

SUSTAINABLE MANAGEMENT (SMGT)

SMGT 115 | Environmental Science and Sustainability | 3 cr

Overview of the interrelationships between humans and the environment.

The material presented in the first one-third of the course focuses on important ecological concepts. The remainder of the course deals with human influences on the environment and sustainable practices to avoid or ameliorate the negative impacts. The ecological concepts are used throughout to identify, understand, and provide a basis for proposing possible solutions to contemporary environmental problems. Overall, this course will provide the student with a better understanding of how humans can more positively affect the environment in which they live.

Prerequisites: Admitted sustainable management majors only or program advisor consent on space available basis.

Offered: Occasionally.

SMGT 220 | Systems Thinking | 3 cr

Students will use systems thinking to apply the concepts of sustainability in various business, social, and scientific contexts. Rather than looking at a problem by analyzing their component parts, students will learn to analyze whole systems. Students will then model the relationships and behaviors to identify leverage points for change.

Prerequisites: College Math, admitted sustainable management majors only or program advisor consent on space available basis.

Offered: Occasionally.

SMGT 230 | Triple Bottom Line Accounting for Managers | 3 cr

Students will be introduced to the discipline of financial and managerial accounting and learn how this information is used. Students will gain a basic knowledge of the preparation of financial statements and their analytical use. Further, students will explore how this accounting information is applied by managers in the decision-making process helping organizations meet the triple bottom line (strong profits, healthy environment, and vital communities).

Prerequisites: College Math, admitted sustainable management majors only or program advisor consent on space available basis.

Offered: Occasionally.

SMGT 235 | Economics in Society and Sustainability | 3 cr

General introductory course highlighting economics, social and environmental issues facing society. In addition to covering traditional issues such as markets and prices (microeconomics), government economic management (macroeconomics), and international trade, it also introduces economic content into the analysis of selected topics such as poverty and discrimination, the environment, and the provision of government services. Critiques of conventional economic thought, within the context of systems thinking and ecological economics, are integrated throughout the course.

Prerequisites: College Math, admitted sustainable management majors only or program advisor consent on space available basis.

Offered: Occasionally.

SMGT 240 | Business Communications for Sustainable Management | 3 cr

Interdisciplinary professional and technical communication course that applies knowledge of sustainability principles and develops rhetorical skills for a variety of audiences in social, economic, and environmental contexts.

Prerequisites: Admitted sustainable management majors only or program advisor consent on space available basis.

Offered: Occasionally.

SMGT 250 | Sustainable Agriculture and Food Security | 3 cr

This course offers an in-depth assessment of the economic, social, and environmental considerations of production agricultural systems that provide safe, reliable, and affordable food supplies for a growing human population. In addition to the maintenance of the economic viability of production agricultural systems, course topics will focus on: the maintenance of soil, water, and air resources; addressing issues of biodiversity loss; and, maintenance of rural community character and economics. Economic, regulatory, and public entity tools that promote sustainability in production agriculture will also be addressed.

Prerequisites: SMGT 115; admitted sustainable management majors only or program advisor consent on space available basis.

Offered: Occasionally.

SMGT 305 | Climate Change and Sustainability | 3 cr

This course focuses on climate change science and greenhouse gases, natural and human impacts of climate change, and sustainable and efficient strategies to limit carbon emissions. The course is divided into three major areas: 1) climate science and measured impacts, 2) modeled predictions and mitigation/adaptation strategies, 3) sustainable and carbon neutral practices. This course will emphasize not only the economics of carbon budgeting and increasing efficiency but also the human role in creating and solving climate change and the discrepancies in who, where, and what will be impacted by both climate change and the necessary solutions.

Prerequisites: College Math, admitted sustainable management majors only or program advisor consent on space available basis.

Offered: Occasionally.

SMGT 310 | Ecology for Sustainable Management | 3 cr

Interrelationships of organisms with each other and their environments. Investigation into composition and dynamics of populations, communities, ecosystems, landscapes, and the biosphere with emphasis on sustainability.

Prerequisites: Introductory Biology or SMGT 115; admitted sustainable management majors only or program advisor consent on space available basis.

Offered: Occasionally.

SMGT 320 | Renewable Energy for Sustainable Management | 3 cr

Discusses sustainability as it relates to the world's increasing use of energy. Considers the potential harm done via greenhouse gases and prospects for large-scale implementation of more benign sources. Covers basic engineering principles and applications.

Prerequisites: College Math; admitted sustainable management majors only or program advisor consent on space available basis.

Offered: Occasionally.

SMGT 325 | Natural Resource Management | 3 cr

Examines the interdependence between natural resources associated with land, air, and water. Explores significant environmental issues regarding the policies and problems in the use and management of natural resources related to soils, vegetation, landscape within the context of social needs and sustainability.

Prerequisites: Admitted sustainable management majors only or program advisor consent on space available basis.

Offered: Occasionally.

SMGT 330 | Marketing for a Sustainable World | 3 cr

Analyzes an organization's opportunities to develop sustainability practices as they relate to the development of product, pricing, supply and distribution channels (retail, wholesale), promotion (advertising, sales promotion, public relations), target markets and reporting methodologies. **Prerequisites:** SMGT 235; admitted sustainable management majors only or program advisor consent on space available basis.

Offered: Occasionally.

SMGT 331 | Sustainable Organizational Finance | 3 cr

An introduction to the theory and methods of sustainable organizational finance. Topics include financial statements; discounting and budgeting; uncertainty and risk/reward trade-offs; and assessing the financial implications of the triple bottom line (e.g. climate change, carbon trading, human resource management, and creating environmentally-conscious shareholder value).

Prerequisites: Sustainable management major or program advisor consent.

Offered: Fall, Spring.

SMGT 332 | Economics of Environmental Sustainability | 3 cr

Provides an examination of the interaction between market activity and the environment as well as the use of economic decision making to manage the environment. This course applies economic analysis to the efficient and sustainable management of environmental goods and resources, and examines how economic institutions and policies can be changed to bring the environmental impacts of economic decision-making more into balance with human desires and the needs of the ecosystem. The last unit of the course serves as an introduction to the theory, methods, and application of sustainable organizational finance. Topics include financial statements, discounting and budgeting, uncertainty and risk/reward trade-offs, and assessing the financial implications of the triple bottom line (e.g., climate change, carbon trading, human resource managements, and the creation of environmentally conscious shareholder value).

Prerequisites: Admitted sustainable management majors only or program advisor consent on space available basis.

Offered: Occasionally.

SMGT 335 | Management and Environmental Information Systems | 3 cr

This course presents an overview of different technologies and information systems used in modern organizations. It covers various information systems for analyzing organizational data and processes. It presents tools for managing projects, promoting collaboration, and teamwork in the workplace. This course provides students hands-on experience with the information systems and technology tools. It also covers technologies that promote sustainability, and includes topics such as green computing and low-carbon technologies.

Prerequisites: SMGT 230; admitted sustainable management majors only or program advisor consent on space available basis.

Offered: Occasionally.

SMGT 340 | Organizational Behavior and Sustainability | 3 cr

Management principles and theories underlying human behavior in organizations are investigated. Topics include personality, motivation, communication, decision-making, leadership, teamwork, ethics, power, diversity, and work stress. Constraints and opportunities of an "eco" friendly organization are realized.

Prerequisites: Public Speaking; admitted sustainable management majors only or program advisor consent on space available basis.

Offered: Occasionally.

SMGT 360 | Environmental and Sustainability Policy | 3 cr

Topics include the spectrum of historical, theoretical and technical issues applicable to sustainable management of natural resources, environmental quality standards and risk management. Administrative structures that form the basis for selecting appropriate responses to complex management problems faced by industry, government and non-governmental agencies are identified. The historical development and current framework of public policy are investigated and specific foundational legislation is critiqued..

Prerequisites: SMGT 115; admitted sustainable management majors only or program advisor consent on space available basis.

Offered: Occasionally.

SMGT 370 | Logistics, Supply Chain Management and Sustainability | 3 cr

An introduction to the concepts, functions, processes, and objectives of logistics and supply chain management activities. It covers those activities that are involved in physically moving raw materials, inventory, and finished goods from point of origin to point of use or consumption. It covers the planning, organizing, and controlling of such activities, and examines the role of supply chain processes in creating sustainable competitive advantage with respect to quality, flexibility, lead-time, and cost. Topics include customer service, inventory management, transportation, warehousing, supply chain management, reverse logistics, green supply chains and international logistics. Prior knowledge of Excel spreadsheet applications is recommended.

Prerequisites: Statistics course; admitted sustainable management majors only or program advisor consent on space available basis.

Offered: Occasionally.

SMGT 410 | Corporate Social Responsibility and Sustainability | 3 cr

Corporate Social Responsibility (CSR) and the organization. First and foremost, this course will enable students to understand the rationale behind CSR and sustainability. This course takes students through an evaluation of risks and potential impacts in decision making, enabling them to recognize the links between the success of an organization and the well-being of a community/society. Additionally, methods and standards of integrating CSR throughout an organization, creating metrics and communicating CSR policies internally and externally will be discussed and analyzed. Students will develop an understanding of best practices of CSR in its entire breadth within an organization as well as delve into economic structures designed to foster more responsibility and accountability.

Prerequisites: Admitted sustainable management majors only or program advisor consent on space available basis.

Offered: Occasionally.

SMGT 420 | The Built Environment and Sustainability | 3 cr

This course addresses the impacts of the human-built environment on natural systems and opportunities available to mitigate them through thoughtful planning, design, and implementation techniques to provide desirable, affordable, and sustainable living and working spaces. Topics focus on providing critical infrastructure for economic development, housing, transportation, and utilities while protecting and enhancing environmental assets through effective site and building design, public input, and use of regulatory tools. Additional attention is given to the maintenance of community character and the economic and social interdependence of rural, exurban, suburban, and urban areas.

Prerequisites: Admitted sustainable management majors only or program advisor consent on space available basis.

Offered: Occasionally.

SMGT 430 | International Management for a Sustainable World | 3 cr

Analysis of the theory and practice of managing international organizations including socio-cultural aspects and group dynamics of international business and service organizations through the study of sustainable management practices. Implementation of a triple bottom line solution to organizational problems will be emphasized.

Prerequisites: SMGT 235; sustainable management major or program advisor consent.

Offered: Fall, Spring.

SMGT 435 | International Development and Sustainability | 3 cr

This course examines the international sustainability concerns. It explores interrelationships of sustainable management practices with population growth, health, food security, poverty, inequality, urbanization, international trade, technology and environmental change at local, regional, and global levels. Contemporary issues and alternatives will be explored to identify sustainable management practices that can lead to strong profitability, healthy environments, and vibrant communities.

Prerequisites: SMGT 235; admitted sustainable management majors only or program advisor consent on space available basis.

Offered: Occasionally.

SMGT 460 | Environment and Society | 3 cr

Introduces the fundamentals of human-environmental interaction; a grasp of how these interactions create problems; and how the elements of social, technological, and personal choices combine to overcome them.

Prerequisites: SMGT 115; admitted sustainable management majors only or program advisor consent on space available basis.

Offered: Occasionally.

SMGT 495 | Sustainable Management Capstone | 3 cr

An application and study of sustainable management through the solution of an industry-based project. Implementation of a triple bottom line solution to industrial problems will be emphasized.

Prerequisites: Senior standing; instructor consent, admitted sustainable management major only or program advisor consent on space available basis.

Offered: Occasionally.

SMGT 700 | Cultural and Historical Foundations of Sustainability | 3 cr

The changing relationships of humans to the natural environment; changes in dominant scientific perspectives and the process of scientific debate. The quest for understanding, manipulating, and dominating the natural world. Cultural and organizational structures; the role and impact of technology; the systems approach to problem solving and its implications for the future.

Prerequisites: Sustainable management major or program advisor consent.

Offered: Fall, Spring, Summer.

SMGT 710 | The Natural Environment | 3 cr

Natural cycles, climate, water, energy, bio-systems, the role of humans in the biosphere; human impacts on natural systems. Use of case studies; some pre-reading, carbon cycle as a unifying theme. Disturbance pollution and toxicity; carrying capacity; natural capital.

Prerequisites: Sustainable management major or program advisor consent.

Offered: Fall, Spring, Summer.

SMGT 720 | Applied Research and the Triple Bottom Line | 3 cr

Document and project internal and external costs resulting from the inseparability of the natural, social and economic environments.

Assesses sustainability issues using basic modeling techniques; cause and effect, root cause analysis, regression analysis and business scenario based cases.

Prerequisites: Sustainable management major or program advisor consent.

Offered: Fall, Spring, Summer.

SMGT 730 | Policy, Law, and the Ethics of Sustainability | 3 cr

The Law and Ethics regarding sustainability of Economic development and emerging environmental challenges at national and international levels; including National Environmental Policy Act (NEPA), United Nations Environmental Program (UNEP), Carbon Footprints, Kyoto protocol, and Brundtland Commission. The policy and role of government and its agencies such as Army Corps of Engineers; Department of Interior, etc., in building a more just, prosperous, and secure environmental common future.

Prerequisites: Sustainable management major or program advisor consent.

Offered: Fall, Spring, Summer.

SMGT 740 | Economics of Sustainability | 3 cr

Understanding the economy as a component of the ecosystem within it resides, with natural capital added to the typical analysis of human, social, built, and financial capital. Explores traditional micro, macro, and international trade theory and policy and the implications of sustainability. Topics include: history of economic systems and thought; globalization and localization; distinguishing between growth and development; the nature and causes of market failure; consumption, consumerism, and human well-being; emerging markets; technological change; business organization and financial market alternatives; demographic change; and the global economy.

Prerequisites: Sustainable management major or program advisor consent.

Offered: Fall, Spring, Summer.

SMGT 750 | The Built Environment | 3 cr

Explore how the built environment came to be and the intersection of human needs: water, air, food, water, waste, transportation, healthcare and education. Evaluate community design; what does a sustainable community look like? Study related technologies and evaluate alternatives, discuss unintended consequences. Course will include case studies.

Prerequisites: Sustainable management major or program advisor consent.

Offered: Fall, Spring, Summer.

SMGT 760 | Geopolitical Systems-Decision Making For Sustainability on the Local, State, and National Level | 3 cr

An examination of decision making and public policy for sustainability at the national, state and local level, with emphasis on the social, economic, political factors affecting decisions within both the public and private sectors. Attention is given to formal American policymaking processes, informal grassroots activities and consensus building, public engagement with sustainability decisions, corporate sustainability actions and reporting, the promise of public-private partnerships and collaborative decision making, and practical examples of how decision making fosters effective transitions to sustainability goals at all levels.

Prerequisites: Sustainable management major or program advisor consent.

Offered: Fall, Spring, Summer.

SMGT 770 | Leading Sustainable Organizations | 3 cr

A macro-level perspective on leading sustainable organizations. Topics addressed include: organizational change and transformation processes, strategic and creative thinking, organizational structures and their impacts, conflict management and negotiation, stakeholders management and situational leadership styles and behaviors. Focuses on how organizational leaders develop and enable sustainable organizations, especially in times of environmental change.

Prerequisites: Sustainable management major or program advisor consent.

Offered: Fall, Spring, Summer.

SMGT 780 | Corporate and Social Responsibility | 3 cr

Corporate social responsibility and an organization. Evaluation of risks and potential impacts in decision making recognizing the links between the success of an organization and the well being of a community. Integrating corporate social responsibility throughout an organization, creating metrics and communicating CSR policies internally and externally. Development of best practices in an organization pertaining to corporate social responsibility.

Prerequisites: Sustainable management major or program advisor consent.

Offered: Fall, Spring, Summer.

SMGT 782 | Supply Chain Management | 3 cr

Planning, organizing and controlling the organization's supply chain is examined in context of the triple bottom line. Total cost analysis of product and process life cycles are considered in the context of strategy and operations. Topics include: sourcing, operations, distribution, reverse logistics and service supply chains. Process measurements and the impact on organizational performance in the context of footprints (e.g. carbon, water, pollution). Discussion of existing and potential software systems.

Prerequisites: Sustainable management major or program advisor consent.

Offered: Fall, Spring, Summer.

SMGT 784 | Sustainable Water Management | 3 cr

This course addresses practical applications of sustainability in aquatic environments. Topics covered include water and health, water quality and quantity, governance, assessing the aquatic environment, water treatment technologies, environmental mitigation, and impacts of climate change. emphasis will be on selected areas of interest from the perspective of public health, engineering, and municipal conservation management.

Prerequisites: Sustainable management major or program advisor consent.

Offered: Fall, Spring, Summer.

SMGT 785 | Waste Management and Resource Recovery | 3 cr

Topics include the generation, processing, management and disposal of municipal, industrial and agricultural waste with an emphasis on the technical, economic and environmental aspects of various recovery processes.

Prerequisites: Sustainable management major or program advisor consent.

Offered: Fall, Spring, Summer.

SMGT 786 | Climate Change | 3 cr

In this course, you will explore climate change through scientific, humanistic, and sustainability frameworks. After building a strong foundation in the causes, impacts, and study of climate change, you will apply this understanding to evaluate scientific communication, environmental justice and vulnerability, and environmental policy to find solutions and strategies to address anthropogenic climate change.

Prerequisites: Sustainable management major/program or program advisor consent.

Offered: Fall.

SMGT 790 | Capstone Preparation Course | 1 cr

Research, data, analysis, scholarly inquiry resulting in project proposal.

Prerequisites: Sustainable management major or program advisor consent.

Offered: Fall, Spring, Summer.

SMGT 792 | Capstone Project | 3 cr

Completion of approved project utilizing concepts from coursework.

Prerequisites: Sustainable management major or program advisor consent.

Offered: Fall, Spring, Summer.

SMGT 795 | Special Topics in Sustainable Management | 3 cr

Various specialized areas in sustainable management will be examined.

Prerequisites: Sustainable management major or program advisor consent.

Offered: Fall, Spring, Summer.