Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Sustainability Course	ALES	Resource Economics and Environmental Sociology	AREC 173	The plate, the planet and society	Undergraduate	AREC173 - The Plate, the Planet and Society A cornerstone course that provides an introduction to social perspectives on everything from what we eat for breakfast to how we protect endangered species and agricultural landscapes. Topics covered include current issues around food production and consumption and issues related to sustainability of our natural and social systems. Debates over new technologies (e.g., GMOs, nanotechnology), food, environment, and health can only be understood in the context of political, economic and personal decisions.
Sustainability Course	ALES	Resource Economics and Environmental Sociology	AREC 365	Natural Resource Economics	Undergraduate	AREC365 - Natural Resource Economics Economics of natural resources; resource scarcity, conservation, sustainability, water resource issues, fisheries, forestry, agriculture, recycling, property and tenure institutions and public resource policy. Credit will be given for only one of AREC 365 and INT D 365. Prerequisite: ECON 101.
Sustainability Course	ALES	Resource Economics and Environmental Sociology	AREC 465	Advanced Natural Resource Economics	Undergraduate	AREC465 - Advanced Natural Resource Economics Applied economic modeling of renewable resource utilization and environmental issues with a focus in forestry and agriculture. Topics may include current Canadian and international issues in the area of environmental valuation, energy, climate change, biodiversity and conservation as related to Forestry and Agriculture. Prerequisite: AREC 365 or permission of Instructor; (AG EC 416 or AREC 313) and ECON 281 recommended. Credit will be given for only one of AREC 465 and INT D 465.
Sustainability Course	ALES	Resource Economics and Environmental Sociology	AREC 471	Society and well-being	Undergraduate	AREC471 - Society and Well-Being Economic, political, historical, and legal perspectives on how and why governments promote well-being in areas such as food safety, nutritional policy, consumer protection, recreation, and the workplace. Topics include the historical development of wellness-related policies, how these decisions are made in society, and economic and moral justifications for such interventions. Prerequisites: One of the following: AREC 200, ECON 281, AREC 365, ECON 365, or consent of the instructor.
Sustainability Course	ALES	Resource Economics and Environmental Sociology	AREC 565	Economic valuation of ecosystem services	Graduate	AREC565 - Economic Valuation of Ecosystem Services Economic valuation of ecosystem goods and services. Topics include: Theoretical and empirical analysis of environmental valuation methods, advanced benefit cost analysis, welfare economics, valuation of ecosystem goods and services, valuation of health impacts from environmental quality change, and linkages to experimental and behavioural economics. Prerequisite: *3 Introductory Econometrics course and consent of instructor; AREC 502 recommended. [Resource Economics and Environmental Sociology]

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Sustainability Course	ALES	Resource Economics and Environmental Sociology	ENCS 352	Natural resource and environmental law	Undergraduate	ENCS352 - Natural Resource and Environmental Law Overview of Canadian laws and policies designed to control air, land, and water pollution including licensing systems, quasi-criminal sanctions, and environmental impact assessment processes. The course will also review relevant constitutional issues and consider alternative legal approaches to the resolution of environmental problems. Prerequisite: Completion of *60 of university-level course work. [Resource Economics and Environmental Sociology].
Sustainability Course	ALES	Resource Economics and Environmental Sociology	ENCS 473	Environmental and conservation policy	Undergraduate	ENCS473 - Environmental and Conservation Policy An overview of principles and programs relating to environmental and conservation policy. Selected local, national, and international environmental policy issues. Prerequisite: One of the following: AREC 200, FOREC 345, AREC 365, ECON 365, ECON 369. Credit will only be given for one of ENCS 473 and ECON 467. [Resource Economics and Environmental Sociology].
Sustainability Course	ALES	Resource Economics and Environmental Sociology	ENCS 673	Environmental and conservation policy	Graduate	ENCS673 - Environmental and Conservation Policy An overview of principles and programs relating to environmental and conservation policy. Selected local, national, and international environmental policy issues. Prerequisite: One of the following: AREC 200, FOREC 345, INT D 365, AREC 365, ECON 365, INT D 369, ECON 369. Not available for students with credit in ENCS 473. Available only to students in MBA/MAg, MBA/MF, MBA in Natural Resource and Energy Programs, or by consent of Department. [Resource Economics and Environmental Sociology].
Sustainability Course	ALES	Resource Economics and Environmental Sociology	INT D 665	Advanced natural resource economics	Graduate	INT D665 - Natural Resource Utilization Economics of utilizing and conserving land, water and energy resources in Agriculture and Forestry. Prerequisite: INT D 365 or AREC 365. Not available for students with credit in INT D 465 or AREC 465. Available only to students in MBA/MAg, MBA/MF, MBA in Natural Resource and Energy Programs, or by consent of Department. [Resource Economics and Environmental Sociology].
Sustainability Course	ALES	Agricultural Food and Nutritional Science	NU FS 377	Introduction to nutrition in the community	Undergraduate	NU FS377 - Introduction to Nutrition in the Community Examination of nutritional problems in contemporary communities. Community nutrition seeks to improve diets and nutritional status of whole populations by working at the community, provincial, national and international levels. Discussion of nutrition programs and resources. Credit will only be given for one of NU FS 377 and 477. Prerequisite: (NU FS 223 or 323) and (NU FS 305 or NUTR 301). May contain alternative delivery sections: refer to the Fees Payment Guide in the University Regulations and Information for Students section of the Calendar.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Sustainability Course	ALES	Agricultural Food and Nutritional Science	NU FS 442	Sustainability of Food and Bio-based Products	Undergraduate	NU FS442 - Sustainability of Food and Bio-based Products This course provides a comprehensive review on sustainability in the food and "green" products industries, and provides a hands-on introduction to methods such as Life Cycle Assessment (LCA) which is used to evaluate the environmental impact of products and processes. Graduate students may not register for credit (see AFNS 542). Credit will only be given for one of NU FS 442 or AFNS 542. Prerequisite: NU FS 283 or 311, or consent of instructor.`
Sustainability Course	ALES	Agricultural Food and Nutritional Science	NUTR 477	Advanced community nutrition	Undergraduate	NUTR477 - Advanced Community Nutrition Builds on concepts learned in introductory community nutrition that relate to health promotion, food security, policy, program planning and community nutrition throughout the lifecycle. Students will develop the skills to write a community grant application. Field trips to places and events that relate to community nutrition. Graduate students may not register for credit (see AFNS 577). Credit will only be given for one of AFNS 577 and NUTR 477. Prerequisites: NUTR 302 and NU FS 377.
Sustainability Course	ALES	Agricultural Food and Nutritional Science	PL SC 200	Urban plants: Gardening and sustainability	Undergraduate	PL SC200 - Urban Plants: Gardening and Sustainability A hands-on, experiential education course taught at Devonian Botanic Garden. Students will learn relevant plant anatomy, an introduction to horticultural methods, garden plant basic needs, soil development, pruning practice, vegetable production examples, and contrast between home gardening and commercial production systems. Discussions and readings will incorporate sustainable practices, food security, local food movement, and environmental footprint.
Sustainability Course	ALES	Resource Economics and Environmental Sociology	R SOC 355	Rural communities and global economies	Undergraduate	R SOC355 - Rural Communities and Global Economies The historic and contemporary role of rural regions and extractive economies in the global marketplace is discussed from a macrosociological perspective. Sociological concepts are applied to the study of the structural constraints and opportunities facing social and economic systems in rural regions. Prerequisite: *30 or more of university level course work.
Sustainability Course	ALES	Resource Economics and Environmental Sociology	R SOC 365	Sociology of environment and development	Undergraduate	R SOC365 - Sociology of Environment and Development Examines the relationship between development and environment at the local, regional, national and international levels. Critically discusses development strategies, the environmental and social forces promoting them, and the distribution of environmental and social impacts. Also examines alternative development strategies, sustainable development experiences and relevant international policy.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Sustainability Course	ALES	Resource Economics and Environmental Sociology	R SOC 375	Public participation and conflict resolution	Undergraduate	R SOC375 - Public Participation and Conflict Resolution The anatomy of environmental and resource management conflict is examined through a lens of critical sociological theory and deliberative democracy. Focusing on contemporary case studies of conflict in energy production, forestry, conservation and protected areas management, social practices and strategies for conflict resolution are explored. Prerequisite: *54 or consent of instructor.
Sustainability Course	ALES	Resource Economics and Environmental Sociology	R SOC 410	Research methods and policy applications in applied environmental sociology	Undergraduate	R SOC410 - Research Methods and Policy Applications in Applied Environmental Sociology Empirical applications of theory and methods used in environmental sociology, rural sociology, and natural resource sociology. Involves one or more case study projects that focus on conceptual understandings, field research methods, and policy analysis in the human dimensions of resource management. Prerequisite: R SOC 355, 365, 450 or by consent of instructor. Open to fourth year students in Environmental and Conservation Sciences (Human Dimensions of Environmental Management major) and BA Environmental Studies major.
Sustainability Course	ALES	Resource Economics and Environmental Sociology	R SOC 443	Resilience and global change	Undergraduate	R SOC443 - Resilience and Global Change This course explores the links between community and environmental sustainability using the lens of social-ecological resilience. What values/beliefs, knowledge, practices and norms have contributed towards the sustainability of local resources and ecosystems? How are small social groups demonstrating resilience in the face of larger scale political, economic, cultural, and environmental change? Drawing on interdisciplinary social science literature, the course critically discusses concepts, theories and issues of resilience from around the globe. Graduate students may not register for credit (see R SOC 543). Credit will only be given for one of R SOC 443 and R SOC 543. Prerequisite: *60 or more
Sustainability Course	ALES	Resource Economics and Environmental Sociology	R SOC 450	Environmental sociology	Undergraduate	R SOC450 - Environmental Sociology Introduction to a field in sociological inquiry that addresses how individuals and groups influence, and are influenced by, natural resources and environmental conditions. Examination of individual-level influences, such as beliefs, attitudes, and behaviors, as well as broader social-level influences at the institutional and organizational level. Focus is on providing an understanding and appreciation for the interaction between human attitudes, behaviors, and organizations with other components of the ecosystem. Prerequisite: *60 or more. An introductory Sociology course is strongly recommended.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Sustainability Course	ALES	Resource Economics and Environmental Sociology	R SOC 460	Perspectives on traditional knowledge	Undergraduate	R SOC460 - Perspectives on Traditional Knowledge Traditional Knowledge is recognized as integral to environmental sustainability and the social and cultural well-being of indigenous peoples. The course focuses on the development of Traditional Knowledge as a field of inquiry and policy debate in Canadian society. Critical attention to the history, politics and theory behind its definition, classification and use will provide students with perspectives on its importance in addressing emergent issues of environmental change. Prerequisite: *60 or more. Credit will only be given for one of R SOC 400-level and R SOC 500-level.
Sustainability Course	ALES	Resource Economics and Environmental Sociology	R SOC 543	Resilience and global change	Graduate	R SOC543 - Resilience and Global Change This course explores the links between community and environmental sustainability using the lens of social-ecological resilience. What values / beliefs, knowledge, practices and norms have contributed towards the sustainability of local resources and ecosystems? How are small social groups demonstrating resilience in the face of larger scale political, economic, cultural, and environmental change? Drawing on interdisciplinary social science literature, the course critically discusses concepts, theories and issues of resilience from around the globe. Lectures and labs are the same as for R SOC 443, but with additional assignments and evaluation appropriate to graduate studies. Credit will only be given for one of R SOC 443 and R SOC 543. Prerequisite: Consent of instructor.
Sustainability Course	ALES	Resource Economics and Environmental Sociology	R SOC 558	The Sociology of Environmental Risk: Theory and application	Graduate	R SOC558 - The Sociology of Environmental Risk: Theory and Applications Theoretical and empirical research on the study of environmental risk in the social sciences, and their application in various institutional areas. Divergent theoretical perspectives on risk within the social sciences, directions taken by empirical researchers in the analysis of the construction and perception of environmental risk, as well as current institutional mechanisms for risk management and social impact assessment. Prerequisite: consent of Instructor.
Sustainability Course	ALES	Resource Economics and Environmental Sociology	R SOC 559	States, social movements and the environment	Graduate	R SOC559 - States, Social Movements and the Environment Covers classic and contemporary theories of states and social movements and their application to environmental and ecological issues. Topics include the Environmental State; relationships among state and societal forces; sub-national, national, and international environmental politics; political distinctions among environmental and ecological issues; and the potential for sustainability governance. Prerequisite: consent of Instructor.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Sustainability Course	ALES	Resource Economics and Environmental Sociology	R SOC 560	Perspectives on traditional knowledge	Graduate	R SOC560 - Perspectives on Traditional Knowledge Traditional Knowledge is recognized as integral to environmental sustainability and the social and cultural well-being of indigenous peoples. The course focuses on the development of Traditional Knowledge as a field of inquiry and policy debate in Canadian society. Critical attention to the history, politics and theory behind its definition, classification and use will provide students with perspectives on its importance in addressing emergent issues of environmental change. Prerequisite: Consent of instructor. Credit will only be given for one of R SOC 400-level and R SOC 500-level.
Sustainability Course	ALES	Renewable Resources	REN R 260	History and fundamentals of environmental protection and conservation	Undergraduate	REN R260 - History and Fundamentals of Environmental Protection and Conservation A philosophical and sociological exploration of historical and contemporary perspectives on human-environmental relationships and their implications. Explores these perspectives in a framework of critical thinking and through case studies. Credit may be obtained for only one of REN R 260 or ENCS 260.
Sustainability Course	ALES	Renewable Resources	REN R 271	The politics of food and natural resources	Undergraduate	REN R271 - The Politics of Food and Natural Resources Students will gain a sociological understanding of contemporary Canadian politics in the food and natural resources sectors. Examination of the nature of political organizations and policymaking in Canada; the particular roles played by the state, the "public," and certain sectors of civil society, including social movements, industry organizations, labour unions, scientific organizations, and rural and aboriginal peoples. Contemporary case studies may include climate change and energy dependence, genetic engineering in agribusiness, the organic food products movement, mining in the circumpolar north, forestry expansion in the boreal region and cod management in the Atlantic fisheries. Credit may be obtained for only one of REN R 271 or ENCS 271.
Sustainability Course	ALES	Renewable Resources	REN R 307	Environmental assessment principles and methods	Undergraduate	REN R307 - Environmental Assessment Principles and Methods Principles and elements of environmental assessment with an interdisciplinary focus. Topics include types of environmental assessments, when to use them, data required, sampling strategies, how data should be collected and analyzed and ultimately communicated to pass legal and scientific scrutiny. Prerequisites: PL SC 221 and STATS 151 and (REN R 205 or ENCS 201) and (REN R 250 or ENCS 203) and (REN R 210 or SOILS 210) and (REN R 299 or FOR 302/303/304); or equivalents. Consent of instructor required for students outside the Faculty of Agricultural, Life & Environmental Sciences. Credit may be obtained for only one of REN R 307 or ENCS 307.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Sustainability Course	ALES	Renewable Resources	REN R 360	Soil and water conservation	Undergraduate	REN R360 - Soil and Water Conservation Global soil and water resources and their current rates of degradation. The main processes of degradation (erosion, loss of organic matter, salinization, pollution) and their causes. Consequences of degradation and conservation of resources through improved land use practices. Prerequisites: (REN R 210 or SOILS 210) and (ENCS 203 or REN R 250). Credit may be obtained for only one of REN R 360 or ENCS 360.
Sustainability Course	ALES	Renewable Resources	REN R 450	Environmentally sustainable agriculture	Undergraduate	REN R450 - Environmentally Sustainable Agriculture Land-management issues that influence the sustainability of both agriculture and the land resource. Role of ecological processes in determining sustainability and the development and adoption of practices that facilitate long-term viability of both agriculture and biophysical resources. The concept of the agro-ecosystem and application of ecological principles to agricultural land management. Use of environmental indicators to measure and predict long-term sustainability of agricultural land management. Prerequisites: *60 at university level including (REN R 210 or SOILS 210), and (BIOL 208 or PL SC 221).
Sustainability Course	ALES	Renewable Resources	REN R 462	Protected areas planning and management	Undergraduate	REN R462 - Protected Areas Planning and Management Principles and practices of planning and management of protected areas, including national and provincial parks and forest recreational systems; wilderness management; the integration of biological and sociological criteria in protected areas planning and management. Prerequisites: (REN R 260 or ENCS 260) and (REN R 364 or ENCS 364). Credit may be obtained for only one of REN R 462 or ENCS 462.
Sustainability Course	ALES	Renewable Resources	REN R 464	Conservation and management of endangered species	Undergraduate	REN R464 - Conservation and Management of Endangered Species Theoretical and applied considerations for maintaining endangered, threatened and rare populations and species, including provincial, national and international strategies. Contributory factors to decline and extinction are discussed, as are various recovery programs. Prerequisite: REN R 364 or ENCS 364, or consent of Instructor. Credit may be obtained for only one of REN R 464 or ENCS 464.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Sustainability Course	ALES	Renewable Resources	REN R 465	Environmental and conservation field studies	Undergraduate	REN R465 - Environmental and Conservation Field Studies Field trip studies with a focus on environmental and conservation biology topics. Course content and offerings vary from year to year, and have included study trips on Northern Ecosystems, National Parks, and Protected Areas, Arctic Tundra, the Florida Everglades, and Galapagos Islands. Prerequisite: *9 in biological or ecological topics. Credit may be obtained for only one of REN R 465 or ENCS 465. Requires payment of additional student instructional support fees. Refer to the Fees Payment Guide in the University Regulations and Information for Students section of the Calendar.
Sustainability Course	ALES	Renewable Resources	REN R 466	Climate change and the north	Undergraduate	REN R466 - Climate Change and the North Current and projected impacts of climate change on the circumpolar north, including the land, its biota, northern communities, and drivers that shape these interactions. Prerequisite: enrolment in the BSc Environmental and Conservation Sciences (ENCS) Northern Systems Major, or consent of Department.
Sustainability Course	ALES	Renewable Resources	REN R 473	Nothern Resource Management	Undergraduate	REN R473 - Northern Resource Management In-depth analysis of topical issues in northern resource management, including both ecological and socio-political dimensions, and emphasizing underlying scientific principles and adaptive management strategies. Prerequisite: enrolment in the BSc Environmental and Conservation Sciences (ENCS) Northern Systems Major, or consent of Department.
Sustainability Course	ALES	Renewable Resources	REN R 474	Utilization of wildlife resources	Undergraduate	REN R474 - Utilization of Wildlife Resources Issues, principles and science surrounding sustainable use of wildlife resources. Hunting, angling and trapping for subsistence, recreational and commercial purposes. Sociopolitical dimensions of harvest regulation, wildlife administration, and human demographic changes. Field trips. Requires payment of additional student instructional support fees. Refer to the Fees Payment Guide in the University Regulations and Information for Students section of the Calendar. Prerequisite: minimum of *6 of Renewable Resources or Biological Sciences courses at the 300-level or higher. Credit may be obtained for only one of REN R 474 or ENCS 474.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Sustainability Course	ALES	Renewable Resources	REN R 482	Soil remediation	Undergraduate	REN R482 - Soil Remediation Principles and methods of biological, chemical, and physical remediation of soils contaminated by hazardous chemicals and other pollutants. Topics include bioremediation of hydrocarbon contaminated soils; chemical restoration of heavy metal polluted soils, acid soils and mine spoils, and salt-affected soils; physical and biological restoration of compacted soils and hydrophobic soils contaminated with organic compounds or wastes; and risk analysis and soil quality criteria in soil remediation. Prerequisites: At least *75 university credit with emphasis on biophysical courses, and REN R 442 or SOILS 430 recommended. Credit may be obtained for only one of REN R 482 or ENCS 455. Requires payment of additional student instructional support fees. Refer to the Fees Payment Guide in the University Regulations and Information for Students section of the Calendar.
Sustainability Course	ALES	Renewable Resources	REN R 483	Waste management and utilization	Undergraduate	REN R483 - Waste Management and Utilization Chemical, biological, and physical properties of anthropogenic wastes, their reactions in the soil environment, theory and practice for their chemical and biological immobilization and use in agriculture, forest, and urban lands. Prerequisites: consent of Instructor, must have completed at least *60 at the university-level. Credit may be obtained for only one of REN R 483 or ENCS 475.
Sustainability Course	ALES	Renewable Resources	REN R 491	Land-Use planning in Canada's north	Undergraduate	REN R491 - Land-use Planning in Canada's North Contemporary approaches to land-use planning applied to northern systems in Canada, addressing the integration of social, environmental and economic values, and maintenance of ecosystem integrity through proactive measures. Prerequisites: enrolment and *81 credits at the university level in the BSc Environmental and Conservation Sciences (ENCS) Northern Systems Major, or consent of Department.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Sustainability Course	ALES	Renewable Resources	REN R 495	Land reclamation	Undergraduate	REN R495 - Land Reclamation Principles, practices, and philosophy of reclamation of degraded lands. Topics include types of land disturbances and regulations governing their reclamation, landscape development, site preparation, soil reclamation and remediation, revegetation, seed mix design, planting methods, plant species selection, monitoring, determining success, plant community ecology and change, bioengineering, phytoremediation, vegetative reclamation, and ecological restoration. Team based land reclamation project required. Should be taken in students' last year as the Capstone Course for the Land Reclamation Major. Prerequisites: *90 university credit including introductory courses in soil science, hydrology, ecology, and vegetation science; and REN R 307 or ENCS 307 or equivalent; and *3 in vegetation science at the 300-or 400-level (e.g. botany, forestry, plant ecology, plant resources, plant science, range science, weed science); and *6 in soil science at the 300-or 400-level. Prerequisites or corequisites: *3 in vegetation science at the 300-or 400-level; and *3 in soil science at the 300-or 400-level; and REN R 482 or ENCS 455. ENCS 406 recommended. Note: This course is not open to anyone who has taken REN R 475 or 485.
Sustainability Course	ALES	Renewable Resources	REN R 496	Conservation planning	Undergraduate	REN R496 - Conservation Planning Conservation Planning is a quantitative, inter-disciplinary applied science that prioritizes conservation actions in a spatially-explicit manner. It seeks to understand trade-offs between biological, social and economic factors associated with land use activities. The course is a combination of computing labs that demonstrate key principles and software, lectures to discuss key issues, and a student-led final project to apply key concepts and quantitative techniques. Special emphasis is given to Alberta's land use planning challenges, although North American examples and exercises are also used. Prerequisites: Consent of instructor, or (REN R 364 or ENCS 364) and (REN R 201 or EAS 221) and (STATS 141 or STATS 151) and *81 university level credits.
Sustainability Course	ALES	Renewable Resources	REN R 710	Environmental assessment principles and methods	Graduate	REN R710 - Environmental Assessment Principles and Methods Principles and elements of environmental assessment with an interdisciplinary focus. Topics include types of environmental assessments, when to use them, data required, sampling strategies, how data should be collected and analyzed and ultimately communicated to pass legal and scientific scrutiny. Not available for students with credit in REN R 307 or ENCS 307. Available only to students in MAg, MBA/MAg, MF, or MBA/MF, or by consent of Department.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Sustainability Course	ALES	Renewable Resources	REN R 752	Environmentally sustainable agriculture	Graduate	REN R752 - Environmentally Sustainable Agriculture Land-management issues that influence the sustainability of both agriculture and the land resource. Role of ecological processes in determining sustainability and the development and adoption of practices that facilitate long-term viability of both agriculture and biophysical resources. The concept of the agroecosystem and application of ecological principles to agricultural land management. Use of environmental indicators to measure and predict long-term sustainability of agricultural land management. Not available for students with credit in REN R 450. Available only to students in MAg, MBA/MAg, MF, or MBA/MF, or by consent of Department.
Sustainability Course	ALES	Renewable Resources	REN R 765	Principles of managing natural diversity	Graduate	REN R765 - Principles of Managing Natural Diversity Introduction to the theoretical foundation for conservation science. Elements of population, community and landscape ecology will be reviewed, and their application to real-world challenges discussed. Objective is to provide students with the scientific tools to evaluate and develop conservation strategies for maintaining diversity in human-altered systems. Ethical and philosophical aspects of the sociopolitical arena in which conservation decisions are made and implemented are also explored. Not available for students with credit in REN R 364 or ENCS 364. Available only to students in MAg, MBA/MAg, MF, or MBA/MF, or by consent of Department.
Sustainability Course	ALES	Renewable Resources	REN R 766	Protected areas planning and management	Graduate	REN R766 - Protected Areas Planning and Management Principles and practices of planning and management of protected areas, including national and provincial parks and forest recreational systems; wilderness management; the integration of biological and sociological criteria in protected areas planning and management. Not available for students with credit in REN R 462 or ENCS 462. Available only to students in MAg, MBA/MAg, MF, or MBA/MF, or by consent of Department.
Sustainability Course	ALES	Renewable Resources	REN R 770	Utilization of wildlife resources	Graduate	REN R770 - Utilization of Wildlife Resources Issues, principles and science surrounding sustainable use of wildlife resources. Hunting, angling and trapping for subsistence, recreational and commercial purposes. Sociopolitical dimensions of harvest regulation, wildlife administration, and human demographic changes. Field trips. Requires payment of additional student instructional support fees. Refer to the Fees Payment Guide in the University Regulations and Information for Students section of the Calendar. Not available for students with credit in REN R 474 or ENCS 474. Available only to students in MAg, MBA/MAg, MF, or MBA/MF, or by consent of Department.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Sustainability Course	ALES	Renewable Resources	REN R 796	Conservation planning	Graduate	REN R796 - Conservation Planning Conservation Planning is a quantitative, inter-disciplinary applied science that prioritizes conservation actions in a spatially-explicit manner. It seeks to understand trade-offs between biological, social and economic factors associated with land use activities. The course is a combination of computing labs that demonstrate key principles and software, lectures to discuss key issues, and a student-led final project to apply key concepts and quantitative techniques. Special emphasis is given to Alberta's land use planning challenges, although North American examples and exercises are also used. Not available for students with credit in REN R 496. Available only to students in MAg, MBA/MAg, MF, or MBA/MF, or by consent of Department.
Sustainability Course	Arts	Community Service Learning	CSL 100	An introduction to community engagement	Undergraduate	CSL100 - An Introduction to Community Engagement An interdisciplinary introduction to community and civic engagement for students interested in preparing the groundwork for undertaking further experiential educational opportunities (e.g., Internships, Study Abroad, CSL).
Sustainability Course	Arts	Art and Design	DES 401	Intermediate industrial design principles and practices II	Undergraduate	DES401 - Intermediate Industrial Design Principles and Practices II Subject areas include research methods and the design processes; communication skills and collaborative dynamics, human factors, the psychology of design, material properties and applications for fabrication and production, market considerations. Projects are 2-D, 3-D and computer-based. Prerequisites: DES 400 and consent of Department. Note: Not open to students with credit in DES 470.
Sustainability Course	Arts	Art and Design	DES 402	Product design principles and practices I	Undergraduate	DES402 - Product Design Principles and Practices I A studio-based course which implements design principles and practices with a focus on their application to product design for batch production and mass production. Experimentation and concept development with computer technology. 2-D media and 3-D models and mock-ups. Prerequisite or corequisite: DES 400 and consent of Department. Note: Not open to students with credit in DES 475.
Sustainability Course	Arts	Art and Design	HADVC 216	China's Design Revolution	Undergraduate	HADVC216 - China's Design Revolution This course raises the question: when will China stop manufacturing and start designing? Students will study the historical foundations, theory and practice of sustainable design in China since the end of the Maoist era.
Sustainability Course	Arts	Art and Design	HADVC 309	Sustainable Design	Undergraduate	HADVC309 - Design Theory and History Historical and/or contemporary issues in design practice and theory
Sustainability Course	Arts	Economics	ECON 269	Economics of the environment	Undergraduate	ECON269 - Economics of the Environment Economic growth and the deterioration of the environment; types, causes, theory, policy, and measurement, and current Canadian environmental topics. Prerequisite: ECON 101 or equivalent. Not open to students with credit in ECON 369, INT D 369, or INT D 225 offered as Economics and the Environment.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Sustainability Course	Arts	Economics	ECON 467	Environmental and natural resource policy	Undergraduate	ECON467 - Environmental and Natural Resource Policy Environmental and natural resource law; domestic and global policy issues related to renewable and non-renewable resources. Prerequisites: MATH 113 or SCI 100, ECON 281, and one of ECON 365, ECON 366, ECON 369 or AREC 365. Not open to students with credit in ECON 466 or ENCS 473.
Sustainability Course	Arts	Economics	ECON 566	Environmental economics	Graduate	ECON566 - Environmental Economics Economic theory and policy relating to environmental problems; welfare and public policy issues in environmental decision making. Environmental law; transboundary pollution; economic instruments for pollution control.
Sustainability Course	Arts	Earth and Atmospheric Sciences (Science)	HGP 250	Natural resources and environmental management	Undergraduate	HGP250 - Natural Resources and Environmental Management Geographic concepts and perspectives on renewable and non-renewable natural resources. Prerequisite: Any *3 course. Not available to students with credit in EAS 294.
Sustainability Course	Arts	Earth and Atmospheric Sciences (Science)	HGP 355	Environmental planning	Undergraduate	HGP355 - Environmental Planning Introduction to issues in policy making, planning and management related to human interaction with the physical environment. Prerequisite: EAS 192 or any EAS 29X course.
Sustainability Course	Arts	Earth and Atmospheric Sciences (Science)	HGP 443	Environment and health	Undergraduate	HGP443 - Environment and Health An examination of relations between human health and environmental issues, particularly those related to the natural, built, and social environments. Prerequisite: EAS 395 or HGP 343 or consent of Instructor. Not available to students with credit in EAS 494.
Sustainability Course	Arts	Earth and Atmospheric Sciences (Science)	HGP 450	Resource management and environmental policy	Undergraduate	HGP450 - Resource Management and Environmental Policy Roles of governmental and nongovernmental organizations, industry and private enterprise, and advocacy organizations in addressing issues of resource scarcity and environmental policy. Institutions, policies, and strategies for resource and environmental management at the provincial/state, national, and international levels. Prerequisites: EAS 294 or HGP 250. Not available to students with credit in EAS 491.
Sustainability Course	Arts	Earth and Atmospheric Sciences (Science)	HGP 452	Human dimensions of environmental change	Undergraduate	HGP452 - Human Dimensions of Environmental Change Investigation of issues related to the human use of resources and impact on the regional and global environment. Critical review of current frameworks for assessing, mitigating, and adapting to global environmental change. Prerequisite: Any EAS 3XX or HGP 3XX course or Consent of Instructor. Not available to students with credit in EAS 493.
Sustainability Course	Arts	Earth and Atmospheric Sciences (Science)	HGP 552	Advanced human dimensions of global change	Graduate	HGP552 - Advanced Human Dimensions of Global Change Investigation of issues related to the human use of resources and impact on the regional and global environment. Critical review of alternative frameworks for assessing, mitigating and adapting to global environmental change. Research project. Classes concurrent with HGP 452. Not available to students with credit in EAS 493, 593 or HGP 452.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Sustainability Course	Arts	History and Classics	HIST 359	Canadian environmental history	Undergraduate	HIST359 - Canadian Environmental History Brings the natural environment onto a shared stage with social, economic, political and cultural history in Canada from the last ice age to the present.
Sustainability Course	Arts	Philosophy	PHIL 355	Environmental ethics	Undergraduate	PHIL355 - Philosophy of the Environment Philosophical dimensions of issues raised by our relationship to the environment. Topics may include anthropocentrism versus biocentrism, the value of biodiversity, the aesthetic appreciation of nature, the relationship between environmental and economic values.
Sustainability Course	Arts	Sociology	SOC 269	Introductory sociology of globalization	Undergraduate	SOC269 - Introductory Sociology of Globalization Introduces various aspects of globalization and its impact on our lives at local, national, and international levels. Prerequisite: SOC 100 or consent of instructor.
Sustainability Course	Arts	Sociology	SOC 291	Introduction to environmental sociology	Undergraduate	SOC291 - Introduction to Environmental Sociology Sociological examination of the relationship between human societies and the natural environment.
Sustainability Course	Arts	Sociology	SOC 580	Colonialism, post-colonialism and globalization	Graduate	SOC580 - Colonialism, Post-colonialism and Globalization There is no description available for this course.
Sustainability Course	Arts	Interdisciplinary Studies	STS 210	Environment, science, culture, and values	Undergraduate	STS210 - Environment, Science, Culture, and Values An examination of the interrelations between human cultural frameworks and environmental issues, emphasizing an interdisciplinary humanities and social sciences perspective.
Sustainability Course	Arts	Women and Gender Studies	WGS 240	Feminism and food	Undergraduate	WGS240 - Feminism and Food Women's material relationships to food from a variety of feminist perspectives. Note: Not open to students with credit in W ST 340 or WGS 340.
Sustainability Course	Arts	Women and Gender Studies	WGS 390	Environmental Feminisms and Social Justice	Undergraduate	WGS390 - Environmental Feminisms and Social Justice Addresses issues of environmental racism, sexism, and ableism, feminist approaches to environmental ethics, and social justice responses to climate change. Prerequisite: Any 100 or 200 level WGS or W ST course, or consent of department.
Sustainability Course	Arts	Women and Gender Studies	WGS 498	Topics in Women and Gender Studies	Undergraduate	WGS498 - Topics in Women's and Gender Studies Prerequisite: Any 100 or 200 level WGS or W ST course, or departmental consent. "Anthropocene Feminism" is a frequent topic for this class.
Sustainability Course	Arts	-	GSJ 507	Feminist Theory Now	Graduate	GSJ507 - Feminist Theory Now Examines current preoccupations within feminist theory. Topics and geographical focus will vary. "Anthropocene Feminism" is a frequent topic for this class.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Sustainability Course	Augustana	Science	AUBIO 350	Conservation theory and biodiversity in tropical systems	Undergraduate	AUBIO350 - Conservation Theory and Biodiversity in Tropical Systems Introduction to the basic concepts of conservation biology. The scope of conservation biology and levels of biodiversity are explored, as are aspects of tropical ecology related to conservation. Prerequisite: One of AUBIO 253, 294, or 295, and consent of the instructor(s) based on successful completion of the selection process. Note: This course is intended to be taken in sequence with AUBIO 459 or AUENV 459. Credit may be obtained for only one of AUBIO 350, 450, AUENV 350, 450.
Sustainability Course	Augustana	Science	AUBIO 354	Freshwater ecology and management	Undergraduate	AUBIO354 - Freshwater Ecology and Management Introduction to the biological, chemical and physical features of freshwater ecosystems, and how they relate to ecological processes in and adjacent to aquatic systems. The course will examine the role of ecological patterns in lakes, ponds, rivers and streams, with an emphasis on freshwater systems and their management in western Canada. Prerequisite: AUBIO 253. Notes: Credit may be obtained for only one of AUBIO 354, AUENV 354, and AUGEO 354. The course requires participation in a field trip. Requires payment of additional student instructional support fees. Refer to the Fees Payment Guide in the University Regulations and Information for Students section of the Calendar.
Sustainability Course	Augustana	Science	AUBIO 459	Field studies in tropical ecology and conservation	Undergraduate	AUBIO459 - Field Studies in Tropical Ecology and Conservation Field course that addresses problems of biodiversity and conservation in tropical environments. The student participates in field workshops, and designs and conducts his or her own field project to answer questions related to ecological and biological conservation. Prerequisite: AUBIO 350 or AUENV 350, and consent of the instructors based on successful completion of the selection process. Notes: Credit may be obtained for only one of AUBIO 459 and AUENV 459. Students who have received credit for AUBIO 359 or AUENV 359 may enrol in AUBIO 459 or AUENV 459 in a subsequent year based on successful completion of the selection process. Requires payment of additional student instructional support fees. Refer to the Fees Payment Guide in the University Regulations and Information for Students section of the Calendar.
Sustainability Course	Augustana	Social Sciences	AUECO 341	Environmental economics	Undergraduate	AUECO341 - Environmental Economics Examination of the relationships between the economy and the environment. Emphasis is placed on the application of economic analysis to various environmental issues. Prerequisite: AUECO 101. Note: Credit may be obtained for only one of AUECO 341 and AUENV 341.
Sustainability Course	Augustana	Social Sciences	AUECO 346	Agricultural economics	Undergraduate	AUECO346 - Agricultural Economics Study of economic theory and policy relating to the agricultural sector of the economy. Emphasis is placed on the economic aspects of agricultural production, marketing, finance, and resource use with particular reference to agricultural policy in Canada and Alberta. Prerequisite: AUECO 101.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Sustainability Course	Augustana	Science	AUENV 120	Human activies and the natural environment	Undergraduate	AUENV120 - Human Activities and the Natural Environment Introductory analysis of the interrelationships between society and the natural world, environmental consequences, and human perceptions. The characteristics and interactions of physical environmental systems and various facets of resource management (including forestry, agriculture, fisheries, protected areas, endangered species, and pollution) are described and analyzed. Note: Credit may be obtained for only one of AUENV 120 and AUGEO 120.
Sustainability Course	Augustana	Science	AUENV 320	Parks and wilderness	Undergraduate	AUENV320 - Parks and Wilderness Examination of scientific principles and concepts underlying parks, wilderness and other protected area systems with emphasis on Canada. Topics include history, philosophy, conceptual frameworks, roles in sustainability, and types of biological and geographic designations. Prerequisite: One of AUBIO 253, AUENV 120, AUGEO 120, consent of the instructor. Note: Credit may be obtained for only one of AUENV 320, 420, AUGEO 320, 420.
Sustainability Course	Augustana	Science	AUENV 324	Resource and environmental management	Undergraduate	AUENV324 - Resource and Environmental Management Integration of both physical and human phenomena in understanding natural resources, their dimensions and boundaries. Basic concepts in resource analysis and management: the decision-making process, management frameworks and strategies, legislation and regulation, impact assessment, the role of perceptions, attitudes and behaviour, and the impact of public participation/interest groups in the development of natural resources. Prerequisite: One of AUBIO 253, AUENV 120, AUGEO 120, 230, 231, consent of the instructor. Note: Credit may be obtained for only one of AUENV 324 and AUGEO 324. Requires payment of additional student instructional support fees. Refer to the Fees Payment Guide in the University Regulations and Information for Students section of the Calendar.
Sustainability Course	Augustana	Social Sciences	AUENV 328	Environmental politics	Undergraduate	AUENV328 - Environmental Politics Examination of contemporary debates in, and the evolution of, environmental policy and politics. This course will focus on Canadian issues in a comparative perspective, exploring topics such as environmental political theory, the policy cycle, social movements, international issues, and related case studies. Prerequisite: *3 in either Environmental Studies/Science or Political Studies. Note: Credit may be obtained for only one of AUENV 328 and AUPOL 328.
Sustainability Course	Augustana	Social Sciences	AUENV 341	Environmental economics	Undergraduate	AUENV341 - Environmental Economics Examination of the relationships between the economy and the environment. Emphasis is placed on the application of economic analysis to various environmental issues. Prerequisite: AUECO 101. Note: Credit may be obtained for only one of AUENV 341 and AUECO 341.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Sustainability Course	Augustana	Humanities	AUENV 345	Religion and ecology	Undergraduate	AUENV345 - Religion and Ecology This course examines the complexities and tensions in formulating religious responses to environmental problems. It looks at how eco justice, stewardship, ecological spirituality, and ecofeminism integrate Christian traditions with environmental responsibility. It also devotes substantial time to outlining the ways place-based identities address issues related to colonialism, environmental racism, technology and community. Note: Credit may be obtained for only one of AUENV 345 and AUREL 345.
Sustainability Course	Augustana	Science	AUENV 350	Conservation theory and biodiversity in tropical systems	Undergraduate	AUENV350 - Conservation Theory and Biodiversity in Tropical Systems Introduction to the basic concepts of conservation biology. The scope of conservation biology and levels of biodiversity are explored, as are aspects of tropical ecology related to conservation. Prerequisite: One of AUBIO 253, 294, or 295, and consent of the instructor(s) based on successful completion of the selection process. Note: This course is intended to be taken in sequence with AUBIO 459 or AUENV 459. Credit may be obtained for only one of AUENV 350, 450, AUBIO 350, 450.
Sustainability Course	Augustana	Science	AUENV 354	Freshwater ecology and management	Undergraduate	AUENV354 - Freshwater Ecology and Management Introduction to the biological, chemical and physical features of freshwater ecosystems, and how they relate to ecological processes in and adjacent to aquatic systems. The course will examine the role of ecological patterns in lakes, ponds, rivers and streams, with an emphasis on freshwater systems and their management in western Canada. Prerequisite: AUBIO 253. Notes: Credit may be obtained for only one of AUENV 354, AUBIO 354, and AUGEO 354. The course requires participation in a field trip. Requires payment of additional student instructional support fees. Refer to the Fees Payment Guide in the University Regulations and Information for Students section of the Calendar.
Sustainability Course	Augustana	Humanities	AUENV 355	Philosophy, technology, and the environment	Undergraduate	AUENV355 - Philosophy, Technology, and the Environment Investigation of the philosophical and social issues related to technology and the environment. The natural/artificial distinction, different senses of "environment" and the ways we understand, package, and manage nature form the foundation of the course. Issues in environmental ethics are also addressed. Thinkers may include Marx, Heidegger, Marcel, Borgmann, Winner, Singer, Regan, and others. Prerequisite: None, but AUPHI 350 would be useful. Note: Credit may be obtained for only one of AUENV 355 and AUPHI 355.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Sustainability Course	Augustana	Social Sciences	AUENV 358	Environmental sociology	Undergraduate	AUENV358 - Environmental Sociology Theoretical and empirical examination of the connection between the natural environment and the social world. This involves inquiry into the sociological dimensions of some major contemporary environmental problems, including air, water and soil pollution, decreased biodiversity, deforestation, climate change, and ozone depletion. Particular attention is paid to the social and political connections among issues of industrialization, development, globalization, inequality, gender, social change and environmental destruction. Prerequisites: Third-year standing and AUENV 120 (or its cross-listed equivalent). Note: Credit may be obtained for only one of AUENV 358, 458 and AUSOC 358, 458.
Sustainability Course	Augustana	Social Sciences	AUENV 375	Canadian environmental history	Undergraduate	AUENV375 - Canadian Environmental History Historical examination of the dynamic interrelationships between the natural world and humans, with a focus on Canadian issues within a North American context. Topics and perspectives will include: Aboriginal peoples, colonization, fur trade, exploration, settlement, western agriculture, science, and the conservation movement. Note: Credit may be obtained for only one of AUENV 375, 475, AUHIS 375, 475.
Sustainability Course	Augustana	Science	AUENV 420	Parks and wilderness	Undergraduate	AUENV420 - Parks and Wilderness Examination of scientific principles and concepts underlying parks, wilderness, and other protected area systems with emphasis on Canada. Topics include history, philosophy, conceptual frameworks, roles in sustainability, and types of biological and geographical designations. Prerequisite: One of AUBIO 253, AUENV 120, AUGEO 120; and one of AUBIO 350, 351, 353, 359, 450, 459, AUENV 324, 350, 353, 359, 450, 459, AUGEO 324, 351. Note: Credit may be obtained for only one of AUENV 320, 420, AUGEO 320, 420.
Sustainability Course	Augustana	Science	AUENV 421	Environmental science: History and impacts	Undergraduate	AUENV421 - Environmental Science: History and Impacts Overview of the historical developments, past and current impacts, and changing roles of the field of environmental science. Prerequisites: One of AUBIO 350, 353, 450; AUENV 320, 324, 350, 353, 420, 450; AUGEO 320, 324, 420 and at least fourth-year standing. Note: Credit may be obtained for only one of AUENV 421 and AUGEO 421.
Sustainability Course	Augustana	Science	AUENV 425	Environmental impact assessment	Undergraduate	AUENV425 - Environmental Impact Assessment History and theory of environmental impact assessment; legislative and policy frameworks; role in resource planning; methods and techniques for the assessment of impacts; future directions. Prerequisites: One of AUENV 324, AUGEO 324, and AUBIO 253. Note: Credit may be obtained for only one of AUENV 425, AUGEO 425. Requires payment of additional student instructional support fees. Refer to the Fees Payment Guide in the University Regulations and Information for Students section of the Calendar.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Sustainability Course	Augustana	Science	AUENV 459	Field studies in tropical ecology and conservation	Undergraduate	AUENV459 - Field Studies in Tropical Ecology and Conservation Field course that addresses problems of biodiversity and conservation in tropical environments. The student participates in field workshops, and designs and conducts his or her own field project to answer questions related to ecological and biological conservation. Prerequisite: AUBIO 350 or AUENV 350, and consent of the instructors based on successful completion of the selection process. Notes: Credit may be obtained for only one of AUBIO 459 and AUENV 459. Students who have received credit for AUBIO 359 or AUENV 359 may enrol in AUBIO 459 or AUENV 459 in a subsequent year based on successful completion of the selection process. Requires payment of additional student instructional support fees. Refer to the Fees Payment Guide in the University Regulations and Information for Students section of the Calendar.
Sustainability Course	Augustana	Social Sciences	AUENV 475	Canadian environmental history	Undergraduate	AUENV475 - Canadian Environmental History Historical examination of the dynamic interrelationships between the natural world and humans, with a focus on Canadian issues within a North American context. Topics and perspectives will include: Aboriginal peoples, colonization, fur trade, exploration, settlement, western agriculture, science, and the conservation movement. Prerequisite: One of AUHIS 260, 261. Note: Credit may be obtained for only one of AUENV 375, 475, AUHIS 375, 475.
Sustainability Course	Augustana	Fine Arts	AUHIS 375	Canadian environmental history	Undergraduate	AUHIS375 - Canadian Environmental History Historical examination of the dynamic interrelationships between the natural world and humans, with a focus on Canadian issues within a North American context. Topics and perspectives will include: Aboriginal peoples, colonization, fur trade, exploration, settlement, western agriculture, science, and the conservation movement. Note: Credit may be obtained for only one of AUHIS 375, 475, AUENV 375, 475.
Sustainability Course	Augustana	Fine Arts	AUHIS 475	Canadian environmental history	Undergraduate	AUHIS475 - Canadian Environmental History Historical examination of the dynamic interrelationships between the natural world and humans, with a focus on Canadian issues within a North American context. Topics and perspectives will include: Aboriginal peoples, colonization, fur trade, exploration, settlement, western agriculture, science, and the conservation movement. Note: Credit may be obtained for only one of AUHIS 375, 475, AUENV 375, 475.
Sustainability Course	Augustana	Fine Arts	AUPHI 355	Philosophy and the environment	Undergraduate	AUPHI355 - Philosophy and the Environment Investigation of the philosophical and social issues related to technology and the environment. Topics may include the natural/artificial distinction, different meanings of "environment", the ways we understand, package, and manage nature as well as issues in environmental ethics and aesthetics. May include texts by Western and Indigenous thinkers. Note: Credit may be obtained for only one of AUPHI 355 and AUENV 355.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Sustainability Course	Augustana	Social Sciences	AUPOL 328	Environmental politics	Undergraduate	AUPOL328 - Environmental Politics Examination of contemporary debates in, and the evolution of, environmental policy and politics. This course will focus on Canadian issues in a comparative perspective, exploring topics such as environmental political theory, the policy cycle, social movements, international issues, and related case studies. Prerequisite: *3 credits in either Environmental Studies/Science or Political Studies. Note: Credit may be obtained for only one of AUPOL 328 and AUENV 328.
Sustainability Course	Augustana	Fine Arts	AUREL 345	Religion and ecology	Undergraduate	AUREL345 - Religion and Ecology Examination of the relationship between ecology and religion from Christian and non-Christian perspectives. The course looks at ecological spirituality, ecotheology, animal rights, deep ecology, ecoactivism, and ecofeminism. It also devotes substantial time to ecological themes in Asian (Hindu, Buddhist, and Chinese) and traditional (native American and Australian aboriginal) religions. Note: Credit may be obtained for only one of AUREL 345 and AUENV 345.
Sustainability Course	Augustana	Social Sciences	AUSOC 358	Environmental sociology	Undergraduate	AUSOC358 - Environmental Sociology Theoretical and empirical examination of the connection between the natural environment and the social world. This involves inquiry into the sociological dimensions of some major contemporary environmental problems including air, water and soil pollution, decreased biodiversity, deforestation, climate change, and ozone depletion. Particular attention is paid to the social and political connections among issues of industrialization, development, globalization, inequality, gender, social change and environmental destruction. Prerequisites: Third year standing and one of AUSOC 101, 103 or 105. Note: Credit may be obtained for only one of AUSOC 358, 458 and AUENV 358, 458.
Sustainability Course	Augustana	Science	AUENV 220	Applications in Sustainability	Undergraduate	AUENV220 - Applications in Sustainability An introductory course in the theoretical and applied aspects of sustainability as it relates to key categories of energy, food, water, pollution, waste and their impacts on the environment. Current technological advances and emerging initiatives based on lowering our ecological footprint provide a basis for examining sustainability science as it relates to environmental challenges in a changing world.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Sustainability Course	Business	Accounting, operations and information systems	ACCTG 463	Accounting for natural resources, energy and the environment	Undergraduate	ACCTG463 - Accounting for Natural Resources, Energy, and the Environment This course covers accounting rules and practice in the area of natural resources, energy and the environment. Some topics include mineral rights and exploration costs, emissions trading, environmental reporting and liabilities. While it does contain technical material, it is meant for both accounting and non-accounting students. Both International and U.S. generally accepted accounting principles (GAAP) will be explored. The focus will be on understanding how firms in this area report their natural resource assets and related liabilities. Prerequisite: ACCTG 311. ACCTG 412 or 414 are recommended.
Sustainability Course	Business	Accounting, operations and information systems	ACCTG 663	Accounting for natural resource, energy and the environment	Graduate	ACCTG663 - Accounting for Natural Resources, Energy and the Environment This course covers accounting rules and practice in the area of natural resources, energy and the environment. Some topics include mineral rights and exploration costs, emissions trading, environmental reporting and liabilities. While it does contain technical material, it is meant for both accounting and non-accounting students. Both International and U.S. generally accepted accounting principles (GAAP) will be explored. The focus will be on understanding how firms in this area report their natural resource assets and related liabilities. Prerequisite: ACCTG 501.
Sustainability Course	Business	Marketing, business economics, and law	B LAW 428	Natural resource and environmental law	Undergraduate	B LAW428 - Natural Resource and Environmental Law The legal framework in which managerial decisions affecting the environment are taken. Substance of environmental law and the procedures for enforcing it. Interaction of this legal approach with business strategies for dealing with environmental issues is analyzed. Prerequisite: B LAW 301 or ENGG 420.
Sustainability Course	Business	Marketing, business economics, and law	B LAW 628	Natural resource and environmental law	Graduate	B LAW628 - Natural Resource and Environmental Law The course considers the legal framework in which managerial decisions affecting the environment are taken. It looks at the substances of environmental law and the procedures for enforcing it. The interaction of this legal approach with business strategies for dealing with environmental issues is analyzed.
Sustainability Course	Business	Marketing, business economics, and law	BUEC 463	Energy and the environment: industry structure, performance, and challenges	Undergraduate	BUEC463 - Energy and the Environment: Industry Structure, Performance and Challenges Uses the basic tools of business economics in order to gain a better understanding of energy markets and industries. Differences and similarities between specific industries (oil, gas, electricity, etc.) and between different industry segments (exploration, production, retail, etc.) are highlighted. New challenges faced by the industry, most notably environmental concerns, but also globalization and new forms of competition, are analysed with respect to the impacts that they have had and might have in the future on firms' strategies and on market performance. Prerequisite: BUEC 311 or ECON 281.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Sustainability Course	Business	Marketing, business economics, and law	BUEC 464	Environmental management	Undergraduate	BUEC464 - Environmental Management Introduction to the theory and application of environmental economics and its role in management and policy-making. The course will cover development of a model of pollution control, evaluation of policy in this context, the setting of optimal environmental policies, and the application of these policies. Particular policies and practices implemented in North America will be examined. Prerequisite: BUEC 311 or ECON 281.
Sustainability Course	Business	Marketing, business economics, and law	BUEC 564	Environmental management	Graduate	BUEC564 - Environmental Management The economic theory of externalities is introduced and applied in a discussion of alternative policy instruments such as taxes, tradable permits, and regulatory standards which are used to deal with pollution. Topics include current environmental regulation issues such as climate change, water and air pollution and firm strategy. Extensions include an introduction to cost-benefit analysis and environmental impact assessment tools for project evaluation as well as a discussion of the economics of non-renewable resources. Prerequisite: BUEC 502 or 503. Not open to students with credit in BUEC 562.
Sustainability Course	Business	Strategic management and organization	BUS 505	Ethics and corporate social responsibility with comunications	Graduate	BUS505 - Ethics and Corporate Social Responsibility with Communications This course focuses on the application of moral principles and models for ethical decision making to individuals and businesses in the 21st century. Contemporary ethical and social issues will be examined through the use of case studies, class discussions and presentations. Topics include concepts of individual ethics, workplace issues, corporate compliance and social and environmental responsibility. While examining ethical issues, emphasis will be placed on improving students' proficiency levels in verbal and written business communication.
Sustainability Course	Business	Marketing, business economics, and law	MARK 455	Sustainability and responsible marketing	Undergraduate	MARK455 - Sustainability and Responsible Marketing Marketing plays a large role in and is affected by corporate social responsibility (CSR) and sustainability issues. This course will explore, examine and inform how the marketing function of business activity engages in CSR and sustainability issues. Specific topics will cover how these issues are influenced by consumer trends and how they are communicated to consumers. Marketing problems found in the non-profit, for-profit and public sectors will be examined, and responsible (and irresponsible) marketing practices will be explored. Prerequisite: MARK 301.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Sustainability Course	Business	Marketing, business economics, and law	MARK 655	Sustainability and responsible marketing	Graduate	MARK655 - Sustainability and Responsible Marketing Marketing plays a large role in and is affected by corporate social responsibility (CSR) and sustainability issues. This course will explore, examine and inform how the marketing function of business activity engages in CSR and sustainability issues. Specific topics will cover how these issues are influenced by consumer trends and how they are communicated to consumers. Marketing problems found in the non-profit, for-profit and public sectors will be examined, and responsible (and irresponsible) marketing practices will be explored. Prerequisite: MARK 502.
Sustainability Course	Business	Strategic management and organization	SMO 406	Ethical issues in business	Undergraduate	SMO406 - Ethical Issues in Business This course assists students in developing and refining their personal ethical frameworks by examining issues commonly facing members of business and government organizations. A wide range of issues will be explored including discrimination, product and worker safety, environmental impacts, insider trading, and employee privacy and rights. Prerequisite: SMO 201, 301 or 310. Open to third- and fourth-year students
Sustainability Course	Business	Strategic management and organization	SMO 423	Power and organization	Undergraduate	SMO423 - Power and Organization An introduction to aspects of organizational life often omitted in business courses - the role of humor, gossip, emotion and sex; the organization of time and space; the nature of the body and the construction of organizational identities - and consider their significance for understanding contemporary organizational and human resources practices. Prerequisite: Open to third- and fourth-year students only.
Sustainability Course	Business	Strategic management and organization	SMO 445	Corporate social responsibility and social entrepreneurship	Undergraduate	SMO445 - Corporate Social Responsibility and Social Entrepreneurship Corporate social and environmental responsibility is an important strategic consideration for companies around the world. The relationship a business has with both government and the larger public is integral to its success, reputation, and day-to-day activities. This course offers a practical introduction to social entrepreneurship and addresses entrepreneurship, innovation, and corporate social responsibility. The course focuses on key concepts in the field of social entrepreneurship and social enterprise, including organizational learning, sustainability, philanthropy, commercialization, and profit and nonprofit development. It also presents cases that illustrate these concepts in practical contexts. Ideas and skills learned in this course will better enable students to: play a role in shaping socially responsible businesses; develop a genuinely sustainable business enterprise; infuse non-profit organizations with a spirit of social innovation and practical financial sustainability; assist in influencing future government actions. Open to third and fourth year students.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Sustainability Course	Business	Strategic management and organization	SMO 601	Innovation and sustainability: the cleantech revolution	Graduate	SMO601 - Innovation and Sustainability: The Cleantech Revolution The clean technology and renewables course is a course designed to fit with three areas of graduate study: technology development and transfer, strategy, and sustainability. In this course, we will begin with an examination renewable energy industries (solar, water, wind, etc.) and clean technologies focused on waste and recycling. Clean and green strategies will be identified and discussed, using specific examples from our international clean technology research and database. At the end of the course, students will present either a project with a local clean technology company project or a case analysis of a key clean technology company of interest.
Sustainability Course	Business	Strategic management and organization	SMO 638	Corporate sustainability	Graduate	SMO638 - Corporate Sustainability This course examines business strategies for sustainable development. Business sustainability is defined as managing the "triple bottom line" - designing mission driven enterprises that provide a thriving future for business, society and the planet. To achieve this, managers must adopt a fresh understanding of the role of the business enterprise. The course will draw from successful sustainability efforts of leading business organizations, both locally and internationally, by identifying key success factors that encourage sustainable business practices. It will also place current understandings of sustainability in a wider context by exploring the historical roots of current sustainability practices and examining their implications for key stakeholders of the business enterprise.
Sustainability Course	Business	Strategic management and organization	SMO 645	Social entrepreneurship	Graduate	SMO645 - Social Entrepreneurship Corporate social and environmental responsibility is an important strategic consideration for companies around the world. The relationship a business has with both government and the larger public is integral to its success, reputation, and day-to-day activities. This course offers a practical introduction to social entrepreneurship and addresses entrepreneurship, innovation, and corporate social responsibility. The course focuses on key concepts in the field of social entrepreneurship and social enterprise, including organizational learning, sustainability, philanthropy, commercialization, and profit and nonprofit development. It also presents cases that illustrate these concepts in practical contexts. Ideas and skills learned in this course will better enable students to; play a role in shaping socially responsible businesses; develop a genuinely sustainable business enterprise; infuse non-profit organizations with a spirit of social innovation and practical financial sustainability; assist in influencing future government actions.
Sustainability Course	Education	Educational policy studies	ED PS 360	Society and education	Undergraduate	EDPS360 - Society and Education The changing function and structures of education, with special reference to contemporary Canadian society. Students may not receive credit for both EDFN 360 and EDPS 360.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Sustainability Course	Education	Educational policy studies	ED PS 411	Cross cultural studies in education	Undergraduate	EDPS411 - Cross Cultural Studies in Education This course is an ethnographic study of the interrelatedness of educational and cultural practices and how they affect different social groups in Canadian and global contexts. It considers how cultural politics affect schooling, its outcomes, and the range of educational opportunities for different students in relation to their ethnocultural backgrounds. Examining both the historical and contemporary dynamics of schooling, the course examines how the schooling-larger culture interaction shapes the social, political, and economics dimensions of students' lives.
Sustainability Course	Education	Educational policy studies	ED PS 425	Global education: Issues and strategies for teachers	Undergraduate	EDPS425 - Global Education: Issues and Strategies for Teachers This course explores, in theory and practice, how global education in schools can facilitate critical understanding and develop skills and values for building more peaceful futures in local, national, and global contexts. It draws on North and South scholars and educators to clarify underlying conceptual and pedagogical principles of global education and related fields (education for peace, justice, development, human rights, cultural solidarity, environmental care). Exemplars of creative curriculum content and teaching-learning strategies for global literacy will be included. Students may not receive credit for both EDPS 425 and EDFDN 425.
Sustainability Course	Education	Educational policy studies	ED PS 528	Global Transformations, Indigenous Knowledge and the Crisis of Sustainability	Graduate	EDPS528 - Global Transformations, Indigenous Knowledge and the Crisis of Sustainability This course examines the intersection of Indigenous peoples, Indigenous traditional and contemporary knowledge and global transformations in the early 21st century. Central to the course are changes to the conceptualization of education and knowledge and the contested nature and role of Indigenous knowledge and politics. In this context the course has particular regard to what has been designated as the 'triple crisis of sustainability'. This course is open to all graduate students. Credit cannot be received for both EDPS 636 and EDPS 528.
Sustainability Course	Education	Faculty of Education	EDU 211	Aboriginal Education and Contexts for Professional and Personal Engagement	Undergraduate	EDU211 - Aboriginal Education and Contexts for Professional and Personal Engagement In this course, preservice teachers will continue to develop knowledge of Aboriginal peoples' histories, educational experiences, and knowledge systems, ways of knowing and being and will further develop an understanding of the implications of this knowledge to the professional roles and obligations for teachers. Students will engage in a learning process of self-and-other awareness, and will be supported by Indigenous educators, Faculty members and Elders. Prerequisite: EDU 100. Note: This prerequisite does not apply to Elementary and Secondary After Degree students. [Department of Educational Policy Studies]

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Sustainability Course	Engineering	Civil and environmental engineering	CIV E 221	Environmental engineering fundamentals	Undergraduate	CIV E221 - Environmental Engineering Fundamentals Basic mechanisms of chemistry, biology, and physics relevant to environmental engineering processes. Principles of equilibrium reactions and kinetics, mass transfer and material balances, microbial growth and kinetics, water, energy, and nutrient cycles. Applications to environmental engineering systems as biological degradation, mass and energy movement through the environment, and design of water and wastewater treatment systems. Prerequisites: CHEM 103 and CHEM 105.
Sustainability Course	Engineering	Civil and environmental engineering	CIV E 657	Air pollution control	Graduate	CIV E657 - Air Pollution Control Overview of air quality regulations. Overview of fundamental principles in air quality engineering. Theory and application of processes for gaseous and particulate pollutants control, including incineration, adsorption, absorption, biofiltration, cyclonic separation, electrostatic precipitation, filtration, and scrubbing. Special applications may include the control of sulfur dioxide, nitrogen oxides, volatile organic compounds, and mobile/automotive emissions.
Sustainability Course	Engineering	Electrical and computer engineering	ECE 635	Power converters and renewable energy systems	Graduate	ECE635 - Power Converters and Renewable Energy Systems This course covers: power converter topologies (including DC-DC converters, DC-AC converters, two level and multilevel converters, voltage source converters, current source converters). PWM methods (including Sine PWM, Space Vector PWM, Hysteresis PWM, Selective Harmonic Elimination PWM, and PWM for multilevel converters) and implementation techniques. Wind power systems, PV systems, fuel cell systems and the power converters used in these systems. Operation/control issues of renewable energy systems
Sustainability Course	Engineering	Civil and environmental engineering	ENV E 302	Environmental impact assessment	Undergraduate	ENV E302 - Environmental Impact Assessment Need and objectives of environmental impact assessment (EIA). Basic tasks and methods for need justification, project description, environmental factor determination, impact prediction, significance testing, mitigation design, evaluation, reporting, and public review. Review of impacts of different types of engineering projects and activities. Prerequisite: ENV E 222.
Sustainability Course	Engineering	Civil and environmental engineering	ENV E 322	Environmental protection	Undergraduate	ENV E322 - Environmental Protection Principles and methods of environmental and public health protection for the engineering profession. Assessment of behaviour of pollutants in the environment, framework for environmental health risk management and standards in practice such as federal and provincial environment legislation. Environmental policies and their effects on engineering design. Environmental management plans and issues. Prerequisite: ENV E 220.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Sustainability Course	Engineering	Civil and environmental engineering	ENV E 324	Biological processes	Undergraduate	ENV E324 - Biological Processes The principles and applications of biological processes in the treatment of contaminated environmental media, with a focus on wastewater treatment. Includes knowledge of environmental microbiology necessary to understand biological processes. Prerequisite: ENV E 222.
Sustainability Course	Engineering	Mechanical engineering	MEC E 643	Renewable energy engineering and sustainability	Graduate	MEC E643 - Renewable Energy Engineering and Sustainability Principles of renewable energy systems such as solar, wind, tidal, biomass, geothermal, and fuel cells. Environmental aspects of implementation of renewable energy e.g. hydro and nuclear energy sources. Energy conservation and conventional fossil fuel sources. New technologies and trends in renewable energy. Concept of sustainability and sustainable design for energy systems. Elementary economics of implementation of renewable energy sources and related policy and social issues. Prerequisites: consent of instructor.
Sustainability Course	Engineering	Civil and environmental engineering	MIN E 422	Environmental impact of mining activities	Undergraduate	MIN E422 - Environmental Impact of Mining Activities Environmental impact of mining projects and activities. Topics include: environmental impact assessment (EIA) processes, sustainable development, mine closure, reclamation planning, social responsibility of mining, regulations, guidelines, surface subsidence, tailings disposal, erosion and acid rock drainage. Corequisite: MIN E 413.
Sustainability Course	Faculté Saint-Jean	-	ANTHE 110	Ethnologie du sexe, de l'âge et du pouvoir	Undergraduate	ANTHE110 - Ethnologie du sexe, de l'âge et du pouvoir Dans toute société, le statut social de l'individu et des groupes change au cours du cycle de la vie. Ce cours examine comment l'âge et le sexe privilégient les rôles et le statut social dans des sociétés différentes.
Sustainability Course	Faculté Saint-Jean	-	ANTHE 207	Introduction à l'anthropologie sociale et culturelle	Undergraduate	ANTHE207 - Introduction à l'anthropologie sociale et culturelle Étude comparative de la société et de la culture humaine, en insistant sur la famille, la structure sociale, l'économie, les institutions politiques et la religion, les procédures de changement, et l'histoire de l'anthropologie sociale et culturelle. Peut comprendre des sections Alternative Delivery; veuillez consulter le Fees Payment Guide dans la section University Regulations and Information for Students de l'annuaire. Note(s): *3 en ANTHE ou ANTHR sont fortement recommandés.
Sustainability Course	Faculté Saint-Jean	-	BIOLE 108	Introduction à la diversité biologique	Undergraduate	BIOLE108 - Introduction à la diversité biologique Examine les grandes lignées de la vie sur la Terre. Un survol des principes de l'évolution et de la classification, l'histoire de la vie et les adaptations clefs des procaryotes, protistes, eumycètes, végétaux et animaux. Les laboratoires examinent la diversité de formes et de fonctions biologiques, et introduisent l'étudiant à la collecte de données et à la rédaction scientifique. Préalable: Biologie 30. Note: BIOLE 107 n'est pas un préalable pour BIOLE 108.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Sustainability Course	Faculté Saint-Jean	-	BIOLE 208	Les principes de l' écologie	Undergraduate	BIOLE208 - Les principes de l'écologie L'écologie est l'étude scientifique des interactions entre les organismes et leur environnement selon une hiérarchie de niveaux d'organisation: les individus, les populations, les communautés et les écosystèmes. Destiné à donner à l'étudiant une vue générale des concepts de base en écologie, ce cours peut aussi servir de préparation à des cours plus avancés. Dans les laboratoires, l'accent sera sur le recueil, l'analyse et l'interprétation des données provenant d'expériences écologiques afin d'illustrer et compléter les notes du cours. Les exemples seront tirés d'une vaste étendue d'organismes et de systèmes. Préalable(s): BIOLE 108 ou SCI 100.
Sustainability Course	Faculté Saint-Jean	-	CHIM 340	Chimie verte	Undergraduate	CHIM340 - Chimie verte (ou la chimie durable) Introduction à la chimie verte. Les douze principes de la chimie verte ; Déchets chimiques: Impacts sur la santé et l'environnement, et prévention; Nouvelles réactions et méthodes utilisant des produits chimiques bénins; Ressources renouvelables; Biocatalyse et bioprocédés. Préalable(s): CHIM 102 ou 105; CHIM 164 ou 261; CHIM 263.
Sustainability Course	Faculté Saint-Jean	-	ECONE 365	Économie des ressources	Undergraduate	ECONE365 - Économie des ressources Étude des problèmes reliés à l'exploitation de ressources naturelles renouvelables et non-renouvelables, incluant l'exploration, l'extraction et la taxation; rareté et détermination des prix des ressources; politiques canadiennes actuelles touchant ces sujets. Préalable(s): ECONE 101 ou équivalent. Note: ECON 365 et AREC 365 ne peuvent pas être suivis tous les deux pour crédits.
Sustainability Course	Faculté Saint-Jean		EDUS 350	Stage interdisciplinaire et volontariat international	Undergraduate	EDU S350 - Stage interdisciplinaire et volontariat international Ce cours consiste en un séjour intensif d'environ trois semaines dans un pays francophone. Les étudiants, selon leur programme d'études et leurs aspirations, bénéficieront d'un placement auprès de partenaires locaux tels que des écoles, des hôpitaux, des orphelinats, différents médas ou encore des ONG locales oeuvrant à l'insertion sociale et au développement durable (ferme biologique, ateliers d'artisans, associations sportives), etc. Les étudiants auront l'occasion de développer des contacts avec les locaux par le biais de diverses activités sociales et de volontariats autres que leur placement principal (projet de construction notamment). Préalable: EDU M 498. Note: Ce cours peut également être appliqué au Certificate in Community Engagement and Service-Learning, Certificate in International Learning et Certificate in Global Citizenship.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Sustainability Course	Faculté Saint-Jean	-	PHILE 386	La bioéthique	Undergraduate	PHILE386 - La bioéthique Regard philosophique sur les problèmes majeurs de la bioéthique. Exemples: les droits et les devoirs du personnel hospitalier et du patient, l'euthanasie active et passive, le droit à la vie et l'avortement, la recherche et l'expérimentation en médecine humaine et animale, la manipulation génétique.
Sustainability Course	Faculté Saint-Jean	-	SOCIE 260	Inégalité et stratification sociales	Undergraduate	SOCIE260 - Inégalité et stratification sociales Introduction à l'étude des inégalités sociales structurées et de la pauvreté; approches théoriques majeures; conclusions des études empiriques clés, en mettant l'accent sur le Canada. Préalable: SOCIE 100.
Sustainability Course	Faculté Saint-Jean	-	SOCIE 269	Sociologie de la mondialisation	Undergraduate	SOCIE269 - Sociologie de la mondialisation Introduction à l'analyse critique des transformations de l'économie-monde et de leurs impacts économiques, politiques, sociaux et culturels. La mondialisation comme fait social, les acteurs de la mondialisation, les discours pro-anti- et alter-mondialisation. Préalable: SOCIE 100.
Sustainability Course	Faculté Saint-Jean	-	SOCIE 301	Sociologie des rapports de sexes	Undergraduate	SOCIE301 - Sociologie des rapports de sexes Étude comparée des rapports entre les femmes et les hommes dans certaines sociétés, en mettant l'accent sur le Canada contemporain; étude des rôles spécifiques à chaque sexe, et des théories relatives à leurs origines; recherche sociologique récente sur l'importance de la division sexuelle de la société. Préalable: SOCIE 100.
Sustainability Course	Faculté Saint-Jean	-	SOCIE 412	Sociologie du developpement	Undergraduate	SOCIE412 - Sociologie du développement Analyse critique des enjeux de développement dans l'économie mondiale et le système interétatique; analyse de différents aspects des sociétés en voie de développement: régimes agraires et monde rural; stratégies d'industrialisation; marché du travail (secteur formel/informel); clivages sociaux (classes, castes, ethnies); conflits intercommunautaires; état (bureaucraties, régimes, politiques sociales); approche comparative interrégionale. Préalable: SOCIE 100.
Sustainability Course	Law	-	LAW 399	Introduction to environmental law	Undergraduate	LAW399 - Introduction to Environmental Law Introduces students to the basic structure and function of the legal system. It will then focus on the way in which law is used to control environmental problems, focussing on major federal and provincial pollution licensing legislation, and the legal duties of persons working within industry. Regimes for environmental impact assessment and the use of criminal and civil enforcement mechanisms will also be included. The relationship between legal rules and non-legal industry standards and voluntary initiatives may also be explored. Note: Open to students in the Civil Engineering (Environmental Option) degree program only. This course may not be taken for credit if credit has already been obtained for LAW 459.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Sustainability Course	Law	-	LAW 559	Environmental law and policy	Undergraduate	LAW559 - Environmental Law and Policy Canadian laws and policies designed to control air, land, and water pollution, including licensing systems, the use of quasi-criminal sanctions, environmental impact assessment processes, constitutional issues, and the usefulness of the common law. Other topics may include alternative legal approaches, such as economic incentives, wildlife protection, environmental rights, parks, the public trust doctrine or environmental mediation.
Sustainability Course	Law	-	LAW 593	International environmental law	Undergraduate	LAW593 - International Environmental Law The development of international law in the environmental area. Topics to be covered include: customary principles of state responsibility; multilateral environmental treaties; global atmospheric issues; toxic contamination; sustainable development; biodiversity conservation; and international trade implications. It is recommended, but not required, that students enrolled in this course take Public International Law.
Sustainability Course	Native Studies	-	NS 110	Historical perspectives in Native Studies	Undergraduate	NS110 - Historical Perspectives in Native Studies A thematic introduction to the historical relationships, colonial contexts, and social, economic, political and cultural patterns that have shaped the contemporary situation of Aboriginal peoples in Canada. Not open to students with credit in NS 210. Sections may be offered in a Cost Recovery format at an increased rate of fee assessment; refer to the Fees Payment Guide in the University Regulations and Information for Students section of the Calendar.
Sustainability Course	Native Studies	-	NS 111	Contemporary perspectives in Native Studies	Undergraduate	NS111 - Contemporary Perspectives in Native Studies An introductory survey of current issues affecting Aboriginal peoples in Canada and their efforts to confront their colonial relationships with and within Canadian society. Not open to students with credit in NS 211. Sections may be offered in a Cost Recovery format at an increased rate of fee assessment; refer to the Fees Payment Guide in the University Regulations and Information for Students section of the Calendar.
Sustainability Course	Native Studies	-	NS 200	Aboriginal Canada: Looking forward/looking back	Undergraduate	NS200 - Aboriginal Canada: Looking Forward/Looking Back For students from faculties outside the Faculty of Native Studies with an interest in acquiring a basic familiarity with Aboriginal/non-Aboriginal relationships, particularly those in Alberta. Consists of a survey of historical and contemporary relationships between Aboriginal peoples and newcomers, with the aim of expanding the understandings held by many Canadians about these relationships. Not designed for Native Studies majors.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Sustainability Course	Native Studies	-	NS 201	Aboriginal Canada: Looking forward/looking back	Undergraduate	NS201 - Aboriginal Canada: Looking Forward/Looking Back For students from faculties outside the Faculty of Native Studies with an interest in acquiring a basic familiarity with Aboriginal/non-Aboriginal relationships. Consists of a survey of historical and contemporary relationships between Aboriginal peoples and newcomers, with the aim of expanding the understandings held by many Canadians about these relationships. This course will be delivered online. Not open to students with credit in NS 200. Not designed for Native Studies majors. Sections may be offered in a Cost Recovery format at an increased rate of fee assessment; refer to the Fees Payment Guide in the University Regulations and Information for Students section of the Calendar.
Sustainability Course	Native Studies	-	NS 362	Aboriginal women	Undergraduate	NS362 - Aboriginal Women An interdisciplinary approach to understanding historical and contemporary experiences of Aboriginal women. Examines the ways in which Aboriginal women have resisted and been shaped by colonialism and other contemporary racialized gendered practices through an exploration of community, race, gender, sexuality, identity, representation, and activism. The course also considers the ways in which Indigenous knowledge shape alternative ways of conceptualizing and politicizing history, identity, place, self-determination, land rights, resources and wellbeing. Prerequisites: NS 110, 111 and 240 or 290 or consent of the Faculty.
Sustainability Course	Native Studies	-	NS 420	Negotiation strategies	Undergraduate	NS420 - Negotiation Strategies An exploration of the theory and practice of negotiation and mediation from different perspectives, including perspectives from the dominant society and Indigenous peoples. The strategies of litigation, and coercion to overcome conflict and achieve settlements of disputes will also be examined. These negotiation theories will then be applied to concrete dispute situations in Canada, including multi-party disputes over land, governance, development of resources and the environment. This course will be taught in a seminar format. Prerequisite: NS 320 or 340 or consent of the Faculty. Sections may be offered in a Cost Recovery format at an increased rate of fee assessment; refer to the Fees Payment Guide in the University Regulations and Information for Students section of the Calendar.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Sustainability Course	Native Studies	-	NS 435	Management of Aboriginal natural resources	Undergraduate	NS435 - Management of Aboriginal Natural Resources The application of knowledge of resource management to the traditional Native economic activities, especially hunting, fishing and trapping. Conservation problems that developed with the spread of the commercial economy will be analyzed by examining Aboriginal and European approaches to resource management. The uses of conservation to rationalize the re-allocation of traditional resources are examined. Prerequisites: Any *6 in EAS 294, 391, ENCS 201, 260 or AUGEO 324, or one 300-level NS course or consent of the Faculty. Sections may be offered in a Cost Recovery format at an increased rate of fee assessment; refer to the Fees Payment Guide in the University Regulations and Information for Students section of the Calendar.
Sustainability Course	Nursing	-	NURS 686	International and intercultural perspectives in health and nursing	Graduate	NURS686 - International and Intercultural Perspectives in Health and Nursing The focus of this course is on relationships among health, development, globalization and human resources to reduce health inequities and foster social justice. Emphasis is placed on fostering an appreciation of the meaning of global, epidemiological, demographic, historical, socio-cultural, environmental, economic, and political contexts in relation to the changing pattern in health of populations, the development of nursing and/or other health professions and health services, the impact on delivery and planning of nursing/health care and the nursing/health professions response within the global context. This course cannot be taken for credit if credit has already been obtained in NURS 660 - Int'l Health and Nursing.
Sustainability Course	Kinesiology, Sport, and Recreation	-	KIN 205	Introduction to outdoor environmental education	Undergraduate	KIN205 - Introduction to Outdoor Environmental Education A conceptual and experiential introduction to outdoor environmental education and leadership. In addition to weekly lecture and lab components, the course includes weekend commitments. Note: Requires payment of additional student instructional support fees. Refer to the Fees Payment Guide in the University Regulations and Information for Students section of the Calendar. Note: Credit will be granted for only one of KIN 205 or PEDS 205.
Sustainability Course	Kinesiology, Sport, and Recreation	-	KRLS 204	Canadian history of leisure, sport, and health	Undergraduate	KRLS204 - Canadian History of Leisure, Sport, and Health An introductory examination of Canadian leisure, sport, physical cultures, recreation, tourism, and health, in a global world, since the 19th century. Topics are integrated to understand the past in order to think broadly and critically through historical study of culture and society. Prerequisite: KRLS 104. Credit will be granted for only one of KRLS 204 or PERLS 204.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Sustainability Course	Kinesiology, Sport, and Recreation	-	RLS 463	Issues in tourism development	Undergraduate	RLS463 - Issues in Tourism Development Critical issues in tourism development will be examined within the context of tourism transformation models and fundamental development concepts such as commodification, authenticity, globalization, sense of place, economic impact, socio-cultural impact and environmental impact. NOTE: Field Trips are an integral and required component of this course. Requires payment of additional student instructional support fees. Refer to the Fees Payment Guide in the University Regulations and Information for Students section of the Calendar. Prerequisite: RLS 263.
Sustainability Course	Kinesiology, Sport, and Recreation	-	RLS 541	Parks and protected areas: Planning and management of natural cultural heritage	Graduate	RLS541 - Parks and Protected Areas: Planning and Management of Natural and Cultural Heritage. An interdisciplinary perspective on policy, planning, and management issues associated with parks, protected areas, and the stewardship of natural and cultural heritage. Current issues facing conservation and outdoor recreation agencies will be emphasized. The provision and management of outdoor recreation opportunities within protected areas is also examined. Prerequisite: RLS 225, or permission of the instructor. Note: additional fees related to Field Trip expenses are anticipated.
Sustainability Course	School of Public Health	-	SPH 514	Introduction to environmental health	Graduate	SPH514 - Introduction to Environmental Health Introduces environmental health issues and scientific understanding of their causes in developed and developing countries. Examines the role of environmental factors (biological, chemical, and physical) and its importance in relation to other factors that affect health of a community. Provides case studies of how environmental factors are dealt with in practice; including methods and approaches for assessment, prevention, and control. May contain alternate delivery sections; refer to the Fees Payment Guide in the University Regulations and Information for Students section of the Calendar.
Sustainability Course	Science	Biological Sciences	BIOL 108	Introduction to Biological Diversity	Undergraduate	BIOL108 - Introduction to Biological Diversity Examines the major lineages of life on Earth. Overview of evolutionary principles and classification, the history of life, and the key adaptations of prokaryotes, protists, fungi, plants, and animals. Laboratories survey the diversity of biological form and function, and introduce students to data collection and scientific writing. Prerequisite: Biology 30. Note: BIOL 107 is not a prerequisite for BIOL 108. BIOL 107 and 108 can be taken in either term.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Sustainability Course	Science	Biological Sciences	BIOL 208	Principles of Ecology	Undergraduate	BIOL208 - Principles of Ecology Ecology is the scientific study of interactions between organisms and their environment in a hierarchy of levels of organization: individuals, populations, communities, and ecosystems. Provides a comprehensive survey of general concepts that can stand alone or serve as preparation for advanced courses in ecology. Labs emphasize collection, analysis, and interpretation of data from ecological experiments and field studies to illustrate and complement lecture material. Examples are drawn from a broad range of organisms and systems. Prerequisite: BIOL 108 or SCI 100. Open to students in the BSc Forestry and BSc Forest Business Management program once they have completed REN R 120 and REN R 205.
Sustainability Course	Science	Biological Sciences	BIOL 315	Biology: An Historical Perspective	Undergraduate	BIOL315 - Biology: An Historical Perspective An outline of the scientific foundations of biological discovery to the mid-20th century. Students must have a sophisticated understanding of modern concepts in biology, be prepared to write a major essay on a focused topic, deliver an oral presentation and participate actively in class discussion. Prerequisite: a third-year course in the biological sciences or consent of instructor.
Sustainability Course	Science	Biological Sciences	BIOL 367	Conservation biology	Undergraduate	BIOL367 - Conservation Biology This course introduces the principles of conservation biology with an emphasis on ecological processes operating at population, community and ecosystem levels of organization. Threats to biological diversity, ranging from species introductions to habitat destruction will be discussed along with conservation solutions ranging from the design of protected areas through conservation legislation. Prerequisite: BIOL 208. Credit cannot be obtained in both BIOL 367 and REN R 364.
Sustainability Course	Science	Biological Sciences	BIOL 381	A Planet in Crisis	Undergraduate	BIOL381 - A Planet in Crisis This course examines how humankind's collective activities, including altering the climate, have significantly affected the natural planetary balance. We will discuss human population growth and unsustainable resource use; the movement of pollutants through the atmosphere, hydrosphere and biosphere; the impacts these stressors have on ecosystem services and human health; and how certain impacts have been and can be mitigated by environmental policies and laws. Groups of students will produce a short video documentary on a topic related to how humans impact their environment. Prerequisite: BIOL 208.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Sustainability Course	Science	Biological Sciences	BIOL 384	Global change and ecosystems	Undergraduate	BIOL384 - Global Change and Ecosystems Ecological impacts of climate change and large-scale human activities on terrestrial and aquatic ecosystems. The focus of this course is to learn to write brief technical summaries of current environment issues, in a fashion that can be understood by an educated citizen. Topics such as climate change, water management projects, invasion of exotic species and national parks management are presented as the forum to evaluate options, trade-offs and solutions to environmental social issues. Prerequisites: BIOL 208 or consent of Instructor. BOT 205 recommended.
Sustainability Course	Science	Physics	GEOPH 223	Environmental geophysics	Undergraduate	GEOPH223 - Environmental Geophysics Near surface geophysical imaging techniques with focus on applications in hydrogeology, glaciology and environmental studies; rock properties; imaging methods covered include: shallow seismic exploration, magnetic exploration, radiometric techniques, electrical resistivity tomography (ERT); electromagnetic (EM) methods; ground penetrating radar (GPR), application to environmental monitoring, climate change, environmental legislation. Prerequisites: one of MATH 101, 115, 118; one of PHYS 126, 146, EN PH 131. SCI 100 may be used in lieu of MATH 115 and PHYS 126 or 146. Note: Offered alternate years only. Consult Department for course schedule.
Sustainability Course	St. Joseph's	-	CHRTC 221	Indigenous Spiritual Traditions and Christianity	Undergraduate	CHRTC221 - Interactions between Indigenous Spiritual Traditions and Christianity An exploration of cross-cultural issues focusing on indigenous spiritual traditions and Christianity in Canada.
Sustainability Course	St. Joseph's	-	CHRTC 349	Social Justice and Christianity	Undergraduate	CHRTC349 - Social Justice and Christianity An examination of particular social justice issues related to the economy, women, native peoples, the environment, etc., in light of Catholic social teachings and other Christian perspectives; social action strategies, and education for social justice.
Sustainability Course	St. Joseph's	-	CHRTC 396	Environmental issues: Christian perspectives	Undergraduate	CHRTC396 - Environmental Issues: Christian Perspectives Theological and ethical issues concerning our relationship to the planet earth: responsible stewardship, non-renewable resources, pollution, the use of technology.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Course that Includes Sustainability	ALES	Agricultural Food and Nutritional Science	AFNS 416	One Health	Undergraduate	AFNS416 - One Health 'One Health' is an emerging paradigm in public and veterinary health which recognizes that human, animal and environmental health are interlinked. The course will address food and water safety, the increase in prevalence of antibiotic resistant organisms, emerging infectious zoonotic diseases, environmental protection and environmental sustainability, emphasizing the interaction of these diverse yet interconnected disciplines in protecting the health of populations. Graduate students may not register for credit (see AFNS 516) Credit will only be given for one of AFNS 416, 516 or SPH 416, 516. Prerequisites: *3 microbiology and *3 physiology or consent of instructor.
Course that Includes Sustainability	ALES	Agricultural Food and Nutritional Science	AFNS 510	Renewable Biomaterials	Graduate	AFNS510 - Renewable Biomaterials Fundamentals in bio-based materials development, characterization, and applications. Sources and classification of biomaterials, synthesis of renewable polymeric biomaterials, their characterization using different techniques, and industrial applications will be discussed. Prerequisite: consent of instructor.
Course that Includes Sustainability	ALES	Agricultural Food and Nutritional Science	AFNS 516	One Health	Graduate	AFNS516 - One Health 'One Health' is an emerging paradigm in public and veterinary health which recognizes that human, animal and environmental health are interlinked. The course will address food and water safety, the increase in prevalence of antibiotic resistant organisms, emerging infectious zoonotic diseases, environmental protection and environmental sustainability, emphasizing the interaction of these diverse yet interconnected disciplines in protecting the health of populations. Lectures and labs are the same as for AFNS 416, but with additional assignments and evaluation appropriate to graduate studies. Credit will only be given for one of AFNS 416, 516 or SPH 416, 516. Prerequisites: Consent of instructor.
Course that Includes Sustainability	ALES	Agricultural Food and Nutritional Science	AFNS 552	Nutrition in the prevention of chronic human diseases	Graduate	AFNS552 - Nutrition in the Prevention of Chronic Human Diseases A lecture and reading course for graduate students to review current research and the scientific basis of nutrition intervention in the prevention and treatment of chronic human disease. Translation of research findings to nutrition recommendations in topical areas including global health and food supply, obesity, cardiovascular disease, polycystic ovary syndrome and behavior-cognitive disorders. Lectures are the same as for NUTR 452, but with additional assignments and evaluation appropriate to graduate studies. Credit will only be given for one of AFNS 552 and NUTR 452. Prerequisite: consent of instructor. *6 PHYSL recommended.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Course that Includes Sustainability	ALES	Agricultural Food and Nutritional Science	AFNS 568	Clinical nutrition	Graduate	AFNS568 - Clinical Nutrition Basic principles of nutrition in clinical situations. The role of diet in the management of various diseases. The laboratory sessions include practical experience in providing individualized nutritional care for clients from various cultural backgrounds. Lectures and labs are the same as for NUTR 468, with additional assignments and evaluation appropriate to graduate studies. Credit will only be given for one of AFNS 568, NUTR 468 and NU FS 468. Pre- or corequisite: NUTR 301.
Course that Includes Sustainability	ALES	Agricultural Food and Nutritional Science	AFNS 572	Practical case studies in rangeland management and conservation	Graduate	AFNS572 - Practical Case Studies in Rangeland Management and Conservation Cumulative effects of fire, grazing, browsing, and improvement practices on the productivity and species composition of range and pasture ecosystems, including management implications. Extended field trip prior to the start of classes. Lectures and labs are the same as for ENCS 471, but with additional assignments and evaluation appropriate to graduate studies. Credit will only be given for one of AFNS 572 and ENCS 471. Offered in odd-numbered years. Prerequisite: ENCS 356; ENCS 406 strongly recommended.
Course that Includes Sustainability	ALES	Agricultural Food and Nutritional Science	AFNS 577	Advanced community nutrition	Graduate	AFNS577 - Advanced Community Nutrition Examination of nutrition problems in contemporary communities that relate to health promotion, food security, policy, program planning and community nutrition throughout the life cycle. Discussion of nutrition programs and resources. Students will develop the skills to write a community grant application. Lectures and labs are the same as for NUTR 477, with additional assignments and evaluation appropriate to graduate studies. Credit will only be given for one of AFNS 577 and NUTR 477. Prerequisite: consent of instructor.
Course that Includes Sustainability	ALES	Agricultural Food and Nutritional Science	AN SC 100	Introduction to animal health science	Undergraduate	AN SC100 - Introduction to Animal Health Science An orientation to current issues and challenges related to animal health and disease in a global context. An interdisciplinary overview of the role and importance of animal health in modern society and its relationship to agriculture, food safety and human health. Causes of disease and the principles of maintaining healthy animals. The history and development of animal health professions and their roles. Not available to students who have credit in AN SC 375. Not available to students with *90 in ALES or Science without consent of instructor. Prerequisite: Biology 30
Course that Includes Sustainability	ALES	Agricultural Food and Nutritional Science	AN SC 376	Animal Welfare	Undergraduate	AN SC376 - Animal Welfare An overview of animal welfare as it relates to both food and companion animals. Discussion of the scientific and ethical components that underlie our evaluation of the quality of life that animals experience. Prerequisite: AN SC 200 or (*3 biology and consent of instructor) and *60.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Course that Includes Sustainability	ALES	Resource Economics and Environmental Sociology	AREC 200	Current economic issues for agriculture and food	Undergraduate	AREC200 - Current Economic Issues for Agriculture and Food Applications of economic principles to problems and current issues relating to agriculture, food and the environment. Prerequisite: ECON 101 or consent of Department. Credit will only be given for one of AREC 200 and AG EC 200.
Course that Includes Sustainability	ALES	Resource Economics and Environmental Sociology	AREC 250	Social and economic issues of food biotechnology	Undergraduate	AREC250 - Social and Economic Issues of Food Biotechnology This course will provide an introduction to the economics and business concepts in the biotechnology industry with an emphasis on food produced using genetic modification and other food technologies. The basic science behind GM foods will be discussed, but most of the material will focus on the social, economic, environmental, and legal issues surrounding GM foods. Key questions will be addressed using peer-reviewed literature and case studies, and the material will be presented from various disciplinary viewpoints.
Course that Includes Sustainability	ALES	Resource Economics and Environmental Sociology	AREC 313	Statistical analysis	Undergraduate	AREC313 - Statistical Analysis Analysis of economic data relating to renewable resource sectors including agriculture, food, forestry, and the environment; collection of data, sampling methods, tests of hypotheses, index numbers, analysis of variance, regression, and correlation; time series analysis. Prerequisite: Introductory statistics course.
Course that Includes Sustainability	ALES	Resource Economics and Environmental Sociology	AREC 323	Introduction to management for agri-food, environmental, and forestry business	Undergraduate	AREC323 - Introduction to Management for Agri-Food, Environmental, and Forestry Businesses Principles and practical aspects of business management, and their relevance to the managing businesses involved in a variety of industries, including agriculture, environment, food, and forestry. Topics include business planning and organizing, and issues related to the management of financial, physical, and human resources. Prerequisite: ECON 101. Not open to students in BSc Agriculture Business Management, Food Business Management, or Forest Business Management.
Course that Includes Sustainability	ALES	Resource Economics and Environmental Sociology	AREC 333	Economics of production and resource management	Undergraduate	AREC333 - Economics of Production and Resource Management Application of economic concepts and introduction of management tools related to production decision-making for resource-based businesses. Integration of biophysical and environmental relationships with economic objectives in allocating resources. Introduction to quantitative tools used in applied production management decision-making. Prerequisite: One of AREC 200, ECON 281, INT D 365, AREC 365 or equivalent.
Course that Includes Sustainability	ALES	Resource Economics and Environmental Sociology	AREC 375	World food and agriculture	Undergraduate	AREC375 - World Food and Agriculture Economic issues in international agriculture including the world food problem, agricultural development; agricultural and food trade and policy and selected agricultural biotechnology issues. Selected international applications and issues are stressed. Prerequisite: ECON 101 or consent of Department. Credit will only be given for one of INT D 303 or AREC 375.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Course that Includes Sustainability	ALES	Resource Economics and Environmental Sociology	AREC 384	Food market analysis	Undergraduate	AREC384 - Food Market Analysis Applications of price and market theories to marketing problems and issues for food and agricultural products. Topics include: market structures and marketing functions; price analysis; futures markets; economics of food safety and quality; and international food marketing. Prerequisite: One of AREC 200, ECON 281, INT D 365, AREC 365 or equivalent.
Course that Includes Sustainability	ALES	Resource Economics and Environmental Sociology	AREC 410	Advanced methods and applications in applied economics	Undergraduate	AREC410 - Advanced Methods and Applications in Applied Economics Empirical applications of methods used in resource, environmental, agri-food, and forest economics. Involves one or more case study projects that focus on the empirical examination of economic issues in renewable resource management. Credit will be given for only one of AREC 410 and ENCS 410. Prerequisites: AREC 313 by consent of Instructor. Open to fourth year students in Agricultural/Food Business Management, Agriculture (Agricultural and Resource Economics major), Environmental and Conservation Sciences (Environmental Economics and Policy major) and Forest Business Management programs, or consent of Instructor. Requires payment of additional student instructional support fees. Refer to the Fees Payment Guide in the University Regulations and Information for Students section of the Calendar.
Course that Includes Sustainability	ALES	Resource Economics and Environmental Sociology	AREC 423	Advanced management methods and applications for agri-food, environmental and forestry businesses	Undergraduate	AREC423 - Advanced Management Methods and Applications for Agri-Food, Environmental and Forestry Businesses Empirical applications of management and research methods used by business managers. Emphasis is given to integrating economic and business management concepts with applications to problems and issues in agriculture, food, the environment and forestry. Prerequisites: AREC 313 or consent of Instructor. Open to fourth year students in Agricultural/Food Business Management, Agriculture (Agricultural and Resource Economics major), Environmental and Conservation Sciences (Environmental Economics and Policy major) and Forest Business Management, Nutrition and Food Science (Food marketing minor and Food Policy minor) programs, or consent of Instructor. Requires payment of additional student instructional support fees. Refer to the Fees Payment Guide in the University Regulations and Information for Students section of the Calendar.
Course that Includes Sustainability	ALES	Resource Economics and Environmental Sociology	AREC 430	Economic impact assessment	Undergraduate	AREC430 - Economic Impact Assessment Examination of the theory and application of economic assessment methods with a focus on the evaluation of environmental, agricultural and natural resource projects, regulatory policy, and planning. Includes case studies of recent project and policy proposals to illustrate the methods used to evaluate economic benefits and costs of such proposals. Applications to estimating private economic benefits. Prerequisite: One of the following: AREC 200, AREC 365, ECON 281, or equivalent, or consent of Instructor. Credit will only be given for one of AREC 430, 450, 530 and 550.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Course that Includes Sustainability	ALES	Resource Economics and Environmental Sociology	AREC 473	Food and Agricultural Policies	Undergraduate	AREC473 - Food and Agricultural Policies Economics of public policy for agriculture and food industries. Public choice principles and institutions. Farm and food policy in Canada and selected countries. Case studies on price and output policy; agricultural trade; food safety and quality; resource use and environmental sustainability; and/or rural change/restructuring. Prerequisite: One of AREC 200, ECON 281, AREC 365, ECON 365 or equivalent. Credit will only be given for one of AREC 473 or 673.
Course that Includes Sustainability	ALES	Resource Economics and Environmental Sociology	AREC 485	Trade and globalization in food and resources	Undergraduate	AREC485 - Trade and Globalization in Food and Resources Principles and policies affecting international trade in food, forestry and natural resources. Current issues in trade, including fair trade concerns, trade in capital and services, effects of food safety and quality standards, and environmental issues surrounding trade agreements and institutions. Prerequisite: One of AREC 200, AREC 365, ECON 365, R SOC 355 or equivalent. Credit will only be given for one of AREC 485 or 685.
Course that Includes Sustainability	ALES	Resource Economics and Environmental Sociology	AREC 530	Economic impact assessment	Graduate	AREC530 - Economic Impact Assessment Examination of the theory and application of economic assessment methods with a focus on the evaluation of environmental, agricultural and natural resource projects, regulatory policy, and planning. Includes case studies of recent project and policy proposals to illustrate the methods used to evaluate economic benefits and costs of such proposals. Applications to estimating private economic benefits. Prerequisite: One of the following: AREC 200, AREC 365, ECON 281, or equivalent, or consent of Instructor. Credit will only be given for one of AREC 430, 450, 530 and 550.
Course that Includes Sustainability	ALES	Resource Economics and Environmental Sociology	AREC 575	Agriculture in developing countries	Graduate	AREC575 - Agriculture in Developing Countries Role of agriculture in the economic growth of developing countries; use of economic theory, simulations and contemporary econometric methods to understand the forces that shape the welfare of households and individuals in poor agrarian communities. Prerequisite: consent of instructor.
Course that Includes Sustainability	ALES	Resource Economics and Environmental Sociology	INT D 303	Economics of world food and agriculture	Undergraduate	INT D303 - Economics of World Food and Agriculture Economic issues in international agriculture including the world food problem; the role of agriculture in development; agricultural and food trade; biotechnology and associated environmental and globalization issues. Prerequisite: ECON 101 or 102 or consent of Department. Credit will only be given for one of INT D 303 or AREC 375. (Offered jointly by the Departments of Economics and Resource Economics and Environmental Sociology). [Resource Economics and Environmental Sociology]

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Course that Includes Sustainability	ALES	Renewable Resources	ENCS 356	Principles of rangeland conservation and habitat management	Undergraduate	ENCS356 - Principles of Rangeland Conservation and Habitat Management An introduction to rangeland conservation and wildlife habitat management. Examines the effects of grazing and browsing on ecosystems components, including rangeland soils, plants, plant communities, and landscapes. Discusses interactions among herbivores including livestock and wildlife. Reviews practical management activities such as rangeland inventory, improvements, planning, and condition assessment. Prerequisite: *3 in university-level biology. [Agricultural, Food and Nutritional Science]
Course that Includes Sustainability	ALES	Renewable Resources	ENCS 406	Rangeland plant communities of Western Canada	Undergraduate	ENCS406 - Rangeland Plant Communities of Western Canada Examines major rangeland plant communities and their physical environments in western Canada, including individual plant identification and ecology. Includes a review of various land uses such as livestock and wildlife grazing within these communities, their response to disturbances such as herbivory and fire, and other management considerations. Graduate students may not register for credit (see AFNS 506). Credit will only be given for one of AFNS 506 and ENCS 406. Prerequisite: one of ENCS 356, REN R 120 or BOT 210; ENCS 356 strongly recommended. [Agricultural, Food and Nutritional Science]
Course that Includes Sustainability	ALES	Renewable Resources	ENCS 407	Rangeland plant communities of North America	Undergraduate	ENCS407 - Rangeland Plant Communities of North America An in-depth study of the plants and communities of North American rangelands and wildland ecosystems, and their management. Prerequisites: ENCS 356; ENCS 406 strongly recommended. [Agricultural, Food and Nutritional Science]
Course that Includes Sustainability	ALES	Renewable Resources	ENCS 471	Practical case studies in rangeland management and conservation	Undergraduate	ENCS471 - Practical Case Studies in Rangeland Management and Conservation Cumulative effects of fire, grazing, browsing, and improvement practices on the productivity and species composition of range and pasture ecosystems, including management implications. Extended field trip prior to the start of classes. Offered in alternate years commencing 2001-02. Graduate students may not register for credit (see AFNS 572). Credit will only be given for one of AFNS 572 and ENCS 471. Prerequisite: ENCS 356. ENCS 406 strongly recommended. [Agricultural, Food and Nutritional Science]
Course that Includes Sustainability	ALES	Resource Economics and Environmental Sociology	FOREC 473	Forest policy	Undergraduate	FOREC473 - Forest Policy Analysis of forest resource policy formation and evaluation. Review of selected policies and programs provincially, nationally, and internationally. Analysis of current policy issues. Prerequisite: One of the following: AREC 200, FOREC 345, INT D 365, AREC 365, ECON 365, INT D 369, ECON 269. (Offered jointly by the Departments of Renewable Resources and Resource Economics and Environmental Sociology). [Resource Economics and Environmental Sociology]

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Course that Includes Sustainability	ALES	Human Ecology	HECOL 100	Introduction to the principles and practice in human ecology	Undergraduate	HECOL100 - Introduction to Principles and Practice in Human Ecology An introductory course that provides a foundation in the body of knowledge that constitutes the field of human ecology. The history, philosophy, theoretical approaches and scope of the field are explored and skills that foster effective professional practice are discussed.
Course that Includes Sustainability	ALES	Human Ecology	HECOL 201	Introduction to Material culture	Undergraduate	HECOL201 - Introduction to Material Culture The study of a range of objects and environments (from clothing to buildings) within selected time periods, and the study of particular perspectives through which such items can be interpreted. Students explore and learn about the connections between personal, social, temporal, and cultural contexts and the objects and environments that contribute to these contexts.
Course that Includes Sustainability	ALES	Human Ecology	HECOL 241	Fashion industries	Undergraduate	HECOL241 - Fashion Industries An introduction to the soft goods industry including an overview of the apparel sector, apparel production, channels of distribution, fashion oriented products, global competitive influences, and career opportunities.
Course that Includes Sustainability	ALES	Human Ecology	HECOL 300	Policy Development and Evaluation	Undergraduate	HECOL300 - Policy Development and Evaluation Processes of policy development, implementation and analysis; Canadian policy environments, institutional frameworks and instruments; application to professional practice and to current social and economic issues.
Course that Includes Sustainability	ALES	Human Ecology	HECOL 315	Interviewing and counseling	Undergraduate	HECOL315 - Interviewing and Counseling An introduction to interviewing and counseling strategies for working with individuals using a strengths-based, human ecological approach. Prerequisite: successful completion of *30 including HECOL 100.
Course that Includes Sustainability	ALES	Human Ecology	HECOL 360	Dress and culture	Undergraduate	HECOL360 - Dress and Culture The complex phenomenon of bodily adornment is explored in relationship to values, attitudes, activities, beliefs, and forms of knowledge. Clothing is considered in terms of how it is expressive of various aspects of culture. Students develop analytical skills to help them understand the role played by clothing in different times, places, and contexts. Prerequisite: HECOL 201.
Course that Includes Sustainability	ALES	Human Ecology	HECOL 440	Family policy issues	Undergraduate	HECOL440 - Family Policy Issues Analysis of current policy issues faced by Canadian families and the examination of policies and programs affecting family well-being and relationships. Prerequisite: HECOL 300.
Course that Includes Sustainability	ALES	Human Ecology	HECOL 441	Textiles and apparel in the global economy	Undergraduate	HECOL441 - Textiles and Apparel in the Global Economy Production and distribution of textiles and apparel in a global context; issues and policy related to international trade agreements; impact of national and international consumer, labor and environmental standards. Prerequisite: HECOL 241.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Course that Includes Sustainability	ALES	Agricultural Food and Nutritional Science	NU FS 223	The cultural ecology of food and health	Undergraduate	NU FS223 - The Cultural Ecology of Food and Health Contemporary dietary patterns, including how food choices are shaped by cultural, social, and economic spheres. The roles of culture and religion as determinants of healthy eating will be highlighted. Prerequisite: NUTR 100 or NU FS 305.
Course that Includes Sustainability	ALES	Agricultural Food and Nutritional Science	NUTR 100	Nutrition and wellbeing	Undergraduate	NUTR100 - Nutrition and Well-being Principles of nutrition. The need for and functions of the major nutrients for humans. May contain alternative delivery sections: refer to the Fees Payment Guide in the University Regulations and Information for Students section of the Calendar.
Course that Includes Sustainability	ALES	Agricultural Food and Nutritional Science	NUTR 452	Nutrition in the prevention of chronic human diseases	Undergraduate	NUTR452 - Nutrition in the Prevention of Chronic Human Diseases A lecture and reading course to review current research and the scientific basis of nutrition intervention in the prevention and treatment of chronic human disease. Translation of research findings to nutrition recommendations in topical areas including global health and food supply, obesity, cardiovascular disease, polycystic ovary syndrome and behavior-cognitive disorders. Graduate students may not register for credit (see AFNS 552). Credit will only be given for one of AFNS 552 and NUTR 452. Prerequisites: (NUTR 302 or 304 or NU FS 305) and NU FS 356 or consent of instructor. *6 PHYSL recommended.
Course that Includes Sustainability	ALES	Agricultural Food and Nutritional Science	NUTR 468	Clinical nutrition	Undergraduate	NUTR468 - Clinical Nutrition Basic principles of nutrition in clinical situations. The role of diet in the management of various diseases. The laboratory sessions include practical experience in providing individualized nutritional care for client from various cultural backgrounds. Graduate students may not register for credit (see AFNS 568). Credit will only be given for one of AFNS 568, NUTR 468, and NU FS 468. Pre- or corequisite: NUTR 301. May contain alternative delivery sections; refer to the Fees Payment Guide in the University Regulations and Information for Students section of the Calendar.
Course that Includes Sustainability	ALES	Agricultural Food and Nutritional Science	PL SC 100	Plants in our lives	Undergraduate	PL SC100 - Plants in our Lives Issues related to the importance of plants in our lives, including global food security, interactions between agriculture and the environment, the role of crops in human and animal nutrition, and the potential development of biofuels, biofibers, biopharmaceutical, and bioindustrial crops. Not available to students with *60 in Agricultural, Life and Environmental Sciences. This course does not substitute for PL SC 221 in the program core. Prerequisite: Biology 30 recommended.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Course that Includes Sustainability	ALES	Agricultural Food and Nutritional Science	PL SC 221	Introduction to Plant Science	Undergraduate	PL SC221 - Introduction to Plant Science Principles of plant science for use in agriculture, forestry and environmental sciences. Emphasis on vascular plants in an applied context. Topics include: plant structure and function; reproduction and development; and diversity and management of vegetation and crops. Credit will only be given for one of PL SC 220, PL SC 221 or BOT 205. [Offered jointly by the Departments of Agricultural, Food and Nutritional Science and Renewable Resources].
Course that Includes Sustainability	ALES	Agricultural Food and Nutritional Science	PL SC 324	Crop ecophysiology	Undergraduate	PL SC324 - Crop Ecophysiology Study of crop production as influenced by plant-plant and plant-environment interactions, as well as management practices. Topics may include photosynthetic efficiency, growth analysis, competition and facilitation in monocrops and mixtures, response to climate change and environmental stress, use of genetically modified organisms and contrasting world crop production systems. Prerequisite: PL SC 221 or *3 200-level plant related course. Offered in even-numbered years.
Course that Includes Sustainability	ALES	Agricultural Food and Nutritional Science	PL SC 345	Plants for Bioproducts	Undergraduate	PL SC345 - Plants for Bioproducts Agronomy, breeding, biochemistry, biotechnology, and ecological issues related to production of plants for bioproducts. Topics selected from biodiesel, fuel ethanol, biolubricants, bioplastic, platform biochemicals, and starch and protein for nonfood applications. Prerequisite: BIOL 107, PL SC 221 or CHEM 164 (or equivalent).
Course that Includes Sustainability	ALES	Agricultural Food and Nutritional Science	PL SC 352	Invasive alien plants: biology and control	Undergraduate	PL SC352 - Invasive Alien Plants: Biology and Control Biology and ecology of invasive alien species in cropped, disturbed, and natural environments. Methods of control of weedy species, including biological, cultural, mechanical, and chemical and an introduction to the herbicide mechanism of action and environmental impacts. Prerequisite: PL SC 221 recommended.
Course that Includes Sustainability	ALES	Agricultural Food and Nutritional Science	PL SC 354	Forage crops	Undergraduate	PL SC354 - Forage Crops The establishment, management, conservation and utilization of forages. Morphological structure and adaptation of the principal forage grasses and legumes. Prerequisite: PL SC 221 or consent of Instructor.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Course that Includes Sustainability	ALES	Agricultural Food and Nutritional Science	PL SC 499	Cropping systems	Undergraduate	PL SC499 - Cropping Systems The cropping systems of Alberta are unique and specific to the diverse climatic regions of the province. This course will discuss crop and variety choices, crop rotations, nutrient requirements, agronomic management, soil health and pest management options within the context of environmental and economic sustainability. The course depends on interaction with agronomists, other professionals and researchers from across Alberta. Completion of a group project is a major component of the laboratory. Prerequisites: PL SC 355 and (SOILS 210 or REN R 210); two of three of (PL SC 324, PL SC 352, PL SC 380). PL SC 495 and REN R 445 recommended. Open to fourth-year students in the Faculty of Agricultural, Life and Environmental Sciences.
Course that Includes Sustainability	ALES	Agricultural Food and Nutritional Science	R SOC 271	The Politics of Food and Natural Resources	Undergraduate	R SOC271 - The Politics of Food and Natural Resources Students will gain a sociological understanding of contemporary Canadian politics in the food and natural resources sectors. Examination of the nature of political organizations and policymaking in Canada; the particular roles played by the state, the "public," and certain sectors of civil society, including social movements, industry organizations, labour unions, scientific organizations, and rural and aboriginal peoples. Contemporary case studies may include climate change and energy dependence, genetic engineering in agribusiness, the organic food products movement, mining in the circumpolar north, forestry expansion in the boreal region and cod management in the Atlantic fisheries. Credit will only be given for one of ENCS 271, R SOC 271 or REN R 271.
Course that Includes Sustainability	ALES	Agricultural Food and Nutritional Science	R SOC 555	Advances in Environmental Sociology	Graduate	R SOC555 - Advances in Environmental Sociology In-depth examination of a select set of current theoretical and empirical areas in the sub-discipline of environmental sociology. Examines the relationships among various environmental and social problems and how such problems and undesirable conditions can be and are being addressed. Prerequisite: R SOC 450.
Course that Includes Sustainability	ALES	Renewable Resources	REN R 100	Forests: Ecology, Use and Society	Undergraduate	REN R100 - Forests: Ecology, Use and Society An introduction to forest trees, plants, insects, fungi, fire, biodiversity and ecology. Discusses the use of forests for wood products recreation, watersheds, wildlife, carbon, and overall management and policies in Alberta and elsewhere. Not available for credit to BSc Forestry or BSc Forest Business Management students. Credit will only be given for one of REN R 100 or FOR 100.

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Course that Includes Sustainability	ALES	Renewable Resources	REN R 205	Wildlife Biodiversity and Ecology	Undergraduate	REN R205 - Wildlife Biodiversity and Ecology Introduction to animals in the context of conservation, interactions with people, and roles in natural ecosystems. Labs provide a survey of Western Canadian animal life, both vertebrate and invertebrate, with emphasis on recognition of higher taxa and on hierarchical classification. Field trip. Credit may be obtained for only one of REN R 205 or ENCS 201. Requires payment of additional student instructional support fees. Refer to the Fees Payment Guide in the University Regulations and Information for Students section of the Calendar.
Course that Includes Sustainability	ALES	Renewable Resources	REN R 210	Introduction to Soil Science and Soil Resources	Undergraduate	REN R210 - Introduction to Soil Science Elementary aspects of soil formation, occurrence in natural landscapes, and classification, including basic morphological, physical, and chemical characteristics employed in the identification of soils. Introduction to soil minerology, water movement, reactivity, organic matter, and nutrient cycling for predicting soil performance in both managed and natural landscapes. Prerequisite: *30. CHEM 101 and (BIOL 208 or EAS 201) or equivalents recommended. Credit may be obtained for only one of REN R 210 or SOILS 210.
Course that Includes Sustainability	ALES	Renewable Resources	REN R 250	Water Resource Management	Undergraduate	REN R250 - Water Resource Management Global perspective of supply of and demand for water, basic hydrologic principles, concepts in water management, human intervention in the hydrologic cycle, and environmental issues related to this intervention. Prerequisite: *30 at the university level with at least *6 in the life or natural sciences.
Course that Includes Sustainability	ALES	Renewable Resources	REN R 299	Environmental and Conservation Sciences and Forestry Field School	Undergraduate	REN R299 - Environmental and Conservation Sciences and Forestry Field School Combines the concepts, theories and practices of environmental, conservation and forest sciences in an off-campus field experience. Field skill proficiency in planning, measurement, analysis and reporting is emphasized for biophysical and socioeconomic components of the environment. Prerequisites: *30 and REN R 110. (REN R 210 or SOILS 210), (ENCS 201 or REN R 205) and a plant identification course are recommended. Students must complete this course prior to completion of the final *30 of their program. Requires payment of additional student instructional support fees. Refer to the Fees Payment Guide in the University Regulations and Information for Students section of the Calendar. Consent of Instructor is required for students outside the Faculty of Agricultural, Life and Environmental Sciences. Credit may not be obtained in this course if previous credit has been obtained for ENCS 207 or FOR 302/303/304.

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Course that Includes Sustainability	ALES	Renewable Resources	REN R 322	Forest Ecosystems	Undergraduate	REN R322 - Forest Ecosystems Exploration of key concepts regarding the ecology of forest ecosystems at varying temporal and spatial scales. Emphasis will be on relationships between biotic and abiotic components of the ecosystem. Topics covered will include flows of energy and matter, ecosystem dynamics, forest landscapes and biodiversity, impacts of natural and anthropogenic disturbance forest conservation and ecosystem management. Lab exercises during the first month are held outside. The course is taught using a blended learning approach. Requires payment of additional student instructional support fees. Refer to the Fees Payment Guide in the University Regulations and Information for Students section of the Calendar. Prerequisite: BIOL 208 or consent of instructor. Credit will only be given for one of REN R 322 or FOR 322.
Course that Includes Sustainability	ALES	Renewable Resources	REN R 323	Silviculture	Undergraduate	REN R323 - Silviculture Forest regeneration principles and techniques; stand tending including fertilization, thinning, pruning and drainage; harvesting systems for reforestation; nursery practices; reforestation, the law and current practices. Requires payment of additional student instructional support fees. Refer to the Fees Payment Guide in the University Regulations and Information for Students section of the Calendar. Prerequisite: BIOL 208 or consent of instructor. Credit may be obtained for only one of REN R 323 or FOR 323.
Course that Includes Sustainability	ALES	Renewable Resources	REN R 327	The Mosses of Alberta: Conservation and identification	Undergraduate	REN R327 - The Mosses of Alberta: Conservation and Identification This is an introduction to identification and conservation of the mosses of Alberta, with a strong emphasis on field identification. Students are introduced to the morphological characters used to identify Alberta mosses, with supplementary information about individual species' habitat affinities and distribution within Alberta. Lecture topics include basic morphology, conservation and management of species diversity, and rare/endangered species found within Alberta. Students learn to identify more than 110 species from the province's six major natural regions. Prerequisite: *30. PLSC 221 or BIOL 208 or equivalent are recommended.
Course that Includes Sustainability	ALES	Renewable Resources	REN R 340	Wildland Fire Science and Management	Undergraduate	REN R340 - Wildland Fire Science and Management Principles of forest fire science and management in Canadian forest ecosystems. Fire science fundamentals and their applications for addressing complex social, ecological and economic fire management challenges. Topics include fire as a natural disturbance process, mechanisms of fire ignition and spread, fire weather, fire behaviour, and fire occurrence prediction. Models, systems, analytical techniques and policies used to support fire management operations and decisions are explored in relation to contemporary fire management issues. Credit will only be given for one of REN R 340 or FOR 340.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Course that Includes Sustainability	ALES	Renewable Resources	REN R 364	Principles of managing natural diversity	Undergraduate	REN R364 - Principles of Managing Natural Diversity Introduction to the theoretical foundation for conservation science. Elements of population, community and landscape ecology will be reviewed, and their application to real-world challenges discussed. Objective is to provide students with the scientific tools to evaluate and develop conservation strategies for maintaining diversity in human-altered systems. Ethical and philosophical aspects of the sociopolitical arena in which conservation decisions are made and implemented are also explored. Prerequisites: BIOL 208 or (BIOL 108 and REN R 110) and *60 of university-level coursework. Credit will only be given for both REN R 364 and (ENCS 364 or BIOL 367). This course has limited enrolment, with preference given to students in the Conservation Biology major of the ENCS Program.
Course that Includes Sustainability	ALES	Renewable Resources	REN R 365	Ecology of northern landscapes	Undergraduate	REN R365 - Ecology of Northern Landscapes A study of landscape properties - pattern, process and scale - and their relationship to broad-scale ecological and environmental issues in northern systems. Prerequisite: REN R 364 or ENCS 364. Registration requires enrolment in the BSc Environmental and Conservation Sciences (ENCS) Northern Systems Major, or consent of Department.
Course that Includes Sustainability	ALES	Renewable Resources	REN R 366	Restoration ecology	Undergraduate	REN R366 - Restoration Ecology Principles and practices of restoring ecosystem structure, function and biodiversity after natural or anthropogenic disturbances. The course focuses on ecological theory and how to apply it to ecological restoration. Topics include landscape processes and connectivity, soil-plant processes, techniques, philosophy and ethics and societal aspects of ecological restoration. Prerequisite: BIOL 208.
Course that Includes Sustainability	ALES	Renewable Resources	REN R 376	Fisheries and wildlife management	Undergraduate	REN R376 - Fisheries and Wildlife Management Principles of ecology as applied to the management of fisheries and wildlife communities. Topics include the growth and regulation of populations, interactions among species and their environments, tools and techniques used to assess and manage fisheries and wildlife. Special emphasis will be placed applying knowledge using case studies and class exercises to demonstrate key principles. Prerequisite: BIOL 208. Credit may be obtained for only one of REN R 376 or ENCS 376.
Course that Includes Sustainability	ALES	Renewable Resources	REN R 414	Agroforestry systems	Undergraduate	REN R414 - Agroforestry Systems Principles, complexity, and diversity of agroforestry. Classification of agroforestry systems. Agroforestry systems in North America, specifically Canada. Plant and soil aspects of and interactions among the components in agroforestry systems. Use of agroforestry systems to enhance land productivity and sustainability. Socioeconomic aspects of agroforestry. Prerequisite: 60 units of university courses.

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Course that Includes Sustainability	ALES	Renewable Resources	REN R 423	Advanced silviculture	Undergraduate	REN R423 - Advanced Silviculture Readings, discussions and exercises on current topics in silviculture. Possible topics include: forest microsites, forest competition, plantation forestry, partial-cut systems, or intensive management. Prerequisite: REN R 323 or FOR 323. Credit may be obtained for only one of REN R 423 or FOR 423.
Course that Includes Sustainability	ALES	Renewable Resources	REN R 440	Disturbance ecology fundamentals	Undergraduate	REN R440 - Disturbance Ecology Fundamentals This course will cover various aspects of disturbance ecology, including concepts of disturbance frequency, severity, intensity; ecological resilience and resistance and ecosystem responses to and recovery from disturbance. Students will define what a disturbance is and critically evaluate disturbance types and their characteristics in different ecosystems and their implications for conservation, sustainability of ecosystems, and application to reclamation / restoration. Prerequisites: *60 and BIOL 208.
Course that Includes Sustainability	ALES	Renewable Resources	REN R 441	Soil formation and landscape processes	Undergraduate	REN R441 - Soil Formation and Landscape Processes Soil formation, with emphasis on landscape processes as factors in soil development; pedogenic processes and their relation to environmental issues; soils; vegetation, and geological associations; kinds and distribution of soils in Canada; soil classification; field examination and computer-assisted learning of soils and their landscape. Field trips. Requires payment of additional student instructional support fees. Refer to the Fees Payment Guide in the University Regulations and Information for Students section of the Calendar. Prerequisite: REN R 210 or SOILS 210 or consent of instructor. Credit may be obtained for only one of REN R 441 or SOILS 420.
Course that Includes Sustainability	ALES	Renewable Resources	REN R 442	Soil Biogeochemistry	Undergraduate	REN R442 - Soil Biogeochemistry Introduction to the main components of the soil biota; the metabolic and molecular diversity of microbial populations and their role in soil processes; the microbiology and biochemistry of decomposition of organic matter in soil; biogeochemical cycling of N, P, S, Si, base cations and metals; and the application of soil microbiology to selected environmental problems. Prerequisite: REN R 210 or SOILS 210, or consent of instructor. Credit may be obtained for only one of REN R 442 or SOILS 430.
Course that Includes Sustainability	ALES	Renewable Resources	REN R 443	Soil Physics	Undergraduate	REN R443 - Soil Physics Quantitative characterization of soil physical properties. Description and measurement of soil physical properties and transport processes in soils. Examples from areas of land resource management, soil remediation, agriculture, and forestry will be used to illustrate the principles. Prerequisite: *60. REN R 210 or SOILS 210 or equivalent recommended. Credit will only be given for one of REN R 443 or SOILS 440.

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Course that Includes Sustainability	ALES	Renewable Resources	REN R 444	Environmental soil chemistry	Undergraduate	REN R444 - Environmental Soil Chemistry Chemical processes in soil and related terrestrial environments and the consequences of these processes as they relate to soil productivity, environmental quality and pollution of soil and water. The course describes fundamental chemical concepts such as soil solution and solid phase chemistry, sorption phenomena, ion exchange, oxidation-reduction reactions and speciation of metals. These concepts are used to predict the fate (distribution, transport, bioavailability and transformation) of inorganic and organic contaminants in soil. The chemical principles provide fundamental knowledge to develop soil reclamation strategies and nutrient management practices for enhanced crop production. Prerequisite: A chemistry course plus completion of (REN R 210 or SOILS 210) or consent of instructor. Credit will only be given for one of REN R 444 or SOILS 450.
Course that Includes Sustainability	ALES	Renewable Resources	REN R 446	Climates and ecosystems	Undergraduate	REN R446 - Climates and Ecosystems The basic principles by which the cycles of water, carbon, and nutrients through soils, plants, and the atmosphere are controlled in terrestrial ecosystems under different climates. Interrelationships among water, carbon and nutrient cycles in natural and managed ecosystems that have developed in different climatic zones. Environmental consequences of human intervention in the cycles for food and fibre production in different ecosystems. Prerequisite: REN R 210 or SOILS 210. Recommended courses: PL SC 221 or BOT 340. Credit may be obtained for only one of REN R 446 or ENCS 461.
Course that Includes Sustainability	ALES	Renewable Resources	REN R 467	Environmental Interpretation and Science Communication	Undergraduate	REN R467 - Environmental Interpretation and Science Communication An overview of theories and methods of communication, as applied to environmental topics and general audiences. Includes discussion of environmental interpretation, science communication, audio-visual communication, and media skills. Credit will only be given for one of REN R 467 or ENCS 467.
Course that Includes Sustainability	ALES	Renewable Resources	REN R 468	Conservation of genetic resources	Undergraduate	REN R468 - Conservation of Genetic Resources Principles and issues in conserving and managing plant and animal genetic resources from the global perspective. Lectures will be supplemented with case studies. Students are assigned tasks, individually and in groups. Prerequisite: consent of instructor.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Course that Includes Sustainability	ALES	Renewable Resources	REN R 721	Forest ecosystems	Graduate	REN R721 - Forest Ecosystems Exploration of key concepts regarding the ecology of forest ecosystems at varying temporal and spatial scales. Emphasis will be on relationships between biotic and abiotic components of the ecosystem. Topics covered will include flows of energy and matter, ecosystem dynamics, forest landscapes and biodiversity, impacts of natural and anthropogenic disturbance, forest conservation and ecosystem management. Lab exercises during the first month are held outside. The course is taught using a blended learning approach and is available via remote delivery. May require payment of additional student instructional support fees. Refer to the Fees Payment Guide in the University Regulations and Information for Students section of the Calendar. Not available for students with credit in REN R 322 or FOR 322. Available only to students in MAg, MBA/MAg, MF, or MBA/MF, or by consent of Department.
Course that Includes Sustainability	ALES	Renewable Resources	REN R 727	Forest resources management	Graduate	REN R727 - Forest Resources Management Analytical techniques used by renewable resource managers for management of wildland areas for single or multiple outputs; problems of defining optimality when confronted with competing uses and multiple outputs. Not available for students with credit in REN R 430. Available only to students in MAg, MBA/MAg, MF, or MBA/MF, or by consent of Department.
Course that Includes Sustainability	ALES	Renewable Resources	REN R 732	Disturbance Ecology Fundamentals	Graduate	REN R732 - Disturbance Ecology Fundamentals This course will cover various aspects of disturbance ecology, including concepts of disturbance frequency, severity, intensity; ecological resilience and resistance and ecosystem responses to and recovery from disturbance. Students will define what a disturbance is and critically evaluate disturbance types and their characteristics in different ecosystems and their implications for conservation, sustainability of ecosystems, and application to reclamation / restoration. Not available for students with credit in REN R 440. Available only to students in MAg, MBA/MAg, MF, or MBA/MF, or by consent of Department.
Course that Includes Sustainability	ALES	Renewable Resources	REN R 741	Soil formation and landscape processes	Graduate	REN R741 - Soil Formation and Landscape Processes Soil formation, with emphasis on landscape processes as factors in soil development; pedogenic processes and their relation to environmental issues; soils; vegetation, and geological associations; kinds and distribution of soils in Canada; soil classification; field examination and computer-assisted learning of soils and their landscape. Field trips. Requires payment of additional student instructional support fees. Refer to the Fees Payment Guide in the University Regulations and Information for Students section of the Calendar. Not available for students with credit in REN R 441 or SOILS 420. Available only to students in MAg, MBA/MAg, MF, or MBA/MF, or by consent of Department.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Course that Includes Sustainability	ALES	Renewable Resources	REN R 744	Environmental soil chemistry	Graduate	REN R744 - Soil Environmental Chemistry Chemical processes in soil and related terrestrial environments and the consequences of these processes as they relate to environmental quality and pollution of soil and water, nutrient levels, and mechanical stability or dispersion of clays and soils. The course describes fundamental chemical concepts such as soil solution speciation, precipitation/dissolution, and adsorption exchange and then uses the concepts in the examination and computer modelling of some current environmental, agricultural and engineering problems. The leachate chemistry of certain large volume industrial wastes is also examined in the course. Not available for students with credit in REN R 444 or SOILS 450. Available only to students in MAg, MBA/MAg, MF, or MBA/MF, or by consent of Department.
Course that Includes Sustainability	ALES	Renewable Resources	REN R 746	Climates and ecosystems	Graduate	REN R746 - Climates and Ecosystems The basic principles by which the cycles of water, carbon, and nutrients through soils, plants, and the atmosphere are controlled in terrestrial ecosystems under different climates. Interrelationships among water, carbon and nutrient cycles in natural and managed ecosystems that have developed in different climatic zones. Environmental consequences of human intervention in the cycles for food and fibre production in different ecosystems. Not available for students with credit in ENCS 461 or REN R 446. Available only to students in MAg, MBA/MAg, MF, or MBA/MF, or by consent of Department.
Course that Includes Sustainability	ALES	Renewable Resources	REN R 750	Soil and water conservation	Graduate	REN R750 - Soil and Water Conservation Global soil and water resources and their current rates of degradation. The main processes of degradation (erosion, loss of organic matter, salinization, pollution) and their causes. Consequences of degradation and conservation of resources through improved land use practices. Not available for students with credit in REN R 360 or ENCS 360. Available only to students in MAg, MBA/MAg, MF, or MBA/MF, or by consent of Department.
Course that Includes Sustainability	ALES	Renewable Resources	REN R 751	Agroforestry systems	Graduate	REN R751 - Agroforestry Systems Principles, complexity, and diversity of agroforestry. Classification of agroforestry systems. Agroforestry systems in North America, specifically Canada. Plant and soil aspects of and interactions among the components in agroforestry systems. Use of agroforestry systems to enhance land productivity and sustainability. Socioeconomic aspects of agroforestry. Not available for students with credit in REN R 414. Available only to students in MAg, MBA/MAg, MF, or MBA/MF, or by consent of Department.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Course that Includes Sustainability	ALES	Renewable Resources	REN R 761	Restoration ecology	Graduate	REN R761 - Restoration Ecology Principles and practices of restoring ecosystem structure, function and biodiversity after natural or anthropogenic disturbances. The course focuses on ecological theory and how to apply it to ecological restoration. Topics include landscape processes and connectivity, soil-plant processes, techniques, philosophy and ethics and societal aspects of ecological restoration. This course is intended for students in course based masters programs. Not available for students with credit in REN R 366. Requires department consent.
Course that Includes Sustainability	ALES	Renewable Resources	REN R 767	The Mosses of Alberta: Conservation and identification	Graduate	REN R767 - The Mosses of Alberta: Conservation and Identification This is an introduction to identification and conservation of the mosses of Alberta, with a strong emphasis on field identification. Students are introduced to the morphological characters used to identify Alberta mosses, with supplementary information about individual species' habitat affinities and distribution within Alberta. Lecture topics include basic morphology, conservation and management of species diversity, and rare/ endangered species found within Alberta. Students learn to identify more than 110 species from the province's six major natural regions. Not available for students with credit in REN R 327. Available only to students in MAg, MBA/MAg, MF, or MBA/MF, or by consent of Department.
Course that Includes Sustainability	ALES	Renewable Resources	REN R 771	Fisheries and wildlife management	Graduate	REN R771 - Fisheries and Wildlife Management Principles of ecology as applied to the management of fisheries and wildlife communities. Topics include the growth and regulation of populations, interactions among species and their environments, tools and techniques used to assess and manage fisheries and wildlife. Special emphasis will be placed applying knowledge using case studies and class exercises to demonstrate key principles. Not available for students with credit in REN R 376 or ENCS 376. Available only to students in MAg, MBA/MAg, MF, or MBA/MF, or by consent of Department.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Course that Includes Sustainability	ALES	Renewable Resources	REN R 782	Soil remediation	Graduate	REN R782 - Soil Remediation Principles and methods of biological, chemical, and physical remediation of soils contaminated by hazardous chemicals and other pollutants. Topics include soil-contaminant interactions, microbial processes used in remediation and process fundamentals of remediation technologies including bioremediation and phytoremediation. Other important environmental issues associated with growing industrial activities such as off-shore oil spills, and production of red mud sludge and oil sands tailings are included with potential remediation strategies to address those issues. This course describes approaches to managing contaminated sites incorporating Canadian guidelines and soil quality criteria for soil remediation. Students will review recent literature pertaining to soil remediation. Not available for students with credit in REN R 482 or ENCS 455. Available only to students in MAg, MBA/MAg, MF, or MBA/MF, or by consent of Department.
Course that Includes Sustainability	ALES	Renewable Resources	REN R 783	Waste mangement and utilization	Graduate	REN R783 - Waste Management and Utilization Chemical, biological, and physical properties of anthropogenic wastes, their reactions in the soil environment, theory and practice for their chemical and biological immobilization and use in agriculture, forest, and urban lands. Not available for students with credit in REN R 483 or ENCS 475. Available only to students in MAg, MBA/MAg, MF, or MBA/MF, or by consent of Department.
Course that Includes Sustainability	Arts	Anthropology	ANTHR 230	Anthropology of science, technology, and the environment	Undergraduate	ANTHR230 - Anthropology of Science, Technology, and Environment Science as a cultural practice, cultural effects and globalization of technology, changing views of nature, gender and science, traditional ecological knowledge, and the evolution of technology.
Course that Includes Sustainability	Arts	Anthropology	ANTHR 372	Anthropology of Food	Undergraduate	ANTHR372 - Anthropology of Food Examination of the relationship between food and culture through historical and cross-cultural analysis of foodways. Offered in alternate years.
Course that Includes Sustainability	Arts	Art and Design	ART H 209	History of modern design	Undergraduate	ART H209 - History of Design Introduction to the development of design since the Industrial Revolution.
Course that Includes Sustainability	Arts	Art and Design	DES 139	Design fundamentals II	Undergraduate	DES139 - Design Fundamentals II Further study of the conceptual and practical concerns of the design disciplines. Two- and three-dimensional design-related studies. Note: Restricted to BFA and BDes students. Prerequisite: DES 138.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Course that Includes Sustainability	Arts	Art and Design	DES 300	Foundations of industrial design I	Undergraduate	DES300 - Foundations of Industrial Design I Introduction to the principles, methods and techniques of industrial design. Studies of three-dimensional design address concept, form and function in a social/environmental context and involve projects combining theory and practice in two and three dimensions. Prerequisites: ART 134 and DES 135 or ART 136 and DES 138. Corequisite: DES 302 and consent of Department. BDes Students must enroll in DES 301 in second term. Note: Not open to students with credit in DES 370.
Course that Includes Sustainability	Arts	Art and Design	DES 301	Foundations of industrial design II	Undergraduate	DES301 - Foundations of Industrial Design II Continuing study of the principles, methods and techniques of industrial design. Studies of three-dimensional design address concept, form and function in a social/environmental context and involve projects combining theory and practice in two and three dimensions. Prerequisite: DES 300.
Course that Includes Sustainability	Arts	Art and Design	DES 400	Intermediate industrial design principles and practices I	Undergraduate	DES400 - Intermediate Industrial Design Principles and Practices I Subject areas include research methods and the design processes; communication skills and collaborative dynamics, human factors, the psychology of design, material properties and applications for fabrication and production, market considerations. Projects are 2-D, 3-D and computer-based. Prerequisites: DES 302 and DES 303 and consent of Department. BDes Students must enroll in DES 401 in second term. Note: Not open to students with credit in DES 470.
Course that Includes Sustainability	Arts	Art and Design	DES 483	Seminar on Design Issues	Undergraduate	DES483 - Seminar on Design Issues Contemporary design issues in the fields of theory, criticism, history, professional practice and social concerns. Restricted to third-year Bachelor of Design students. Prerequisite(s): ART H 209 and/or consent of Department.
Course that Includes Sustainability	Arts	Art and Design	DES 501	The practice of industrial design	Undergraduate	DES501 - The Practice of Industrial Design II Subject areas include design and culture; human factors; social, environmental and economic implications of design; appropriate technologies; production considerations processes; communication skills and collaborative dynamics; human factors; the psychology of design; material properties and applications for fabrication and production; market considerations. Projects are 2-D, 3-D and computer-based. Prerequisites: DES 500 and consent of Department. Note: Not open to students with credit in DES 570.
Course that Includes Sustainability	Arts	Art and Design	DES 593	The practice of Graphic Design I	Undergraduate	DES593 - The Practice of Graphic Design I Applied practical projects and complex design systems. Problem definition, strategic planning, project management and design evaluation. Project brief and production specifications, professional practice, procedures, codes of ethics, pricing and intellectual property. Prerequisites: DES 494 and consent of Department. BDes students must enroll in DES 594 in second term. Note: not open to students with credit in DES 590.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Course that Includes Sustainability	Arts	Community service learning	CSL 300	Theory and practice in community-service learning	Undergraduate	CSL300 - Theory and Practice in Community Service-Learning An in-depth exploration of theories and practices of civic engagement and community change for students who have already completed a course with a CSL component and who wish to extend their volunteer experience. Prerequisite: Completion of a course with a CSL component or consent of instructor. Note: For information about courses in programs and departments across the Faculty of Arts that offer a CSL component, see the link on the CSL website, www.csl.ualberta.ca
Course that Includes Sustainability	Arts	History and Classics	CLASS 261	Women, gender and sexuality in the ancient world	Undergraduate	CLASS261 - Women, Gender and Sexuality in the Ancient World The role of women and the construction of gender and sexuality in Greek and Roman society from the Archaic period to Late Antiquity.
Course that Includes Sustainability	Arts	Economics	ECON 211	Chinese economic development	Undergraduate	ECON211 - Chinese Economic Development A survey of the characteristics of and recent developments in the Chinese economy emphasizing the nature and consequences of China's economic reforms and Canada's economic relations with China. Prerequisite: ECON 101 or equivalent.
Course that Includes Sustainability	Arts	Economics	ECON 213	An introduction to the economics of developing countries	Undergraduate	ECON213 - An Introduction to the Economics of Developing Countries A survey of the major approaches to and problems of economic development in the less developed countries with particular emphasis on issues relating to savings and investment, income distribution, employment and population growth, and trade and aid. Prerequisite: ECON 101 and 102 or equivalent.
Course that Includes Sustainability	Arts	Economics	ECON 357	Health economics	Undergraduate	ECON357 - Health Economics Resource allocation and public policy in health care, including determinants of health status, market structures, incentives and the effects of imperfect information. Prerequisite: ECON 281 or equivalent, or consent of Department.
Course that Includes Sustainability	Arts	Economics	ECON 366	Energy economics	Undergraduate	ECON366 - Energy Economics The economics of producing and consuming energy: pricing, role in economic growth; energy sources and markets; the role of government; regulation and other energy policy issues. Prerequisite: ECON 281 or consent of Department.
Course that Includes Sustainability	Arts	Economics	ECON 414	Economics of developing countries	Undergraduate	ECON414 - Economics of Developing Countries An introduction to models of growth and development; the role of agriculture, industry, finance, and trade in structural transformation of developing countries; approaches to development planning. Prerequisite: ECON 281 or consent of department.
Course that Includes Sustainability	Arts	Economics	ECON 421	International trade	Undergraduate	ECON421 - International Trade Nature and relevance of international trade; early trade doctrines; the theory of comparative advantage, classical and modern approaches and empirical evidence for them; new approaches to the pure theory of international trade; economic growth and international trade; market imperfections and trade; commercial policy; economic integration and the gains from trade. Prerequisites: ECON 281 and MATH 113 or SCI 100 or consent of Department.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Course that Includes Sustainability	Arts	Modern Language and Cultural Studies	FREN 312	Colonialism and postcolonialism	Undergraduate	FREN312 - Colonialism and Postcolonialism Francophone cultural texts from a post/colonial perspective, the socio-historical contexts of their production and their importance for definitions of cultural identity. Prerequisite: FREN 298.
Course that Includes Sustainability	Arts	Earth and Atmospheric Sciences (Science)	HGP 210	Introductory planning history and practice	Undergraduate	HGP210 - Introductory planning history and practice An introduction to planning theory and practice. Prerequisite: HGP 100 or EAS 192. Not available to students with credit in EAS 296.
Course that Includes Sustainability	Arts	Earth and Atmospheric Sciences (Science)	HGP 240	The urban environment	Undergraduate	HGP240 - The Urban Environment Introduction to urban geography emphasizing interactions between the physical environment and patterns of human settlement. Topics include models of urbanization and urban form, growth and decline in North American cities. Prerequisite: Any *3 course. Not available to students with credit in EAS 293.
Course that Includes Sustainability	Arts	Earth and Atmospheric Sciences (Science)	HGP 252	Human dimensions of environmental hazards	Undergraduate	HGP252 - Human Dimensions of Environmental Hazards Interactions between environmental hazards, individuals and communities; risk reduction strategies by members of the public and management agencies. Prerequisite: Any *3 course. Not available to students with credit in EAS 295.
Course that Includes Sustainability	Arts	Earth and Atmospheric Sciences (Science)	HGP 341	Social and cultural geography	Undergraduate	HGP341 - Social and Cultural Geography Connections between space, society and culture at multiple scales. Formation and significance of cultural landscapes, and shaping of social life by spatial arrangements. Prerequisite: EAS 192 or HGP 100 and any one EAS 29X or HGP 2XX course. Not available to students with credit in EAS 393.
Course that Includes Sustainability	Arts	Earth and Atmospheric Sciences (Science)	HGP 343	Health, space and place	Undergraduate	HGP343 - Health, Space and Place Geographic research on health and disease, including environmental, social, individual and institutional factors. Prerequisites: EAS 192 or HGP 100, and any one EAS 29X or HGP 2XX course. Not available to students with credit in EAS 395.
Course that Includes Sustainability	Arts	Earth and Atmospheric Sciences (Science)	HGP 495	Planning studio	Undergraduate	HGP495 - Planning Studio Practical study of community planning processes, development or redevelopment projects, or other relevant case studies. Field Work Required. Prerequisites: HGP 310, HGP 315, and Consent of Instructor.
Course that Includes Sustainability	Arts	History and Classics	HIST 369	History of the Native Peoples of Canada Since 1867	Undergraduate	HIST369 - History of the Native Peoples of Canada Since 1867 Federal Indian policy, treaties, reserve life, Native political resurgence, and legal and constitutional developments.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Course that Includes Sustainability	Arts	Linguistics	INT D 318	Technologies for endangered language documentation	Undergraduate	INT D318 - Technologies for Endangered Language Documentation Provides Canadian Indigenous language speakers with the technical skills needed to digitally archive their languages in a database or on the web with text, sound, images, and video. These digital resources can be incorporated into interactive multimedia resources for access by community-based learners and second-language teachers. Restricted to CILLDI program students. (Offered jointly by the following faculties: Arts; Education; and Native Studies.) Prerequisite: LING 101 or LING 111. Note: Not to be taken by students with credit in LING 399 (Techniques for Endangered Language Documentation) or NS 380 (Technologies for Endangered Language Documentation). [Linguistics]
Course that Includes Sustainability	Arts	Linguistics	LING 224	Endangered languages	Undergraduate	LING224 - Endangered Languages An examination of languages facing extinction: how language endangerment arises, local and global factors affecting loss, how linguistic and cultural diversity suffers, and how linguists can respond. Students cannot receive credit for both LING 224 and 324.
Course that Includes Sustainability	Arts	Linguistics	LING 324	Endangered languages	Undergraduate	LING324 - Endangered Languages An examination of languages facing extinction: how language endangerment arises, local and global factors affecting loss, how linguistic and cultural diversity suffers, and how linguists can respond. Prerequisite: LING 101.
Course that Includes Sustainability	Arts	Philosophy	PHIL 250	Ethics	Undergraduate	PHIL250 - Ethics An examination of questions of right and wrong, good and evil, and reasons for action, through the study of ethical thought of authors such as Plato, Aristotle, Hobbes, Kant, and Mill.
Course that Includes Sustainability	Arts	Philosophy	PHIL 345	Humans and animals	Undergraduate	PHIL345 - Humans and Animals Philosophical approaches to the question of comparative human and animal cognition, emotion, awareness, and language. The course will also address the problem of animal rights vis-à-vis individual and institutional human interests.
Course that Includes Sustainability	Arts	Political Science	POL S 250	The politics of gender	Undergraduate	POL S250 - The Politics of Gender An examination of gender, diversity and relations of power in political life. Prerequisite: POL S 101 or consent of Department.
Course that Includes Sustainability	Arts	Political Science	POL S 327	Aboriginal peoples and politics in Canada	Undergraduate	POL S327 - Aboriginal Peoples and Politics in Canada This course is an examination of different historical and contemporary issues associated with Aboriginal politics. Prerequisite: One of POL S 220, NS 110 or 111.
Course that Includes Sustainability	Arts	Political Science	POL S 333	Ecology and politics	Undergraduate	POL S333 - Ecology and Politics This course examines different approaches to understanding the links between politics, society and ecology. Prerequisites: POL S 230 or 240 or consent of Department.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Course that Includes Sustainability	Arts	Political Science	POL S 441	Gender and public policy	Undergraduate	POL S441 - Gender and Public Policy The relationship between gender and public policy in Canada. Of particular concern are effects of restructuring, decentralization, privatization and deregulation on women. Prerequisite: POL S 220 or 350 or consent of Department.This course examines different approaches to understanding the links between politics, society and ecology. Prerequisites: POL S 230 or 240 or consent of Department.
Course that Includes Sustainability	Arts	Political Science	POL S 444	Global critical race theory	Undergraduate	POL S444 - Global Critical Race Theory Politics of race, racialisation and anti-racism in international and comparative perspective. Prerequisite: POL S 230, 240 or 260.
Course that Includes Sustainability	Arts	Political Science	POL S 544	Global critical race theory	Graduate	POL S544 - Global Critical Race Theory Politics of race, racialisation and anti-racism in international and comparative perspective.
Course that Includes Sustainability	Arts	Political Science	POL S 690	Gender and politics	Graduate	POL S690 - Gender and Politics A survey of various theoretical perspectives on gender, ranging from liberal to postmodern, as well as issues and debates in gender research. Also addressed are questions of difference, identity, and conflict arising from, among others, race, class, sexuality, and north-south relations.
Course that Includes Sustainability	Arts	Sociology	SOC 100	Introductory Sociology	Undergraduate	SOC100 - Introductory Sociology An examination of the theory, methods, and substance of Sociology. The study of how societies are shaped including economy, culture, socialization, deviance, stratification, and groups. The process of social change through social movements, industrialization, etc. Note: Not to be taken by students with credit in SOC 300.
Course that Includes Sustainability	Arts	Sociology	SOC 203	Social problems	Undergraduate	SOC203 - Social Problems Selected structural issues in various societies, including inequality, population growth, environment, and human rights. Note: Not to be taken by students with credit in SOC 102.
Course that Includes Sustainability	Arts	Sociology	SOC 260	Inequality and social stratification	Undergraduate	SOC260 - Inequality and Social Stratification Introduction to the study of structured social inequalities and poverty; major theoretical approaches; findings from key empirical studies, with emphasis on Canada. Prerequisite: SOC 100 or consent of instructor.
Course that Includes Sustainability	Arts	Sociology	SOC 343	Social movements	Undergraduate	SOC343 - Social Movements Empirical studies of movements for social change and the dynamics of collective mobilization in a local, national, and international context. Prerequisite: SOC 100 or consent of instructor.
Course that Includes Sustainability	Arts	Sociology	SOC 369	Sociology of globalization	Undergraduate	SOC369 - Sociology of Globalization Critically examines various aspects of globalization from the perspective of world-system studies. Prerequisite: SOC 269 or consent of instructor.

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Course that Includes Sustainability	Arts	Sociology	SOC 370	Racism and decolonization	Undergraduate	SOC370 - Racism and Decolonization Examines decolonizing cultures with an emphasis on racism and its connection to other forms of social inequality, capitalism, multiculturalism and globalization. Prerequisite: SOC 100 or consent of instructor.
Course that Includes Sustainability	Arts	Sociology	SOC 496	Human rights in international perspective	Undergraduate	SOC496 - Human Rights in International Perspective Human rights theories, issues and controversies in local, national and international context. Prerequisite: SOC 100 or POL S 101 or POL S 417 or PHIL 101 or HIST 110 or HIST 114 or consent of instructor.
Course that Includes Sustainability	Arts	Modern Language and Cultural Studies	SPAN 323	Latin american literature and the environment	Undergraduate	SPAN323 - Latin American Literature and the Environment The study of the relationship of Latin American writing and writers to the environment with a focus on the landscape and current ecological concerns. Prerequisite: SPAN 300 or 306 or consent of Department.
Course that Includes Sustainability	Arts	Women and Gender Studies	WGS 101	Representations of girls and women	Undergraduate	WGS101 - Representations of Girls and Women An exploration of the impact that cultural representations of femininity have on the political, economic, and social lives of girls and women throughout the world.
Course that Includes Sustainability	Arts	Women and Gender Studies	WGS 102	Gender and social justice	Undergraduate	WGS102 - Gender and Social Justice Examines social and cultural constructions of gender, sexuality, race, class, and disability as well as visions for social justice.
Course that Includes Sustainability	Arts	Women and Gender Studies	WGS 244	Disability studies	Undergraduate	WGS244 - Disability Studies Interrogation of medical model of disability through cultural disability studies, including feminist and queer perspectives. Introduces students to social issues in disability studies, social policy, and social justice.
Course that Includes Sustainability	Arts	Women and Gender Studies	WGS 250	Gender and science	Undergraduate	WGS250 - Gender and Science Interdisciplinary exploration of gender and science, with an emphasis on intersections of gender, race, sexuality, and politics in historical and contemporary scientific practices. Note: Not open to students with credit in W ST 350 or WGS 350.
Course that Includes Sustainability	Arts	Women and Gender Studies	WGS 431	Feminism and sexual assault	Undergraduate	WGS431 - Feminism and Sexual Assault Interdisciplinary consideration of conceptual, political and legal strategies that feminists have deployed to confront sexual coercion with an emphasis on contemporary North American context. Prerequisite: Any 100 or 200 level WSG or W ST course, or departmental consent.

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Course that Includes Sustainability	Augustana	Science	AUBIO 334	Field studies in environmental science and ecology	Undergraduate	AUBIO334 - Field Studies in Environmental Science and Ecology A 3-week field course that provides students an opportunity to develop skills in research and study design in the field of Environmental Science and Ecology. Students will live in a field camp to allow them to fully immerse themselves in their research projects, which could cover the range of ecology, botany, geography, environmental science, and/or environmental studies. Course content also includes instruction in key aspects of conservation biology and resource management. Prerequisites: AUSTA 215 and AUENV 120 or AUGEO 120 and one of AUGEO 218, AUGEO 230, AUENV 252, AUBIO 253. Notes: Credit may be obtained for only one of AUBIO 334, AUENV 334 and AUGEO 334.
Course that Includes Sustainability	Augustana	Social Sciences	AUCRI 222	Canadian Social Issues	Undergraduate	AUCRI222 - Canadian Social Issues Introduction to sociological perspectives on social problems. Various theoretical orientations are applied to contemporary Canadian social issues such as poverty, gender issues, aboriginal rights, human sexuality, and regionalism. Prerequisites: One of AUSOC 101, 103, 105, AUIDS 160 or AUCRI 160, or consent of the instructor. Note: Credit may be obtained for only one of AUCRI 222 and AUSOC 222.
Course that Includes Sustainability	Augustana	Social Sciences	AUCRI 453	Women and the law	Undergraduate	AUCRI453 - Women and the Law This course explores historical and contemporary relationships between women and the Canadian legal system. The course uses feminist legal theory to explore the evolution of areas of Canadian law of particular interest to women (for example: reproduction, abortion, family law, rape laws, criminal law) and political activism around the law and women's issues. Prerequisites: One of AUCRI 353, AUPOL 353, 355 or AUIDS 230. Notes: Credit may be obtained for only one of AUCRI 453 and AUPOL 453.
Course that Includes Sustainability	Augustana	Humanities	AUENG 206	Native children's literature	Undergraduate	AUENG206 - Native Children's Literature Students in this course will study a diverse body of literature for children and young adults written by North American First Nations authors. The work of leading Native theorists will be included so that analysis of these picture books and novels for young people will be informed by and rooted in Indigenous ways of understanding the world. In crafting a method of reading that is grounded in the traditions and concerns of North American First Nations people, students will attend to the ways in which these texts present the oral tradition, locate themselves in specific tribal territories and cultural practices, connect their narratives to the environment, and re-present Indigenous histories. Prerequisites: Two of AUENG 102, 103, or 104.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Course that Includes Sustainability	Augustana	Humanities	AUENG 268	Women and Environmental Literature	Undergraduate	AUENG268 - Women and Environmental Literature Study of women's writing about nature and environment focusing on various themes relevant to environmental literature, primarily the various ways that the natural world is represented in literature, and the relationship between cultural constructions of nature and cultural constructions of gender, class, race, and sexuality. Works include fiction, poetry, and/or nonfiction. An introduction to several ecofeminist theorists provides a critical framework for exploring images and themes in women's environmental literature. Prerequisites: AUENG 103 and 104. Note: Credit may be obtained for only one of AUENG 268, 368, AUENV 268, 368.
Course that Includes Sustainability	Augustana	Humanities	AUENG 306	Native children's literature	Undergraduate	AUENG306 - Native Children's Literature Students in this course will study a diverse body of literature for children and young adults written by North American First Nations authors. The work of leading Native theorists will be included so that analysis of these picture books and novels for young people will be informed by and rooted in Indigenous ways of understanding the world. In crafting a method of reading that is grounded in the traditions and concerns of North American First Nations people, students will attend to the ways in which these texts present the oral tradition, locate themselves in specific tribal territories and cultural practices, connect their narratives to the environment, and re-present Indigenous histories. Prerequisites: Two of AUENG 102, 103, 104, and *6 in English at the 200 level (excluding AUENG 215).
Course that Includes Sustainability	Augustana	Humanities	AUENG 368	Women and Environmental Literature	Undergraduate	AUENG368 - Women and Environmental Literature Study of women's writing about nature and environment focusing on various themes relevant to environmental literature, primarily the various ways that the natural world is represented in literature, and the relationship between cultural constructions of nature and cultural constructions of gender, class, race, and sexuality. Works include fiction, poetry, and/or nonfiction. An introduction to several ecofeminist theorists provides a critical framework for exploring images and themes in women's environmental literature. Prerequisites: Two of AUENG 102, 103, or 104, and *6 in English at the 200 level (excluding AUENG 204, 215, 291). Note: Credit may be obtained for only one of AUENG 268, 368, AUENV 268, 368.
Course that Includes Sustainability	Augustana	Science	AUENV 252	Wildlife diversity of Alberta	Undergraduate	AUENV252 - Wildlife Diversity of Alberta Ecology, conservation, and identification of Alberta's common wildlife species, with a focus on mammals, birds, amphibians, reptiles, fish, and invertebrates. A mandatory field trip will be included. Prerequisites: AUENV 120, AUGEO 120, AUBIO 110 (2014) or AUBIO 112.

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Course that Includes Sustainability	Augustana	Humanities	AUENV 268	Women and Environmental Literature	Undergraduate	AUENV268 - Women and Environmental Literature Study of women's writing about nature and environment focusing on various themes relevant to environmental literature, primarily the various ways that the natural world is represented in literature, and the relationship between cultural constructions of nature and cultural constructions of gender, class, race, and sexuality. Works include fiction, poetry, and/or nonfiction. An introduction to several ecofeminist theorists provides a critical framework for exploring images and themes in women's environmental literature. Prerequisites: AUENG 103 and 104. Note: Credit may be obtained for only one of AUENV 268, 368, AUENG 268, 368.
Course that Includes Sustainability	Augustana	Science	AUENV 334	Field studies in environmental science and ecology	Undergraduate	AUENV334 - Field Studies in Environmental Science and Ecology A 3-week field course that provides students an opportunity to develop skills in research and study design in the field of Environmental Science and Ecology. Students will live in a field camp to allow them to fully immerse themselves in their research projects, which could cover the range of ecology, botany, geography, environmental science and/or environmental studies. Course content also includes instruction in key aspects of conservation biology and resource management. Prerequisites: AUSTA 215 and AUENV 120 or AUGEO 120 and one of AUGEO 218, AUGEO 230, AUENV 252, AUBIO 253. Notes: Credit may be obtained for only one of AUBIO 334, AUENV 334 and AUGEO 334.
Course that Includes Sustainability	Augustana	Science	AUENV 335	Wildlife ecology and management	Undergraduate	AUENV335 - Wildlife Ecology and Management Theory and practices in the study and management of wildlife populations and communities. Population dynamics, habitat assessment and management, conservation challenges, and emerging trends. Computational models and assignments aid theoretical understanding of material. Prerequisites: AUENV 252; AUBIO 253; AUSTA 215.
Course that Includes Sustainability	Augustana	Science	AUENV 350	Conservation theory and biodiversity in tropical systems	Undergraduate	AUENV350 - Conservation Theory and Biodiversity in Tropical Systems Introduction to the basic concepts of conservation biology. The scope of conservation biology and levels of biodiversity are explored, as are aspects of tropical ecology related to conservation. Prerequisite: One of AUBIO 253, 294, or 295, and consent of the instructor(s) based on successful completion of the selection process. Note: This course is intended to be taken in sequence with AUBIO 459 or AUENV 459. Credit may be obtained for only one of AUENV 350, 450, AUBIO 350, 450.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Course that Includes Sustainability	Augustana	Humanities	AUENV 368	Women and Environmental Literature	Undergraduate	AUENV368 - Women and Environmental Literature Study of women's writing about nature and environment focusing on various themes relevant to environmental literature, primarily the various ways that the natural world is represented in literature, and the relationship between cultural constructions of nature and cultural constructions of gender, class, race, and sexuality. Works include fiction, poetry, and/or nonfiction. An introduction to several ecofeminist theorists provides a critical framework for exploring images and themes in women's environmental literature. Prerequisites: AUENG 103, 104, and *6 in English at the 200 level (excluding AUENG 204, 215, 291). Note: Credit may be obtained for only one of AUENV 268, 368, AUENG 268, 368.
Course that Includes Sustainability	Augustana	Science	AUENV 459	Field studies in tropical ecology and conservation	Undergraduate	AUENV459 - Field Studies in Tropical Ecology and Conservation Field course that addresses problems of biodiversity and conservation in tropical environments. The student participates in field workshops, and designs and conducts his or her own field project to answer questions related to ecological and biological conservation. Prerequisite: AUBIO 350 or AUENV 350, and consent of the instructors based on successful completion of the selection process. Notes: Credit may be obtained for only one of AUBIO 459 and AUENV 459. Students who have received credit for AUBIO 359 or AUENV 359 may enrol in AUBIO 459 or AUENV 459 in a subsequent year based on successful completion of the selection process. Requires payment of additional student instructional support fees. Refer to the Fees Payment Guide in the University Regulations and Information for Students section of the Calendar.
Course that Includes Sustainability	Augustana	Science	AUGEO 231	Climatology	Undergraduate	AUGEO231 - Climatology Study of (1) elements and processes of climate and weather; (2) distributions and regional patterns of climates; and (3) interrelationships among climates, plants, animals, and people. Note: AUGEO 230 need not precede AUGEO 231. Requires payment of additional student instructional support fees. Refer to the Fees Payment Guide in the University Regulations and Information for Students section of the Calendar.
Course that Includes Sustainability	Augustana	Social Sciences	AUIND 101	Introduction to Indigenous studies	Undergraduate	AUIND101 - Introduction to Indigenous Studies An introduction to the discipline of Indigenous Studies covering indigenous methodologies and theory through the lens of contemporary issues affecting Aboriginal peoples in Canada and attempts to rectify these issues. Note: Credit may be obtained for only one of AUIND 101 and AUIND 201.
Course that Includes Sustainability	Augustana	Social Sciences	AUIND 201	Introduction to Indigenous studies	Undergraduate	AUIND201 - Introduction to Indigenous Studies An introduction to the discipline of Indigenous Studies covering indigenous methodologies and theory through the lens of contemporary issues affecting Aboriginal peoples in Canada and attempts to rectify these issues. Note: Credit may be obtained for only one of AUIND 101 and AUIND 201.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Course that Includes Sustainability	Augustana	Social Sciences	AUIND 240	Introduction to Indigenous Cultural Production	Undergraduate	AUIND240 - Introduction to Indigenous Cultural Production This class will introduce students to the projects of colonization, settler-colonialism, decolonization, indigenization and sovereignty through a discussion of various creative practices by Indigenous peoples and communities. While engaging Indigenous methodologies, students will gain an understanding about the role of creative practices to address the ongoing impact of settler colonialism, assert sovereignty, resilience and the revitalization of cultures, and invigorate innovative creative communities. Prerequisites: AUIND 101 or 201.
Course that Includes Sustainability	Augustana	Social Sciences	AUIND 367	The Fur Trade	Undergraduate	AUIND367 - The Fur Trade A seminar examining the history of the fur trade with a particular focus on Canada. Far from being a political history course, this seminar examines the social and cultural aspects of the fur trade from the pre-contact period to the present in its attempt to answer questions such as the role of the environment, how perceptions of the environment and ecological relations changed and more recently the relationship between the fur trade, environmental/conservation movements and neocolonialism. Credit may be obtained for only one of AUIND 367 and 467.
Course that Includes Sustainability	Augustana	Social Sciences	AUIND 370	Oral History	Undergraduate	AUIND370 - Oral History A seminar examining the oral history and tradition as systems of knowledge that preserve and pass on knowledge about people, cultures and history. It focuses on historic and contemporary approaches to oral history and traditions, including its use as traditional ecological knowledge (TEK). Students will be taught best practices for conducting research in oral history and tradition, including how to conduct community based research. Credit may be obtained for only one of AUIND 370 and 470.
Course that Includes Sustainability	Augustana	Science	AUMAT 332	Mathematical ecology and dynamical systems	Undergraduate	AUMAT332 - Mathematical Ecology and Dynamical Systems Mathematical analysis of problems associated with ecology, including models of population growth (e.g., discrete, continuous, age-structured, limited carrying capacity), the population dynamics of ecosystems, the spread of epidemics, the transport of pollutants, and the sustainable harvesting of vegetation and animal populations. Fundamental concepts of discrete and continuous dynamical systems, both linear and nonlinear. Prerequisites: AUMAT 120 and 211.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Course that Includes Sustainability	Augustana	Social Sciences	AUPED 184	Introduction to outdoor education: Snowshoeing	Undergraduate	AUPED184 - Introduction to Outdoor Education Opportunity for self-awareness and personal and group leadership development through outdoor tripping and small-group living. The skills associated with backpacking, river canoe tripping, and Leave No Trace camping are developed and practised. In addition, educational and recreational use of wilderness and wildlands is examined. Notes: The course requires participation in field trips. A student must furnish his or her own outdoor clothing, footwear, and sleeping bag. Additional fees may be assessed.
Course that Includes Sustainability	Augustana	Social Sciences	AUPED 284	Introduction to outdoor education: Canoeing	Undergraduate	AUPED284 - Introduction to Outdoor Education - Canoeing Introduction to theoretical and practical aspects of outdoor education. The course examines a variety of outdoor education theories and perspectives regarding leadership, group dynamics, and nature-human relationships. In addition, outdoor skills needed for wilderness canoe tripping will be developed. Note: The course requires participation on a multi-day overnight field trip. Students are required to provide personal outdoor clothing and equipment. Prerequisite: second-year standing. Note: Credit may only be received for one of AUPED 283 and 284.
Course that Includes Sustainability	Augustana	Social Sciences	AUPED 286	Outdoor education and leadership	Undergraduate	AUPED286 - Outdoor Education and Leadership Opportunity for self-awareness and personal and group leadership development through extended outdoor tripping and small-group living. The skills associated with intermediate/advanced backpacking, wilderness navigation, white water canoeing, and Leave No Trace camping are developed and practised. Prerequisites: AUPED 184 or equivalent, and consent of the instructor. Corequisite: AUPAC 226 or 326. Notes: The course requires participation in field trips. A student must furnish his or her own outdoor clothing, footwear, and sleeping bag. Requires payment of additional student instructional support fees. Refer to the Fees Payment Guide in the University Regulations and Information for Students section of the Calendar.
Course that Includes Sustainability	Augustana	Social Sciences	AUPED 387	Arctic Expedition Planning	Undergraduate	AUPED387 - Arctic Expedition Planning Study of the many factors involved in extended Arctic canoe expeditions. The course uses an interdisciplinary approach to explore the biological, geographical, historical, and sociological aspects of the Canadian North. Students will plan and prepare for an extended Arctic canoe expedition. Prerequisites: One of AUPED 284 or 286, or one of AUPED 184 or 283 and AUPAC 191 (Introduction to Moving Water Canoeing); *3 in Geography and consent of the instructor. Notes: This course is intended to be taken in sequence with AUGEO 343 or AUPED 388. Credit may be obtained for only one of AUGEO 341, 342 and AUPED 387.

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Course that Includes Sustainability	Augustana	Social Sciences	AUPOL 329	Politics and culture	Undergraduate	AUPOL329 - Politics and Culture Drawing on existing work in the areas of political culture, cultural studies and popular culture, this course explores the relationship and tension between politics and culture in western states, with a focus on Canada. Prerequisites: AUPOL 103 or 104.
Course that Includes Sustainability	Augustana	Social Sciences	AUPOL 355	Gender and politics	Undergraduate	AUPOL355 - Gender and Politics Exploration of the social and political construction of gender and the impact of gender on politics through an examination of gender with regards to one or more of the following areas: representation, social policy, feminist political thought, international relations, development, and/or globalization. Prerequisite: One of AUPOL 103, 104, AUIDS 230.
Course that Includes Sustainability	Augustana	Social Sciences	AUPSY 342	Health Psychology	Undergraduate	AUPSY342 - Health Psychology An overview of theory, research and practice of health psychology and behavioural medicine. Prerequisite: AUPSY 220 or 240.
Course that Includes Sustainability	Augustana	Social Sciences	AUPSY 346	Community Psychology	Undergraduate	AUPSY346 - Community Psychology Examination of the theories, approaches, and values behind social intervention intended to ameliorate, or prevent, psychological difficulty. Examples of community change are drawn from a Canadian context whenever possible. Prerequisites: AUPSY 102 (2016) or 103; AUPSY 213.
Course that Includes Sustainability	Augustana	Humanities	AUREL 263	Spirituality and globalization	Undergraduate	AUREL263 - Spirituality and Globalization Critical investigation of the values and views of human nature implicit in the discourse of corporate globalization and of those within the alternative visions of Jesus and the Hebrew prophets.
Course that Includes Sustainability	Augustana	Social Sciences	AUSOC 218	Sociology of Global and Development Issues	Undergraduate	AUSOC218 - Sociology of Global and Development Issues Introductory exploration of the issues of global economic development, global wealth and poverty, and global inequality. Alternative theoretical perspectives are introduced. Prerequisite: One of AUSOC 101, 103, 105.
Course that Includes Sustainability	Augustana	Social Sciences	AUSOC 222	Canadian Social Issues	Undergraduate	AUSOC222 - Canadian Social Issues Introduction to sociological perspectives on social problems. Various theoretical orientations are applied to contemporary Canadian social issues such as poverty, gender issues, aboriginal rights, human sexuality, and regionalism. Prerequisites: One of AUSOC 101, 103, 105, AUIDS 160 or AUCRI 160, or consent of the instructor. Note: Credit may be obtained for only one of AUSOC 222 and AUCRI 222.
Course that Includes Sustainability	Augustana	Social Sciences	AUSOC 275	Sex, gender, and society	Undergraduate	AUSOC275 - Sex, Gender, and Society Examination of the relation between gender as a social institution and our experiences of sexual identity and gender. The way gender differences are constructed and sustained as part of the reality of everyday life is also examined. Prerequisite: One of AUSOC 101, 103, 105, consent of the instructor.

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Course that Includes Sustainability	Augustana	Social Sciences	AUSOC 341	Sociology of food	Undergraduate	AUSOC341 - Sociology of Food This course places food into broader sociocultural context to better understand why we eat what we eat. Topics will include: patterns of food production, distribution and consumption; the role of rood in relation to embodiment, identities, culture, class, and gender; the socio-cultural and political-economic organization of local, national, and global food systems; the implication of the food system for health, urban-rural relations, ecological sustainability, and social justice; food as a site of power relations, contestation, and social movements. In sum, this course will offer a sociological perspective of the food system and of engagements for its social transformation. Prerequisites: *3 at a senior level in Sociology and 3rd year standing, or consent of the instructor.
Course that Includes Sustainability	Augustana	Social Sciences	AUSOC 377	Theorectical Approaches to Gender	Undergraduate	AUSOC377 - Theoretical Approaches to Gender Examination of various theoretical approaches to gender, primarily the various forms of feminism. This course will engage a range of current gendered issues and utilize theoretical debates to gain a better appreciation of the breadth and depth of gendered experience. Prerequisite: One of AUSOC 232, 233, 275, or any course listed in the Women's Studies program; and 3rd year standing; or consent of the instructor.
Course that Includes Sustainability	Business	Marketing, business economics, and law	BUEC 363	Introduction to energy and resource industries	Undergraduate	BUEC363 - Introduction to Energy and Resource Industries Introduces students to the current Canadian and global energy landscape, key energy industries, regulations, and commodities markets. Examines oil sands, conventional oil sectors, refined products such as gasoline, renewable fuels, natural gas including shale gas, and electricity. Students will also be introduced to environmental issues such as climate change, water, and land use. Students will use economic models of energy demand and supply to determine the environmental and economic advantages/shortcomings of these models in their application to real-world issues, both within Alberta and internationally, and will learn how economics can be used to guide energy policy. Not to be taken by students with credit in BUEC 463.
Course that Includes Sustainability	Business	Marketing, business economics, and law	BUEC 563	Energy industries and markets	Graduate	BUEC563 - Energy Industries and Markets This course provides a broad introduction to the energy industries and markets, focusing on market structure, firm strategy and behavior, regulation and public policy. The evolving nature of industries and markets, including technological challenges, environmental constraints and globalization, are discussed. The course includes a number of site visits and guest speakers. Prerequisite: BUEC 502 or 503. Not open to students with credit in BUEC 560.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Course that Includes Sustainability	Business	Marketing, business economics, and law	BUEC 663	Natural resources and energy capstone	Graduate	BUEC663 - Natural Resources and Energy Capstone A project-focused course dealing with international market, business and policy issues and challenges in the energy, environment and natural resources sectors. A course designed around an international trip with a focus on knowledge integration and application to international markets through an intense set of visits with firms, organizations and government agencies. The specific content including the location of the trip and issues addressed changes from year to year. The course involves both teamwork and individual research. In exceptional circumstances students can complete an additional project if they are unable to complete the travel component of the course. The course is open only to students registered in the NREE specialization in the final year of the MBA program. Prerequisites: Completion of all core and NREE required courses, or permission from the program office.
Course that Includes Sustainability	Business	Finance and Statistical Analysis	FIN 436	Investment management	Undergraduate	FIN436 - Investment Management This course provides students with experience managing an institutional asset portfolio, the PRIME FUND. Students interact with investment professionals in making asset acquisition and divesture decisions within the institutional framework of the fund. This course draws on and unifies skills related to investment analysis and portfolio theory. It combines traditional academic objectives with the practical demands of hands-on investment analysis and portfolio management. The students learn by actually using the tools of the trade. These include printed materials, real-time computerized sources of information and, most importantly, access to practising analysts and managers. Students also learn about the differences between institutional and personal investment decisions, the mechanics of trading, the different providers of trading services, and cash management. Prerequisites: FIN 412, 416. Open only to students with the consent of the Department.
Course that Includes Sustainability	Business	Strategic management and organization	SMO 200	Introduction to management for non-business students	Undergraduate	SMO200 - Introduction to Management for Non-Business Students Provides an understanding of the behavior of individuals and groups within the context of the business organization. Topics covered include organizational structure, culture, individual differences, personality, motivation, leadership, groups, decision making, power, politics, conflict, careers, stress, and organizational change. Not to be taken by students with credit in SMO 101, 201, 301 or 310.
Course that Includes Sustainability	Business	Strategic management and organization	SMO 310	Introduction to management	Undergraduate	SMO310 - Introduction to Management Introduces students to the behavioral, political and organizational dynamics of managerial practice. Topics include management theory, social responsibility, ethics, motivation, decision making, leadership, organizational structure, and strategy. Not to be taken by students with credit in SMO 200 or 301. Open only to students in the Faculty of Business. Not to be taken by students with credit in SMO 200, 201 or 301.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Course that Includes Sustainability	Business	Strategic management and organization	SMO 433	Managing organizational change	Undergraduate	SMO433 - Managing Organizational Change This course examines organization change, e.g. how organizations make transitions from one state to another. There is also a focus on understanding how management goes about changing corporate culture, organization structure and management systems. Prerequisite: SMO 201, 301 or 310. Open to third- and fourth-year students.
Course that Includes Sustainability	Business	Strategic management and organization	SMO 441	Business strategy	Undergraduate	SMO441 - Business Strategy This course examines top management decisions and emphasizes the development of business and corporate strategy. It integrates the management principles studied in the business core using a series of business cases. Guest Faculty members and executives will participate. Prerequisites: FIN 301; MARK 301; and SMO 201, 301 or 310.
Course that Includes Sustainability	Business	Strategic management and organization	SMO 633	Managing organizational change	Graduate	SMO633 - Managing Organizational Change This course examines organization change, e.g. how organizations make transitions from one state to another. There is also a focus on understanding how management goes about changing corporate culture, organization structure and management systems.
Course that Includes Sustainability	Business	Strategic management and organization	SMO 635	Managing international enterprise	Graduate	SMO635 - Managing International Enterprises International enterprises are for-profit businesses and nonprofit organizations which actively coordinate their operations sited in multiple countries. Top managers of international enterprises must ensure that their organizations simultaneously adapt to differences in external contexts around the world and increase internal coordination, efficiency, and innovation on a worldwide basis. Students will be put in the role of practicing top managers who are facing challenges, making decisions, and providing leadership in complex, multicultural contexts. Topics may include: entry decisions; aligning strategy, structure, and process; globalization; international strategic alliances; and sustainability. Prerequisites: SMO 500.
Course that Includes Sustainability	Education	Elementary education	EDEL 460	Sustaining Language and Culture through Traditional Knowledge and Practices	Undergraduate	EDEL460 - Sustaining Language and Culture through Traditional Knowledge and Practices This course examines approaches to Indigenous language and culture revitalization and their application to everyday life. Topics include traditional worldviews, the life cycle, rites of passage, community feasts, cultural celebrations, and festivals (but nothing of a sacred nature). The aim of this course is to create awareness about strategies Indigenous people are taking to sustain, preserve, and protect traditional practices. Elders serve as resources in the class. Prerequisites: EDEL 306 or consent of Department.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Course that Includes Sustainability	Education	Elementary and Secondary	EDES 409	Aboriginal Curriculum Perspectives	Undergraduate	EDES409 - Aboriginal Curriculum Perspectives This course is designed to help educators better understand and interpret the significance of recent curricular initiatives in Alberta and across Canada that emphasize Aboriginal perspectives across subject areas and grade levels. The class will consider the philosophies and wisdom traditions of Aboriginal knowledge systems and the curricular and pedagogical implications of these. The class will also focus in on particular subject area concerns, individually and collectively, and consider the critical contributions that Aboriginal knowledge systems and perspectives could play in these classroom contexts. One of the unifying messages of this course is that Aboriginal curriculum perspectives provide a unique opportunity for teachers to creatively rethink and reframe their approaches to teaching and learning.
Course that Includes Sustainability	Education	Educational policy studies	INT D 404	Global Citizenship: Contemporary Issues and Perspectives	Undergraduate	INT D404 - Global Citizenship: Contemporary Issues and Perspectives This course aims to provide students the opportunity to engage with current literature and experts, and to extend their own research skills as they strive to understand how global citizenship might frame the roles of individuals and communities with which they will interact in increasingly diverse social, economic, and political contexts that are not restricted by geographical or social boundaries. This course will examine select theories and case studies that focus on the constructions of global citizenship, and how citizenship is (has been) lived, denied, recreated and/or re-imagined. [Educational Policy Studies]
Course that Includes Sustainability	Education	Educational policy studies	EDPS 415	Sexuality, Gender, and Culture in Education	Undergraduate	EDPS415 - Sexuality, Gender, and Culture in Education This course explores, in theory and practice, contemporary issues related to sexual orientation, gender identity, and gender expression in K-12 schools. It draws upon critical scholarship to explore issues related to the construction and regulation of teacher and student identities, school leadership, bullying, violence, and discrimination. We further consider the implications of policy and other targeted educational interventions to help create welcoming, respectful and safe learning and teaching environments. NOTE: Community Service Learning (CSL) is an integral and required component of this course.
Course that Includes Sustainability	Education	Educational policy studies	EDPS 422	International development education	Undergraduate	EDPS422 - International Development Education This course examines the interplay of education and international development in diverse contexts of our world. Theoretical analysis and discussions will focus on different types of education, the histories of international development and globalization, as well as citizenship, social justice and human rights education. These topical foci will be complemented by specialized regional perspectives on the state of education and social development in Africa, Asia, Latin America, Eastern Europe, the Caribbean region and Oceania.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Course that Includes Sustainability	Education	Educational policy studies	EDPS 520	Adult education, popular movements and NGOs in the global south	Graduate	EDPS520 - Adult Education, Popular Movements and NGOs in the Global South This course will examine the role and nature of adult education and learning processes in social change initiatives being undertaken by development non-governmental organizations (NGOs) and by popular subaltern social movements of pastoralists, peasants, indigenous peoples, rural women and urban poor (shack dwellers) social groups in Asia, Africa, Latin America & the Caribbean (Global South). These initiatives will be explored in terms of a critical contextual appreciation of the inter/national development project and neoliberal globalization.
Course that Includes Sustainability	Education	Educational policy studies	EDPS 525	Globalization, global education and change	Graduate	EDPS525 - Globalization, Global Education and Change This course will develop a critical understanding of select perspectives on globalization and the associated implications for: (a) formal, non-formal and informal education in local, national, and international contexts; and (b) pedagogical possibilities for critical global education in schools and communities addressing global issues pertaining to international development (poverty and inequality in North-South trajectories), ecology, human rights and improved prospects for peace.
Course that Includes Sustainability	Education	Educational policy studies	EDPS 539	Revitalizing Indigenous Language	Graduate	EDPS539 - Revitalizing Indigenous Language Course studies the impact of the loss of Indigenous languages and strategies, policies and practices aimed at the revival and maintenance of Indigenous languages locally and internationally. Students may not receive credit for both EDPS 601 "From Oral Language to Written Text" and EDPS 538.
Course that Includes Sustainability	Education	Educational policy studies	EDPS 547	Leadership and social justice	Graduate	EDPS547 - Leadership and Social Justice This course explores theoretical frameworks of social justice and practical experiences of social justice issues in schools, higher education institutions, and their communities. Students will critically examine concepts of social justice, exclusion, and inclusive education from the perspective of the educational leader as part of a wider educational community.
Course that Includes Sustainability	Education	Educational psychology	EDPY 301	Introduction to Inclusive Education: Adapting Classroom Instruction for Students with Special Needs	Undergraduate	EDPY301 - Inclusive Education: Adapting Instruction for Students with Special Needs This course provides an introduction to teaching students with special needs within the inclusive education context. Course content focuses on knowledge of special needs and exceptionalities (learner characteristics), familiarity with Individualized Program Plans (IPPs), program modifications and adaptations, classroom management, and assessment. A major focus in the course is on Differentiated Instruction which facilitates the development of an awareness of how diverse contexts affect students and teachers. May contain alternative delivery sections; refer to the Fees Payment Guide in the University Regulations and Information for Students section of the Calendar.

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Course that Includes Sustainability	Education	Secondary Education	EDSE 307	Language, Literacy, and Society in Educational Contexts	Undergraduate	EDSE307 - Language, Literacy and Society in Educational Contexts Prerequisite: *9 in the Major subject area. Corequisite: Courses in the Introductory Professional Term (IPT) for the Secondary Education Route. Successful completion of the on-campus portion of the IPT is expected prior to being granted permission to continue into EDFX 350. EDSE 307 is designed to prepare teachers to develop English language and literacy abilities in learners in grades 7 through 12, particularly diverse and minority learners. Note: Not open to first year students.
Course that Includes Sustainability	Education	Faculty of Education	EDU 100	Contexts of education	Undergraduate	EDU100 - Contexts of Education This course focuses on the different contexts of professional practice within education. It critically examines the complex social relationships among educators as professionals and learners as participants in educational institutions. Teacher identity will be explored as a dynamic, reformative process in response to competing tensions that require an awareness of the positionality of educators. Preservice teachers will learn about the relationships between education and practice that are nested in social relations of learning that are also economic, political, and cultural. Engagement from a variety of perspectives they will develop professional knowledge for critical reconstructive practice. Credit cannot be received for both EDU 100 and EDU 250 or equivalent. [Departments of Elementary Education and Secondayr Education]
Course that Includes Sustainability	Education	Library and information studies	LIS 592	Intellectual Freedom and Social Responsibility in Librarianship	Graduate	LIS592 - Intellectual Freedom and Social Responsibility in Librarianship An examination of the central concepts of intellectual freedom and social responsibility and the range of related issues impacting librarians, library institutions, and library associations. Sections may be offered in a Cost Recovery format at an increased rate of fee assessment; refer to the Fees Payment Guide in the University Regulations and Information for Students. Prerequisite: LIS 501 or consent of instructor.
Course that Includes Sustainability	Engineering	Chemical and Materials Engineering	CH E 464	Chemical engineering design I	Undergraduate	CH E464 - Chemical Engineering Design I Engineering design concepts; cost estimation; project planning and scheduling; plant safety and hazards analysis; selected project design examples. Prerequisites: CH E 314, 345, and ENG M 310 or 401. Corequisite: CH E 416. Credit may not be obtained in this course if previous credit has been obtained for CH E 365.
Course that Includes Sustainability	Engineering	Chemical and Materials Engineering	CH E 465	Chemical Engineering Design II	Undergraduate	CH E465 - Chemical Engineering Design II Integration of chemical engineering practice, theory and economics into capital project proposal, sustainable design and evaluation. Course work requires pre-session preparation, team and project work. Prerequisites: CH E 446, 464, and ENGG 404.

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Course that Includes Sustainability	Engineering	Civil and environmental engineering	CIV E 321	Principles of environmental modeling and risk	Undergraduate	CIV E321 - Principles of Environmental Modeling and Risk Introduction modeling environmental processes to predict the movement of water and fate of contaminants in the hydrologic cycle. Principles of mass transfer, conservation of mass, environmental transformations, nutrient enrichment and depletion are developed. Introduction to storm events, rainfall, runoff, stream discharge and stormwater management. Applications of modeling results to the quantification of risk using examples from hydrology, water pollution and health protection and development of environmental regulations. Prerequisite: CIV E 221. Corequisite: CIV E 330.
Course that Includes Sustainability	Engineering	Civil and environmental engineering	CIV E 429	Environmental engineering design	Undergraduate	CIV E429 - Environmental Engineering Design Fundamentals of municipal planning and design of water supply, water and wastewater treatment, storm water management, or wastewater collection and management systems. Course includes design projects, field trips, and presentations. Students work in teams on a design project. Prerequisites: CIV E 321 and ENV E 421. Note: Restricted to fourth-year traditional and fifth-year co-op engineering students.
Course that Includes Sustainability	Engineering	Civil and environmental engineering	CIV E 431	Water resources engineering	Undergraduate	CIV E431 - Water Resources Engineering Hydrotechnical analysis, including: advanced open channel hydraulics; advanced surface water hydrology; groundwater and well hydraulics; and environmental hydraulics. Prerequisites: CIV E 321, 331.
Course that Includes Sustainability	Engineering	Civil and environmental engineering	CIV E 439	Water resources engineering design	Undergraduate	CIV E439 - Water Resources Engineering Design Design of hydraulic structures and river engineering works, including: dams, spillways, energy dissipators, bridges, culverts, erosion protection and river training works. Students work in teams on a design project. Prerequisite: CIV E 431. Note: Restricted to fourth-year traditional and fifth-year co-op engineering students.
Course that Includes Sustainability	Engineering	Civil and environmental engineering	CIV E 526	Soil remediation	Graduate	CIV E526 - Soil Remediation Identification of regulations and guidelines applicable to contaminated site assessment and remediation. Review of soil and contaminant properties that affect contaminant partitioning and movement in subsurface soils. Study of physical, chemical and biological treatment methods for the remediation of contaminated soils.
Course that Includes Sustainability	Engineering	Civil and environmental engineering	CIV E 620	Environmental engineering measurements I	Graduate	CIV E620 - Environmental Engineering Measurements I Theory and procedures for determining the quality of natural water, potable water, municipal and industrial wastes. Fundamental parameters and concepts for environmental quality evaluation.
Course that Includes Sustainability	Engineering	Civil and environmental engineering	CIV E 623	Industrial water and wastewater management	Graduate	CIV E623 - Industrial Water and Wastewater Management Industrial water quantity and quality requirements. Characteristics of wastes, inplant controls, product recovery; effluent characteristics, chemical and toxic properties, pretreatment and treatment design theory and methodology, water reclamation and reuse regulations.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Course that Includes Sustainability	Engineering	Civil and environmental engineering	CIV E 627	Environmental engineering measurements II	Graduate	CIV E627 - Environmental Engineering Measurements II Laboratory experiments to present techniques for obtaining data and relationships needed for design of treatment facilities. Introduction to experimental design principles and their application. Statistical analysis of experimental data for data interpretation, presentation and design.
Course that Includes Sustainability	Engineering	Civil and environmental engineering	CIV E 628	Municipal solid waste management	Graduate	CIV E628 - Municipal Solid Waste Management Principles of municipal waste management to protect public health, municipal waste streams, waste stream analysis and prediction. Refuse collection, storage and hauling methods, and facilities. Engineering design and operation of solid waste processing, treatment and disposal methods: resource recovery, recycling programs, incineration, composting, landfilling, and novel techniques. Solid waste legislation and policies. Environment impacts, impact management and facility siting of waste facilities.
Course that Includes Sustainability	Engineering	Civil and environmental engineering	CIV E 635	Advanced environmental fluid mechanics	Graduate	CIV E635 - Environmental Fluid Mechanics Mixing processes and pollutant transport in rivers, lakes, estuaries, coastal waters, and the atmosphere. Prerequisite: CIV E 631.
Course that Includes Sustainability	Engineering	Chemical and Materials Engineering	CME 200	Introduction to chemical and materials engineering	Undergraduate	CME200 - Introduction to Chemical and Materials Engineering Topics of interest to second year Chemical and Materials Engineering students, with special reference to industries in Alberta, including coverage of elements of ethics, equity, concepts of sustainable development and environmental stewardship, public and worker safety and health considerations including the context of the Alberta Occupational Health and Safety Act. Offered in a single day during the first week of September. Restricted to students registered in the Department of Chemical and Materials Engineering.
Course that Includes Sustainability	Engineering	Electrical and computer engineering	ECE 475	Optoelectronic and photovoltaic devices	Undergraduate	ECE475 - Optoelectronic and Photovoltaic Devices Basic optical properties of crystalline and amorphous semiconductor materials: energy band diagrams, optical constants. Recombination and light emission in semiconductors. Light emitting diodes: spectral characteristics, materials, and applications. Stimulated emission and laser oscillation conditions in semiconductors. Laser diodes: modal and spectral properties, steady state rate equations, materials and structures. Light absorption, optical to electrical energy conversion. Photovoltaic cells: fill factors and efficiency, temperature effects, alternative materials and structures. Prerequisite: ECE 302 or E E 340. Credit may be obtained in only one of ECE 475 or E E 475.
Course that Includes Sustainability	Engineering	Mechanical engineering	ENG M 508	Energy auditing and management	Graduate	ENG M508 - Energy Auditing and Management Concepts and value of energy management and conservation. Methodologies for energy management in energy intensive systems in various industries. Energy auditing methods and implementation. Energy accounting and economic analysis. Energy audits and maintenance. Exposure to software for energy auditing.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Course that Includes Sustainability	Engineering	-	ENGG 100	Orientation to the Engineering Profession I	Undergraduate	ENGG100 - Orientation to the Engineering Profession I An introduction to the Faculty of Engineering and the engineering profession: the engineering disciplines; study skills; cooperative education; work opportunities; engineering and society including elements of ethics, equity, concepts of sustainable development and environmental stewardship, public and worker safety and health considerations including the context of the Alberta Occupational Health and Safety Act.
Course that Includes Sustainability	Engineering	-	ENGG 101	Orientation to the Engineering Profession II	Undergraduate	ENGG101 - Orientation to the Engineering Profession II An introduction to the engineering profession and its challenges: the engineering disciplines, career fields; professional responsibilities of the engineer including elements of ethics, equity, concepts of sustainable development and environmental stewardship, public and worker safety and health considerations including the context of the Alberta Occupational Health and Safety Act.
Course that Includes Sustainability	Engineering	-	ENGG 404	Engineering safety and risk management - Leadership in risk management	Undergraduate	ENGG404 - Engineering Safety and Risk Management-Leadership in Risk Management Basic concepts of risk and consequences of loss incidents; risk management principles and practices; incident investigation, causation, root cause analysis; process safety management; the roles of government agencies, professional bodies and industry associations; workplace safety; risk-based decision-making processes; leadership and the human-factors side of risk management. The course focuses on the principles and practices of leadership towards the effective application and implementation of risk management in major organizations across all engineering disciplines. Industry virtual tours, case studies, seminars and team projects specific to the student's engineering program will be used to develop competencies and proficiencies in applying leadership and organizational effectiveness for successful risk management.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Course that Includes Sustainability	Engineering	-	ENGG 406	Engineering safety and risk management - Methodologies and Tools	Undergraduate	ENGG406 - Engineering Safety and Risk Management - Methodologies and Tools Basic concepts of risk and consequences of loss incidents; risk review methodologies and tools: hazard and operability (HAZOP), failure modes and effects analysis (FMEA), fire and explosion indices (F and EI), chemical exposure index (CEI), layers of protection analysis (LOPA) including hazard identification, risk analysis, risk assessment, loss prevention and control; process safety management; specific occupational health and safety code compliance requirements for professional engineers. Case studies and industrial tour(s) demonstrate the application of specialized tools and methodologies in complex industrial operations across all engineering disciplines. Seminars and team projects develop competencies and proficiencies in applying these specialized methodologies and tools towards proactive risk management. Requires payment of additional student instructional support fees. Refer to the Fees Payment Guide in the University Regulations and Information for Students section of the Calendar. Prerequisite: ENGG 404 or consent of the instructor.
Course that Includes Sustainability	Engineering	-	ENGG 600	Engineering Ethics and Professionalism	Graduate	ENGG600 - Engineering Ethics and Professionalism The technical and professional duties and responsibilities of the engineer. Academic integrity and research ethics. Intellectual property. The ethics of the engineering profession; technical and professional organizations. The impact of engineering decisions on society, including elements of equity, concepts of sustainable development and environmental stewardship, public and worker safety and health considerations including the context of the Alberta Occupational Health and Safety Act. Intellectual property. Note: Restricted to engineering graduate students.
Course that Includes Sustainability	Engineering	Civil and environmental engineering	ENV E 220	Environmental chemistry for engineers	Undergraduate	ENV E220 - Environmental Chemistry for Engineering Survey of basic principles in analytical, inorganic, and organic chemistry with emphasis on environmental engineering applications. Laboratory measurements related to water quality. Prerequisite: CHEM 105.
Course that Includes Sustainability	Engineering	Civil and environmental engineering	ENV E 320	Environmental hydrology	Undergraduate	ENV E320 - Environmental Hydrology Introduction to concepts in hydrology and hydrogeology. Hydrology topics include precipitation, evaporation, infiltration, streamflow, and hydrograph analysis. Hydrogeology topics include infiltration, percolation, seepage, drainage, aquifer hydraulics, and urban runoff quality. Prerequisite: CIV E 330; Corequisite: CIV E 331.
Course that Includes Sustainability	Engineering	Civil and environmental engineering	ENV E 325	Chemical and physical processes	Undergraduate	ENV E325 - Chemical and Physical Processes Theory of chemical and physical processes and their application in environmental engineering. Prerequisite: ENV E 220. Corequisites: CIV E 290 or STAT 235, CIV E 295, CIV E 330. Credit cannot be obtained for both ENV E 222 and ENV E 325.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Course that Includes Sustainability	Engineering	Civil and environmental engineering	ENV E 423	Principles of air quality management and control	Undergraduate	ENV E423 - Principles of Air Quality Management and Control A first course on air quality and air pollution, dealing with: types of gaseous and particulate pollutants and their sources, effects of air pollution on man, vegetation, and materials, indoor air pollution, sampling and analysis of air pollutants, air pollution meteorology and dispersion, control techniques for gaseous and particulate pollutants, and air quality management aspects. Prerequisite: ENV E 325. Credit cannot be obtained for both ENV E 323 and ENV E 423.
Course that Includes Sustainability	Engineering	Civil and environmental engineering	ENV E 432	Solid waste management	Undergraduate	ENV E432 - Solid Waste Management Principles of solid waste management to protect public health. Study of solid waste components, refuse collection, storage, and handling. Design and operation of solid waste transfer and disposal facilities including transfer stations, resource recovery and composting facilities, incinerators, and landfills. Prerequisites: ENV E 324 and 351.
Course that Includes Sustainability	Engineering	Civil and environmental engineering	ENV E 434	Environmental geotechnics	Undergraduate	ENV E434 - Environmental Geotechnics Design of soil waste containment systems; stability of natural slopes, engineered cuts and embankments; earth pressure theories; design of retaining structures and pressures on buried pipes; settlement of earth containment structures and foundations; load-carrying capacity of foundations; design for filtration, separation, containment, and reinforcement using geosynthetics. Prerequisites: CIV E 381 and ENV E 251.
Course that Includes Sustainability	Engineering	Civil and environmental engineering	ENV E 440	Facility deisgn	Undergraduate	ENV E440 - Facility Design Design of water supply, water treatment, wastewater treatment, or sewerage and storm water management facilities. Course includes major design projects, field trips, and presentations. Students work in teams on a design project. Prerequisites: ENV E 324 and 421. Note: Restricted to fourth-year traditional and fifth-year co-op engineering students.
Course that Includes Sustainability	Engineering	Chemical and Materials Engineering	MAT E 464	Materials process engineering design	Undergraduate	MAT E464 - Materials Process Engineering Design Engineering design concepts in materials processing. Cost estimation. Project planning and scheduling. Plant safety and hazards analysis. Selected project design examples. Credit may not be obtained in this course if previous credit has been obtained in MAT E 365. Prerequisites: CME 265 and MAT E 204 or 301. Corequisites: CH E 314, ENG M 310 or 401, and ENGG 404.

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Course that Includes Sustainability	Engineering	Chemical and Materials Engineering	MAT E 465	Materials design project	Undergraduate	MAT E465 - Materials Design Project Team materials design projects. Feasibility study and detailed materials design including: selection of materials and manufacturing processes; cost analysis; safety, social, and environmental considerations; failure modes; and microstructural specifications. Projects will require students to exercise creative and critical thinking, decision making, and demonstrate integration of Materials Engineering practice and synthesis of technical knowledge rather than simply analyse existing designs. Prerequisites: ENGG 404, MAT E 336, 345, 351 and 464.
Course that Includes Sustainability	Engineering	Mechanical engineering	MEC E 443	Energy conversion	Undergraduate	MEC E443 - Energy Conversion Sources, flow and overall efficiency of use of various energy forms in society, thermodynamic analysis of energy conversion devices such as thermoelectric and magnetohydrodynamic generators, solar and fuel cells, energy from fission and fusion reactors. Prerequisite: MEC E 340.
Course that Includes Sustainability	Engineering	Mechanical engineering	MEC E 460	Design project	Undergraduate	MEC E460 - Design Project Feasibility study and detailed design of a project which requires students to exercise creative ability, to make assumptions and decisions based on synthesis of technical knowledge, and in general, devise new designs, rather than analyse existing ones. Prerequisites: MEC E 200, 330 or 331, 340, 360, 362, 370 or 371, 380. Corequisite: ENG M 310 (or ENG M 401).
Course that Includes Sustainability	Extension	Communications and Technology	COMM 554	Risk communication	Graduate	COMM554 - Risk Communication The theory, research, and practice of risk communication are explored through the introduction of models of risk communication and risk assessment in various contexts which may include environmental issues, public health and safety, occupational hazards, and consumer products. Students may not receive credit for both COMM 597 (Case Studies in Risk Communication) and COMM 554.
Course that Includes Sustainability	Extension	Regional Planning	INT D 345	Rural Environments	Undergraduate	INT D345 - Rural Environments The characteristics of rural environments that relate to current planning challenges and land use pressures will be examined. Topics such as: changing agricultural practices, rural health issues, planning for rural sustainability and the role of legislation at provincial, regional and intermunicipal levels will be discussed. Many case examples will be used throughout the course. Sections may be offered in a Cost Recovery format at an increased rate of fee assessment; refer to the Fees Payment Guide in the University Regulations and Information for Students. Open to students in the Undergraduate Program in Planning or consent of the Instructor.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Course that Includes Sustainability	Extension	-	INT D 500	An Introduction to Community-Based Research and Evaluation	Undergraduate	INT D500 - An Introduction to Community-Based Research and Evaluation An introduction to conceptual and methodological foundations of community-based research and evaluation in the health and social sciences, particularly pertaining to the development of children, youth, and/or families. Seminar format. Prerequisite: Consent of instructor.
Course that Includes Sustainability	Faculté Saint-Jean	-	ADMI 342	Introduction au Commerce International	Undergraduate	ADMI342 - Introduction au Commerce International Introduction aux outils requis pour réussir dans un monde des affaires de plus en plus international. Sert de tremplin à des cours plus avancés en affaires internationales. Les sujets couverts incluent les différences entre les pays, le commerce international, l´investissement direct étranger, l´intégration économique internationale, le marché des changes, et la stratégie et les opérations en affaires internationales. Note : Ce cours n´est pas accessible aux étudiants ayant ou postulant des crédits pour BUEC 342.
Course that Includes Sustainability	Faculté Saint-Jean	-	ADMI 463	L'énergie et l'environnement: Structure industrielle, performance et défis	Undergraduate	ADMI463 - L'énergie et l'environnement: Structure industrielle, performance et défis Dans ce cours on utilise les outils de l'économique pour obtenir une meilleure compréhension des marchés et de l'industrie de l'énergie. Les différences et similarités entre les industries (pétrole, gaz naturel, électricité, etc.) et entre les différents segments (exploration, production, vente) sont expliquées. On y analyse les grands défis de l'industrie, entre autres la question environnementale et la mondialisation des marchés et les nouvelles formes de la concurrence. On verra comment cette transformation de l'industrie affectera les performances et stratégies de l'industrie. Préalable(s): ECONE 281 ou ECON 281 ou BUEC 311.
Course that Includes Sustainability	Faculté Saint-Jean	-	ADMI 479	L'entreprise et le gouvernement au Canada	Undergraduate	ADMI479 - L'entreprise et le gouvernement au Canada Analyse de l'interaction entre l'entreprise et l'administration publique. On s'intéresse en particulier à la dynamique d'ajustement de la firme et du gouvernement dans les changements d'environnement et de politiques. Les motivations et comportements des décideurs publics et des personnes responsables de l'application des mesures sont présentés dans le contexte d'interaction entre les différents groupes impliqués. Sont posées les bases d'une analyse de l'efficacité des différentes politiques, tant fiscales que réglementaires, visant la firme. On y aborde aussi les conséquences des changements de l'environnement économique, technologique et social pour la firme. Préalable(s): ECONE 281 ou BUEC 311. Note: Ce cours n'est pas accessible aux étudiants ayant ou postulant des crédits pour BUEC 479.
Course that Includes Sustainability	Faculté Saint-Jean	-	ANTHE 393	Anthropologie des enjeux médicaux	Undergraduate	ANTHE393 - Anthropologie des enjeux médicaux D'une perspective multiculturelle et comparative : étude des croyances et des activités sociales associées à la santé et à la guérison. Les enjeux de langues et services de santé en contexte minoritaire sont analysés. Préalable(s) : *3 en ANTHE ou autre cours de sciences sociales de niveau 200 ou plus.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Course that Includes Sustainability	Faculté Saint-Jean	-	BIOLE 380	Analyse génétique des populations	Undergraduate	BIOLE380 - Analyse génétique des populations Application de la biologie moléculaire à l'étude de la systématique, de la structure des populations naturelles, des systèmes d'accouplement et de la criminalistique. Les sujets discutés incluent les techniques de détection de la variation génétique des populations naturelles, l'analyse phylogénétique de données moléculaires, les modèles mathématiques de la structure des populations, l'analyse de paternité et les empreintes génétiques. Préalable: BIOLE 207. BIOLE 221 est recommandé.
Course that Includes Sustainability	Faculté Saint-Jean	-	CHIM 101/103	Introduction à la chimie I	Undergraduate	CHIM101 - Introduction à la chimie I Structure atomique, liaisons covalentes, thermochimie, équilibre chimique, acides et bases, les éléments représentatifs. Préalable(s): Chimie 30 ou l'équivalent.
Course that Includes Sustainability	Faculté Saint-Jean	-	CHIM 102/105	Introduction à la chimie II	Undergraduate	CHIM102 - Introduction à la chimie II États de la matière et forces intermoléculaires, solubilité et solutions, électrochimie, thermodynamique chimique, cinétique chimique, liaison et propriétés des métaux de transition. Préalable: CHIM 101.
Course that Includes Sustainability	Faculté Saint-Jean	-	CHIM 164/261	Chimie organique I	Undergraduate	CHIM164 - Chimie organique I Étude de la structure moléculaire de base et de la réactivité des composés organiques basée sur leurs groupes fonctionnels. Introduction à la nomenclature, la structure tridimensionnelle, les propriétés physiques et la réactivité des composés du carbone. L'accent sera mis sur les alcanes, les alcènes, les alcynes, les halogénures d'alkyle, les alcools et certains composés aromatiques. Les exemples comprendront des hydrocarbures (produits pétroliers), les composés organiques halogénés (par ex. les pesticides) et les polymères d'une importance industrielle que l'on retrouve dans la vie quotidienne. Préalable(s) : Chimie 30 ou l'équivalent. Note(s) : (1) Les étudiants qui ont des crédits pour CHIM 101 doivent s'inscrire à CHIM 261. (2) Limité aux étudiants avec une moyenne minimale de 90% en Chimie 30, ou l'approbation du vice-doyen aux affaires académiques. (3) Ce cours n'est pas accessible aux étudiants ayant ou postulant des crédits pour CHIM 161.
Course that Includes Sustainability	Faculté Saint-Jean	-	CHIM 263	Chimie organique II	Undergraduate	CHIM263 - Chimie organique II Continuation de l'étude des propriétés structurales et chimiques des groupes fonctionnels avec l'accent sur les alcynes, les composés aromatiques, les aldéhydes, les cétones, les acides carboxyliques et leurs dérivés, et les amines. Exemples de ces groupes fonctionnels dans les produits naturels; les hydrates de carbone, les amino-acides et les protéines, les acides nucléiques, et les lipides. Étude de la déduction des structures des molécules organiques par spectroscopie infrarouge et spectroscopie de résonance magnétique nucléaire. Préalable(s): CHIM 161 ou 164 ou 261 ou SCI 100. Note: Ce cours n'est pas accessible aux étudiants ayant ou postulant des crédits pour CHIM 163.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Course that Includes Sustainability	Faculté Saint-Jean	-	ECONE 323	Économie internationale	Undergraduate	ECONE323 - Économie internationale Aperçu des principes de l'économie internationale. Application de ces principes à la politique économique. L'accent est mis sur des sujets comme le commerce international, l'Investissement étranger et la balance des paiements. Préalable (s): ECONE 101 et 102, ou ECONE 223.
Course that Includes Sustainability	Faculté Saint-Jean	-	EDUF 235	École et société	Undergraduate	EDU F235 - École et société Ce cours examine les rapports entre les écoles, les salles de classe, les communautés et la société. Il vise à sensibiliser les étudiants aux enjeux de l'équité et à mieux comprendre les processus d'inclusion et d'exclusion en milieu scolaire. Ce cours offre aux étudiants l'option de faire un stage de bénévolat de 20 heures avec un organisme communautaire à but non lucratif dans le cadre du programme « Community Service-Learning ». Note : Ce cours n'est pas accessible aux étudiants ayant des crédits pour FO ED 200.
Course that Includes Sustainability	Faculté Saint-Jean	-	EDU F 212	Éducation autochtone: un engagement professionnel et personnel	Undergraduate	EDU F212 - Éducation autochtone: un engagement professionnel et personnel Ce cours est axé sur les enjeux de l'éducation autochtone en contexte canadien. Il aborde les relations entre sociétés autochtones et coloniales, les conceptions autochtones de la connaissance, le vécu des peuples autochtones et les Appels à l'action présentés par la Commission de vérité et réconciliation. 2 Les étudiants seront invités à s'engager dans un processus réflexif visant à explorer les théories relatives à la décolonisation afin de les appliquer dans leur vie professionnelle et personnelle. Note: Ce cours n'est pas accessible aux étudiants ayant ou postulant des crédits pour SCSOC 212 et EDU 211.
Course that Includes Sustainability	Faculté Saint-Jean	-	EDU P 245	Interaction sociales et communication	Undergraduate	EDU P245 - Interactions sociales et communication Ce cours offre une introduction aux principaux paradigmes de la communication et des relations interpersonnelles. Il vise l'appropriation et l'approfondissement des modèles théoriques, des méthodes d'analyse et de communication et des stratégies pour comprendre la dynamique relationnelle afin d'intervenir sur celle-ci. Cette dynamique relationnelle renvoie à différentes situations de communication et relations interpersonnelles quotidiennes propres au milieu scolaire actuel (élèves, enseignants, parents, administrateurs, etc.). Note: Ce cours n'est pas accessible aux étudiants ayant des crédits pour PS ED 250 et EDU P 241
Course that Includes Sustainability	Faculté Saint-Jean	-	HISTE 311	Histoire de L'Afrique francophone	Undergraduate	HISTE311 - Histoire de l'Afrique francophone Étude de l'Afrique francophone de la décolonisation à nos jours : le poids de son passé colonial, ses défis politiques, économiques et sociaux, sa place au sein de la francophonie internationale. Préalable(s): *3 HISTE de niveau 100 ou 200.
Course that Includes Sustainability	Faculté Saint-Jean	-	HISTE 460	Thèmes d'histoire du Canada (Canada et le monde)	Undergraduate	HISTE460 - Thèmes d'histoire du Canada Thèmes d'histoire du Canada dans ses relations avec le monde.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Course that Includes Sustainability	Faculté Saint-Jean	-	PHYSQ 261	Physique de l'énergie et de l'environnement	Undergraduate	PHYSQ261 - Physique de l'énergie et de l'environnement Diverses formes d'énergie; conservation de l'énergie. Principes de thermodynamique; gaz parfaits; transitions de phase ; pompes à chaleur et réfrigérateurs. Transfert de chaleur. Consommation de ressources énergétiques. Physique nucléaire; radioactivité; fission, énergie nucléaire. Énergie de remplacement et sources d'énergie renouvelable. Préalable(s): PHYSQ 126 et MATHQ 113 ou MATH 114 ou 144. SCI 100 peut remplacer PHYSQ 126 et MATH 114.
Course that Includes Sustainability	Faculté Saint-Jean	-	PSYCE 104	Procédés psychologiques de base	Undergraduate	PSYCE104 - Procédés psychologiques de base Principes et développement de la perception, motivation, apprentissage et réflexion et leur relation avec le fonctionnement psychologique de l'individu. Ce cours est un préalable pour la plupart des cours de psychologie et est normalement suivi de PSYCE 105. Peut comprendre des sections Alternative Delivery; veuillez consulter le Fees Payment Guide dans la section University Regulations and Information for Students de l'annuaire.
Course that Includes Sustainability	Faculté Saint-Jean	-	PSYCE 275	Cerveau et comportement	Undergraduate	PSYCE275 - Cerveau et comportement Introduction à la fonction du cerveau et à son rapport à la sensation, à la perception, au mouvement, à l'apprentissage, à la motivation et à la pensée. Préalable(s): PSYCE 104 ou SCI 100, STAT 141 ou STATQ 151 ou SCI 151 et Biologie 30 ou l'équivalent.
Course that Includes Sustainability	Faculté Saint-Jean	-	PSYCE 282	Modification du comportement	Undergraduate	PSYCE282 - Modification du comportement Introduction aux bases théoriques des principales techniques en modification du comportement, les principaux courants de recherche et les applications aux troubles du comportement en milieu scolaire, clinique et social. Préalable(s): PSYCE 104 ou SCI 100. Note: Ce cours n'est pas accessible aux étudiants ayant ou postulant des crédits pour PSYCE 281.
Course that Includes Sustainability	Faculté Saint-Jean	-	SC PO 261	Relations internationales I	Undergraduate	SC PO261 - Relations internationales I Introduction au rôle de l'État au sein du système international ayant pour but de développer une connaissance des événements contemporains internationaux. Ce cours couvre la nature de la politique étrangère et la dynamique d'interaction entre les États. Préalable(s): SC PO 101 ou SC PO 102 ou POL S 101.
Course that Includes Sustainability	Faculté Saint-Jean	-	SC PO 262	Relations internationales II	Undergraduate	SC PO262 - Relations internationales II Introduction aux problèmes contemporains de relations internationales ayant pour but de développer une connaissance du système international. Ce cours porte sur le rôle des institutions internationales, des acteurs supra étatiques et non-étatiques, ainsi que certains enjeux liés à la mondialisation.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Course that Includes Sustainability	Faculté Saint-Jean	-	SC PO 320	La politique du systeme de sante au Canada	Undergraduate	SC PO320 - La politique du système de santé au Canada Le développement du système de santé canadien, ses composantes législatives et philosophiques ainsi que son financement et son organisation; l'étude comparative des défis au système de santé canadien posés par les enjeux financiers, l'accès universel et les modes alternatifs. Note(s): (1) La priorité sera accordée aux étudiants du BScInf (bilingue).(2) Ce cours n'est pas accessible aux étudiants ayant ou postulant des crédits pour POL S 321 ou 322.
Course that Includes Sustainability	Faculté Saint-Jean	-	SOCIE 100	Introduction à la sociologie	Undergraduate	SOCIE100 - Introduction à la sociologie Examen de la théorie, des méthodes et de la substance de la sociologie. Étude de la façon dont les sociétés comprennent la culture, la socialisation, la déviance, la stratification et les groupes. Le procès de transformation sociale par les mouvements sociaux, l'industrialisation, etc. Note: Ce cours n'est pas accessible aux étudiants ayant des crédits en SOCIE 300.
Course that Includes Sustainability	Faculté Saint-Jean	-	SOCIE 368	Étude des minorités et des groupes ethniques	Undergraduate	SOCIE368 - Étude des minorités et des groupes ethniques Analyse de processus sociaux qui permettent le développement et la compréhension du statut des minorités. Étude de cas des relations entre les groupes ethniques et minoritaires fondée sur les travaux réalisés à l'échelle nationale. Préalable: SOCIE 100.
Course that Includes Sustainability	Faculté Saint-Jean	-	SOCIE 371	La famille	Undergraduate	SOCIE371 - La famille Le système familial vu dans le contexte de l'histoire et de la rencontre des cultures. Étude du système familial dans les sociétés contemporaines, soulignant les aspects caractéristiques de l'institution et ses tendances actuelles.
Course that Includes Sustainability	Faculté Saint-Jean	-	MICRE 265	Microbiologie générale	Undergraduate	MICRE265 - Microbiologie générale Ce cours se focalisera sur la structure et la physiologie des bactéries libres et pathogènes. La diversité de leurs activités métaboliques, l'interaction des microbes avec leur environnement, les relations symbiotiques et la communication intercellulaire sont les sujets principaux. Les lectures et les exercices des laboratoires permettent l'exploration de la microbiologie de base, de la microbiologie environnementale, de la microbiologie moléculaire et de la production de produits importants d'un point de vue médical ou économique grâce à la biotechnologie microbienne. Préalable(s) : BIOL ou BIOLE 107 et CHEM ou CHIM 164 ou 261. SCI 100 peut être utilisé comme préalable en remplacement de BIOL 107 et CHEM 261 Note: Ce cours n'est pas accessible aux étudiants ayant ou postulant des crédits pour MICRB 265.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Course that Includes Sustainability	Faculté Saint-Jean	-	MAFSJ 504	Enjeux canadiens	Graduate	MAFSJ504 - Enjeux canadiens Analyse critique des enjeux portant sur le Canada. Culture et institutions en relation avec les contextes historiques et sociaux. Relations et conflits socio-politiques. Relations de sexe/genre, race, langue et classes. Nationalisme, régionalisme et mondialisation. Relations économie, société et État. Peut comprendre des sections Alternative Delivery; veuillez consulter le Fees Payment Guide dans la section University Regulations and Information for Students de l'annuaire. Note: Ce cours n'est pas accessible aux étudiants ayant ou postulant des crédits pour ETCAN 504.
Course that Includes Sustainability	Law	-	LAW 507	Canadian human rights law	Undergraduate	LAW507 - Canadian Human Rights Law This course focuses on the practice of human rights law in Canada. The importance of anti- discrimination legislation will be discussed, as will the development, interpretation, and enforcement of the Canadian Human Rights Act and the provincial legislative schemes. Reference will also be made to the international context and to the equality provisions of the Canadian Charter of Rights and Freedoms. Students will also learn the practical aspects of litigating a human rights case in Canada.
Course that Includes Sustainability	Law	-	LAW 543	Basic oil and gas law	Undergraduate	LAW543 - Basic Oil and Gas Law The origin, occurrence, and production of oil and gas; the nature of interests in oil and gas; the acquisition and disposition of interests in oil and gas; the rights and duties of parties under oil and gas leases; pooling of oil and gas interests; acquisition of surface leases and pipeline easements.
Course that Includes Sustainability	Medicine & Dentistry	Biomedical engineering	BME 511	Stem cell engineering	Graduate	BME511 - Stem Cell Engineering This course will give an overview of the stem cell biology and biomedical applications. Topics will include biological aspects of stem cells, environmental factors and signals that are implicated in regulating stem cell fate, the practical use of stem cells for tissue engineering and cellular therapies. The course will highlight techniques for engineering of stem cells and their micro-environments. The ethical, legal, and regulatory issues that accompany current and emerging stem cell engineering applications will be also discussed. This course is designed for upper undergraduates and graduate students with a strong interest in stem cell biology and stem cell engineering, and the desire to actively contribute to discussions in the class. Pre-requisites: BME 320 or consent of instructor.
Course that Includes Sustainability	Medicine & Dentistry	Dentistry & Dental Hygiene	D HYG 320	Health education and leadership	Undergraduate	D HYG320 - Health education and leadership This course provides teaching and leadership skills for the dental hygienist through lecture and a teaching practicum. Topics include learning theory, teaching methods, health literacy, cultural competence and public speaking. Teaching to an audience is practiced in two different community settings.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Course that Includes Sustainability	Medicine & Dentistry	Dentistry & Dental Hygiene	D HYG 322	Population health, health promotion, and community	Undergraduate	D HYG322 - Population health, health promotion, and community This course prepares students with an understanding of the factors that affect the health and well-being of the population. Students will learn about the determinants of health and suggest strategies for working with other disciplines and community agencies to affect health outcomes. The course demonstrates applied public health principles in today's dental public health practice. Concepts of dental public health practice, examples of current programming in Alberta and Canada, and evidence-based public health prevention will be studied in context of the dental public health practice model.
Course that Includes Sustainability	Medicine & Dentistry	Dentistry & Dental Hygiene	D HYG 422	Health information and policy	Undergraduate	D HYG422 - Health Information and Policy This course examines the role policy plays in influencing general and oral health in a community setting. Students will utilize the Dental Hygiene Process of Care (assess, plan, implement and evaluate) as a framework for designing a community oral health plan to meet an identified need. Also offered as a distance course pursuant to enrolment quota.
Course that Includes Sustainability	Medicine & Dentistry	Dentistry & Dental Hygiene	D HYG 440	Advocacy for change in healthcare	Undergraduate	D HYG440 - Advocacy for Change in Healthcare Provides an overview of the professional, social, political and global trends and issues affecting health and health care delivery. Through the application of a framework for planned change, this course will demonstrate how health care professionals can act as change agents in society. Also offered as a distance course pursuant to enrolment quota.
Course that Includes Sustainability	Medicine & Dentistry	Laboratory Medicine and Pathology	LABMP 550	Analytical and Environmental Toxicology	Graduate	LABMP550 - Analytical and Environmental Toxicology Students will integrate knowledge and practical skills in the areas of environmental chemistry and toxicology. The student will learn to predict how chemicals can move and transform in the environment based on physical and chemical properties, how this affects human and environmental exposure, and consequences thereof for health. The basic principles of toxicology will be taught and students will gain appreciation for the diversity of physiological and/or biochemical mechanisms by which toxicants cause their adverse effects, and the various defenses our bodies have evolved to employ. Open to graduate students in Laboratory Medicine and Pathology. Students from other departments may register with consent of the instructor.
Course that Includes Sustainability	Medicine & Dentistry	Medicine	MED 516A	Physicianship I	Undergraduate	MED516A - Physicianship I This course will encompass all aspects of the development of a physician including but not limited to professionalism, evidence based medicine, ethics, health equity, patient safety, patient immersion experiences, early clinical experiences, communication skills and physical examination, public health, health systems. Open only to students registered in the MD Program.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Course that Includes Sustainability	Medicine & Dentistry	Medicine	MED 516B	Physicianship I	Undergraduate	MED516B - Physicianship I This course will encompass all aspects of the development of a physician including but not limited to professionalism, evidence based medicine, ethics, health equity, patient safety, patient immersion experiences, early clinical experiences, communication skills and physical examination, public health, health systems. Open only to students registered in the MD Program.
Course that Includes Sustainability	Medicine & Dentistry	Medicine	MED 526A	Physicianship II	Undergraduate	MED526A - Physicianship II This course will build upon the knowledge and skills derived from Physicianship I. This course will encompass all aspects of the development of a physician, including but not limited to professionalism, ethics, health equity, patient safety, patient immersion experiences, early clinical experiences, communication skills and physical examination, public health, health systems, and evidence based medicine. Open only to students registered in the MD Program.
Course that Includes Sustainability	Medicine & Dentistry	Medicine	MED 526B	Physicianship II	Undergraduate	MED526B - Physicianship II This course will build upon the knowledge and skills derived from Physicianship I. This course will encompass all aspects of the development of a physician, including but not limited to professionalism, ethics, health equity, patient safety, patient immersion experiences, early clinical experiences, communication skills and physical examination, public health, health systems, and evidence based medicine. Open only to students registered in the MD Program.
Course that Includes Sustainability	Medicine & Dentistry	Medicine	MED 531	Physicianship III/Transitions	Undergraduate	MED531 - Physicianship III /Transitions This course serves as a bridge of learning opportunities of the first two years to the last two years of medical school. It will include: performance of clinical skills within a simulated clinical environment, approach to radiological problems, quality improvement, and social media in medicine, clinical reasoning, and awareness of well-being. This course will build upon the knowledge derived from the Physicianship I and II courses to demonstrate commitment, honesty, integrity, professionalism and compassion in their clinical work. It will be delivered throughout the third year. Open only to students registered in the MD Program.
Course that Includes Sustainability	Medicine & Dentistry	Medicine	MED 541	Physicianship IV/Transitions	Undergraduate	MED541 - Physicianship IV /Transitions This course will build upon the knowledge derived from the Physicianship I, II and III courses and will occur throughout the 4th year. Open only to students registered in the MD Program.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Course that Includes Sustainability	Medicine & Dentistry	Pharmacology	PMCOL 305	An introduction to the pharmacology of drug abuse	Undergraduate	PMCOL305 - An Introduction to the Pharmacology of Drug Abuse An introduction to the complexities of drug abuse and the drugs of abuse. The student will be introduced to the psychological and social problems of drug abuse and their impact upon the abuser. Objectives of the course are to develop an understanding of addiction and a detailed knowledge of the nature of the commonly abused substances. Emphasis will be placed upon the pharmacology of drugs of abuse. Prerequisites: one of the following BIOCH 200, BIOL 201, CELL 201, PHYSL 210, PHSYL 212 and 214, PMCOL 201, PSYCO 275, ZOOL 241 and 242.
Course that Includes Sustainability	Medicine & Dentistry	Psychiatry	PSYCI 515	Maternal, child, and adolescent mental health	Graduate	PSYCI515 - Maternal, Child and Adolescent Mental Health Lectures and seminars on mental health from the perspective of the developing child and adolescent. As the foundations of mental health are determined by the complex interplay of genetics and the environment, issues related to maternal mental health and potential impact on the developing foetus are also examined. Prerequisite: consent of the Department.
Course that Includes Sustainability	Medicine & Dentistry	Radiology and diagnostic imaging	RADTH 328	Health care advocacy and policy	Undergraduate	RADTH328 - Health Care Advocacy and Policy Examines the role that policy and industry plays in health care delivery. The course provides an overview of the social, regulatory, cultural, and financial issues impacting health care delivery in Canada and abroad. The following topics will be analyzed: Codes of conduct, health ethics, standards of practice, social determinants, quality assurance, and current practice issues related to health care treatment. Special emphasis will be placed on examining the current role of oncology related practice and policy in Canada. Prerequisite: Registration in the Radiation Therapy Program.
Course that Includes Sustainability	Native Studies	-	NS 240	Introduction to Aboriginal legal issues	Undergraduate	NS240 - Introduction to Aboriginal Legal Issues This course is designed to give students an introduction to the development of Aboriginal rights law in Canada. It examines the colonial context of Canadian constitutional law, identifies sources of Aboriginal law, discusses the Treaty and Aboriginal rights and the nature of the fiduciary obligations of the Crown to Aboriginal peoples. Sections may be offered in a Cost Recovery format at an increased rate of fee assessment; refer to the Fees Payment Guide in the University Regulations and Information for Students section of the Calendar.
Course that Includes Sustainability	Native Studies	-	NS 300	Traditional cultural foundations I	Undergraduate	NS300 - Traditional Cultural Foundations I Introduces students to the diversity of North American Native peoples. Native traditions are treated as aspects of dynamic cultural systems that have enabled Native peoples to survive and thrive in the centuries prior to European arrival, to resist assimilation efforts, and to persist as culturally distinct peoples. Prerequisites: NS 110, 111 and 240 or 290 or consent of the Faculty.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Course that Includes Sustainability	Native Studies	-	NS 320	Aboriginal governments and politics	Undergraduate	NS320 - Aboriginal Governments and Politics The description, analysis, and principles of various Aboriginal governments will be examined. The relative merits of constitutional, legislative, and administrative options for realizing Aboriginal self-government will be compared. A study of the international and Canadian examples of local and regional Aboriginal governments in practice will be an important focus of this course. Prerequisites: NS 110, 111 and 240 or 290 or consent of the Faculty. Sections may be offered in a Cost Recovery format at an increased rate of fee assessment; refer to the Fees Payment Guide in the University Regulations and Information for Students section of the Calendar.
Course that Includes Sustainability	Native Studies	-	NS 330	Native economic development	Undergraduate	NS330 - Native Economic Development This course will review underlying factors which affect the economies of Native communities and examine different approaches to Native Economic development, including community, corporate and entrepreneurial business approaches. The Native perspective to Native Economic Development will be a principal theme. The objective of the course will be to assess approaches to the identification, planning, and implementation of economic development strategies for Native communities. Prerequisites: NS 110, 111 and 240 or 290 or consent of the Faculty. Sections may be offered in a Cost Recovery format at an increased rate of fee assessment; refer to the Fees Payment Guide in the University Regulations and Information for Students section of the Calendar.
Course that Includes Sustainability	Native Studies	-	NS 340	Aboriginal legal issues	Undergraduate	NS340 - Aboriginal Legal Issues A critical overview of Aboriginal legal issues, with particular reference to Alberta and the Northwest Territories. Includes an introduction to customary law and emphasizes the Constitution Acts of Canada, selected federal and provincial legislation, treaties, and major court cases. Prerequisites: NS 110, 111 and 240 or consent of the Faculty. Sections may be offered in a Cost Recovery format at an increased rate of fee assessment; refer to the Fees Payment Guide in the University Regulations and Information for Students section of the Calendar.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Course that Includes Sustainability	Native Studies	-	NS 345	Management Issues in Native Communities	Undergraduate	NS345 - Management Issues in Native Communities The course introduces the major management issues commonly faced by contemporary Native communities, public administration, and business organizations as a result of their unique cultural, social, economic, demographic, and political environment. Students will acquire an orientation to the management process and to modern management theory and practices. In addition, opportunities will be made to develop and practice the managerial skills involved in diagnosis, analysis and resolution of management issues frequently encountered in Native organizations. Prerequisites: NS 110, 111 and 240 or 290 or consent of the Faculty. Sections may be offered in a Cost Recovery format at an increased rate of fee assessment; refer to the Fees Payment Guide in the University Regulations and Information for Students section of the Calendar.
Course that Includes Sustainability	Native Studies	-	NS 355	Native Oral Traditions and Indigenous Knowledge	Undergraduate	NS355 - Native Oral Traditions and Indigenous Knowledge This course considers oral traditions as aspects of broader, culturally-defined systems of knowledge, in which stories are vehicles for encoding and transmitting knowledge about the people, their culture, and their history. It focuses on new academic and community-based approaches, as well as the complementarity of oral traditions/Indigenous knowledge and Western science. Students will explore the evolving roles of oral traditions for contemporary Native peoples. Prerequisites: NS 110, 111 and 240 or 290 or consent of the Faculty.
Course that Includes Sustainability	Native Studies	-	NS 372	Métis politics	Undergraduate	NS372 - Métis Politics An examination of various Métis political debates: identity, recognition, nationalism, political organizing, self-governance structures, constitutionalization of rights, and theories of Indigenous politics. Prerequisites: NS 110, 111 and 240 or 290 or consent of the Faculty. Sections may be offered in a Cost Recovery format at an increased rate of fee assessment; refer to the Fees Payment Guide in the University Regulations and Information for Students section of the Calendar.
Course that Includes Sustainability	Native Studies	-	NS 390	Research Methods in Native Studies	Undergraduate	NS390 - Research Methods in Native Studies A survey of different disciplinary methods for conducting Native Studies research and data analysis, this course will also review and critique strategies and techniques applied by social science researchers with Indigenous peoples. Prerequisites: NS 110, 111 and 290 or consent of Faculty.
Course that Includes Sustainability	Native Studies	-	NS 440	Indigenous treaties and agreements	Undergraduate	NS440 - Indigenous Treaties and Agreements An exploration of the historical and contemporary issues associated with treaties. Pre- and post-1867 Indian treaties and modern agreements in Canada will be examined. Prerequisite: One 300-level NS course or consent of the Faculty.

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Course that Includes Sustainability	Native Studies	-	NS 441	Indigenous land claims and agreements	Undergraduate	NS441 - Indigenous Land Claims and Agreements An exploration of the historical and contemporary issues associated with Indigenous land claims agreements. The background negotiations, and implementation of modern agreements in Canada will be the focus of this course. Prerequisite: One 300-level NS course or consent of the Faculty. NS 440 is also recommended.
Course that Includes Sustainability	Native Studies	-	NS 476	Perspectives on Aboriginal Health and Well-Being	Undergraduate	NS476 - Perspectives on Aboriginal Health and Well-Being A critical overview of the literature and contemporary health issues affecting Aboriginal peoples in Canada. Special focus is on the meanings of health, socio-economic and environmental determinants of health and the socio-political landscape of Aboriginal health research and healthcare policy. Prerequisites: NS 376 or consent of the Faculty.
Course that Includes Sustainability	Native Studies	-	NS 490	Community-Based Research	Undergraduate	NS490 - Community-Based Research A seminar exploring the issues in the area of community-based research. The course will be organized primarily around the examination of case studies. Methodological concerns will focus on the political, cultural, ethical, and practical aspects of conducting community-based research in conjunction with Native groups and communities. Prerequisite: NS 390.
Course that Includes Sustainability	Nursing	-	NURS 685	Migration and health in the Canadian context	Graduate	NURS685 - Migration and Health in the Canadian Context The focus of this course is on critical analysis of issues related to migration and health in the Canadian context. Determinants of health are used as a framework to define relevant topics, explore theoretical perspectives, and incorporate knowledge from a variety of disciplines. Research challenges in conceptualization and implementation of immigrant health projects are explored. The concepts of cultural competence and cultural safety are examined in depth and implications for policy and research are explored.
Course that Includes Sustainability	Pharmacy and Pharmaceutical Sciences	-	PHARM 453	Intercultural exploration of pharmacy and health	Undergraduate	PHARM453 - Intercultural Exploration of Pharmacy and Health This course explores the relationship between culture, diet, lifestyle and health in a Mediterranean environment. Students will examine factors that influence health, including the geo-political, socioeconomic, and cultural factors. Patient care and pharmacist roles in the prevention and/or management of chronic disease are considered. This course is taught in Italy. Please contact the Faculty for additional information. (Restricted to Pharmacy students entering the fourth year of the program.) Sections offered in a Cost Recovery format at an increased rate of fee assessment; refer to the Fees Payment Guide in the University Regulations and Information for Students.
Course that Includes Sustainability	Kinesiology, Sport, and Recreation	-	HE ED 320	Social dimensions of health promotion	Undergraduate	HE ED320 - Social Dimensions of Health and Health Promotion An examination of contemporary, social, political and economic factors as they affect health and well-being, with a particular focus on understanding the social determinants of health.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Course that Includes Sustainability	Kinesiology, Sport, and Recreation	-	HE ED 321	Psychological dimensions of health promotion	Undergraduate	HE ED321 - Psychological Dimensions of Health Promotion An individual-based analysis of health-related behavior and behavior change. Emphasis will be placed upon social psychological approaches to understanding and changing such health-related behaviors as physical activity involvement, dietary practices, smoking, alcohol and drug abuse within a social context.
Course that Includes Sustainability	Kinesiology, Sport, and Recreation	-	INT D 280	The Mountain World: Introduction to interdisciplinary mountain studies	Undergraduate	INT D280 - The Mountain World: Introduction to Interdisciplinary Mountain Studies An interdisciplinary study of the physical and human dimensions of mountain environments. Content includes the physical (glaciers, climate, geology, etc.), biological (flora, fauna, ecology, etc.), physiological (human bodies at altitude, performance, sport, etc.), and cultural (societies, literature's, histories, etc.) dimensions of these unique regions, as well as a critical analysis of the processes of change and influence shaping local and regional mountain environments around the globe, past and present. (Offered jointly by the Faculty of Kinesiology, Sport, and Recreation and the Faculty of Science) [Kinesiology, Sport, and Recreation]
Course that Includes Sustainability	Kinesiology, Sport, and Recreation	-	KRLS 207	Adapted physical activity and leisure for diverse populations	Undergraduate	KRLS207 - Adapted Physical Activity and Leisure for Diverse Populations An introduction to research, theory and practice pertaining to participation in physical activity and leisure by persons with impairments. The course explores the intersection of social influences and personal interests on participation in active lifestyles. Credit will be granted for only one of KRLS 207 or PERLS 207.
Course that Includes Sustainability	Kinesiology, Sport, and Recreation	-	KRLS 304	Advanced sociology of sport and leisure	Undergraduate	KRLS304 - Advanced Sociology of Sport and Leisure Building on introductory sociological concepts from KRLS 104 and historical foundations from KRLS 204, the course focuses on developing a critical understanding of the power relations operating through contemporary social and cultural processes that shape the body, sport and leisure, such as colonialism, consumer culture, globalization and neo-liberalism. Prerequisites: KRLS 104 and 204. Credit will be granted for only one of KRLS 304 or PERLS 304.
Course that Includes Sustainability	Kinesiology, Sport, and Recreation	-	KRLS 323	Indigenous Perspectives on Activity, Health, and Wellness in Canada	Undergraduate	KRLS323 - Aboriginal Peoples and Physical Practices: Canadian Perspectives This course explores ways in which physical practices influence the health of Aboriginal peoples. In this context health is defined as a state of balance involving body, emotions, mind, and spirit. The various forms of physical activity, sport, recreation, and leisure activities in which Aboriginal peoples participate will be examined. Prerequisite: KRLS 104 or NS 111. Credit will be granted for only one of KRLS 323 or PERLS 323.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Course that Includes Sustainability	Kinesiology, Sport, and Recreation	-	KRLS 504	The history of nature, parks, and travel	Graduate	KRLS504 - The History of Nature, Parks, and Travel Examines history at the crossroads of nature, parks, and travel. It concerns the formation of ideas about nature expressed through leisure. Topics include: adventure, exploration, national parks, wildlife conservation, mountaineering, canoeing, wilderness art, recreation, youth movements, urban parks, holidays, cultural heritage, and tourism. Attention is given to the study of Canadian life in the 19th and 20th centuries, along with international tangents. Credit will be granted for only one of KRLS 504 or PERLS 504.
Course that Includes Sustainability	Kinesiology, Sport, and Recreation	-	KRLS 507	Sport and popular culture	Graduate	KRLS507 - Sport and Popular Culture An examination of the place of sport in contemporary Canadian popular culture, with three principal aims: 1) To offer an introduction to Cultural Studies and its key concepts; 2) To give students a chance to think about how social difference and inequality work in contemporary Canadian society, and how it is reflected in the world of sport and leisure; and 3) To examine the effects of both cultural and economic globalization on sport and Canadian society. Credit will be granted for only one of KRLS 507 or PERLS 507.
Course that Includes Sustainability	Kinesiology, Sport, and Recreation	-	RLS 100	Life, leisure, and the pursuit of happiness	Undergraduate	RLS100 - Life, Leisure, and the Pursuit of Happiness Examination of the nature, characteristics, and functions of leisure in modern Canada. Review of relationships between leisure and time, play, work, family, education, ethnicity, gender, and environment. Discussion of ideas about conventional leisure, serious leisure, and deviant leisure. Overview of the structure of the Canadian recreation and tourism delivery systems.
Course that Includes Sustainability	Kinesiology, Sport, and Recreation	-	RLS 130	Collaborative skills and processes for community recreation and leisure	Undergraduate	RLS130 - Collaborative Skills and Processes for Community Recreation and Leisure Study of the social and political processes through which groups and individuals work to mobilize resources and establish relationships to fulfill individual and community recreation/leisure needs. Basic personal communication and conflict skills for understanding, analyzing, and working through social and political processes will be examined. Note: Credit will be granted for only one of RLS 130 or 230. Prerequisite: RLS 100.
Course that Includes Sustainability	Kinesiology, Sport, and Recreation	-	RLS 263	Principles of tourism	Undergraduate	RLS263 - Principles of Tourism This course presents an overview and explores the basic principles of the tourism system (tourist, travel, destinations, and marketing), underlying influences such as cultural, social, economic, and psychological aspects, areas of major tourist activity such as natural spaces, constructed facilities, and cultural events, and the impact of tourism upon the attraction, local communities, and national arenas. NOTE: Field Trips are an integral and required component of this Course. Requires payment of additional student instructional support fees. Refer to the Fees Payment Guide in the University Regulations and Information for Students section of the Calendar.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Course that Includes Sustainability	Kinesiology, Sport, and Recreation	-	RLS 331	Leisure Education	Undergraduate	RLS331 - Leisure Education A total development process through which individuals develop an understanding of self, leisure, and the relationship of leisure to their own lifestyles and the fabric of society. Examination of determining the place and significance leisure has in one's life. Prerequisite: RLS 100.
Course that Includes Sustainability	Kinesiology, Sport, and Recreation	-	RLS 400	Philosophies of leisure	Undergraduate	RLS400 - Philosophies of Leisure This course examines selected philosophical perspectives related to leisure, recreation, work, play, and quality of life. The course explores the philosophical implications for the recreation profession in Canada and issues related to the future of leisure in Canadian society. Note: Credit will be granted for only one of RLS 300 or 400.
Course that Includes Sustainability	Kinesiology, Sport, and Recreation	-	RLS 465	Natural area tourism	Undergraduate	RLS465 - Natural Area Tourism This course examines the different types of tourism that can occur in natural areas (e.g. adventure, nature based, wildlife, ecotourism) from the perspective of tourists, trip organizers and guides, planners and managers, local residents, and indigenous people. Prerequisite: RLS 263.
Course that Includes Sustainability	Kinesiology, Sport, and Recreation	-	RLS 510	Concepts and theories of leisure and recreation	Graduate	RLS510 - Concepts and Theories of Leisure and Recreation Concepts, theories, and perspectives of leisure and recreation are examined in relation to the psychological, sociological, cultural, political, and global significance of leisure. Practical implications will also be explored.
Course that Includes Sustainability	Rehabilitation Medicine	Occupational Therapy	OCCTH 507	Occupation and society: Theory and practice	Graduate	OCCTH507 - Occupation and Society: Theory and Practice Theory and philosophies underpinning occupational therapy and occupational science.
Course that Includes Sustainability	Rehabilitation Medicine	Occupational Therapy	OCCTH 510	Theory, evidence and skills in practice: Application	Graduate	OCCTH510 - Theory, Evidence and Skills in Practice: Application Application of occupational therapy principles and skills, supported by evidence based practice, in physical and mental health, functioning, participation and activities. Corequisites: All Year 1 Fall Term Courses.
Course that Includes Sustainability	Rehabilitation Medicine	Occupational Therapy	OCCTH 517	Foundations of psychiatry and mental health practice for occupational therapists	Graduate	OCCTH517 - Foundations of Psychiatry and Mental Health Practice for Occupational Therapists Foundational knowledge of the description, mechanism and classification of psychiatric phenomenon required for the provision of client centred, evidence-informed occupational therapy with persons experiencing chronic and acute mental illness.
Course that Includes Sustainability	Rehabilitation Medicine	Occupational Therapy	OCCTH 518	Assessment and interventions for occupational therapists in mental health practice	Graduate	OCCTH518 - Assessment and Interventions for Occupational Therapists in Mental Health Practice Occupational therapy theories, assessments, and intervention techniques aimed at mental health promotion, illness/injury prevention and facilitation of recovery and occupational performance across the lifespan and settings.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Course that Includes Sustainability	Rehabilitation Medicine	Occupational Therapy	OCCTH 519	Enabling occupation: Advanced practices in mental health	Graduate	OCCTH519 - Enabling Occupation: Advanced Practices in Mental Health A discussion and analysis of selected topics of current interest in psychiatry as related to occupational therapy practice. Selected complex cases and special populations are addressed.
Course that Includes Sustainability	Rehabilitation Medicine	Occupational Therapy	OCCTH 520	Theory, evidence and skills in practice: Integration	Graduate	OCCTH520 - Theory, Evidence and Skills in Practice: Integration Case based clinical reasoning to integrate occupational therapy theory and values in the selection of intervention media and modalities for physical and mental health, functioning, participation, and activities. Prerequisites: Completion of all Year 1 Fall Term courses. Corequisites: All Year 1 Winter Term courses.
Course that Includes Sustainability	Rehabilitation Medicine	Occupational Therapy	OCCTH 530	Theory, evidence and skills in practice: Synthesis	Graduate	OCCTH530 - Theory, Evidence and Skills in Practice: Synthesis The use and design of interventions for physical and mental health, functioning, participation, and activities supported by the analysis and synthesis of occupational therapy principles. Corequisites: All Year 2 Fall Term courses.
Course that Includes Sustainability	Rehabilitation Medicine	Occupational Therapy	OCCTH 540	Theory, evidence and skills in practice: Evaluation	Graduate	OCCTH540 - Theory, Evidence and Skills in Practice Evaluation Application and evaluation of occupational therapy intervention media and modalities for physical and mental health functioning, participation, and activities. Prerequisites: Completion of all Year 1 academic and fieldwork courses and Year 2, Fall Term academic and fieldwork courses. Corequisites: All Year 2 Winter term courses.
Course that Includes Sustainability	Rehabilitation Medicine	Occupational Therapy	OCCTH 558	Enabling Occupation: Community	Graduate	OCCTH558 - Enabling Occupation: Community Application and integration of occupational therapy principles and practice in community settings. The focus is on complex care and chronic degenerative conditions.
Course that Includes Sustainability	Rehabilitation Medicine	Physical Therapy	PTHER 524	Professional issues I	Graduate	PTHER524 - Professional Issues I Introduction to physical therapy including theory and concepts of rehabilitation science. Content will include communication, professional ethics and conduct, disability issues, models of disablement, client centered principles and self reflection. A model of practice and clinical decision making will be presented.
Course that Includes Sustainability	Rehabilitation Medicine	Physical Therapy	PTHER 525	Professional issues II	Graduate	PTHER525 - Professional Issues II - Health Care, Ethics and Medical-Legal Issues Credit. Continuation of the study of professional issues relevant to the practice of physical therapy. Ethical, cultural, medical-legal and regulatory issues and their impact on professional practice. Prerequisites: INT D 410 and PTHER 524.
Course that Includes Sustainability	Rehabilitation Medicine	Physical Therapy	PTHER 526	Professional issues III	Graduate	PTHER526 - Professional Issues III The study of professional roles, responsibilities and essential competencies within public and private practice with an emphasis on professional communication, assignment of care to physical therapy assistants, patient and colleague education, patient safety, organizational structures, health policy and administration. Prerequisite: PTHER 525.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Course that Includes Sustainability	Rehabilitation Medicine	Faculty of Rehabilitation Medicine	REHAB 546	Sex positivity: In theory and practice	Graduate	REHAB546 - Sex Positivity: In Theory and Practice This course will give students a better understanding of the importance of using a sex-positive approach with clients. The course will explore what shapes an individual's sexual morals, values, and beliefs. The impact of religion, culture, media, and the law on sexuality will be emphasized. This course will help students become more aware of their sexual attitudes and offer strategies to become more effective sexual health practitioners. Prerequisite: REHAB 544. Sections offered in a Cost Recovery format at an increased rate of fee assessment; refer to the Fees Payment Guide in the University Regulations and Information for Students.
Course that Includes Sustainability	Rehabilitation Medicine	Faculty of Rehabilitation Medicine	REHAB 502	Indigenous Health - Interprofessional Practice	Graduate	REHAB502 - Indigenous Health - Interprofessional Practice This course is offered in response to the Truth and Reconciliation Commission of Canada: Calls to Action. Students will be introduced to contemporary issues, cultural safety and interprofessional practices relevant to Indigenous health in Canada.
Course that Includes Sustainability	School of Public Health	-	SPH 500	Introduction to health policy and management	Graduate	SPH500 - Introduction to Health Policy and Management The course provides an overview of the development, organization, financing, delivery and management of the Canadian health system. Students will examine the health care system's central assumptions, the distribution of power and authority within the system, current debates about the system's future, and the potential for political action. Recognizing that the existing health care system is the result of power struggles and contestable political choices, the lectures and readings will encourage students to think critically about health care policy in Canada. By the end of the course, students should be formulating their own opinions about future directions for health care. May contain alternate delivery sections; refer to the Fees Payment Guide in the University Regulations and Information for Students section of the Calendar.
Course that Includes Sustainability	School of Public Health	-	SPH 501	Determinants of health	Graduate	SPH501 - Determinants of Health Students will be expected to apply knowledge of selected social determinants of health to multi-level interventions to improve health of individuals, communities, and populations. The course takes an ecological approach to the analysis of health needs and the design of public health actions. Students will apply key social science theories to the analysis of social determinants of health. May contain alternate delivery sections; refer to the Fees Payment Guide in the University Regulations and Information for Students section of the Calendar.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Course that Includes Sustainability	School of Public Health	-	SPH 510	Health promotion with communities	Graduate	SPH510 - Health Promotion with Communities In this course, learners focus on people taking collective action to influence change. Comprehensive strategies for promoting health are examined and analyzed by example, framed by "empowerment" education, creating supportive environments, strengthening community action and advocating for healthy policies. Learners explore questions and challenges in applying health promotion principles, concepts and theories to practice at the community level. The value of democratic approaches to decision-making is an underlying premise for this course. Pre or corequisite: SPH 501. Note: Credit may not be obtained for both HPS 510 and SPH 510. Credit will be granted for only one of SPH 510 or NURS 531. May contain alternate delivery sections; refer to the Fees Payment Guide in the University Regulations and Information for Students section of the Calendar.
Course that Includes Sustainability	School of Public Health	-	SPH 511	Environmental contaminant exposure assessment	Graduate	SPH511 - Environmental Contaminant Exposure Assessment Principles and practice of monitoring exposure to environmental contaminants, external and internal dose. Biomarkers for environmental contaminant dose estimation. Environmental and biological sampling. Routes of exposure, absorption, and distribution. Note: Credit may not be obtained for both PHS 511 and SPH 511.
Course that Includes Sustainability	School of Public Health	-	SPH 512	Environmental risk assessment and management	Graduate	SPH512 - Environmental Risk Assessment and Management Concepts of risk to health and environment, assessment, management and communication of risk, hazard identification, links to exposure assessment, toxicology and epidemiology, dose response assessment, risk characterization, regulatory and policy science. Note: Credit may not be obtained for both PHS 512 and SPH 512.
Course that Includes Sustainability	School of Public Health	-	SPH 516	One-health	Graduate	SPH516 - One-Health "One Health" is an emerging paradigm in public and veterinary health which recognizes that human, animal and environmental health are interlinked. The course will address food and water safety, the increase in prevalence of antibiotic resistant organisms, emerging infectious zoonotic diseases, environmental protection and environmental sustainability, emphasizing the interaction of these diverse yet interconnected disciplines in protecting the health of populations. Lectures are the same as for SPH 416, but with additional assignments and evaluation appropriate to graduate studies. Note: Credit may not be obtained for both PHS 516 and SPH 516. Credit will only be given for one of AFNS 416, 516 or SPH 416, 516. Prerequisite: consent of Instructor.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Course that Includes Sustainability	School of Public Health	-	SPH 555	Foundations of Public Health Research	Graduate	SPH555 - Foundations of Public Health Research The aim of this course is for students to gain competencies in three areas: determinants of health and strategies to address these; ontologies, epistemologies and research designs relevant to public health research; knowledge mobilization and engaged scholarship. Sessions will usually comprise introductory interactive presentations and small/large group discussions. Class time and assignments are aimed at enhancing students' understanding, critical analysis and application of key concepts and selected issues related to Public Health, research methods used in Public Health and Knowledge translation.
Course that Includes Sustainability	School of Public Health	-	SPH 640	Introduction to global health	Graduate	SPH640 - Introduction to Global Health The aim of this course is to enable students to increase their understanding of historical and current determinants of global health and of the interventions to reduce global health inequities. Note: Credit may not be obtained for both PHS 640 and SPH 640.
Course that Includes Sustainability	Science	Biological Sciences	BIOL 333	Wetland Science and Management	Undergraduate	BIOL333 - Wetland Science and Management The course includes an introduction to the hydrology, biogeochemistry and ecology of wetland ecosystems. Topics covered include classification, geomorphic setting, distribution, functions and ecosystem services of wetlands. Human use, alteration and management of wetlands are examined. An emphasis is placed on wetlands and wetland management in Western Canada, including boreal peatlands and prairie marshes. A full day field trip on a Saturday is required. Prerequisite: one of BIOL 208, REN R 250, or EAS 201. Credit may be obtained in only one of BOT 333 and BIOL 333.
Course that Includes Sustainability	Science	Biological Sciences	BIOL 340	Global biogeochemistry	Undergraduate	BIOL340 - Global Biogeochemistry An introduction to biogeochemical cycles in the environment. Discusses processes and reactions governing cycles in the atmosphere, lithosphere, terrestrial ecosystems, freshwater wetlands and lakes, river estuaries, and the oceans. Outlines the global cycles of water, carbon, nitrogen, phosphorus, and sulfur. Group discussions will incorporate current topics in anthropogenic alterations of natural cycles that lead to ecosystem degradation. Prerequisites: CHEM 101 or SCI 100 and BIOL 208; MICRB 265 strongly recommended.
Course that Includes Sustainability	Science	Biological Sciences	BIOL 341	Ecotoxicology	Undergraduate	BIOL341 - Ecotoxicology An overview of the adverse effects of chemicals or physical agents on biological systems in an ecological context. This course takes a multidisciplinary approach to understanding biological effects and their assessment. Prerequisites: BIOL 208, ZOOL 241, or PHYSL 210, or 212 or 214 and CHEM 164 or 261, or instructor consent.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Course that Includes Sustainability	Science	Biological Sciences	BIOL 366	Northern ecology	Undergraduate	BIOL366 - Northern Ecology Examines the ecology of boreal and arctic ecosystems, including postglacial history, climate, geology, nutrient cycling and energy flow in forests, wetlands, lakes and marine systems, animal and plant adaptations to cold and current human impacts. Prerequisite: BIOL 208. Credit cannot be obtained for BIOL 366 and any of the following courses: REN R 365, 463, 466.
Course that Includes Sustainability	Science	Biological Sciences	BIOL 540	Advanced watershed ecohydrology	Graduate	BIOL540 - Advanced Watershed Ecohydrology The course will introduce students to theory and techniques employed in the analysis of physical, hydrological, chemical, and ecological properties of ecosystems using a watershed (catchment) approach. Focus will be on landscape approaches relating interactions or linkages between upland, wetland/riparian, and surface-water in the study of the natural ecohydrologic function and response to disturbance of watershed ecosystems. Emphasis will be placed on Boreal Alberta. Topics are covered through reading the literature and group discussions. Seminars are the same as for BIOL 440, but with additional assignments and evaluation appropriate to graduate studies. Prerequisite: consent of instructor. Credit cannot be obtained for both BIOL 440 and 540.
Course that Includes Sustainability	Science	Biological Sciences	BOT 330	Biodiversity and Ecosystem Function of Algae	Undergraduate	BOT330 - Biodiversity and Ecosystem Function of Algae The remarkable biodiversity of algae provides the foundation for most aquatic ecosystems around the world. This course emphasizes the evolution, taxonomy, and ecology of major groups of algae to illustrate relationships between their form and function in pristine and polluted environments. Laboratories will focus on the taxonomic diversity of algae through the use of field surveys of local streams and lakes, and experiments using our extensive algal culture collection. Prerequisite: 200-level Biology course. Both BOT 205 and BIOL 208 recommended. Offered in alternate years.
Course that Includes Sustainability	Science	Chemistry	CHEM 303	Environmental Chemistry I	Undergraduate	CHEM303 - Environmental Chemistry I The chemistry of environmental processes. Atmospheric chemistry; thermal and photochemical reactions of atmospheric gases including oxygen, ozone, hydroxy radical, and oxides of nitrogen and sulfur. Aquatic chemistry; characterization, reactions, and equilibria of dissolved species, water purification treatments. Metals and organohalides in the environment. Risk assessment. Prerequisites: CHEM 102 or SCI 100; CHEM 164 or 261; CHEM 263; and one 200-level CHEM course or CH E 243.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Course that Includes Sustainability	Science	Chemistry	CHEM 305	Environmental chemistry II	Undergraduate	CHEM305 - Environmental Chemistry II The lecture and laboratory portions of this course will highlight adsorption from aqueous solutions, convective/diffusive transport, vapour/solution equilibria, coagulation of colloids, sedimentation, ion exchange, computer modeling of complex systems, trace analysis of pesticides, chemical treatment of hazardous wastes. Quantitative calculations will be emphasized. The lecture component will provide theoretical background for experiments and instrumentation used for chemical measurements. Prerequisites: CHEM 263; CHEM 213 or 298 or 313; CHEM 303 or 373. Note: Restricted to students in the Environmental Physical Sciences and Chemistry (Honors, Specialization, and General Science with concentration in Chemistry) programs.
Course that Includes Sustainability	Science	Chemistry	CHEM 333	Inorganic Materials Chemistry	Undergraduate	CHEM333 - Inorganic Materials Chemistry Fundamentals of the synthesis, structure and properties of inorganic solids, thin films, and nanoscale materials, to be complemented with case studies of modern applications of inorganic materials; selected topics such as catalysis, molecular and nanoparticle-based computing, telecommunications, alternative energies, superconductivity, biomedical technologies, and information storage will be discussed. Techniques for characterization and analysis of materials on the nano and atomic level will be introduced. Prerequisite: CHEM 241.
Course that Includes Sustainability	Science	Chemistry	CHEM 436	Synthesis and Applications of Inorganic and Nano-materials	Undergraduate	CHEM436 - Synthesis and Applications of Inorganic and Nano-materials Introduction to methods of synthesizing inorganic materials with control of atomic, meso- and micro-structure. Topics include sol-gel chemistry, chemical vapor deposition, solid state reactions, solid-state metathesis and high-temperature self-propagating reactions, template directed syntheses of micro and mesoporous materials, micelles and colloids, synthesis of nanoparticles and nanomaterials. Applications of these synthetic techniques to applications such as photonic materials, heterogeneous catalysts, magnetic data storage media, nanoelectronics, display technologies, alternative energy technologies, and composite materials will be discussed. Prerequisite: CHEM 243 and one 300-level CHEM course; or CHEM 341; or CHEM 333; or consent of the instructor.
Course that Includes Sustainability	Science	Earth and Atmospheric Sciences	EAS 100	Planet Earth	Undergraduate	EAS100 - Planet Earth Introduction to the origin and evolution of the Earth and the solar system. Introduction to plate tectonics and the rock cycle. Simple energy balances and interactions between radiation and the atmosphere, land, oceans, ice masses, and the global hydrological cycle. Evolution of life, biogeography, and global climate in the context of geologic time. The carbon cycle. Human interaction with the Earth. Mineral and energy resources. Not available to students with credit in EAS 101, 102 or 201 or SCI 100 (Note: Students with credit in EAS 201 may take EAS 200.). [Faculty of Science]

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Course that Includes Sustainability	Science	Earth and Atmospheric Sciences	EAS 200	Introductory Studies in Earth Sciences	Undergraduate	EAS200 - Introductory Studies in Earth Science Laboratory study of topics in introductory Earth Science. EAS 200 and EAS 201 are considered to be equivalent to EAS 100 for prerequisite purposes. Not available to students with credit in EAS 100, 101, EAS 210 or SCI 100. Prerequisite: EAS 201.
Course that Includes Sustainability	Science	Earth and Atmospheric Sciences	EAS 201	Earth Science I	Undergraduate	EAS201 - Earth Science I A non-laboratory introduction to the origin and evolution of the Earth and the solar system. Introduction to plate tectonics and the rock cycle. Simple energy balances and interactions between radiation and the atmosphere, land, oceans, ice masses, and the global hydrological cycle. Evolution of life, biogeography, and global climate in the context of geologic time. The carbon cycle. Human interactions with the Earth. Mineral and energy resources. Not available to students with credit in EAS 100, 101, 102, 210 or SCI 100. (Note: EAS 201 and EAS 200 are considered to be equivalent to EAS 100 for prerequisite purposes).
Course that Includes Sustainability	Science	Earth and Atmospheric Sciences	EAS 204	Environment Alberta	Undergraduate	EAS204 - Environment Alberta The physical environment of Alberta. Regional variation in the patterns of climate, landforms, water, soils, vegetation and wildlife; the geographic synthesis of these patterns to give a broad understanding and appreciation of the province and its environmental problems. Prerequisite: One of EAS 100, 101, 102, 201, 210 or SCI 100. [Faculty of Science]
Course that Includes Sustainability	Science	Earth and Atmospheric Sciences	EAS 205	Environment earth	Undergraduate	EAS205 - Environment Earth General introduction to interactions between people and their natural environment, with an emphasis on geological processes. Topics include: soil resources and degradation; earthquakes and volcanoes; streams and flooding; landslides, mass movement and subsidence, shoreline development and coastal processes; surface water and groundwater resources; air and water pollution; waste management and disposal; and global change. Prerequisite: Any 100-level Science course. [Faculty of Science]
Course that Includes Sustainability	Science	Earth and Atmospheric Sciences	EAS 207	Mass Extinctions and Dinosaurs	Undergraduate	EAS207 - Mass Extinctions and Dinosaurs Mass extinctions that have affected the biosphere and their possible causes. Overview of vertebrate evolution. Classification, behaviour, and ecology of dinosaurs. Origins of birds and mammals. Prerequisite: Any 100-level Science course. [Faculty of Science]
Course that Includes Sustainability	Science	Earth and Atmospheric Sciences	EAS 208	Introduction to Global Change	Undergraduate	EAS208 - Introduction to Global Change Natural and anthropogenic causes of global scale environmental change; the role of the atmosphere, oceans, biosphere and cryosphere in the processes of environmental change; relationships between levels of technology and development and the character of environmental change associated with human activity. Prerequisite: Any 100-level Science course. [Faculty of Science]

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Course that Includes Sustainability	Science	Earth and Atmospheric Sciences	EAS 210	Engineering Earth Science	Undergraduate	EAS210 - Engineering Earth Science Rock-forming minerals, origins of igneous, metamorphic and sedimentary rocks; economic minerals and ore deposits; rock weathering and soil formation, mass-wasting, groundwater, deformation of the earth's crust. Laboratories on identification of minerals and rocks and the interpretation of topographic and geologic maps and aerial photography. Prerequisite: Any 100-level Science course. Not available to students with credit in EAS 101, 105, or SCI 100. Intended for students in Engineering programs. Restricted to students in Engineering programs.
Course that Includes Sustainability	Science	Earth and Atmospheric Sciences	EAS 215	Introduction to Arctic Environments and Climate	Undergraduate	EAS215 - Introduction to Arctic Environments and Climate Students will learn about the circumpolar North, starting with an overview of regional geography, and then focusing on the cryosphere (ice), atmosphere and ocean of the region. Students will learn why the Arctic is cold and ice covered, and how that impacts its climate and ecosystems. Topics will also include present-day climate change, the processes driving it, and evidence for it in the Arctic, as well as its implications in the rapidly evolving North. This course will be delivered entirely on-line. Prerequisites: Biology 30 or equivalent, or any 100-level course in the Faculty of Science.
Course that Includes Sustainability	Science	Earth and Atmospheric Sciences	EAS 250	Biogeography	Undergraduate	EAS250 - Biogeography The factors controlling global distribution of plants and animals will be covered from ecological and historical perspectives. Techniques for the analysis of biogeographic patterns, including paleoecology, remote sensing, and phylogenetics. Ecosystem responses to global change, including species migration, disturbance ecology, and invasions. May require field trips. If so, will require payment of additional student instructional support fees. Refer to the Fees Payment Guide in the University Regulations and Information for Students section of the Calendar. Prerequisite: EAS 100, BIOL 108 or SCI 100.
Course that Includes Sustainability	Science	Earth and Atmospheric Sciences	EAS 351	Environmental Applications of Geographical Information Systems	Undergraduate	EAS351 - Environmental Applications of Geographical Information Systems This course emphasizes the applications of Geographic Information Systems (GIS) to the environmental sciences. Examples from resource management and the earth and biological sciences are discussed. Labs impart technical experience with ARCINFO. Prerequisites: EAS 221 and one of MATH 113, 114, STAT 141, 151, SCI 151, or permission of the instructor. [Faculty of Science]

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Course that Includes Sustainability	Science	Earth and Atmospheric Sciences	EAS 354	Environmental earth science field school	Undergraduate	EAS354 - Environmental Earth Science Field School Introduction to fieldwork in geomorphology, biogeography and microclimatology. Elementary field mapping, the use of electronic field instrumentation for hydrological, water quality and micro-climatological monitoring, mapping and analysis of vegetation patterns, and techniques for the field description and laboratory analysis of soils and sediments. Introductory lectures and ten days of fieldwork. Requires payment of additional student instructional support fees. Refer to the Fees Payment Guide in the University Regulations and Information for Students section of the Calendar. Prerequisites: EAS 225, 250 and either 270 or 327, or consent of Instructor. [Faculty of Science]
Course that Includes Sustainability	Science	Earth and Atmospheric Sciences	EAS 364	Petroleum geology and subsurface methods	Undergraduate	EAS364 - Petroleum Geology and Subsurface Methods Source rocks and origin of petroleum; principles of fluid migration; reservoir rocks and traps. Exploration and development of hydrocarbon plays using subsurface techniques. Introduction to reservoir evaluation, and hydrocarbon production. Prerequisite: EAS 222. Not available to students with credit in EAS 424 or 430. [Faculty of Science]
Course that Includes Sustainability	Science	Earth and Atmospheric Sciences	EAS 373	The climate system	Undergraduate	EAS373 - The Climate System An examination of the physical processes influencing global climate. Radiation and energy in the climate system, the hydrological cycle, general circulation of the atmosphere and ocean, climate feedback mechanisms, climate history and climate change, introduction to climate models. Prerequisite: EAS 270. Not available to students with credit in EAS 271. [Faculty of Science]
Course that Includes Sustainability	Science	Earth and Atmospheric Sciences	EAS 425	Contaminant hydrogeology	Undergraduate	EAS425 - Contaminant Hydrogeology An introduction to the principles of groundwater chemistry, the chemical evolution of natural groundwater flow systems, sources of contamination, and mass transport processes. Hydrogeologic aspects of waste disposal and groundwater remediation. Prerequisite: EAS 323. [Faculty of Science]
Course that Includes Sustainability	Science	Earth and Atmospheric Sciences	EAS 457	Global change	Undergraduate	EAS457 - Global Change Major processes of change in the contemporary environment, their history and their interrelationships (climate and sea level change, changes in atmospheric composition, deforestation, desertification, water resource depletion, soil erosion, atmospheric and aquatic pollution); global biogeochemical cycles and their role in environmental change. Prerequisite: One of EAS 208, 225 or 250. [Faculty of Science]

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Course that Includes Sustainability	Extension		INT D 340	Regional Planning	Undergraduate	INT D340 - Regional Plannng The key issues and challenges of regional planning such as how regional planning will be examined including: historical development of regionalism in Canada and Alberta, how regionalism has helped and hindered the development of communities, nationally, provincially, locally. Students will gain experience in reviewing and critiquing concepts and theories that are characteristic of regionalism. Sections may be offered in a Cost Recovery format at an increased rate of fee assessment; refer to the Fees Payment Guide in the University Regulations and Information for Students. Open to students in the Undergraduate Program in Planning or Consent of the Instructor.
Course that Includes Sustainability	Science	Biological Sciences	ENT 222	Insects in managed ecosystems	Undergraduate	ENT222 - Insects in Managed Ecosystems An introduction to insects and related arthropods emphasizing aspects of their structure, life history and ecology responsible for their importance as pest or beneficial organisms in managed landscapes. Principles of integrated pest management of insects of importance to Albertan and North American agricultural, horticultural and forested ecosystems will be discussed. Students will gain practical experience in identification of pest and beneficial insects. Prerequisite: Biology 108 or SCI 100. Credit may be obtained for only one of ENT 207, 222 or 380.
Course that Includes Sustainability	Science	Biological Sciences	GENET 424	Ethical issues in genetics	Undergraduate	GENET424 - Ethical Issues in Genetics A seminar and discussion course where students will use their existing knowledge of genetics to investigate, evaluate, and discuss how the field of genetics affects society. Students participate in classroom presentations, written submissions and discussions that may include medical research ethics, genetically modified organisms (GMOs), gene patenting, and other current topics. Enrollment is limited and is by permission of the instructor(s). Prerequisite: Any two GENET 300-level lecture courses.
Course that Includes Sustainability	Science	Physics	PHYS 114	Physics: The big picture	Undergraduate	PHYS114 - Physics: The Big Picture A qualitative and mostly non-mathematical course in which the overall structure and main concepts of physics are examined. Classical versus quantum worlds; order versus chaos; Newton's versus Einstein's universe; selected topics and issues in modern physics. Prerequisites: Mathematics 30-1. Note: This course does not qualify as an equivalent to high school Physics 30. This course also does not qualify as a prerequisite for 200 or higher level ASTRO, GEOPH, MA PH, or PHYS courses. Not accepted as part of the Physics requirements for Faculty of Medicine and Dentistry applications.

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Course that Includes Sustainability	Science	Physics	PHYS 261	Physics of energy	Undergraduate	PHYS261 - Physics of Energy Energy in its various forms; conservation of energy; basic thermodynamics of ideal gases and phase changes; heat engines and refrigerators; consumption of energy resources; space heating and heat transfer; radioactivity; nuclear fission and nuclear power; alternative and renewable energy resources. Prerequisites: PHYS 124 and 126, or PHYS 144 and 146 (or equivalent), and MATH 113 or 114. SCI 100 may be used in lieu of PHYS 124, 126 and MATH 114.
Course that Includes Sustainability	Science	Physics	PHYS 364	Environmental physics II	Undergraduate	PHYS364 - Environmental Physics II Calculation of pollutant concentrations using principles of materials balance; vertical variation of pressure and temperature in the atmosphere; atmospheric stability and the dispersal of air pollutants; water vapour and humidity; blackbody radiation and Earth's global energy balance; molecular absorption of electromagnetic radiation; the ozone problem; the radon problem. Prerequisites: PHYS 261, and MATH 115 or 101 or 118 or SCI 100. Offered alternate years only. Consult Department for course scheduling.
Course that Includes Sustainability	Science	Psychology	PSYCO 104	Basic Psychological Processes	Undergraduate	PSYCO104 - Basic Psychological Processes Principles and development of perception, motivation, learning, and thinking and their relationship to the psychological functioning of the individual. Fulfillment of the 1/4 laboratory credit typically entails serving as a research participant, but can be fulfilled through the completion of alternative assignments. The course is a prerequisite to all courses in the department and is normally followed by PSYCO 105.
Course that Includes Sustainability	Science	Psychology	PSYCO 258	Basic Psychological Processes	Undergraduate	PSYCO258 - Cognitive Psychology A survey of findings of theoretical issues in the study of cognition, such as perception, attention, knowledge representation, memory, learning, language, reasoning, and problem solving. Prerequisites: PSYCO 104 or SCI 100, and STAT 141 or 151.
Course that Includes Sustainability	Science	Psychology	PSYCO 275	Brain and Behavior	Undergraduate	PSYCO275 - Brain and Behavior An introduction to brain mechanisms involved in sensation, perception, movement, motivation, learning, and cognition, as studied in both humans and lower animals. Prerequisites: PSYCO 104 or SCI 100, STAT 141 or STAT 151 and Biology 30 or equivalent. Students enrolled in the BSc Honors Neuroscience program are exempt from the STAT prerequisite.
Course that Includes Sustainability	Science	Psychology	PSYCO 282	Behaviour Modification	Undergraduate	PSYCO282 - Behavior Modification A study of applications of learning principles and laboratory findings to behavior problems in educational, clinical, and social settings, with emphasis on empirical research demonstrating the effectiveness of behavior modification and cognitive/behavioral techniques. Not open to students with credit in PSYCO 281. Prerequisites: PSYCO 104 or SCI 100. [Faculty of Science]

Focus	Faculty	Department	Course Number	Course Name	Grad or Undergrad	Course Description
Course that Includes Sustainability	Science	Faculty of Science	SCI 299 A	Science citizenship	Undergraduate	SCI299A - Science Citizenship Supervised participation in a student-initiated community service learning and citizenship project. In this course, students will work in interdisciplinary groups to research and present the science underlying a global issue, as well as implement a local solution to that global issue. The course will also include a discussion of the possible career paths, ethics, culture and values of scientists. Normally taken after completion of a minimum of 30 units of course weight in a program in the Faculty of Science. Prerequisite: GPA of 2.5 or higher, at least five science courses, and consent of Faculty of Science. Enrollment is by consent of the Faculty of Science and requires a formal application. Application does not guarantee a Science Citizenship class position. Course information available at the Science Citizenship (SCI 299) website or Faculty of Science. Course is limited to students in the Faculty of Science.
Course that Includes Sustainability	Science	Faculty of Science	SCI 299 B	Science citizenship	Undergraduate	SCI299B - Science Citizenship Supervised participation in a student-initiated community service learning and citizenship project. In this course, students will work in interdisciplinary groups to research and present the science underlying a global issue, as well as implement a local solution to that global issue. The course will also include a discussion of the possible career paths, ethics, culture and values of scientists. Normally taken after completion of a minimum of 30 units of course weight in a program in the Faculty of Science. Prerequisite: GPA of 2.5 or higher, at least five science courses, and consent of Faculty of Science. Enrollment is by consent of the Faculty of Science and requires a formal application. Application does not guarantee a Science Citizenship class position. Course information available at the Science Citizenship (SCI 299) website or Faculty of Science. Course is limited to students in the Faculty of Science.
Course that Includes Sustainability	St. Joseph's	-	CHRTC 272	Catholic Moral Thought: An Introduction	Undergraduate	CHRTC272 - Catholic Moral Thought: An Introduction Major themes in Catholic moral reflection with application to contemporary issues. The meaning of morality and Christian conversion: the role of experience, the Bible, the Church, moral norms, the development of conscience, and personal responsibility. Not open to students with credit in CHRTC 172.
Course that Includes Sustainability	St. Joseph's	-	CHRTC 292	Spirituality for Today's Christians	Undergraduate	CHRTC292 - Spirituality for Today's Christians Developing an understanding of the role of prayer, leisure, and work within a Christian lifestyle in the light of Scripture, Christian tradition, current theological reflection, and personal differences.
Course that Includes Sustainability	St. Joseph's	Philosophy	PHIL 279	Philosophy of hunting	Undergraduate	PHIL279 - Philosophy of Hunting The moral, conceptual, existential, environmental, socio-political, and spiritual issues raised by the practice of hunting by humans.