Sustainability Inclusive	Sustainability Focused	Title	Department	Course Level (Undergraduate or Graduate)	Course Description
x		HUM501: Social & Ethical Issues: Global	Humanities	Graduate	With the explosion of worldwide communications, the globalization of the economy, and the increase of international conflicts, this course takes a global perspective on major ethical issues impacting our daily lives as members of a world community. From business to world politics, students will examine enduring ethical concepts. Case studies will be used to explore contemporary applications to such concerns as armed conflict, overpopulation, global degradation, and education and literacy. This course will encourage students to seek solutions to improve the world in which we live.
x		HUM605: Philosophical Perspective on Digital Age	Humanities	Graduate	This course provides opportunities for students to investigate technology in historical context as the organization and institutionalization of knowledge for practical purposes. Students examine the effects of technology on the traditional human wisdom that has served as a stabilizing force throughout history.
x		INR572: Complex Humanitarian Emergencies	International Relations	Graduate	Focusing on complex humanitarian emergencies (CHEs), this course addresses the capacity to govern in the face of violence, turmoil, and conflict. The course will examine public policy challenges of developing and implementing the necessary systems to monitor, anticipate and react to critical response incidents and natural disasters. As such, the course will evaluate early warning methodologies and review the scientific research and competing approaches to preventing and mitigating complex humanitarian emergencies.
	x	INR534: Environmental Justice	International Relations	Graduate	Students examine the practice of natural resources utilization and its impact on environmental and human integrity. Is there a balance between derived benefits of resource utilization and the cost associated with it? Are the benefits and costs distributed equally between regions and states and between all users in a region or state? Does the use of resources by some entail only costs for others? Overall, is there a balance between considerations of economic order and environmental justice?
x		BCH-410: Pharmacology and Toxicology (4 Credits)	Biochemistry (BCH)	Undergraduate	The fundamentals of how chemicals produce therapeutic and toxic responses are presented. Emphasis is given to the absorption, distribution, metabolism and elimination of drugs from the body and their receptors and interactions. Through case studies and informed debate, students learn the effects of drugs on the human population and the environment. Junior or senior academic standing; Biology major or Neuroscience minor are required.
	x	BIO-111: General Biology I (4 Credits)	Biology (BIO)	Undergraduate	This course introduces fundamental concepts in ecology and evolution, relationships within populations and communities in the biosphere. Laboratory exercises include the use of natural richness of the school's island geography and in-lab simulations. Ethical concerns related to resources and their care and distribution are discussed.
	x	BIO-111L: General Biology I Lab (0 Credits)	Biology (BIO)	Undergraduate	Laboratory course in general biology intended for science majors. Laboratory exercises include the use of natural richness of the school's island geography and in-lab simulations. Ethical concerns related to resources and their care and distribution are discussed.
x		BIO-112: General Biology II (4 Credits)	Biology (BIO)	Undergraduate	Foundational concepts in comparative anatomy of plants and animals, their physiology and adaptations are considered. Cell structure, biochemistry, and molecular biology are highlighted. Lab includes wet experiment, dissection and simulations.
x		BIO-112L: General Biology II Lab (0 Credits)	Biology (BIO)	Undergraduate	Laboratory course in general biology intended for science majors. Topics include the application of the scientific method, examination of cellular processes (e.g., respiration, photosynthesis, mitosis, meiosis), Mendelian genetics, operation of basic laboratory equipment, and investigations of structure and function of plants and animals.
	x	BIO-140: Humans and their Environment (3 Credits)	Biology (BIO)	Undergraduate	This course considers the interdependence and tension between humans and their environment. Discussions of contemporary, social, economic, and ecological concerns such as population growth, world hunger, pollution and resource utilization attempt to provide the student with the general background necessary for consideration of environmental ethics. The student will then critically evaluate and analyze the moral choices involved in such environmental dilemmas as intergenerational equity, the needs of developing countries versus the needs of industrialized nations, individual needs and rights versus the good of both the local and global communities. Fulfills Core Requirement in Natural Scienc
	x	BIO-140L: Humans and their Environment Lab (1 Credits)	Biology (BIO)	Undergraduate	This course consists of laboratory exercises to give the students experience with the scientific method, measurement, computation, quantification, statistical analysis, and lab report writing. These include topics such as osmotic gradients, analysis of temperature, pH, conductivity, salinity, population demographics, water, air and soil quality, toxicology and behavioral ecology.
x		BIO-190: Nutrition (3 Credits)	Biology (BIO)	Undergraduate	This course presents a survey of nutrition. Various nutrients and their relationship to human growth and development will be analyzed. Both the benefits and the safety problems associated with the rapid changes in the technology of food science will be assessed along with hunger as serious global, moral, and ethical concerns.
	x	BIO-200: Botany (4 Credits)	Biology (BIO)	Undergraduate	This is an introductory course with laboratory emphasizing the continuous interaction of living plants with the environment by examining the structures and functions of cells, tissues and organs of both terrestrial and marine plants and algae. Special emphasis will be placed on ecology, particularly the role of plants in the biosphere, and on appropriate environmental issues. Additionally, this class examines through laboratories and hands-on work in our greenhouse how environmental factors affect plant growth and survival.
	x	BIO-200L: Botany Lab (0 Credits)	Biology (BIO)	Undergraduate	This laboratory emphasizes the continuous interaction of living plants with the environment by examining the structures and functions of cells, tissues and organs of both terrestrial and marine plants and algae. This class examines how environmental factors affect plant growth and survival through hands-on work in our greenhouse.
	x	BIO-230: Biotechnology (3 Credits)	Biology (BIO)	Undergraduate	An introduction to recent developments in basic biological research that are improving technologies for producing food, medicines, clinical diagnostic procedures, and a vast array of other biochemicals that extend and improve modern life. The course discusses the basic principles of genetics, applied microbiology, agribusiness and industrial biotechnology. Also considered are governmental policies regarding the development and regulation of biotechnology research. Students will then analyze and evaluate the moral and ethical choices and dilemmas of this rapidly evolving technology and its global effects.
	x	BIO-255: Conservation Biology (3 Credits)	Biology (BIO)	Undergraduate	Conservation Biology is the integrated science of diversity and scarcity developed to face the challenge of stemming the current rate of extinction. Students will be introduced to the discipline in three key areas: understanding patterns of global biodiversity, investigating the human influence on biological species, populations, communities and ecosystems, and to gain a basic understanding of the practical approaches to prevent extinction, maintain genetic variation, and protect and restore biological communities.
	x	BIO-260: Marine Biology (4 Credits)	Biology (BIO)	Undergraduate	Estuarine, coastal and marine environments and their organisms that inhabit these environments are studied in this course. The technology needed to monitor and maintain marine ecosystems is practiced in the lab and the field.
	x	BIO-260L: Marine Biology Lab (0 Credits)	Biology (BIO)	Undergraduate	The laboratory examines the estuarine, coastal and marine environments and the organisms that inhabit these environments. The laboratory focuses on the technology and techniques needed to monitor and maintain marine ecosystems and how it is practiced in the field.
	x	BIO-275: Tropical Biology (3 Credits)	Biology (BIO)	Undergraduate	An introduction to terrestrial and marine biomes of tropical latitudes, biodiversity of Neotropical wildlife and fisheries of the Caribbean, human ecology in Central America, and coral reef, mangrove and tropical forest ecology. Tropical biology offers students the exciting opportunity to study first-hand the evolutionary ecology of important plant and animal taxa in tropical ecosystems. Course design emphasizes intensive field exploration of tropical ecosystems on land and sea in Belize, Central America, where students are introduced to a great diversity of tropical habitats, each possessing distinctive biotas that in turn demonstrate unique evolutionary histories and ecological dynamics. The course and field exploration emphasizes the human dimensions of tropical systems and the principles of conservation biology.
	x	BIO-310: Ecology (4 Credits)	Biology (BIO)	Undergraduate	This course examines the concepts of the ecosystem, populations, communities, the flows of energy, material cycles, and the necessity of diversity. Concepts including the unity of organisms and inseparable interactions with the physical environment are analyzed. Class discussions include topics such as the formation, distribution, and organization of ecological communities; plant succession and nutrient cycling; evolutionary trends of plant and animal populations.
	x	BIO-310L: Ecology Lab (0 Credits)	Biology (BIO)	Undergraduate	This course examines the concepts of the ecosystem, populations, communities, the flows of energy, material cycles, and the necessity of diversity. Laboratory topics such as the formation, distribution, and organization of ecological communities; plant succession and nutrient cycling; evolutionary trends of plant and animal populations are examined.

	x	BIO-390: Environmental Science Internship (3-4 Credits)	Biology (BIO)	Undergraduate	A supervised work experience in areas of environmental science such as wildlife management, water resources, sewer treatment systems, salt marsh monitoring and restoration, environmental education or natural resource management are available. Students are expected to review the literature on the chosen internship project and to make formal oral and written presentation of the internship experience. Permission of the department chair is required.
x		CHM-130: Chemistry in Society (3 Credits)	Chemisty (CHM)	Undergraduate	The course entails learning, thinking about, and applying major laws, principles, concepts, and theories of chemistry to issues in contemporary society. In any one semester, topics may include air and water quality, global warming and forensic chemistry. The course will be offered in an instructor-led, online environment with regularly scheduled classroom review sessions. Fulfills Core Requirement in Natural Sciences.
x		CHM-203: Fundamentals of Organic Chemistry (4 Credits)	Chemistry (CHM)	Undergraduate	The course provides a brief review of organic chemistry. The material is designed to focus on applicable areas of organic chemistry to students majoring in environmental studies or interested in health-related fields such as biotechnology or forensics.
	x	CHM-310: Environmental Chemistry (4 Credits)	Chemistry (CHM)	Undergraduate	A study of the chemistry of the environment applying the principles of chemistry to such topics as atmospheric chemistry, air pollution, water chemistry, water pollution, hazardous chemicals, and hazardous waste management.
	x	CHM-310L: Environmental Chemistry Lab (0 Credits)	Chemistry (CHM)	Undergraduate	An integrated lecture/laboratory course designed to teach students fundamental laboratory techniques and measurements in environmental chemistry. Experiments include Acid Rain and Pollution Prevention, Measuring Air Pollution, Air-Water Partitioning. Measuring Water Contamination, Soil Analysis, Examining Renewable Resources.
x		CHP-170: Introduction to Historic Preservation (3 Credits)	Cultural & Historic Preservation (CHP)	Undergraduate	This course is an introduction to historic preservation as it is practiced in the United States. Some people think historic preservation is all about keeping things the way they are (or were), but this is a practical impossibility and it is much more accurate to think of historic preservation as "the management of change."
x		CHP-218: Exploring North American Indigenous Cultures (3 Credits)	Cultural & Historic Preservation (CHP)	Undergraduate	This course provides an introduction to North American Indian societies. The class takes an anthropological approach that explores diversity in the cultural practices and material culture of Native American groups across the continent. Course topics will include adaptation to the environment, belief systems, gender roles, architecture and European colonialism. Students in the course will also engage with modern issues facing Native American communities such as heritage preservation and environmental, economic and social justice.
x		CHP-255: Internship in Cultural and Historic Preservation (3 Credits)	Cultural & Historic Preservation (CHP)	Undergraduate	This internship allows CHP students to work in offices and institutions that deal with cultural and historic preservation under the direction of practitioners.
x		CHP-256: Internship in Archaeology and Cultural Resource Management (3 Credits)	Cultural & Historic Preservation (CHP)	Undergraduate	This internship allows CHP students to work in offices and institutions that deal with the archaeological aspects of cultural resource management under the direction of practitioners.
x		CHP-260: The City as a Work of Art (3 Credits)	Cultural & Historic Preservation (CHP)	Undergraduate	This course begins with the premise that the greatest human artifact is the city. It examines the characteristic elements of urban form as they have developed over time and in different places, explaining their presence and meaning. Not a course in urban history, this is, rather, a study of the history of urbanism, dealing with the physical forms of the urban environment, and how those forms relate to the natural world around cities, primarily in Europe and the New World.
	x	CHP-263: Historic Site and Cultural Resource Management (3 Credits)	Cultural & Historic Preservation (CHP)	Undergraduate	Historic sites come in a wide variety of forms from buildings to battlefields to archaeological sites. While diverse, these sites share a powerful basis of importance - they are physical locations that link the past to the present. In this class, students are introduced to the preservation laws that guide the practice of cultural resource management and the fundamental concepts and practices that are employed to protect and manage historic sites in the United States. This class will focus on protective legislation, management challenges, public outreach, and interpretation.
x		CHP-310: Introduction to Geographic Information Systems (3 Credits)	Cultural & Historic Preservation (CHP)	Undergraduate	In this class, students will be introduced to Geographic Information Systems (GIS) - a powerful set of methods for visualizing and analyzing information using computer-generated maps. Through hands-on projects, students will acquire a sound working knowledge of GIS software and its applications. The skills learned in this class will be useful in several fields including historic preservation, environmental studies, civic planning, social sciences, and business.
x		CHP-311: Landscape History and Interpretation (3 Credits)	Cultural & Historic Preservation (CHP)	Undergraduate	In this course, students are introduced to theories of landscape history, with a particular focus on New England. Techniques of researching, documenting, and interpreting landscapes are critical components of the course. The challenges of preserving landscapes in the face of development and sprawl are also important aspects of the class.
x		CEG-390: Current Issues (3 Credits)	Cultural, Environmental, and Global Studies (CEG)	Undergraduate	This course provides an opportunity for specialized, in-depth study of one or more of the Mercy critical concerns--the Earth, immigration, non-violence, racism and women. Content varies by instructor.
x		CEG-450: Capstone (3 Credits)	Cultural, Environmental, and Global Studies (CEG)	Undergraduate	This course meets the Capstone Requirement for majors in Cultural, Environmental, and Global Studies that includes Environmental Studies, Global Studies and Sociology & Anthropology. Per the 2013 Core Curriculum Task Force, this capstone course meets the requirements of Part IV of the core requirements for all undergraduates: "As a culminating experience this element should build upon and allow students to use skills developed in the University Seminars and in Exploring the Liberal Arts thus providing an opportunity for outcomes assessment." This course involves a synthesis of core curriculum themes and integrates application skills, perspectives and concepts from students' majors. The capstone course will integrate different perspectives, provide opportunity to reflect on the University core and mission, apply theory and putting ideas into practice, and builds skills in information literacy. Senior academic standing is required.
x		CEG-451: Thesis Cultural, Environmental & Global Studies (3 Credits)	Cultural, Environmental, and Global Studies (CEG)	Undergraduate	Development of a thesis in one of the three majors under the close supervision and mentorship of a designated faculty member.
x		ECN-263: Global Economics (3 Credits)	Economics (ECN)	Undergraduate	This course focuses on current global economic debates and challenges facing countries around the world. Possible topics include unsustainable debt, European Union, aging populations, global warming, inequality and poverty, and emerging markets.
	x	ENV-334: Environmental Justice (3 Credits)	Environmental Studies (ENV)	Undergraduate	This course explores global environmental issues from a philosophical and social justice perspective. The foundation of environmental justice is built on the premise that all people, regardless of race, class, gender, ethnicity, and economic capacity have a right to a clean and safe environment, and access to adequate natural resources. Global implications of environmental injustices are explored in the context of various ethical frameworks, and reasonable policy initiatives to correct the disparities are discussed and evaluated.

	x	ENV-350: Natural Resource Management (3 Credits)	Environmental Studies (ENV)	Undergraduate	Natural Resource Management is the field of environmental studies that manages natural resources (land, water, soil, plants, animals) with a goal of improving the quality of life for present and future generations. The course examines the interaction of people and their environment when making decisions that affect the quality and quantity of natural resources balanced by social, economic and other environmental factors. The goal of the course is to introduce students to this very broad discipline through extensive use of case studies and the primary literature.
	x	ENV-360: Hydroponics Practicum (3 Credits)	Environmental Studies (ENV)	Undergraduate	This course is a three-part practicum for any student interested in the biological, economic, and social dimensions of bringing food from farm to table. Part 1 reviews recent and classic literature on the local food movement. In Part 2, students maintain, cultivate, and harvest hydroponic systems with an emphasis on maximizing yield. For Part 3, they learn through practical experience about the socioeconomic processes involved in bringing produce to market. Students should anticipate spending three hours of class time in addition to three hours in the hydroponic research lab per week. Some weekend time for the farmer's market is required.
	x	ENV-397: Environmental Studies Internship (1-6 Credits)	Environmental Studies (ENV)	Undergraduate	Environmental Studies Internship is an interdisciplinary experiential course that seeks to give students an introduction to the practicum of work in fields such as biology, planning, economics, public policy, and education. The internship will help the student better understand concepts learned in class while gaining valuable work experience in the field. The course consists of at least 105 hours of work with an environmental organization that has a cooperative supervisor who has established learning goals and objectives with a faculty member affiliated with the university prior to the commencement of the internship. Open to all students with sophomore academic standing and above.
x		ENV-497: Undergraduate Research (3 Credits)	Environmental Studies (ENV)	Undergraduate	This course provides in-depth investigation of a specific topic in Environmental Studies that involves data collection, analysis, interpretation, and written presentation. Topic will be determined by faculty member who is acting as research adviser.
x		ENV-499: Independent Study (3 Credits)	Environmental Studies (ENV)	Undergraduate	This supervised study is intended to permit individual students to examine a subject that is not offered in the regular curriculum.
	x	GLO-100: Introduction to Global Studies (3 Credits)	Global Studies (GLO)	Undergraduate	This course provides an introduction to concepts and methods used in the interdisciplinary field of Global Studies. The goal of this course is to develop the skills needed to understand complex problems related to global interconnectedness. The course examines the processes of globalization and their effects on people and cultures, economic and political institutions, and the natural environment from multiple perspectives. Open to non-majors.
x		MGT-079: Social Venture in Business (1 Credits)	Management & Business Admin (MGT)	Undergraduate	This course explores the market for social ventures. Examples from practitioners and entrepreneurs are explored, including understanding 'capitalism with a heart' and cause ventures for profit and non-profit. Cause related venture and cause capitalism, that helps the local and global communities, are also explored.
x		MGT-095: Non-Profit Organizations-Mission, Action, Impact (1 Credits)	Management & Business Admin (MGT)	Undergraduate	This workshop will explore local and regional nonprofit organizations in terms of history, structure, board governance and community impact. Guest speakers representing a variety of roles - including directors, administrators, staff and volunteers - will share their expertise and experiences so that students develop increased awareness of the many and varied needs of the populations served as well as the opportunities available to be a part of a mission-driven organization.
x		MGT-300: Ethics for Business (3 Credits)	Management & Business Admin (MGT)	Undergraduate	This course is designed to explore the influence of the personal ethics and social values on the decision-making process of business professionals. Course participants develop and use a matrix based on the frameworks of justice, rights, duty, utility and normative ethics to evaluate the consequences of business decisions on a variety of stakeholders. The attempts to curb the unethical actions of business through legal constraints are examined in depth. Emphasis is placed on research, case study analysis, critical thinking and the strengthening of individual accountability and responsibility for maintaining ethical standards based on justice, respect for the rights of others and honesty in the global business environment.
	x	MGT-385: Environmental Management-Quality Systems (iso9000/Iso14000) (3 Credits)	Management & Business Admin (MGT)	Undergraduate	This course examines the relationship created by the U.S. Constitution between government, business, special interest groups, the general population and the environment (internal/external). The course places emphasis on issues of special concern for future business leaders and managers. Specific topics include compliance with internal and external environmental standards established by the Environmental Protection Agency and Occupational Safety and Health Administration as they relate to workplace processes, training, safety, stakeholder concerns and responsible stewardship of resources. International quality standards associated with ISO 9000 (quality) and ISO 14000 (environmental) are integral to the course. Course participants are assigned appropriate research projects linked to course objectives that include cost-benefit analysis, waste stream analysis, training, documentation, reporting, and inspection requirements essential to achieve and sustain regulatory compliance and process improvement. The course includes visits to off-campus sites to integrate classroom learning with first-hand observations.
	x	NUR-444: Public Health and Disaster Response Planning (3 Credits)	Nursing (NUR)	Undergraduate	This course introduces the student to public health nursing. Epidemiological principles will be utilized in discussing global health issues, environmental health, infectious disease, and health disparities within populations. Concepts of vulnerability to natural and man-made disasters, and the challenges of prevention and health care advocacy for the preparedness of all will be explored within the context of social justice. Community disaster preparation and management will be explored. Local, regional and national preparedness will be evaluated with an emphasis on the effect on the local community. This course may include fieldwork on a public health issue.
	x	PHL-334: Environmental Justice (3 Credits)	Philosophy (PHL)	Undergraduate	This course explores global environmental issues from a philosophical and social justice perspective. The foundation of environmental justice is built on the premise that all people, regardless of race, class, gender, ethnicity, and economic capacity have a right to a clean and safe environment, and access to adequate natural resources. Global implications of environmental injustices are explored in the context of various ethical frameworks, and reasonable policy initiatives to correct the disparities are discussed and evaluated.
	x	POL-345: International Environment and Development (3 Credits)	Political Science (POL)	Undergraduate	Humanity has entered the Anthropocene, an epoch in which economic development produces profound and potentially irreversible effects on Earth, such as climate change, environmental degradation, and mass extinction of species. This course examines the environmental effects of poverty and economic growth, challenges to sustainable development, and the structure of relevant political, cultural, and economic institutions. The course will focus mainly on phenomena that are global in scope but will include domestic examples and applications.
x		RTS-327: Technohuman? Technology, Genetics, God and the Future of Humanity (3 Credits)	Religious & Theological Studies (RTS)	Undergraduate	The course will ask "What does it mean to be human in a world which is using technology to enable human beings to transcend their humanity?" It will explore developments in technology and genetics which alter the human being and which pose significant ethical questions for the future of humanity.
	x	RTS-332: Care for Creation: Christianity, Ethics and the Environment (3 Credits)	Religious & Theological Studies (RTS)	Undergraduate	One of the great questions confronting human beings in the present world is their relationship to the environment. This course explores the human relationship to non-human nature from moral and religious perspectives, engaging the following sorts of questions along the way: Do humans have any moral obligations with respect to non-humans, such as animals or ecosystems? If so, how strong are they and how are they best described? Moreover, how does religion impact the question? Is Christianity positive or negative in its relationship to the earth? Does it lack a sensitivity that Native American and Eastern religions seem to have? Or can Christianity generate a constructive earth-human relationship? These issues are crucial as humankind attempts to understand and control its newfound power on this planet.
	x	RTS-334: Global Ethics (3 Credits)	Religious & Theological Studies (RTS)	Undergraduate	This course explores the ethical dimensions of one or more ethical issues with global implications and helps students develop an informed Christian response. It addresses the sources of moral wisdom and the centrality of the common good in ethical discernment. Issues that students might examine include human development (economic, cultural, social), war and peace, poverty, refugees and migration, the situation of women around the world, food security, etc.
	x	RTS-335: Social Ethics in a Volatile World (3 Credits)	Religious & Theological Studies (RTS)	Undergraduate	This course explores the ethical dimensions of one or more contemporary social issues and helps students develop an informed Christian response. It addresses the sources of moral wisdom and the centrality of the common good in ethical discernment. Issues which students might examine include social and economic justice, race and racism, violence, consumerism, technology, immigration, and ecology. The social science research, the Judeo-Christian tradition and principles of Catholic social teaching provide the framework for this consideration.

	x	SCI-104: Earth Science (3 Credits)	Science (SCI)	Undergraduate	Earth Science draws on the sciences of geology, oceanography, meteorology and astronomy in order to gain an understanding of the earth and its place in the universe. Topics explored include minerals and rocks, external processes such as weathering, and erosion by water, wind and ice, internal processes as manifested by volcanoes, earthquakes, and plate tectonics, the oceans both in a static and dynamic sense, the earth's atmosphere again in both a static and dynamic sense, and the solar system and beyond to stars and galaxies.
Note: all course descriptions are available at https://catalog.salve.edu/undergraduate/academic-programs/					