

Graduate Sustainability Focused Courses

Sustainability-focused courses are courses in which the primary and explicit focus is on sustainability and/or understanding and solving one or more sustainability challenges.

Courses	Department	Course Title	Sustainability Keywords
AUTE 4080U	Automotive Engineering	Electric and Hybrid Vehicles	energy storage, thermal management, life-cycle, infrastructure implication for society, regenerative braking
BIOL 1020U	Biology	Biology II: Diversity of Life and Principles of Ecology	ecosystems, ecology, evolutionary, plants, animals
BIOL 1021U	Biology	Introduction to Organismal Biology and Ecology	ecosystems, ecology, evolutionary, plants, animals
BIOL 3620U	Biology	Conservation Biology	biodiversity
BIOL 3660U	Biology	Ecology	ecosystems, ecology, environment
BIOL 3820U	Biology	Marine Ecology	ecology, environment, conservation management, human impacts
BIOL 3830U	Biology	Coral Reef Ecology	human impact, ecology, nutrient cycling
BIOL 4080U	Biology	Bioethics	bioethical issues, sociological perspective, philosophical perspective
BIOL 4660U	Biology	Aquatic Ecology: Concepts and Environmental Implications	ecology, environmental problems, global warming, ecosystems, pollution
BUSI 3000U	Business	Business and Sustainability	sustainability, society, business ethics, ESG (environmental, social, governance)
CHEM 3050U	Chemistry	Environmental Chemistry	chemical pollutants, environmental toxicants, pesticides, biological degradation
COMM 3310U	Communications	Communication, Communities and Social Change	social change, United Nations

COMM 3350U	Communications	Environmental Communication	communication of environment by social actors, climate change, sustainability, adaptation, food security, social just and sustainable planet
CRMN 3301U	Criminology	Green Criminology and Eco-Justice	environmental crimes, humanity, climate change, environmental disasters, green washing, Indigenous environmentalism
CRMN 3401U	Criminology	Indigenous Peoples and Justice	decolonizing lens, Indigenous voices, environmental justice, racial profiling, Truth and Reconciliation Commission, activism
EDUC 3201U	Education	Environmental Education	environmental education, Indigenous environmental knowledge
ENGR 4570U	Engineering	Indigenous Design and Technology	Indigenous design, Indigenous approaches to sustainability, new sustainability technologies
ENVS 100U	Environmental Science	Environmental Science	ecology, climate change, biodiversity, pollution, energy, soil-water resources, waste management
ENVS 2010U	Environmental Science	Introductory Environmental Science	climate change, ozone layer, pollutant transport, environmental problems
ENVS 3020U	Environmental Science	Introductory Energy Science	sustainable development, energy supply and demand, energy intensity, clean energy systems, chemical pollutants, renewable energy, life cycle assessment
ENVS 3110U	Environmental Science	Economics and Politics of the Environment	social aspects of energy and the environment
HLSC 3823U	Health Science	Health and Indigenous People in Canada	social and political determinants of health, intersection of Indigenous knowledge, power, privilege, and racism
HLSC 4803U	Health Science	Global Health	environmental, economic, political determinants of health
HLSC 4809	Health Science	Environmental and Occupational Health	environmental health, ecosystems, environmental toxicology, effects of global warming, climate change
INDG 2000U	Indigenous	Introduction to Indigenous Studies	relationships to the land, reconciliation
INDG 3310U	Indigenous	Indigenous Peoples, Sustainability and Development: A Global Perspective	sustainability, development, global consumerism capitalism, Indigenous pedagogy

INDG 4100U	Indigenous	(Re)Membering Reciprocal Relations	social justice issues, Indigenous philosophies, connecting locally to land, land-based learning
LGLS 4040U	Legal Studies	Law and the Environment	environmental law, socio-cultural approaches to the ecology, environmental protection, environmental rights, doctrine, regulation, and protection
MANE 4380U	Manufacturing Engineering	Life Cycle Engineering	life cycle models, product modularity, life cycle design, energy-related
MECE 3260U	Mechanical Engineering	Introduction to Energy Systems	energy supply and demand, global energy flows, clean energy systems, air, soil, water pollution, photovoltaics, life cycle assessment, renewable energy
MECE 4151U	Mechanical Engineering	Solar Energy	solar energy, panels, photovoltaic cells, energy storage systems, solar fuel, thermodynamic analysis
MECE 4153U	Mechanical Engineering	Wind and Hydro Energy	wind farm design, wind turbine materials, storage systems, environmental impact of wind and hydro energy systems
MECE 4430U	Mechanical Engineering	Sustainable and Alternative Energy Technologies	tidal and wave energy, solar systems, photovoltaics, district energy, energy storage, geothermal energy systems
PHY 4040U	Physics	Solar Energy and Photovoltaics	renewable energy systems, solar energy, solar cell technology, light conversion
POSC 2502U	Political Science	Community Development and Social Change	community development policies, social change, anti-racism, anti-poverty activism, Indigenous community development, equity, accessibility
POSC 3110U	Political Science	Inequality, Environment and Development	inequitable distribution of power, colonization, globalization, environmental issues, inequalities of class, gender and ethnicity
POSC 3300U	Political Science	Building Sustainable Communities	sustainable communities, sustainable development, social and economic needs, asset measurement
POSC 3301U	Political Science	Eco-Justice	environmental justice movement, displacement of marginalized communities, toxic and uninhabitable areas, environmental injustices
POSC 3302U	Political Science	Environment and Globalization	effects of globalization on the environment, ecosystems, health of the planet
POSC 3303U	Political Science	Policies for Sustainability	sustainable global society, various aspects of sustainability (social, economic, environmental)

POSC 3310U	Political Science	Indigenous Peoples, Sustainability and Development: A Global Perspective	relationship between Indigenous peoples, sustainability and development, decolonial, global social movement, neo-imperialism
RADI 3570U	Radiation Science	Environmental Effects of Radiation	environmental radiation, release of radioisotopes into the environment, emission limits, nuclear fuel cycle
SSCI 2101U	Social Science	Making a Difference: An Introduction to Social Entrepreneurship	social issues, solutions to help address inequality, food insecurity, climate change, social justice issues
ENSY 1000U	Sustainable Energy Systems	Introduction to Energy Systems	renewable energy sources, electricity generating technologies, sustainability, environmental assessment of energy systems
ENSY 2410U	Sustainable Energy Systems	Low Carbon Technologies	life cycle basis, mitigating harmful environmental impacts, implications of the changing transportation sector, carbon capture and storage
ENSY 3600U	Sustainable Energy Systems	Sustainable Energy Thesis I	technological, environmental, social, and economic implications of an energy system
ENSY 3730U	Sustainable Energy Systems	Solar Energy Technologies	photovoltaic systems, solar thermal electricity generation, environmental performances of solar thermal systems
ENSY 3830U	Sustainable Energy Systems	Wind Energy Technologies	wind energy, socio-economic issues, wind turbine design, minimize environmental impact
ENSY 4300U	Sustainable Energy Systems	Environmental Protection Systems	environmental effects with Power and Process industries, waste streams, environmental protection, pollutants
ENSY 4600U	Sustainable Energy Systems	Sustainable Energy Thesis II	understanding of the technological, environmental, social and economic implications of an energy system, ethical behaviour, energy issues
ENSY 4610U	Sustainable Energy Systems	Community and Urban Design	energy security, use less energy, community design, urban resilience, energy storage
ENSY 4800U	Sustainable Energy Systems	Energy Systems Analysis	assess existing technical, economic, environmental and or social performance, Life cycle assessment, Sustainability assessment
SUST 1001U	Sustainability	Fundamentals of Sustainability I: Science and Technology	science and application of sustainability, biological, social and economic components of sustainability

SUST 1002U	Sustainability	Fundamentals of Sustainability I: Health and Science	sustainability in health and social sciences, natural environment
Total			52