

## SUNY Potsdam STARS Sustainability Course Inventory

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<b>Sustainability Courses</b>			
<i>A sustainability course is a course in which the primary and explicit focus is on sustainability and/or on understanding or solving one or more major sustainability challenge (e.g. the course contributes toward realizing principles outlined in the Earth Charter or achieving one or more of the targets embedded in the United Nations Sustainable Development Goals).</i>			
<b>Title</b>	<b>Department</b>	<b>Level</b>	<b>Description</b>
ANTH 331 Women in Native America	Anthropology	UD	An examination of the various roles of women in Native American cultures and how an anthropological and feminist analysis of those roles has led to a re-examination of the development of gender roles
ANTH 354 Environmental Archeology	Anthropology	UD	This course examines cross-cultural evidence of the principal forms which the human-nature relationship has taken. Ecological principles and environmental problems faced by our species today are also addressed.
ANTH 366 Historical Ecology	Anthropology	UD	This course analyzes and addresses contemporary environmental problems through the combined intellectual frameworks of archaeology, anthropology, ecology, and history. In doing so, it recognizes the importance of historical trajectories, and the interconnections between culture and ecological systems, in the production of modern landscapes. This course applies this interdisciplinary perspective to examine the impact of humans on the environment through time.
BIOL 101 Evolution and Ecology	Biology	UD	Most introductory biology courses focus on cellular processes or human anatomy and physiology. Topics of ecology, evolution, and biodiversity are not explored in detail or omitted altogether. Evolution and Ecology helps students understand major biological concepts through the lens of evolutionary principles. This course takes a different approach to understanding biology, emphasizing concepts over details and scientific reasoning over terminology. Topics include natural and sexual selection, genetics, evolution of sex and mating strategies, population ecology, community ecology, macroevolution.
BIOL 111 Adirondack Ecology/Natural History	Biology	UD	General ecological principles including energy flow, biogeochemical cycling, population dynamics and community ecology using the Adirondack region as a backdrop. Natural history and identification of Adirondack plants and animals will be incorporated. Laboratory and field experiences are integral components of this course. For non-majors.
BIOL 148 Biodiversity Conservation	Biology	UD	Conservation biology is a multidisciplinary science with a focus on preserving the diversity of species and ecosystem. The Biodiversity Conservation course uses the Adirondacks as a case study to explore contemporary issues of climate damage, habitat loss, invasive species, pollution, population, and over-population. Conservation efforts in the Adirondacks provide a local and in depth understanding of the global issues and strategies to protect biological diversity on Earth.

BIOL 209 Winter Ecology	Biology	UD	Interdisciplinary course which looks at all aspects of winter. At first the physics of seasons, snow crystals, glaciers, and temperature will be examined. Then plant and animal adaptations to the cold will be considered. Laboratory experiments will include: how plants and insects survive freezing and animal tracking. The last part of the course will cover human adaptations to winter including local customs and Eskimo cultures. Trips to Ottawa and the Adirondacks are planned.
BIOL 300 Ecology	Biology	UD	Physical environment of terrestrial and fresh-water eco-systems, interspecific and intraspecific relationships, speciation, demography, growth and regulation of populations, energy flow, community organization and development.
BIOL 304 Sustainable Agriculture	Biology	UD	Lecture and active learning activities are designed to investigate topics vital to understanding agricultural sustainability, including issues of: land use, biological diversity, pest control, labor and human rights economic viability. Field trips to local farms will serve as examples of the various local agroecosystems. The class will document the differences between these farms and analyze them for their relative sustainability Class members will also grow crops themselves, to investigate tools for sustainability assessment.
BIOL 310 Marine Biology	Biology	UD	Explores the diversity and ecology of organisms that reside in our oceans, bays, and estuaries. Examines physiological and morphological adaptations of marine life, including the specific adaptations and ecological interactions among organisms that inhabit the plankton, nekton, and benthos. We will also explore marine resources and the impact of humans on the oceans.
BIOL 312 Insect Ecology	Biology	UD	Study of insects: anatomy, physiology, development, behavior; social insects; and insect control. Systematic coverage of major insect groups.
BIOL 402 Conservation Biology	Biology	UD	The application of scientific principles to understanding and solving the conservation problems facing most of the Earth's ecosystems and species. This discipline is both derived from and nested within such areas of biological science as ecology, wildlife and fisheries management, zoology and botany and draws heavily on expertise from physiologists, microbiologists, molecular biologists and population geneticists. This course will be a mix of lecture, discussions, field trips, lab and classroom exercises and one large project.
BIOL 409 Fresh Water Ecology	Biology	UD	Adaptations and ecological relationships of freshwater organisms. Physical and chemical properties of water will also be examined; Emphasis will be placed on local ecosystems such as Adirondack lakes, streams and the St. Lawrence River.
CHEM 301 Fundamentals of Environmental Science	Chemistry	UD	A one-semester, non-majors lecture course. After an overview of some science and environment fundamentals, a few issues of current interest are covered in depth. Issues recently covered include stratospheric ozone depletion, global warming, air & water pollution, and acid rain.

CHEM 321The Sustainable World	Chemistry	UD	This course will examine sustainability and sustainable development from a scientific perspective. It will consider how we manage our resources, and the role of science and technology in moving towards a sustainable world.
ECON 320 Economy and Environment	Politics	UD	This course compares different economic explanations of environmental degradations. It shows how these alternative theories provide the foundation for alternative approaches to environmental policy. Finally it evaluates the environmental impact of specific areas of economic activity such as agriculture, energy use and international trade.
ENVR 110 Introduction to Environmental Studies	Environmental Studies	UD	This course is an introduction to the interdisciplinary study of environmental issues. It incorporates the social, political, economic, cultural, and biophysical dimensions of a diversity of environmental problems and solutions, and includes a special focus on the Adirondacks. Human impacts on the environment, historical and contemporary views of the environment, and potential solutions to current environmental problems will be examined.
ENVR 120 Introduction to Sustainability	Environmental Studies	UD	This course is a comprehensive exploration of the intertwining sustainability challenges in the environment, society, and economy and potential solutions for creating more resilient, sustainable societies.
ENVR 210 Environmental Futures	Environmental Studies	UD	This is a required course for ENVR majors, designed for students to gain skills and knowledge as environmental citizens and professionals. Through class exercises, guest speakers, and independent research, students prepare for future internships and professional or graduate work in Environmental Studies. The course also helps students to develop their individual program of study and career planning skills - including resume writing, cover letters, and interviewing.
ENVR 290 Environmental Inquiry	Environmental Studies	UD	This course introduces students to the concept and practice of interdisciplinary research methods, including arguments for, and critiques against interdisciplinary research. It examines why environmental issues lend themselves to the practice of interdisciplinarity and the process of scientific knowledge production. It introduces students to research methodologies commonly found both in the natural and social sciences and the humanities. Students will work through the stages of an interdisciplinary research project.
ENVR 310 Adirondack Environmental History	Environmental Studies	UD	This study of the environmental history of the Adirondack region will give particular focus to the interrelated natural and cultural history of today's Adirondack Park. Current land use conflicts will be regarded as the legacy of a human history of territorial contest and ambivalent attitudes toward nature, embracing the full range of conservation issues in other American protected areas and many developing countries as well.

ENVR 320 Policy and Protected Areas	Environmental Studies	UD	Conservation has long been taking place in protected areas of all varieties, from national parks and forests preserves to seashores and monuments. In this course we will look at both local and global protected areas and examine what policies have been successful conservation strategies and why. The course will use CIS, research, and discussion to create a project on a park of international importance. We will begin the course with a focus on the Adirondack State Park as a model for the world.
ENVR 330 Ecology and the Mind	Environmental Studies	UD	This course will introduce students to the current global epoch we occupy. The Anthropocene, which began with the industrial revolution and extends to include our own contemporary moment, signals human's recognizable geophysical influence on all exosystemic components at a planetary scale. Since 1950, which roughly marks the onset of "the Great Acceleration," scientists have in fact recorded the greatest exponential rise in atmosphere carbon dioxide in the planet's history. While conventional scientific and political discourse has struggled to evaluate the variety of effects the Anthropocene-and associated environmental degradations- has had/is having on the human mind, this course will engage students in the study of environmental philosophy, criticism, literature, and film that represents the psychological results of denying human's evolutionary need to connect with healthy ecosystems.
ENVR 340 Environmental Justices Narratives	Environmental Studies	UD	This course examines the concept of environmental justice, as well as the associated concepts of environmental racism and radioactive colonization, through an interdisciplinary lens. The environmental justice narratives we find in literature, nonfiction, and documental films will introduce environmental studies students to the experiences of marginalized oppressed, and overlooked individuals and communities contending with and responding to environmental harm, which comes to bear on such communities disproportionately. An examination of these narratives will moreover demonstrate to students that nature is not only found in "wilderness," but also in the places where many of us live and work, and revise our understanding of "environment" showing that nature exists in National Parks and nuclear waste sites, wild rivers and mega-dams, industrialized food production and the human body. Ultimately, this course will illuminate for students the reality that environmental harm always comes to bear on human lives and that environmental challenges are inseparable from social issues and concerns.
ENVR 360 Equity and the Outdoors	Environmental Studies	UD	This course will introduce students to the concept of the "adventure gap," which will illuminate the reality that individuals hailing from minority, indigenous, LGBTQIA, disabled and/or middle- and lower-class communities, among other marginalized communities, are underrepresented in outdoor recreation. In this course, we will investigate the ways in which majority communities have excluded marginalized individuals from the arena of outdoor and adventure recreation. We will, moreover, attend to shifting trends in contemporary outdoor recreation, wherein minority recreationalist and athletes are carving out a space for themselves in the able-bodied, white-male-dominated realm of outdoor recreation.
ENVR 391 Field Project	Environmental Studies	UD	This course is the field experience for the Environmental Studies major. Each student will participate in a self-designed internship or field project with a non-profit or government organization. As a

			service-learning project, the field project will provide students with hands-on experience in the environmental field while providing service to the organization where they work.
ENVR 485 Research in Environmental Studies	Environmental Studies	UD	This course is comprised of a student designing, performing, interpreting and summarizing a research project under the supervision and guidance of a staff member.
ENVR 490 Senior Seminar	Environmental Studies	UD	The course is the culmination of the Environmental Studies major. It brings together academic and experiential components of the major and provides students with an opportunity to complete an independent research project, which students present to the entire Environmental Studies community. Students will demonstrate proficiency in conducting independent research and analysis of an environmental issue, and synthesize course work, experiential opportunities and research to critically assess and analyze a contemporary environmental issue.
GEOG 360 Social Geography	Anthropology	UD	This course introduces the concept of spatial relationships and geographic literacy relative to the Universe (Big Bang to present), Milky Way, Solar System, and the Earth we inhabit. We will discuss maps and mapping, tectonics, volcanoes and other geological events that have shaped human history and culture. This course will review key cultural, economic, political, linguistic, musical and historical connections to geographic realms within a global context. A brief history of human origins and key events that led to human evolution will be introduced with discussion of the nature of humankind, the origins of, and role of, culture, using specific examples drawn from cultures from around the globe. We will be comparing and contrasting the effects of global market economies, environmental impacts, population trends, racism, religious diversity, urbanization and other issues within a cross-cultural context
GEOL 101 Environmental Geology	Geology	UD	A study of geology and the human environment. Topics begin with the basics of geology: minerals and rocks, the earth's internal structure, earthquakes, volcanoes and plate tectonics. Surface processes affecting the environment include stream behavior and flooding, groundwater, and air pollution. The course examines laws governing the extractions and use of water, as well as energy sources and environmental concerns. Laboratory includes field trip in the Potsdam area and the use of geological and topographic maps.
GEOL 410 Hydrogeology	Geology	UD	Study of the abundance, distribution and movement of fresh water in the atmosphere, on the surface, and in the sub-surface
GEOL 380 Earth's Climate: Past & Future	Geology	UD	This course introduces students to the fundamentals of climate science, the geologic record of climate change, anthropogenic influence on climate, and predictions of future climate change. Particular emphasis is placed on how the atmosphere, oceans, life, geology, and orbital parameters influence climate and the complex interactions/feedbacks between these systems.

HIST 453 Nature in American History	History	UD	An introduction to North American environmental history. Explores the interaction between human beings and their environment, specifically how that environment shapes human expectation, possibilities and behavior, and how humans have understood the workings of nature and their appropriate role in it.
HIST 464 Technology in History	History	UD	Examines the relationship between technologies and societies in history by looking at the place of technology in western civilizations, and to a lesser extent, globally since the medieval period.
HIST 470 African Environmental History	History	UD	Historical examination of Africa's diverse human and natural environments. Considers interactions between human and natural worlds with issues such as urbanization, agricultural strategies, deforestation, and the role of the supernatural in African environmental knowledges.
HLTH 300 Environmental Health	Public Health and Human Performance	UD	An analysis of the environmental nature of public health and on controlling the factors that are harmful to health. Focus is on current environmental issues including water and air pollution, workplace safety, environmental toxins, food safety, and shelter and how those issues have an impact on the health of individuals.
HLTH 310 Health Disparities	Public Health and Human Performance	UD	In this course, students will examine disparities in the health status of a variety of population groups defined on the basis of race/ethnicity, sex, sexual orientation, socioeconomic status, age, ability, etc. Students will examine and discuss epidemiologic data illustrating disparities, factors that contribute to those disparities and strategies to address disparities.
HLTH 560 Environmental & Occupational Health	Public Health and Human Performance	G	This course is an introduction to the environmental (physical, chemical, biological) factors influencing health of communities in urban and rural areas as well as in the workplace. Topics focus on municipal water supply and disposal, ambient and indoor air quality, solid and hazardous wastes, food protection, vector control, pesticides, occupational health and safety, risk assessment, risk communication.
LITR 351 Nature and Literature	English & Communication	UD	Explores the varied ways nature is represented in art and literature and the ways those representations express the cultural values of the times in which they were created.
PHIL 330 Environmental Ethics	Philosophy	UD	The basic task of environmental ethics is to present and defend a comprehensive and reasoned account of the moral relations between human beings and their natural environment. This course surveys several opposing theories, examines their application to controversial issues and explores their moral and practical implications.

PHYS 325 Energy and the Environment	Physics	UD	Presents basic physical and quantitative concepts which are needed to understand energy and its environmental interaction. The physical laws come from mechanics, heat and thermodynamics, electricity, and nuclear reactions. A recurring theme is the extraction, transportation, conversion, distribution, end use, and dispersal of energy and the environmental impact of each step.
PHYS 330 Meteorology	Physics	UD	Components of the atmosphere, atmospheric dynamics, weather elements, weather phenomena and their physical courses, weather, maps, weather predictions, operation and use of weather instruments.
POLS 303 Policy and Protected Areas	Politics	UD	Conservation has long been taking place in protected areas of all varieties, from national parks and forests preserves to seashores and monuments. In this course we will look at both local and global protected areas and examine what policies have been successful conservation strategies and why. The course will use CIS, research, and discussion to create a project on a park of international importance. We will begin the course with a focus on the Adirondack State Park as a model for the world.
POLS 324 Natural Resource Policy	Politics	UD	Examines historical and current natural resource policy and management in the U.S. Emphasis will be placed on the political, legal, economic, ecological, and social context in which public land management decisions are made at the national, state, and local level.
POLS 414 Environmental Law	Politics	UD	Provides a survey and analysis of statutes, both state and federal, regulating water, soil, air pollution, resource conservation and recovery, and the actions of the Environmental Protection Agency. The course also addresses questions pertaining to problems of implementation, interpretation, enforcement, and development of environmental laws. In addition, the course examines New York State environmental laws, the New York State Constitution, especially Article 14 and other rules and regulations that pertain to the Adirondack Park
POLS 432 Politics of Global Inequality	Politics	UD	Provides a historical overview of the evolution of the international capitalist system. Several competing explanations for the unequal division of wealth and poverty in the global economy are evaluated. We also explore contemporary issues such as the debt crisis, economic development strategies, the role of transnational corporations, and environmental degradation, with an emphasis on specific country examples.
SOCI 340 Environment and Society	Sociology & Criminal Justice	UD	An examination of worldwide environmental crisis. Topics: energy, non renewable resources, hazardous wastes, the ecological implications of technological change, agricultural and food issues in the context of social systems, beliefs and institutions.
SOCI 371 Globalization and the Environment	Sociology & Criminal Justice	UD	This course examines the soci-environmental consequences of globalization. The course begins with a discussion of general understandings of globalization and the major social institutions involved before moving to an analysis of the socio-environmental consequences of globalization. The course examines the connections between international political and economic policies, local environmental and social conditions, and international and intra-national inequality. Further the course explores

			international policy responses to global environmental problems, as well as local and transnational social movements resisting globalization and its environmental consequences.
SOCI 395 Sustainable Communities: The Ecovillage Experience	Sociology & Criminal Justice	UD	Students will learn about sustainable communities with an emphasis on the ecovillage model and take part in immersion experiences at two thriving ecovillages – one in New York State and the other in Ireland. Students will experience community life through social and service-learning activities, workshops with community residents and educators, field trips to nearby sustainability projects and exploring the natural surroundings at each location.
SOCI 420 Rich & Poor in America	Sociology & Criminal Justice	UD	Examines the causes, consequences and dimensions of inequality in the U.S. Course evaluates dimensions of educational, environmental, racial, and gender inequality. Looks at different interpretations to explain unequal control over power and wealth in the U.S.

### **Courses that Include Sustainability**

*A course that includes sustainability is primarily focused on a topic other than sustainability, but incorporates a unit or module on sustainability or a sustainability challenge, includes one or more sustainability-focused activities, or integrates sustainability issues throughout the course.*

<b>Title</b>	<b>Department</b>	<b>Level</b>	<b>Description</b>
ANTH 395 Activism, Resistance, Change	Anthropology	UD	This course examines activism and social movements from a cross-cultural perspective. We will begin by looking at key theoretical texts on hegemony and organized resistance, and then examine historical and ethnographic material on a variety of organized social uprisings in different parts of the globe. This literature will focus on key themes, such as grassroots advocacy, representation, feminism, media and technology, radical and anarchist approaches, etc. In addition, you will have the opportunity to apply theory to practice in addressing issues of equity and social justice, and learn how to engage in culturally informed political action in both local and global contexts.
COMP 304 Technical Writing	English & Communication	UD	Writing in common formats to inform and to recommend action in business, nonprofit, and technical fields. Principles of design, ethics, and collaboration.
COMP 321 Writing for the Environment	English & Communication	UD	This course centers on writing about environmental debates, focusing on insightful comprehension of the discourses shaping the Adirondacks and the North Country. Resources for analysis and composition include scholarly essays and nonfictions about the region, local news media and journalism articles, public policy reports, etc.
COMP 322 Grant Writing	English & Communication	UD	Examination of contemporary theories of genre and context in academic and professional writing, especially concerning the roles of community, writer, and situation in shaping the forms and norms for writing. Application to the case of grant writing.

ECON 302 The Global Economy	Politics	UD	A policy-oriented examination of current events in international economic relations. Topics include global economic interdependence; the politics and economics of U.S. trade policy; regional trading blocs; European monetary union; reform in transitional economies; U.S.-Japan and U.S.-E.U. economic relations; roles of the International Monetary Fund, World Bank, and World Trade Organization; and debt burdens of developing countries.
ECON 321 Economic Development of Nations	Politics	UD	This course analyzes theories of economic development and planning. It also covers other economic factors such as population growth, labor, capital, and technology.
GEOL 103 Physical Geology	Geology	UD	Minerals, rocks, rock deformation, maps, geological processes that shape the land, environmental geology.
GEOL 406 Geomorphology	Geology	UD	This course focuses on the origin and development of landforms created by fluvial, glacial, and alluvial processes. In addition, we explore the relationships of landforms to underlying geologic structures and the history of geologic and climatic changes that are recorded by surface features. Landscapes and surface processes are analyzed using air photos and topographic maps, as well as field mapping techniques and geographic information systems.
HLTH 343 Maternal and Child Health	Public Health and Human Performance	UD	Maternal Child Health (MCH) offers an introduction to health issues affecting infants, children, adolescents and women of reproductive age. The course focuses on the ways in which poverty, politics, and racial/ethnic disparities affect the health of families in the U.S. and abroad. Students will examine the history and organization of MCH programs in the U.S., discuss the organization and financing of MCH health services, and explore current topics and trends in MCH, including pregnancy and childbirth, children with special needs, and teen pregnancy, among others.
HLTH 361 - Foundations of Community Health	Public Health and Human Performance	UD	This course outlines the history, evolution and status of the practice of health education among groups of people who define themselves as a community. There is a focus on health behaviors, environmental influences, health policy, and economic and health care system issues in health promotion and disease prevention
MGMT 312 Ethical Issues in Business	Business Administration	UD	This course examines the role of ethics in the business world and the ethical dilemmas encountered by managers. Special attention is given to the relationship among the varied stakeholders that have roles in business situations. Students are presented with practical tools to handle moral dilemmas in the workplace and the world.
POLS 335 Peace & Conflict Resolution	Politics	UD	Explores different forms of conflict – from non-violent to violent – and their underlying dynamics. It addresses the following questions: Why can some conflicts be managed in a peaceful way, while others end Politics in genocide? What are causes of conflict? What role does the cultural context, the state, the military, the economy, the gender order and ethnicity and nationalism play in conflicts? What are techniques to mediate and transform conflicts? And how in the aftermath of a conflict, can peace be made sustainable?

POLS 359 International Migrants & Refugees	Politics	UD	Provides an overview over the interdisciplinary study of voluntary and forced international migration. It investigates the history and causes for the processes of migration and its impacts on both sending and receiving countries. In addition, it takes a closer look at experiences of migrants, with a focus on human trafficking and migration control measures as well as transnational living.
SOCI 150/WMST 100 Introduction to Women's and Gender Studies	Sociology & Criminal Justice	UD	This course provides an introduction to the interdisciplinary field of women's and gender studies. It explores the biological, cultural, and structural debates surrounding issues such as gendered violence, gay vs. straight parenting, the gendered workplace, pornography, and the role of media in the social construction of masculinity and femininity. While the focus is primarily on the U.S., it does include a global perspective as well.
SOCI 305 Sociology of the Family	Sociology & Criminal Justice	UD	Family as social institution. Emphasis on structure and function of family; cross-cultural comparisons; analysis of contemporary American family systems. *Includes assignment on population, fertility and demographic transition
WILD 240 Backpacking	Public Health and Human Performance	UD	Introduction to Leave No Trace camping skills, clothing/equipment selection and use, food planning/expedition nutrition, map interpretations, are among topics covered. Culminates in a four-day backpacking trip.
WILD 320 Outdoor Education	Public Health and Human Performance	UD	Introduction to the broad field of Outdoor Education, and the use of wildland areas for the purpose of recreation, education, development, and therapy. Experiential learning theory associated with leading groups in wildland settings and visitor education will be examined. Students will earn a Leave No Trace Trainer's certificate and participate in overnight camping as part of this course
WILD 350 Wilderness and Adventure Program Planning	Public Health and Human Performance	UD	Program development, administration, risk management, and wildland management issues will be examined. Emphasis is on planning experiential learning and adventure activities for environmental education, recreation, personal development and therapy programs. Students will develop a comprehensive program proposal as part of this course

UN SDGs

GOAL 1: No Poverty

GOAL 2: Zero Hunger

GOAL 3: Good Health and Well-being

GOAL 4: Quality Education

GOAL 5: Gender Equality

GOAL 6: Clean Water and Sanitation

GOAL 7: Affordable and Clean Energy

GOAL 8: Decent Work and Economic Growth

GOAL 9: Industry, Innovation and Infrastructure

GOAL 10: Reduced Inequality

GOAL 11: Sustainable Cities and Communities

GOAL 12: Responsible Consumption and Production

GOAL 13: Climate Action

GOAL 14: Life Below Water

GOAL 15: Life on Land

GOAL 16: Peace and Justice Strong Institutions

GOAL 17: Partnerships to achieve the Goal