

# Sustainability-Related Learning Outcomes

College	Department/ Program	Learning Objective Related to Sustainability	Degree(s)	Explicit	Related
Architecture and Planning	City and Metropolitan Planning	PROGRAM PURPOSE: The undergraduate degree in Urban Ecology provides students with unique interdisciplinary academic training in the ecological, infrastructural, building and cultural systems that shape human settlements, with the goal of maximizing the vitality, ecological health, and resilience of places and communities. Graduates of the program will possess the foundational knowledge and skills needed for understanding the complexity of the social, environmental and economic relationships of urban systems and for improving these systems. They will be prepared to pursue careers in fields such as community and economic development, environmental and sustainability planning, urban planning, public health, public policy, and public administration. Graduates will also be well positioned to pursue graduate studies in a range of fields including urban planning, law, and business.LEARNING OUTCOME: Understand the relationships between social, environmental and economic systems and their role in shaping and managing human settlements.	B.A., B.S. in Urban Ecology	X	
Architecture and Planning	City and Metropolitan Planning	PROGRAM PURPOSE: Upon graduating, students have the ability to develop and implement urban plans and policies guided by the core values of livability, environmental sustainability, resiliency planning, the celebration of cultural diversity, social equity, and economic efficiency. LEARNING OUTCOME: Core values: Understand livability, environmental sustainability, resilience, celebration of cultural diversity, social equity, economic efficiency, interdependency, and prosperity as core values and goals of planning.	Master of City and Metropolitan Planning	X	
Architecture and Planning	School of Architecture	Students will understand the historic evolution of architectural design and the environmental and contextual influences that shape its development. They will have a respect for diversity and the relationship between human behavior and the physical environment. They will understand the fundamental role of the architect in society and their ethical responsibility to sustain and preserve the environment within which they construct.	B.S. in Architectural Studies	X	X
Architecture and Planning	School of Architecture	Historic Preservation Track: Understand how preservation and reuse of buildings can contribute to community revitalization including issues of social equity, density, gentrification, open space preservation, transportation, law and land use policies.	M.S. in Architectural Studies		X
Architecture and Planning	School of Architecture	Architectural Technology Track: Understand construction and energy efficiency through building performance, lifecycle, and post-occupancy assessments.	M.S. in Architectural Studies		X
Education	Education, Culture & Society	Students will acquire an understanding of theoretical frameworks for examining issues related to questions about diversity, equity, and social justice in formal and informal educational settings. -Students will complete an original piece of research that demonstrates interdisciplinary and multi-racial approaches to the examination of educational and social inequalities and of approaches to counter them.	M.S. M.A. in Education, Culture & Society		X
Education	Education, Culture & Society	It aims to offer students an inter-disciplinary framework for critically exploring education in its social, cultural, and institutional context; to encourage students to explore questions about class, race, ethnicity, gender, and sexuality inside and outside the schools at the primary, secondary, and post-secondary levels; and, to enable students to act as facilitators of change in their local classrooms, schools, and/or communities. *Students will acquire interdisciplinary tools for thinking about issues of inequality, diversity, and power in educational policy and practice and of alternative approaches to address them. *Students will develop knowledge (and skills) to work with multi-cultural and multilingual communities.	M.Ed. in Education, Culture & Society		X
Education	Education, Culture & Society	It is designed to equip students with advanced theoretical and empirical tools they need to teach courses on educational policy and practice with an emphasis on social justice in education and with knowledge about the methodological issues involved in conducting research on questions about class, race, ethnicity, gender and/or sexuality in educational policy and practice in elementary, secondary, and post-secondary settings and/or in family, community, and alternative educational contexts. Students will acquire knowledge of mainstream and critical theoretical frameworks and of empirical research on historical and contemporary issues related to questions about diversity, equity, and power in formal and informal educational settings.	M Phil in Education, Culture & Society		X

Engineering	Biomedical Engineering	an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability. -the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context	BS in Biomedical Engineering	X	
Engineering	Chemical Engineering	an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability. -the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context	BS in Chemical Engineering	X	
Engineering	Civil and Environmental Engineering	an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability. -the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context	BS in Civil Engineering	X	
Engineering	Civil and Environmental Engineering	Knowledge of ethical, safety, socio-economic, and environmental aspects pertaining to nuclear engineering.	MS & PhD in Nuclear Engineering	X	
Engineering	Electrical and Computer Engineering	The broad education necessary to understand the impact of engineering solutions in a global and societal context.	BS in Computer Engineering		X
Engineering	Electrical and Computer Engineering	the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.	BS in Electrical Engineering	X	
Engineering	Materials Science and Engineering	an ability to select or design a materials based system, component, or process to meet desired needs withing realistic constraints, such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.. -an ability to acquire a broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.	BS in Materials Science and Engineering	X	
Engineering	Mechanical Engineering	The broad education necessary to understand the impact of engineering solutions in a global and societal context.	BS in Mechanical Engineering		X
Humanities	History	-Describe the influence of political ideologies, economic structures, social organizations, cultural perceptions, and natural environments on historical events. -Develop an international perspective on the past that addresses the cumulative effect of global exchange, engagement and interdependence.	BA in History, BA in History Teaching, MA in History, MS in History, PhD in History	X	
Humanities	Philosophy	I. Ethics and Value Theory. The topics here include theories of ethics, politics, law, justice, aesthetics, and of the meaning of life. Topics include also such applied fields as business ethics, bioethics, environmental ethics, engineering ethics, and human rights.	BA, BS, MA, MS, PhD in Philosophy		X
Humanities	Environmental Humanities	demonstrate an understanding of fundamental ideas about genres, themes, styles, historical periods, and cultural contexts for the various humanities and their interpretations of the environment; -demonstrate an understanding of major concepts, theories, and approaches to research in the study of the environment;	MA, MS in Environmental Humanities		X

Mines an Earth Sciences	Atmospheric Sciences	Demonstrate a basic understanding of dynamic meteorology, physical meteorology, and climate processes.	B.S., M.S., Ph.D. Atmospheric Sciences		X
Mines an Earth Sciences	Geology and Geophysics	Understanding of the impact of engineering solutions in a global and societal context.	B.S. in Geological Engineering		X
Mines and Earth Sciences	Geology and Geophysics	Understanding of the role of the Earth sciences in helping to solve societal problems related to natural resources, natural hazards, energy, environment and global climate.	ME in Geological Engineering, MS in Geological Engineering, MS in Geology, MS in Geophysics, PhD in Geological Engineering, PhD in Geology, PhD in Geophysics	X	
Mines and Earth Sciences	Geology and Geophysics	To provide students with a broad-based education in aspects outside of engineering and science that will help them appreciate the opportunities and responsibilities they have in molding the future of our society.	B.S. in Metallurgical Engineering		X
Mines and Earth Sciences	Geology and Geophysics	Program Mission: Provide professional service to the mining industry and public by assisting in the environmentally responsible and safe extraction of mineral resources. Learning Outcome: Students will understand and appreciate the issues of worker safety, industrial hygiene, and environmental responsibility.	B.S., M.E., M.S., Ph.D. in Environmental Engineering, B.S., M.E., M.S., Ph.D. in Mining Engineering		X
Nursing	Gerontology	demonstrate an understanding of healthy aging as life course process involving the interplay of hereditary, behavioral, environmental, social and economic influences in conjunction with the role of biomedical/health care systems.	MS in Gerontology		X
Nursing	Gerontology	Provide, manage and evaluate care of individuals and populations using evidence-based concepts related to physiology, pathophysiology, pharmacology, as well as community, environmental, cultural and socioeconomic dimensions of health.	Doctor of Nursing Practice		X
Pharmacy	Interdisciplinary	Provide patient care in accordance with legal, ethical, social, economic, and professional guidelines.	Doctor of Pharmacy		X
Science	Biology	Be able to apply the information and skills acquired to understand/address significant issues facing modern society, at local and/or global levels.	BA, BS in Biology		X
Science	Chemistry	Students will appreciate the central role of chemistry in our society and use this as a basis for ethical behavior in issues facing chemists including an understanding of safe handling of chemicals, environmental issues and key issues facing our society in energy, health and medicine.	BA, BS in Chemistry		X
Science	Chemistry	Demonstrate an understanding of their professional and ethical responsibilities	MA, MS, PhD in Chemistry		X
Science	Mathematics	Upon graduation, our PhD students will demonstrate an understanding of their professional and ethical responsibilities and appreciation of the impact of mathematics in the societal context.	PhD in Mathematics		X
Social and Behavioral Science	Geography	Program Purpose: The mission of the University of Utah Department of Geography is to generate high quality research and teaching focused on the interactions between the human and physical environment. We are inspired to produce important scientific advances in our core research areas, including health and urban geography, hazards and security, climate change and paleoenvironment, GIScience and remote sensing, to provide professional and community service and to prepare students for in-demand careers in Geography and related fields.	B.A., B.S., M.A., M.S., PhD in Geography		X

Social and Behavioral Science	Geography	Program purpose: The Master of Science in Geographic Information Science (MSGIS) is designed for both employed professionals and full-time students who want to deepen their understanding and expertise in the application of geographic information to social and environmental problems.	MGIS (Master of Science in Geographic Information Science)		X
Social and Behavioral Science	Psychology	Ethical and Social Responsibility in a Diverse World: The skills in this domain involve the development of ethically and socially responsible behaviors for professional and personal settings in a landscape that involves increasing diversity.	B.A., B.S. in Psychology		X
Social and Behavioral Science	Psychology	Adopt values that build community at local, national, and global levels	B.A., B.S. in Psychology		X
Social and Behavioral Science	Environmental and Sustainability Studies	Program purpose: We strive to foster an understanding of ecological systems and the consequences of human-environment interactions. ... It stresses the importance of social responsibility, leadership, and a science-based focus on solutions and integrated problem solving. Upon graduation, students will have learned how to build more resilient and sustainable global ecosystems, emphasizing the interaction between society, the economy, and the environment. Students will have the ability to assess complex environmental issues at all scales, using multiple and diverse methodologies and an interdisciplinary approach, within a context of environmental justice, equity, and long-term sustainability. Students will be able to think critically about their role as creative problem-solvers and their responsibility as citizens, political and economic participants, and members of an extended ecological community.	B.A., B.S. in Environmental and Sustainability Studies	X	
Social and Behavioral Science	Environmental and Sustainability Studies	Demonstrate an understanding of comprehensive systemic analysis across both physical and behavioral dimensions involving society, the environment, and the economy	B.A., B.S. in Environmental and Sustainability Studies	X	
Social and Behavioral Science	Environmental and Sustainability Studies	Define sustainability and assess the ways that sustainability topics are approached by a diversity of academic disciplines.	B.A., B.S. in Environmental and Sustainability Studies	X	
Social and Behavioral Science	Environmental and Sustainability Studies	Identify how globalized processes impact socioecological systems.	B.A., B.S. in Environmental and Sustainability Studies		X
Social and Behavioral Science	Environmental and Sustainability Studies	Analyze the role of environmental sustainability in the promotion of comprehensive justice and equity.	B.A., B.S. in Environmental and Sustainability Studies	X	
Social and Behavioral Science	Environmental and Sustainability Studies	Apply critical thinking skills to provide sustainable solutions and build resilient communities.	B.A., B.S. in Environmental and Sustainability Studies	X	
Social and Behavioral Science	Environmental and Sustainability Studies	Articulate a comprehensive world view that integrates diverse approaches to sustainability.	B.A., B.S. in Environmental and Sustainability Studies	X	
Social and Behavioral Science	Environmental and Sustainability Studies	Understand the basic sustainability concepts of homeostasis, carrying-capacity, cradle-to-grave recycling, evolutionary processes, inter-generational debt, socio-political adaptation, climate change, ecosystem services, and environmental justice—and understand the relationships between them.	B.A., B.S. in Environmental and Sustainability Studies	X	

Social and Behavioral Science	Int'l Affairs and Global Enterprise	Possess the knowledge and the skills to analyze global and geographic area-specific social, legal, political and economic issues.	M.S. in International Affairs and Global Enterprise		X
Social and Behavioral Science	Int'l Affairs and Global Enterprise	Demonstrate the skills to analyze global socio-political-economic trends and phenomena (and local ones in a global context) with respect to their potential impacts on the operations of global enterprises. Evaluated each semester in the required core courses.	M.S. in International Affairs and Global Enterprise		X
Social Work	Social Work	A historic and defining feature of social work is the profession's focus on individual well-being in a social context and the well-being of society. Fundamental to social work is attention to environmental forces that create, contribute to, and address problems in living. Social workers promote social justice and social change with and on behalf of clients	BSW in Social Work		X
Social Work	Social Work	Engage in policy practice to advance social and economic well-being and to deliver effective services.	MSW in Social Work		X
School of Business	Business Administration, Entrepreneurship, Finance, Management, Marketing, Operations and Information Systems	Global perspective – An understanding of the economic and social implications of doing business globally.	BA, BS in Business Administration; BA, BS in Entrepreneurship; BA, BS in Finance; BA, BS in Management; BA, BS in Marketing; BA, BS in Information Systems; BS in Operations Management;		X
School of Business	Interdisciplinary	Demonstrate the skills to analyze global socio-political-economic trends and phenomena (and local ones in a global context) with respect to their potential impacts on the operations of global enterprises. Evaluated each semester in the required core courses.	MS in International Affairs and Global Enterprise		X
Medicine	Family and Preventative Medicine	Evaluate the influence of behavioral, social, cultural, political, economic, environmental factors on the initiation and persistence of health disparities among sub-populations.	MPH, MS, PhD in Public Health		X
Medicine	Family and Preventative Medicine	To protect workers and the environment through interdisciplinary education, research and service.	MOH, MS of Occupational Health		X
Medicine	Family and Preventative Medicine	To protect workers and the environment through interdisciplinary education, research and service.	MOH, MS of Occupational Health		X
Medicine	Family and Preventative Medicine	Assess and describe the effects of factors influencing the health care status of individual patients beyond those of a biological nature, including social, cultural, economic, psychological, environmental, occupational, familial and spiritual factors.	MD in Medicine		X