

GUIDE TO SUSTAINABILITY DESIGNATION

In order to have a consistent catalog of SUST courses in Cane Link, the UM Sustainability in the Curriculum committee came up with a simple 4 steps guide to Sustainability Designation.

To know if your course can qualify for a SUST attribute, here are our 4 requirements:

- 1- It needs to contribute towards realizing one or more of the principles outlined in the [Earth Charter](#), OR one or more of the targets embedded in the [United Nations Sustainable Development Goals](#) (SDGs)
- 2- It needs to address the interaction of the three dimensions highlighted in the definition below: social wellbeing, economic prosperity, and ecological health
- 3- It needs to either focus on sustainability or include sustainability in the curriculum (see Generic Inventory of course examples below)
- 4- It needs to address simultaneously at least two of the learning outcomes listed below

DEFINITION of SUSTAINABILITY:

The American Association for the Advancement of Sustainability in Higher Education ([AASHE](#)) defines sustainability in a pluralistic and inclusive way, encompassing human and ecological health, social justice, secure livelihoods, and a better world for all generations. The [UN Sustainable Development Goals](#) cover a broad range of social issues like poverty, hunger, health, education, climate change, women empowerment, gender equality and social justice. Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Sustainability research is research that leads toward solutions that simultaneously support social wellbeing, economic prosperity, and ecological health.

LIST of SYLLABUS LEARNING OUTCOMES:

In order to determine if a section of a course qualifies for the SUST designation, faculty will assess whether the course section helps students build skills and act on at least two of the 20 objectives below. Students will be able to:

- 1 - Explain the principles and ethical implications of the UN Sustainable Development Goals.
- 2 - Describe the roles of personal and social responsibility in protecting Earth's abundance and beauty for future generations.
- 3 - Justify the significance of upholding the right of all living beings to a natural and social environment supportive of dignity, health and well-being in bringing about global sustainability.
- 4 - Describe the relationship between respect for Earth, including life in all its diversity, and human and/or ecological health.
- 5 - Explain how cultural diversity, tolerance, compassion, nonviolence and peace contribute to global sustainability.
- 6 - Outline the history of Earth and the evolution of life.
- 7 - Examine situations and issues from a systemic perspective.
- 8 - Explain how environmental feedback loops affect systems.
- 9 - Explain how humans can learn from nature to create resilient and efficient solutions.
- 10 - Discuss how access to education, health care and economic prosperity affect global sustainability.
- 11 - Illustrate how uncontaminated air, water, and soil are fundamental to healthy living systems.
- 12 - Analyze the interdependence of society, economics, and nature at local, regional, and global levels.
- 13 - Discuss the relationship between poverty, ethics, health, society, and the environment.
- 14 - Compare and contrast human actions and attitudes toward the community of life and their impact on global well-being.
- 15 - Evaluate economic activity and institutions by their contribution to society in the larger ecological context.
- 16 - Diagnose/research the impact of human activities on living systems, with consideration for these systems' limits, complexity, and diversity.

- 17 - Explain the precautionary principle and identify how it can be employed to prevent unintended impacts on human and/or ecological systems.
- 18 - Document democratic principles that enhance global sustainability and peace.
- 19 - Apply knowledge to engage in behavior that fosters ecological sustainability.
- 20 - Display personal and social responsibility toward achieving global sustainability through service learning/civic engagement.

If you have questions, or need help with some syllabus examples, visit [Sustainability in the Curriculum at the U.](#)
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GENERIC Inventory of Sustainability Course Offerings

Example College asked faculty members representing all of its academic departments to identify sustainability course offerings using the definitions outlined in *G. Standards and Terms*. Following is an excerpt of the completed inventory:

1- Sustainability Focused Courses – GENERIC list

Title	Department	Level	Description
Introduction to Sustainability	Interdisciplinary Studies	UG	<i>[Description is optional; sustainability focus of the course is apparent from its title.]</i>
Sustainable Development	Geography	UG	<i>[Description is optional; sustainability focus of the course is apparent from its title.]</i>
Sustainability Science	Ecology and Evolutionary Biology	UG	<i>[Description is optional; sustainability focus of the course is apparent from its title.]</i>
Introduction to Environmental Studies	Environmental Studies	UG	This course provides an overview of environmental studies as an interdisciplinary academic field centered upon interdependent society – nature relationships. It provides an introduction to the concept of sustainability, critical thinking, the interdependency of social and ecological systems, interdisciplinary approaches, and related social engagement.
Systems Thinking and Analysis	Engineering	UG	Introduction to the systems thinking process, systems of systems, and the fundamental considerations associated with engineering and sustainable development.
Society and the Environment	Sociology	UG	This course will enable students to devise their own set of principles for understanding sustainability issues which should be of value in decision-making in their future careers.

Resilient Societies	Interdisciplinary Studies	UG	Provides an overview of the study of social and economic development in the context of ecological limits. Studies pathways and processes that lead to positive adjustment and sustainable societies.
Ecological Economics	Economics	UG	This course studies the role of environmental amenities such as clean air and clear water in economic systems. The course analyzes the problems of market outcomes when such amenities are not priced, examines the challenges associated with estimating economic costs and benefits, and emphasizes the connection between economic understanding and improved public policy.
International Development	International Studies	UG	An interdisciplinary course based on real world problems, direct field experience and current research on the causes of global poverty, environmental degradation, and preventable disease.
Environmental Ethics	Philosophy	UG	Course examines concepts such as animal rights, the land ethic and environmental justice within the larger context of environmental philosophy.
Corporate Social Responsibility	Business	G	This course explores how corporations design, manage and measure social strategies to generate business value. Students will learn frameworks, methodologies and tools and use these to develop CSR strategies for real-world corporations.
Global Environmental Health	Public Health	G	The public health implications, positive and negative, of society's efforts to mitigate and adapt to climate change will be elaborated, including discussions of ethical, political, economic aspects.
Environmental Journalism	Journalism	UG	In this course, students will learn the gathering and presentation of stories about environmental issues. We will also study the effect of mass media on the environmental movement and public policy debates.
Urban Planning	Planning	UG	Examination of current urban planning and policy issues and debates, such as normative theories of good urban form, metropolitan organization and governance, economic development and growth

			management, edge cities, spatial mismatch hypothesis, urban poverty, racial/ethnic inequality, gender and urban structure, sustainability, and the future of cities.
Organic Agriculture	Plant, Soil and Agricultural Systems	UG	This course asks students to use critical thinking skills to compare organic and industrial agricultural practices and explore food production issues including antibiotics, herbicides, hormones, GMOs, animal welfare, crop yields, nutrients, and pollution.
National Environmental Policy Act	Public Policy	UG	Learn about the philosophy and practice of ecological theory and policy and discuss contemporary challenges associated with implementation of the National Environmental Policy Act (NEPA).
Photovoltaic and Wind Turbine Installation	Electrical and Electronics	UG	The course will discuss the fundamentals of photovoltaic and wind power generation, installation and maintenance practices.
Conservation Biology	Biology	G	The focus of this course is on the science of conservation biology in the context of environmental policy, socioeconomic demands, and environmental ethics. Topics will include population biology, extinction, wildlife management, the role of science in making environmental policy, wetlands conservation, sustainable agriculture and forestry, integrated land-use management, and vegetation analysis.
Health Disparities	Public Health	UG	Students learn the nature of socioeconomic, racial and ethnic disparities in health status, and become familiar with the research literature on disparities in health care.
Infill Development	Public Policy	G	This course provides students with a comprehensive understanding of urban infill development, including the economic development thrust of urban infill and the political, environmental and community dimensions of projects.
Integrated Pest Management	Plant, Soil and Agricultural Systems	UG	Course is designed to provide an overview of IPM in agricultural situations. The course covers the fundamentals of pest management; safe use of and alternatives to pesticides; and the development, classification, and identification of insects.

Peace Studies	Peace Studies	UG	This course provides an overview of the field of peace studies and examines theories related to peace, conflict studies and non-violence. Students gain an understanding of the various tools and processes that are used internationally in working towards a more equitable, just and peaceful world.
Life Cycle Assessment	Business	G	Green supply chains are an important part of sustainable business practice. This course teaches about green product and service supply chains and compliance requirements.

2- Courses that includes sustainability – GENERIC list

Courses that includes sustainability are primarily focused on a topic other than sustainability, but incorporate a unit or module on sustainability or a sustainability challenge, include one or more sustainability-focused activities, or integrate sustainability issues throughout the course.

Title	Department	Level	Description
Introduction to Chemistry	Chemistry	UG	Includes a module on green chemistry and chemistry's contribution to sustainability
Art and Social Change	Art and Architecture	UG	One of the course's listed objectives is to examine art's potential contribution to sustainability
Construction Management	Construction and Environmental Management	UG	Includes a unit on green building
Math in Society	Mathematics	UG	Includes practice problems that are oriented around sustainability
Business in the European Union	Business	G	Includes a unit on sustainability, corporate social responsibility (CSR) and EU policy
Applied Ethics	Philosophy	UG	Includes discussion of inter-generational equity and the sustainability ethic
HVAC II	Construction and Environmental Management	UG	Includes a unit on high-efficiency and geothermal HVAC systems
Cause Marketing	Communications	UG	Case studies include marketing around corporate social responsibility (CSR) and sustainability
Social Problems and Social Change	Sociology	UG	Includes units on sustainability, environmental movements and activism, and responses to climate change
Literature and Nature	Literary Arts	UG	Includes readings on the relationship between humans and the land and a writing assignment related to sustainability