equality, international and internal conflict, immigration, new technologies, nationalism, aboriginal affairs, the arts and Canada's role in the world.	Sustainability Related
South Africa: From Jan van Riebeck to Nelson Mandela	HIST3110	Global Political Economy	UG	An opportunity for the intensive study of selected topics or themes in history. The content varies, but may include work in social and cultural history or on specialized subjects. Consult the History Department and the Registration Guide for particulars. The course content may vary.	Sustainability Related
Global Feminisms	HIST3990	Global Political Economy	UG	This course will provide a systematic introduction to advanced research seminars, paying particular attention to the development of: oral skills and public presentation of ideas and research; focused historiographical discussion and analysis; and advanced historical research and writing skills. This course provides the skills and preparation for Year IV of the History Honours program. Prerequisite: [six credit hours of History] and written consent of department head.	Sustainability Related
Twentieth Century British Social History	HIST4000	Global Political Economy	UG/G	The content of this course will vary. It is designed to provide students with specialized topics and themes in History. A description of the course is available in advance at the History Department Office. The course content may vary.	Sustainability Related
World History since 1945	HIST4320	Global Political Economy	UG/G	Advanced historical study of topics in world and global history. Specific thematic, methodological, and theoretical approaches may vary by instructor.	Sustainability Related
Theory and Practice of Human Rights: Critical Perspectives	HMRT7100	Law	GR	This course critically analyzes, from an interdisciplinary perspective, the theory and practice of human rights as a framework for social justice. The course examines historical and current human rights struggles to better understand the potential, politics, challenges and limitations of the international human rights framework.	Sustainability Related
Food: Facts and Fallacies	HNSC1200	Food & Human Nutritional Sci	UG	This course will present facts and fallacies about food from harvest to market forms. Emphasis will be placed on technological development, consumer concerns and factors affecting nutritional quality. Current issues related to food safety and nutritional trends will also be discussed.	Sustainability Related
Nutrition for Health and Changing Lifestyles	HNSC1210	Food & Human Nutritional Sci	UG	This course addresses the relationship between nutrition and health. The focus is on healthy eating and on strategies for modifying food patterns within the context of lifestyle and culture.	Sustainability Related
Culture and Food Patterns	HNSC3350	Food & Human Nutritional Sci	UG	(Lab required) A study of the cultural, sociological and psychological aspects of food patterns and behaviour.	Sustainability Related
Current Issues in Food and Human Nutrition	HNSC4100	Food & Human Nutritional Sci	UG/G	Integration of current issues in food and human nutritional sciences. Emphasis on ethics, equity, economics, and professional approaches to challenges in food and human nutritional sciences using case studies, teamwork, and scientific communication to specialists and the public.	Sustainability Related
Community Nutrition Intervention	HNSC4300	Food & Human Nutritional Sci	UG/G	Principles of planning and evaluating nutrition related interventions. Examples of community needs assessments, program planning strategies and types of program evaluation will be examined.	Sustainability Related

Advanced Problems in Nutrition	HNSC7110	Food and Human Nutritional Science	G	Studies of selected problems and programs in community nutrition emphasizing program planning and evaluation.	Sustainability Related
Seminar in Food and Nutrition Research	HNSC7200	Food and Human Nutritional Science	G	A critical study of selected topics in food and nutrition research involving oral presentations and discussions.	Sustainability Related
Nutritional Epidemiology	HNSC7540	Food and Human Nutritional Science	G	Focus on epidemiology principles and survey techniques for assessing and predicting individual nutritional status, assessing relevant community resources and reporting results to granting agencies and decision makers.	Sustainability Related
Advanced Applied Human Nutrition 1	HNSC7730	Food and Human Nutritional Science	G	Lectures and critical reviews in topics related to the dietetics profession, embedded in nutrition care, food provision and population health promotion. Emphasis will be placed on addressing issues impacting nutritional health of indigenous communities.	Sustainability Related
Advanced Applied Human Nutrition 2	HNSC7740	Food and Human Nutritional Science	GR	Lectures and critical reviews in topics related to the dietetics profession, embedded in nutrition care, food provision and population health promotion. Emphasis will be placed on knowledge related to sustainable food systems and linkage to nutritional health.	Sustainability Focused
Advanced Applied Human Nutrition 3	HNSC7750	Food and Human Nutritional Science	G	Lectures and critical reviews in topics related to the dietetics profession, embedded in nutrition care, food provision and population health promotion. Emphasis will be placed on the development of leadership and advocacy skills.	Sustainability Related
Theory Seminar 1 - Contemporary Issues in Design	IDES7180	Interior Design	G	A theoretical exploration of contemporary design issues as they apply to Interior Design, supporting the work of design studio. Historical precedent in relation to human activity, sensory stimulus, technological and social change, ecological awareness, and aesthetic judgment forms the context for discussion and debate.	Sustainability Related
Sensory Technology 4	IDES7230	Interior Design	G	Examination of the influences and effects of emerging communication systems and building technologies; building and furniture systems; in the context of human well-being and environmental concerns. The study of the design consequences and environmental impact of interior services and systems; communication technologies; building regulations, codes and infrastructure; detailing and specification of projects drawn from design studio.	Sustainability Related
Sustainable Business	IDM3010	Management Interdisciplinary	UG	This course presents sustainable business theory and best practice from a holistic and integrative perspective. A sustainable approach is presented for each of the key functions of business in a way that highlights how they fit with each other and with the social and ecological environment. The course focuses on how business can sustainably create positive social and ecological impact.	Sustainability Focused
Sustainable Economics	IDM7090	Management Interdisciplinary	G	This is a graduate-level MBA course on a very specialized topic and is offered on an infrequent basis. Course content will be an examination of specialized topics or issues which may cross-pollinate with other business related areas. The overall aim of the course is to provide solid practical knowledge about a developing subject, to understand both implications and potential applications for organizations and their leadership today and in the future. Some topics could, for example, include Global Social Enterprise, Global Sales Distribution, Channel Management, Big Data and the Corporation, Infrastructure and Real Estate, and Coaching International Teams.	Sustainability Focused

Contemporary Themes in Business	IDM7130	Management Interdisciplinary	G	This course exposes students to salient themes found in the modern business environment. Students will develop a broad appreciation for the challenges and opportunities presented by these contemporary themes (e.g. International and Emerging Markets: Sustainability: Entrepreneurship and Innovation).	Sustainability Focused
Indigenous History in Canada	INDG2012	Indigenous Studies	UG	A historical survey of Indigenous peoples in Canada from early times to the present. The course will cover pre-contact peoples, responses to the European arrival, military alliances, the fur trade, the Métis, treaties, government policies and Indigenous responses, and cultural resurgence and political organizing since 1945.	Sustainability Related
Indigenous Societies and the Political Process	INDG2220	Indigenous Studies	UG	An analysis of contemporary Canadian (and U.S.) political and administrative processes as they affect Indigenous people. Depending on instructor, this course may have a field trip.	Sustainability Related
Indigenous Feminisms	INDG2630	Indigenous Studies	UG	With reference to scholarship, activism, and literary, narrative, and/or creative works, this course critically engages differences and shared priorities across Indigenous feminisms past and present.	Sustainability Related
Indigenous Peoples and Racism in Canada	INDG3170	Indigenous Studies	UG	This course will trace the historical and colonial roots of racism Indigenous peoples experienced in Canadian history as well as examine its practices in contemporary society and culture. Concepts such as systemic racism, cultural difference and anti-racist education may be explored. Class format will include readings, seminar discussions, some films and lectures. Critical reading and analysis is expected.	Sustainability Related
Gender and Indigenous Societies	INDG3380	Indigenous Studies	UG	An examination of the theoretical issues that surround the cultural construction of Indigenous gender leading into detailed ethnographic and historical case studies.	Sustainability Related
Arctic Lifestyles	INDG4240	Indigenous Studies	UG/G	An interdisciplinary study of the interrelationships between culture, economy, and ecology in the Arctic region. Depending on instructor, this course may have a field component.	Sustainability Related
Issues in Colonization	INDG4300/7240	Indigenous Studies	UG/G	An examination of the factors influencing colonization, assimilation and indigenization. Explores the colonization and decolonization processes, theories of colonization and ways of promoting indigenization without assimilation	Sustainability Related
Indigenous Land-Based Skills	KPER7404	Phys Ed & Rec St General	G	This course brings Indigenous cultural perspectives and practical skills to students in Kinesiology and Recreational Management in Indigenous land based learning.	Sustainability Related
Critical Race Theory, Indigeneity, in Leisure, Recreation and Sport	KPER7430	Phys Ed & Rec St General	G	This course openly discusses issues of race, racism, and settler colonialism. Students will develop an understanding of the role of praxis in CRT and Indigenous scholarship. Students will read, digest, critique, apply, and understand CRT and Indigenous scholarship.	Sustainability Related
Working for a Living	LABR1260	Labour Studies	UG	An introduction to the study of working lives in the contemporary world and the global transformation that has made working for wages central to human existence.	Sustainability Related
Labour Unions and Workers' Rights in Canada	LABR1290	Labour Studies	UG	An introduction to the development of the contemporary working-class movement in Canada and to workplace issues today.	Sustainability Related
The Political Economy of Labour	LABR2100	Labour Studies	UG	This course examines the dynamics of work organization, the production and reproduction of labour power, labour markets and class conflict in capitalist societies, with attention to contemporary Canada.	Sustainability Related

Workers, Employers and the State	LABR2300	Labour Studies	UG	This course examines the social, economic and political contexts of work and the relations, rules and structures that shape the interactions between workers, employers and the state. Topics include workers' and management rights, the rights, obligations and functions of unions, the legal contexts of labour/management relations, and initiatives for increasing equity.	Sustainability Related
Labour Law	LABR3010	Labour Studies	UG	An introduction to legislation and interpretation, legal procedures, and quasi-judicial boards as they concern the organization of trade unions, collective bargaining, settlement of disputes, labour standards, workers' compensation, unemployment insurance and human rights.	Sustainability Related
Issues in Occupational Health and Safety and Workers' Compensation	LABR3050	Labour Studies	UG	This course will explore historical, legal and political issues surrounding health and safety in Canadian workplaces with an emphasis on Manitoba. It will critically examine both the Workers' Compensation and the Workplace Health and Safety systems as they currently exist and review the role of workers, employers, unions and government in these processes. It will investigate various challenges and emerging issues in health and safety including but not limited to industrial disease, gender concerns, precarious employment and globalization.	Sustainability Related
Ecological Crisis, Work and Capitalism Today	LABR3110	Labour Studies	UG	This course will vary from year to year depending on the needs of students and the interests of the instructor. The course content may vary.	Sustainability Related
Employment Legislation and the Protection of Workers	LABR3130	Labour Studies	UG	An examination of the legal rights and obligations of workers and employers, and the enforcement mechanisms for the non-unionized workplace, over the course of the employment relationship from hiring through to termination or retirement. Special emphasis will be placed on statutory and common law, personal employment contracts, wrongful and constructive dismissal, human rights legislation and jurisprudence.	Sustainability Related
Landscape Topics	LARC7400	Landscape Architecture	G	A critical examination of an individual topical study of relevance to contemporary landscape architecture. Students may take the course more than once for credit if the sub-topic differs.	Sustainability Related
Studio 4	LARC7540	Landscape Architecture	G	A comprehensive design studio that synthesizes and integrates the biophysical, socio-cultural, technical, and regulatory aspects of landscape architecture. Site design and implementation are investigated at a high degree of resolution, including grading and drainage, plantation, materials and assembly, and the preparation of construction documents.	Sustainability Related
Human Rights Law	LAW3018	Law	UG	Critical and constructive study, at an advanced level, of a significant major subject or set of topics in Human Rights Law.	Sustainability Related
Gender and the Law	LAW3070	Law	UG	This course will explore ideas about gender differentiation in laws and legal and social systems and organizations. The course will start with an introduction to feminist and gender-based critiques of law and theories about sexual equality, anti-racist and anti-colonial approaches and intersectionality (i.e. the complex phenomena of overlapping forms of discrimination and inequality.) We will then focus on some specific issues related to gender-based violence, reproductive justice, and queer issues. Students will be introduced to complexities of gender regulation in Indigenous cultures and be introduced to the MMIWG Calls to Justice.	Sustainability Related
Employment Law	LAW3330	Law	UG	A detailed study of employment law including employment principles, constructive and wrongful dismissal, just cause, human rights and remedies.	Sustainability Related

Environment Law	LAW3600	Law	UG	This course provides insight into Canadian legal approaches concerning environmental protection, sustainable development, and access to environmental justice. Key topics include: legal jurisdiction of municipal, provincial, federal and Indigenous governments; international environmental law; environmental enforcement; environmental rights; biodiversity; and climate change.	Sustainability Related
Corporate, Social, and Environmental Responsibility	LEAD3030	Business Administration	UG	This course examines the responsibilities of business that accompany maximizing shareholder wealth. This includes balancing the needs of a variety of stakeholders (including owners, employees, customers, suppliers, competitors, neighbours, future generations) among a variety of forms of well-being (e.g., financial, ecological, environmental, social, spiritual, physical). Students will learn theory and best practices.	Sustainability Related
Language and Gender	LING2210	Linguistics	UG	An exploration of the multiple relationships between language and gender. How are gender differences manifested and perpetuated through language use? How are these differences acquired, and what do they reflect? How does gender interact with other factors such as class, sexual orientation, and ethnicity in language?	Sustainability Related
Infectious Diseases Around the World	MBIO4300	Microbiology	UG/G	The course will cover the different influential factors such as climate, travel, poverty and socio-economic conditions, government and religion, and how they impact the prevention, spread and treatment of key infectious disease in different parts of the world.	Sustainability Related
Sustainability Marketing	MKT3246	Marketing	UG	This course will examine strategies that organizations can adopt to be successful in meeting the triple bottom line (people, planet, profit) within the broader framework of sustainability.	Sustainability Focused
Energy Resources Management and Policy	NRI7130	Resource Management	G	This course covers global energy issues, objectives, strategies, and policies, and the environmental impacts of alternative energy sources; Canadian energy issues, objectives, strategies, and policies. The course stresses the need for a sound understanding of energy issues of fundamental importance, ability to assess alternatives, appreciation of policy strategies and instruments, and the ability to formulate an energy policy for a region.	Sustainability Related
Sustainability, Economics and Natural Resources	NRI7182	Resource Management	G	Economic aspects of sustainability are a critical component of sustainable development. The relationship between environment, economy, and the human dimensions of natural resources comprise the primary focus of the course. Specific topics include environmental/ecological economics, externalities, project assessment, benefit cost analysis, the economics of renewable and non-renewable resource management and economic aspects of globalization.	Sustainability Focused
Human Dimensions of Natural Resources and Environmental Management	NRI7222	Resource Management	G	The human dimensions of Natural Resources and Environmental Management will be considered through the following thematic units: definitions, history, and paradigms of management; intersection of science with politics, actors, groups and participatory processes; Traditional Ecological Knowledge (TEK), communications and environmental perception; institutions, common theory and adaptive co-management.	Sustainability Related
Ecological Dimensions of Resource and Environmental Management	NRI7232	Resource Management	G	Current concepts and theories in landscape ecology, plant and animal ecology, life-history strategies, food webs, and population and community ecology are discussed as they relate to management. Common themes throughout the course include the importance of scale, the influence of science on management, adaptive management, and critical thinking.	Sustainability Related

Environmental Management Practice	NRI7252	Resource Management	G	Environmental Management systems (e.g. 14001 and Natural step), best management practices and project management. Tools: Awareness (Environmental Policy, Environmental Impacts, Risk Assessment, Life Cycle Assessment), Action (Objectives, Targets, Risk Reduction, Indicators, Monitoring, Activities), Advance (Sustainability Report, Triple Bottom Line, Environmental Audit).	Sustainability Related
Environmental Risk and Hazards	NRI7320	Resource Management	G	Environmental risk and hazards are viewed in terms of complex processes of natural systems and social formation. Analysis of processes and events is assisted by theoretical formulation, development of models and examination of site- or type-specific empirical cases.	Sustainability Related
Advanced Practice Nursing in Primary Care Settings	NURS7462	Nursing	G	The student will examine advanced nursing care in primary care settings, including population health needs, the determinants of health, ethical practice, cultural safety and social justice. Emphasis will be on the development and evaluation of evidence-informed interventions to meet the health needs of Manitobans.	Sustainability Related
Lean Management	OPM7180	Supply Chain Management	G	Sustainable Lean Management will provide students with a basic understanding of the components of Sustainable Lean Management in the context of Profit, People and Plant (the triple bottom line) and the opportunity to practically apply the principles, methods and tools of Sustainable Lean Management to real problems. Sustainable Lean Management, at its core, is about systematically identifying the strategic problems of an organization and methodically solving those problems while simultaneously growing and developing the potential of people to the benefit of all stakeholders of the enterprise.	Sustainability Focused
The Environment and Occupational Performance	OT6310	Occupational Therapy	G	An examination of physical, social, cultural and institutional aspects of the environment and their relationship to occupational performance throughout the life span. Students will begin to identify the environment in terms of enablers and obstacles to function for individuals with variable capacities.	Sustainability Related
Community Health for Physicians Assistants	PAEP7260	Medicine Interdisciplinary	G	Community Health for PAs is a 4-week clinical experience focusing on primary health care and community services. Community health focuses on the maintenance, protection, and improvement of the patient's and communities' health status. The learners' experience occurs in community health organizations that provide primary healthcare, health promotion, and community services using interdisciplinary teams of health providers.	Sustainability Related
Interpersonal Communication, Problem-Solving, and Trust-building	PEAC7010	Mauro Centre for Peace Studies	G	Examines the role of language and communication in conflict and conflict resolution. These theoretical and practice perspectives are fundamental to the field of conflict analysis and resolution/peace studies. The role of power, gender, and culture in communication and conflict are reviewed. Theories and practical skills for successful communication, collaborative problem-solving, and trust-building are explored. This class is relevant for addressing conflicts within diverse settings. such as the workplace, schools, and communities, as well as for work in international organizations, development, and international conflicts, which involve face-to-face communication in crisis.	Sustainability Related
International Conflict Resolution and Peace-building	PEAC7030	Mauro Centre for Peace Studies	G	Examines international conflict resolution and post accord peace-building. Theories regarding the causes of international conflict are reviewed. Approaches for just and enduring resolution to international conflicts, building peace, and the promotion of a global civil society are explored.	Sustainability Related

Intercultural Conflict Resolution and Peace-Building	PEAC7050	Mauro Centre for Peace Studies	G	Examines the role of socially constructed identities and meaning in intergroup conflicts in a variety of contexts. Culture is broadly conceived to encompass a variety of identities, including differences along racial, ethnic, religious, gender, and class lines. Various models for resolution are reviewed. The nature of and ethics of intervention in cultures other than one's own are explored.	Sustainability Related
Special Topics in Peace and Conflict Studies	PEAC7060	Mauro Centre for Peace Studies	G	The topics addressed in this course will vary depending on faculty expertise and student need. Topics could include but will not be restricted to: "Gender and Conflict;" "Storytelling: Identity, Power and Transformation;" "Ethnic Conflict Analysis and Resolution;" "Children and War;" "Peace Education;" "Transformational Conflict Resolution;" "Role of Religion in Conflict and Peace."	Sustainability Related
International Human Rights and Human Security	PEAC7110	Mauro Centre for Peace Studies	G	This course examines the shift in focus from state security to people. Human security is a bridge between the inter-related fields of development, human rights and conflict resolution. The course explores how these efforts at exploring the human condition can best be understood and applied.	Sustainability Related
Peacebuilding and Social Justice	PEAC7120	Mauro Centre for Peace Studies	G	This course examines the role of peacebuilding in short term crisis intervention and longer term conflict transformation processes. Social justice is addressed at the systems level as it impacts the achievement of sustainable reconciliation. Crisis management in conflict settings, the root causes of conflict and its prevention are explored.	Sustainability Related
Special Topics 1: Children and War	PEAC7300	Mauro Centre for Peace Studies	G	Examines the impact of international war, civil war and genocide on children. Today's children are tomorrow's world citizens, and their events will shape the future in unforeseeable ways. Young people are socio-economic and political agents, expressive through violence, peace work and other creative forms.	Sustainability Related
Equity, Diversity and Inclusion for Professionals	PEDS7030	Pediatrics	G	In this half day course, students learn about the importance of promoting and supporting a community that embraces equity and inclusion for all, and builds upon the strengths of diversity. Students will also be encouraged to consider their own biases.	Sustainability Related
Indigenous Child Health	PEDS7080	Pediatrics	G	In many Indigenous cultures around the globe, children are considered sacred and spiritual. This is true for First Nation people in Manitoba. Indigenous Knowledge Keepers will share how cultural losses have impacted the health of Indigenous children	Sustainability Related
Applied Ethics	PHIL2410	Philosophy	UG	The course offers an examination of contemporary ethical theories and their application to controversial moral issues. Possible topics include: the ethics of affirmative action/reverse discrimination; the censorship of hate speech; and our obligations to the global poor. Students will learn how to think critically about ethical issues and how to develop and defend their own moral position.	Sustainability Related
Applied Ethics 2	PHIL2420	Philosophy	UG	An examination of several issues in applied ethics. Possible topics include: our duty to take action against climate change; the ways we justify punishing people who break the law; the moral responsibilities of corporations; our obligation as a society to compensate historically victimized individuals and communities; how we should respond to individuals and countries guilty of war crimes.	Sustainability Related
Ethics and the Environment	PHIL2750	Philosophy	UG	An examination of some important ethical issues connected with environmental pollution and resource depletion. Examples to be covered include: the ideal of liberty and environmental limits; scarcity and the ideal of justice; growth vs. steady-state economics; animal rights, and survival ethics vs. welfare ethics.	Sustainability Related

Business Ethics	PHIL2830	Philosophy	UG	The course will explore the application of ethical theory to business. Topics to be discussed will normally include: theories of justice, corporate responsibility, the ethics of advertising, consumer and environmental protection, and preferential hiring.	Sustainability Related
Forage and Pasture Management	PLNT0750	Entomology	UG	For forage crops and the continuum of improved and unimproved pasture land a discussion of production practices including: choice of species and cultivars of forage crops, cultural management including tillage practices, pest control, forage harvesting, grazing management and seed production.	Sustainability Related
Weed Management	PLNT0770	Entomology	UG	General principles of weed management and pesticide use safety as they relate to weed control. Topics will include weed biology and identification, economic importance, principles of chemical, cultural, mechanical and biological weed management, introduction to herbicides including modes of action and factors influencing their use, selectivity, risks for development of herbicide-resistant weeds and how to mitigate this risk.	Sustainability Related
Urban Agriculture	PLNT1000	Plant Science	UG	Urban environments and their importance for food production, increasing biodiversity, and reducing pollution are presented. Topics include principles of vegetable, fruit and herb production, landscape plants, and utilization of natural systems for composting, water management and reduced pesticide use. Benefits to environment, community development, and human health are discussed.	Sustainability Related
Fundamentals of Plant Pathology	PLNT3570	Plant Science	UG	An introduction to the science of plant pathology. Topics include causal agents of diseases, symptoms and diagnoses, modes of infections and spread, mechanisms in disease and control, effects of the environment on disease development, and methods of disease control.	Sustainability Related
Grassland Agriculture: Plant, Animal and Environment	PLNT4410	Plant Science	UG/G	Inter-relationships between the biological components of grassland agriculture as they relate to forage production on the Canadian Prairies. Topics include utilization by wild and domestic animals, plant community relationships and role of forages in multiple land use planning.	Sustainability Related
Advanced Cropping Systems	PLNT4510	Plant Science	UG/G	Examination and analysis of sustainable Prairie cropping systems. Emphasis will be placed on systems that optimize the benefits of crop rotation, integrate crops and livestock, conserve soil and water resources, and enhance biodiversity. Current, historical, and emerging crop production systems from the Prairies and other regions of the world will be discussed. Includes experiential learning through farm interviews and/or field tours and/or guest speakers.	Sustainability Related
Politics and the Environment	POLS3140	Political Science	UG	The content of this course will vary. Contact the department for a course description. The course content may vary.	Sustainability Related
International Political Economy	POLS3250	Political Science	UG	A survey of the relationship between political authority and the production and distribution of global wealth. Emphasis is placed on the historical development of international political economy, its fundamentals, as well as major theoretical perspectives.	Sustainability Related
Politics of International Law	POLS3560	Political Science	UG	An introduction to international law including sources of international law, the use of force and international human rights.	Sustainability Related

Advanced Seminar in Political Theory	POLS4310	Political Science	UG/G	Topics may include, but are not limited to: advanced history of political theory, advanced contemporary political theory, political theory and the family, liberalism and critics, toleration, political theory and gender, and conservative political theory. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.	Sustainability Related
Psychology of Gender	PSYC2380	Psychology	UG	A critical examination of the similarities and differences between women and men with a particular emphasis on gender roles and gender identity.	Sustainability Related
Indigenous Recreation and Well-Being	REC4770	Recreation Studies	UG/G	This course will provide students with a historical context of health and wellness among First Nations, Metis and Inuit peoples as well as contemporary perspectives on the promotion of sport, physical, recreation and leisure to achieve social development goals. The political landscape of health, recreation, and sport policies will be examined in relation to their impact on Indigenous sport, health and wellness programming. The strength and resilience of Indigenous peoples will be explored through grassroots movements, physical cultural practices, and wholistic understandings of health and wellbeing.	Sustainability Related
Religion and Social Issues	RLGN2590	Religion	UG	The course examines selected ethical-social issues such as abortion, euthanasia, new genetic and reproductive technologies, and environmental and ecological issues, with reference to one or more of the world's religious traditions.	Sustainability Related
Animals and Ethics	RLGN2610	Religion	UG	This course surveys the emerging field of "critical animal studies." The course centers on questions of human and nonhuman animal difference as these have been debated in a number of religious and cultural traditions. It also engages traditional and contemporary approaches to animal ethics. Discussions will also focus on such pressing issues as global warming, species extinction, loss of biodiversity, pollution, and threats to population health – all of which can be traced to multinational industrialized breeding and marketing of animals and/or of experimentally developed animal "biocapital."	Sustainability Related
Supply Chain Sustainability	SCM3260	Supply Chain Management	UG	This course covers supply chain sustainability. From a functional viewpoint, supply chain management (SCM) includes logistics/transportation, purchasing and certain elements of marketing. Sustainability is a multi-dimensional concept, spanning ecological, social, cultural and economic issues. The course includes a special focus on sustainable transportation. May not be held with SCM 2220 when titled "Supply Chain Sustainability".	Sustainability Focused
DOC SEM in Supply Chain Sustainability	SCM7030	Supply Chain Management	G	This course adopts a broad view of supply chain sustainability. From a functional perspective, SCM includes logistics, purchasing, and a few aspects of marketing. Sustainability is also a multi-dimensional concept, spanning environmental, cultural, social and economic elements. The course has a special focus on sustainable transportation. Various research methods, from content analysis to analytical modeling to survey research are discussed.	Sustainability Focused

Logistics Management	SCM7040	Supply Chain Management	G	Logistics Management is the part of supply chain management that plans, implements, and controls the efficient, effective forward and reverse flow and storage of goods, services, and related information between the point of origin and the point of consumption in order to meet customers' requirements. This course provides a practical, management perspective of the following areas of logistics: distribution, transportation, international logistics, inventory control, sustainable logistics practices, key performance indicators, supply chain finance, leadership in a supply chain role, and an introduction to logistics technology including RFID and ERP systems.	Sustainability Related
Sustainable Supply Chain Management	SCM7046	Supply Chain Management	G	Sustainability efforts can open many opportunities for businesses— product innovation can lead to first-mover advantage, environmental product differentiation can open new markets, green sourcing and waste reduction can reduce operating cost, etc. At the same time, they can present significant challenges—governments and communities are imposing higher standards on pollution, resource exploitation, etc. This course aims to provide students with an understanding of the sustainability challenges and opportunities facing supply chains today. We will look at some of the factors that are contributing to the adoption of sustainability strategies, such as legislations that are penalizing negative environmental and social impacts, and society's expectations of business in terms of health, human rights, and the environment. The supply chains today cannot be concerned only with creating shareholder value; their performance is also measured in terms of social, environmental and economic impact.	Sustainability Focused
Introduction to Sociology	SOC1000	Sociology and Criminology	UG	Sociology is the systematic study of society. It is the study of people and how they interact with each other and social groups. Topics include (but are not limited to): culture, socialization, race and ethnicity, social stratification, gender and sexuality, social inequality, globalization, the environment, crime and deviance, and health.	Sustainability Related
Contemporary Sociology Issues in Canada	SOC2310	Sociology and Criminology	UG	An examination of one or more contemporary social problems, other than crime and delinquency. Issues that might be addressed include poverty, war, environment, licit and illicit drugs, and death and dying. Consult the Registration Guide or contact the instructor for specific content in any particular academic year. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.	Sustainability Related
Sociology of Health and Illness	SOC2490	Sociology and Criminology	UG	A general introduction to health sociology. The course examines health and illness as social concepts by exploring the personal and structural determinants of health status, and everyday health care practices in which people engage to maintain their health and to manage illness.	Sustainability Related
Critical Victimology	SOC3410	Sociology and Criminology	UG	Through investigating a variety of theoretical perspectives, this course fosters an appreciation of forms of and factors leading to victimization and the experiences of victims in the criminal justice system. Students may not hold credit for both SOC 3410 and SOC 3740 when titled "Victims and the Criminal Justice System."	Sustainability Related
Women, Crime and Social Justice	SOC3790	Sociology and Criminology	UG	The course examines gender differences in crime, theories of women's crime and the treatment of women offenders and victims by the criminal justice system. P	Sustainability Related

Ecology and Society	SOC3838	Sociology and Criminology	UG	Examines changing patterns of social organizations of civilizations, the resultant social constructions of the human/nature interface, the human social contribution to the global ecological crisis, and possible strategies to create sustainable societies. Consideration of topics such as population, consumption, capitalism, and agricultural practices.	Sustainability Related
Critiquing Consumption, Creating Community	SOC3840	Sociology and Criminology	UG	This course first examines the current cultural ethos of consumerism, and how it has shaped us. It then explores ideas about creating healthy communities, and how they might be fostered through alternative systems of provisioning. The course considers the ways in which overconsumption can be challenged and explores practices of responsible consumption.	Sustainability Related
Power and Inequality in Comparative Perspective	SOC3890	Sociology and Criminology	UG	Engaging in a cross-temporal and cross-national investigation, this course critically surveys classical and contemporary debates around the inevitability of social inequality, and explores the ways that inequalities have been reproduced and rationalized, or attenuated and challenged, throughout human history. Key facets and indicators of inequality (such as poverty, homelessness, social exclusion and the distribution of income and wealth) and their relation to central axes of social inequality (class, gender, race/ethnicity and age) are considered. Put simply, this course is concerned with 'who gets what and why?'	Sustainability Related
Soil Resources and Productivity	SOIL0420	Soil Science	UG	Soil classification systems; soils of Manitoba and their properties; soil productivity and its maintenance; soil fertility and testing, fertilizer recommendations; environmental concerns.	Sustainability Related
Soil and Water Management	SOIL0620	Soil Science	UG	Land capability for agriculture; storage, use of water and water use efficiency; saline and alkaline soils; soil acidity; soil erosion and conservation; tillage, cropping systems and rotations; fate of biosolids, pesticides.	Sustainability Related
Introduction to Agrometeorology	SOIL3060	Soil Science	UG	Basic description and discussion of properties of the atmosphere, radiation, temperature, effect of temperature on plant growth, climate and animal response, water, evapotranspiration, insect adaptation, activity in relation to climate, climatic data.	Sustainability Related
Pesticides: Environment, Economics and Ethics	SOIL3520	Soil Science	UG	A comprehensive examination of the benefits and risks of pesticide use. Topics include: Characteristics of pesticide products and formulations used in Western Canada; History, practice, successes and failures in the use of pesticides in agriculture; Pesticide use for protecting human health; Pesticide fate processes in air, soil and aquatic environments; Economical and environmental impact of pesticide application drift; Atmospheric pesticide contamination; Pesticide surface and groundwater contamination; Pesticide toxicity to organisms, including humans; Pesticide residues in food; Pesticide regulations; Pesticide risk indicators; Alternatives to pesticides.	Sustainability Related
Soil Ecology	SOIL4400	Soil Science	UG/G	Explore the application of soil biology to diversity in agro ecosystems, response of soil organisms to management, mediation of important environmental issues, and promotion of human health. Appreciate the vast array of soil organisms and their functions in soil ecosystems, understand cycling of nutrients by soil organisms, and discover quantitative methodology in determining soil biochemical processes. The laboratory provides hands-on experience in observing, quantifying and isolating soil organisms and the biochemical processes they conduct.	Sustainability Related

Remediation of Contaminated Land	SOIL4500	Soil Science	UG/G	Physical, chemical and biological approaches to remediation of land including; nature of contaminants, procedures for assessing the extent of the impact, consequences to the environment, approaches to remediation and case studies of contaminant remediation.	Sustainability Related
Soil and Water Management	SOIL4510	Soil Science	UG/G	Topics include: capability of land for agriculture; storage, movement and use of water; saline and alkaline soils; soil conservation including erosion; sustainability of soil organic matter; effect and fate of soil amendments.	Sustainability Related
Social Justice, Diversity and Human Rights	SWRK1220	Social Work	UG	This course examines social work approaches to understanding social justice and human rights in both local and global contexts with a focus on diverse communities and practice settings. Emphasis is placed on how social workers can mitigate injustice and advance human rights at micro, mezzo, and macro levels of practice.	Sustainability Related
Community Health and Well-Being: Imagination for Social Work Practice	SWRK1230	Social Work	UG	This course examines information, perspectives, and competencies needed to integrate social work practice with promoting community health and well-being in public health and healthcare.	Sustainability Related
Anti-Racist Social Work Practice	SWRK2000	Social Work	UG	This course introduces students to the knowledge, theories, and skills necessary for social work practice from anti-racist perspectives. The course involves students in an examination of various frameworks required for anti-racist social work practice.	Sustainability Related
Indigenization and Decolonization in Social Work	SWRK2010	Social Work	UG	This course examines structural and cultural colonization, focusing primarily on the history of institutions of social control, resulting in criminalization and clientization of Indigenous peoples. In response to government social control, Indigenous efforts towards self-governance, Indigenization, and decolonization are explored as they relate to Indigenous epistemologies, modes of helping, emerging practices such as cultural safety and resurgence of Indigenous and anti-oppressive approaches to social work practice and the call for reconciliation.	Sustainability Related
Community Development and Social Work	SWRK2020	Social Work	UG	This course provides a critical examination of social work practice in the context of community development. The course integrates theory and policy with community development methods of social work practice at micro, meso and macro levels. Registration restricted to Social Work students.	Sustainability Related
Social Welfare Policy: Analysis and Advocacy	SWRK2040	Social Work	UG	This is an introduction to the field of policy and its importance to social work practice. Specifically, to the skills of policy analysis and advocacy as forms of social work practice and social justice. Analytical and practice skills are developed through applying the concept of ideology as a useful policy analysis framework. Students will gain knowledge of how social justice can be advanced by means of thoughtful policy advocacy. Open to non-Social Work students with a minimum of 54 credit hours and with instructor permission.	Sustainability Related
Human Behaviour and Social Work Practice	SWRK2090	Social Work	UG	Students are introduced to a broad range of theories and will develop an understanding of how people and environments reciprocally affect each other. Particular emphasis is placed on understanding how gender, race, ethnicity, socioeconomic factors, age, ability, and sexual orientation contribute to and influence human behaviour throughout the lifespan.	Sustainability Related
Emergence of the Canadian Social Welfare State	SWRK2110	Social Work	UG	An examination of the emergence of the Canadian welfare state from its various colonial inheritances to the Canada Assistance Plan. Social, political, economic, religious, geographical, demographic and cataclysmic factors influencing the development of the welfare state are examined and analyzed.	Sustainability Related

Feminist Perspectives in Social Work Practice and Social Welfare Policy	SWRK3160	Social Work	UG	With a focus on social justice, diversity, structural systems change through critical analysis, this course is centered in the deconstruction of social work practice and social welfare policy from a feminist perspective.	Sustainability Related
Homelessness and the Housing Continuum: Ethics of Caring and Community Development	SWRK4262	Social Work	UG/G	This course critically examines the dimensions and issues of individual and community wellbeing connected with home, homelessness and housing in Canada. Introduction to public and social policy analysis of historical, structural and systemic causes of homelessness. Focusing on social work practice, with an emphasis on the critical ethics of care and capabilities framework when working with individuals without permanent, safe and affordable housing. Depending on the instructor, this course may have a field trip. Contact the Director of your program site for details. Open to non-Social Work students with a minimum of 54 credit hours and with instructor permission.	Sustainability Related
Indigeneity, Power, Privilege, and Social Work	SWRK7750	Social Work	G	This course will examine identity development influenced by gender, ethnicity, Indigeneity, internalized oppression, aboriginalism, internalized domination, whiteness, white privilege, racism, and in relation to social policies and social work practice with individuals, families, communities, and nations.	Sustainability Related
Social Challenges and Indigenous Helping Practices	SWRK7770	Social Work	G	This course will teach students how Indigenous Elders, traditional teachers and /or medicine people identify, interpret and meet current social challenges. The course looks at how positive identities and relationships are fostered through traditional Indigenous helping practices and how they currently inform social work.	Sustainability Related
Social Work, Social Challenges, and Indigenous Peoples	SWRK7780	Social Work	G	This course will present challenges Indigenous peoples face through lenses of critical theories, particularly decolonization and social justice. It reviews social policies and social work practices affecting Indigenous peoples, including those of Indigenous organizations that centre Indigenous perspectives.	Sustainability Related
ocial Work Past and Present: Trends, Institutions and Practices	SWRK8100	Social Work	G	Development of Social Work in Canada, with international comparisons, through examination of social processes and intellectual trends shaping the profession, such as colonization, Indigenous issues, feminism, neoliberalism and globalization, and highlighting of practices, methods and models.	Sustainability Related
Introduction to Women's and Gender Studies in the Humanities	WOMN1500	Women's and Gender Studies	UG	Examination of the central concerns of women and gender in the Humanities. A focus on representation, voice, knowledge, and subjectivity.	Sustainability Related
Introduction to Women's and Gender Studies in the Social Sciences	WOMN1600	Women's and Gender Studies	UG	Examination of women's historical and contemporary roles in the economy, family, and society from the perspective of the social sciences. Introduction of feminist theories, with emphasis on the role of gender. Topics covered focus on the social conditions of women's lives: work, health, violence and organizing for change.	Sustainability Related
Feminist Thought	WOMN2000	Women's and Gender Studies	UG	Survey of the varieties of historical and contemporary feminist ideas.	Sustainability Related
Race, Class and Sexuality	WOMN2500	Women's and Gender Studies	UG	An exploration of the various ways race, class, and sexual orientation impact on women's lives and identities. Focus is on how racism, classism and heterosexism are produced and reproduced both within and outside of the feminist movement.	Sustainability Related
Sex, Gender, Space and Place	WOMN2600	Women's and Gender Studies	UG	An examination of how we use places and spaces in our everyday lives to produce and maintain social differences of gender, sexuality, race, class, and citizenship. Drawing on perspectives from feminist geography and history, this course explores ideas about places (for example, homes) and spaces (for example, regions), as well as historical claims that women belong in place but men should control space. Students may not hold credit for both WOMN 2600 and WOMN 2540 with the topic "Sex, Gender, Space and Place."	Sustainability Related

Sex Work in Contemporary Canadian Culture	WOMN3100	Women's and Gender Studies	UG	This course examines cultural linkages between femininity and prostitution in the context of contemporary Canadian culture. The course begins by considering historical cultural and feminist discourses about sex work and sex workers. Keeping in mind that the actual exchange of sexual services for money is currently legal in Canada, course discussions will interrogate enduring representations of sex work/ers. The course also examines some prostitution-related legislation, ideological and "real world" linkages between violence and prostitution, and ongoing activism that reinforce or resist negative representations and the violent realities of sex work/ers in Canada today. Students may not hold credit for both WOMN 3100 and WOMN 2540 with the topic "Sex Work in Contemporary Canadian Culture." Prerequisite: [a minimum of three credit hours of Women's and Gender Studies courses] or written consent of the Women's and Gender Studies coordinator.	Sustainability Related
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