2015-2016 Sustainable Content Courses

St. John's University defines "Sustainability" as "a long-term responsibility to meet the needs of the present without compromising the needs of future generations" and believe that this can be accomplished by the overlap of three areas- social, economic, and environmental. Below, courses that have been identified by Department Chairs as having a sustainable element have been placed in one of these three areas. Sustainable elements include real world application to a sustainable issue, cross-disiplinary content, and connection to sustainable initiatives.

Undergraduate Courses of Study:

Sustainability Content Included:

School of Liberal Arts and Sciences

• Asian Studies-(Social)

- 1230 Contemporary China: An introduction to modern China from World War II to the present, with special emphasis on the problems of political, social and economic development. Credit: 3 semester hours.
- 1250 Contemporary Japan: The political, economic, social and religious development of Japan from the end of World War II to the present. Credit: 3 semester hours
- 1330 Contemporary Korea: An introduction to modern Korea from WWII to the present, with special emphasis on the political, social and economic problems facing the divided Korean nation. Credit: 3 semester hours.
- 2540 America Meets China: A historical look at the encounter between the U.S. and China from 1785 to the present, as a prologue to the uniquely American forms of globalism and multicultural

• Biology-(Environmental)

- 1070 Environmental Biology: Human ecology and evolution; interrelations between humans and environment at the individual, population and ecosystem levels. Not open to BIO majors. Credit: 3 semester hours.
- o 1600 Field Biology (Mini-Course): General principles of ecology and field sampling techniques to measure parameters that influence the distribution of organisms in various ecosystems. Field trips required. Not applicable in major or minor sequences. Not open to students who have previously taken BIO 3370. Credit: 3 semester hours.
- 1859 Tropical Ecology and Evolution: Study Abroad Winter Intersession field course to the Ecuadorean Highlands and Galapagos Islands. Not open to BIO majors. Credit: 3 semester hours.

- 2510 Aquatic Ecology: Introduction to major ecological principles of freshwater and marine habitats. Field trips required. Lecture, 2 hours. Laboratory, 4 hours. Credit: 4 semester hours. Laboratory fee, \$100.
- 2859 Island Biogeography: Principles of biogeography illustrated and explored during a winter intersession trip to Ecuador, including the Galapagos. Credit: 3 semester hours.
- 3370 Ecology: Ecological principles concerning animals and plants, with emphasis on group phenomena, especially the dynamics and evolution of ecosystems, communities and populations. Field trips required. Lecture, 2 hours. Laboratory, 4 hours. Credit: 4 semester hours.
- 2310 Botany: The biology of plants: their morphology, evolution and classification. Field trips. Lecture, 2 hours. Laboratory, 4 hours. Credit: 4 semester hours. Laboratory fee, \$100.

• Chemistry-(Environmental)

- 3420 Environmental Chemistry: The chemical principles which govern environmental quality and environmental regulations are developed using specific examples such as global warming, ozone depletion, water quality and air pollution. Credit: 3 semester hours.
- 3431 Methods in Environmental Chemistry: Laboratory work providing hands-on experience with the techniques and instruments used in modern environmental investigations. Credit: 3 semester hours.

• Environmental Studies- (Environmental)

- 1010 Introduction to Ecological Principles Principles governing the relationships between organisms and their environment. Spatial and temporal organization of ecosystems and distribution of biotic communities are emphasized. Credit: 3 semester hours
- 2110 The Coastal Environment: A systematic and regional analysis of the environmental problems caused by use and misuse of the coastal zone: estuaries, wetlands, saltmarshes, beaches, and alteration and pollution of these environments. Credit: 3 semester hours.
- 2150 Concepts and Practices of Environmental Education: A survey of the goals and fundamental concepts of environmental education with activities and techniques for integrating environmental education into the curriculum. Field trips required. Credit: 3 semester hours.
- 2160 American Environmental Politics and Policies: An analysis of the evolution of United States environmental policy and the influence of politics on those policies with particular emphasis on the late 20th century. Credit: 3 semester hours.

- 3320 Resource Management: An analysis of the goals, principles, methods and ecological measures currently employed by natural resource managers. Lab and field work required. Field trips. Lecture, 2 hours. Laboratory, 4 hours. Credit: 4 semester hours. Laboratory fee, \$100.
- 3480 Environmental Geology: An analysis of the relationships between human beings and the Earth. Geological hazards, evolutionary Earth changes and the power of modern civilization to alter the Earth. Credit: 3 semester hours.

• Government and Politics-(Social)

- 2160 American Environmental Politics and Policies: An analysis of the evolution of the United States environmental policy and the influence of politics on those policies with particular emphasis on the late 20th century. Credit: 3 semester hours.
- 2170 Global Environmental Politics and Policies: Analysis of politics and policies with regard to global environmental issues within a larger discussion of development—sustainable and unsustainable. Credit: 3 semester hours.
- 2520 Politics of Environment and Development An examination of the political dimensions of environmental issues and development issues in selected countries and regions around the world. Credit: 3 semester hours

• History and Geography-(Social)

- 3795 Technology and Science in 20th-century America: From the age of inventions to the rise of the Internet, the ways in which science and technology shape, and are shaped by, human action and decisions. Credit: 3 semester hours.
- 2001 Natural Resources and World Development :An analysis of the most pressing natural resource issues of the late 20th century and how human use of the resource base affects both environmental quality and global development. Credit: 3 semester hours
- 2002 Issues in Environmental Conservation: Environmental issues are analyzed in a spatial framework; energy policy, population, land use, materials and waste management; history of environmental degradation by human activity and possible alternatives to that degradation. Credit: 3 semester hours.

• Mathematics-(Economic)

O 1320 Calculus with Business Applications: Introduction to calculus. Differentiation and integration of algebraic, exponential, and logarithmic functions of a single variable; introduction to functions of several variables; business and economics applications are stressed throughout. Open to The Peter J. Tobin College of Business and St. John's College of Liberal Arts and Sciences students only. Credit: 3 semester hours.

• Philosophy-(Social)

- 2200C Ethics Prerequisite: Human happiness and the essential means of achieving it; universal and objective morality vs. relativism and subjectivism; principles used in formulating a rational moral judgment; the functions of law and the conscience; prudence and the moral virtues as the heart of the moral life. Credit: 3 semester hours.
- 2220C Ethics and Business: The development of the general principles of the moral life in regard to happiness and the means to attain happiness. The objective moral principles which impact on one's life in its various dimensions personal, familial, social and political. Special emphasis is placed on the application of ethical principles to accounting, economics, finance, management, and marketing. Open to The Peter J. Tobin College of Business students only. Credit: 3 semester hours.
- o 3670 Modernity in Crisis: In a world described as postmodern, a world increasingly marked by violence and irrationality, the traditional philosophical search for meaning and ethical value, and the ideas of truth and rationality have been called into question. This course examines the response to this crisis by recent Continental thought. Credit: 3 semester hours.
- O 3720 Environmental Ethics: A philosophical investigation of the environment and its relationship to the human person. Special emphasis is placed on the moral issues that arise from that relationship such as the moral standing of non-humans and the responsibility of the present generation to future generations. Credit: 3 semester hours.
- o 3740 Social Justice: An investigation of social justice issues in the contemporary postmodern world. The course discusses how various philosophical theories and historical perspectives can aid or distort our understanding of social justice and its concretization. Credit: 3 semester hours.

• Physics-(Environmental)

- 1080 Our Planet: An integrated, descriptive study of our planet, stressing the
 principles of plate tectonics. The topics include the origin and history of the earth,
 volcanoes and earthquakes, continental drift, environmental geology and
 astrogeology. No prior study of physics required. Credit: 3 semester hours.
- 1120 Energy and Environment A comprehensive study of energy production, distribution, and consumption. Physical principles and technological problems. Environmental aspects; energy crisis, past and future. Future energy sources and their management. No prior study of physics required. Credit: 3 semester hours.

• Psychology-(Social)

 2010 Cross-Cultural Psychology An introduction to understanding human behavior in its socio-cultural context. The course takes a global perspective and views New York City's cultural diversity as an important resource. Credit: 3 semester hours.

• Sociology-(Social)

 1070 Social Problems: Current social issues and policies; race relations, crime, deviance, aging, economic and political trends and their influence on social structures. Alternative strategies to confront current problems are considered. Credit: 3 semester hours. 2100 Global Poverty: Failures of global policies to substantially change the conditions of the world's poor and conditions that would have to be changed if poverty is to be ended. Credit: 3 semester hours.

• Anthropology-(Social)

- 1040C Culture and Global Change: An examination of the diverse social and cultural movements that have and are currently transforming the world. Credit: 3 semester hours.
- 2400 Anthropology of Development: Survey of anthropological approaches to development. Focus on competing cultural ideas about living standards and economic progress in relation to globalized development strategies. Credit: 3 semester hours.

• Theology-(Social/Moral)

 2810 Introduction to World Religions Prerequisite: THE 1000C. A critical introduction to the study of world religions, exploring the beliefs, rituals and ethical ideals of representative religious manifestations of the past and present. Credit: 3 semester hours.

Peter J.Tobin College of Business:

• Economics-(Econiomic)

- ECO 1320 Economics of Poverty and income Inequality: This course provides an overview of the economic issues of poverty and income inequality as they exist in developed countries (USA, Europe). The course will examine the economic, social and political causes of poverty and income inequality, how they are measured, and the role of public policy. The course also examines the cost to individuals and society of persistently high levels of poverty and rising levels of income inequality. Credit: 3 semester hours
- ECO 3344 International Economics Prerequisite: ECO 2309. International trade, flow of commodities and capital across national boundaries, impact of international organizations on flow of trade. Analysis of foreign investment and balance of payments. Credit: 3 semester hours

• Management-(Economic)

- MGT 3331 Strategic Leadership in a Global Environment Prerequisite: MGT 2301. This course is designed to provide an overview of the fundamental concepts of basic leadership models and theories, as well as an in-depth understanding of contemporary issues and perspectives on leadership in a global environment. Credit: 3 semester hours.
- OMGT 3337 Corporate Social Responsibility Prerequisite: MGT 2301. A conceptual review of the interaction between management and the environment in which it functions is provided. The relationship of the organization with the outside public, community, and society is explored. Credit: 3 semester hours. MGT 3339 Global Organizational Behavior Prerequisite: MGT 2301. This course is designed to provide a comprehensive and up-to-date introduction to the field of international organizational behavior and managerial requirements in the global context. Credit: 3 semester hours

College of Professional Studies:

• <u>Biology-(Envrionmental)</u>

 1014 Ecological and Environmental Studies: This course studies different levels of ecological organization including population, community, ecosystem and biosphere. Emphasis is placed upon current environmental concerns. No prerequisites. Credit: 3 semester hours.

• Health Service Administration-(Economic)

o 1032 Environmental Health Control: The function of government and private agencies in regulating our environment. The role of public health and other agencies' inspectors. Analysis of the quality of air, water, food, sanitation, toxic wastes and other factors affecting pollution levels. Credit: 3 semester hour.

• <u>History-(Social)</u>

• 1016 Contemporary World Issues: This course assists students in an examination of current issues confronting the modern world. The basis for the course, that current events may only be fully analyzed by placing them in the context of historical development, leads to a selection of topics on the national and international scene which vary from semester to semester and is dependent upon the instructor. Credit: 3 semester hours.

• <u>Legal Studies-(Environmental/Social)</u>

 1023 Environmental Law: Designed to acquaint students with the legal responses, to current environmental problems, including air, water, and noise pollution. Credit: 3 semester hours.

Sustainability Courses:

School of Arts and Sciences:

• Environmental Studies:

 2410 Principles and Practices of Sustainable Development: An analysis of the theoretical underpinnings and practical applications of sustainable development on a global, local and individual level; sustainable practices in areas such as building, waste management, industrial production and energy are included. Campus based field work required. Credit: 3 semester hours.

Undergraduate Bulliten Link:

http://www.stjohns.edu/sites/default/files/documents/academics/bulletin-undergrad-2011-2013.p df

Graduate Courses of Study:

Sustainability Content Included:

School of Liberal Arts and Sciences

- Biology-(Environmental)
 - 165 Ecology: This course will deal with recent advances in ecological research in published papers, new books and journals. Credit: 3 semester hours
- Center For Global Developement-(Environmental and Social)
 - o Geographic Information Systems (GIS) Applications for Integrated and Sustainable Development: Participants will develop a working proficiency in the use of online web-based Geographic Information Systems (GIS) applications and a basic familiarity with desktop computer-based GIS software programs. These research tools will be used for mapping and analyzing factors that can assist in integrated and sustainable development and contribute to breaking the cycle of world poverty. This process is often referred to as Poverty Mapping. Some key topics will include the GIS mapping and analysis of: climate change; natural resources; agricultural production; food security; hunger; disease; access to education and healthcare; income disparities; crime; and areas of conflict and civil unrest. The complex relationship between these factors will be reviewed in political, economic, and sociocultural contexts. The overall focus of the course will be on monitoring and problem solving applications of GIS-based data analyses that will contribute to promoting social justice by overcoming barriers to global development. Participants will complete a series of applied projects related to their country of residence or a country in which they plan to work. They will also be involved with ongoing class discussions and peer critique. An additional

- emphasis will be on influencing development policy decisions worldwide through the promotion and use of low-threshold information technologies that increase opportunities for sharing data and knowledge. Credit: 3 semester hours.
- o Gender and Social Justice in Development: Because women have been traditionally linked with the care activities surrounding children and because that which affects women very frequently affects children, children's concerns will also be addressed. This course will be an effort to collect the resources that are in print and to begin a more systematic approach to applying Catholic Social Teaching to women and children. The course will use UN documents to expose issues of injustice and discrimination that affect women and children throughout the world. It will then examine Catholic Social Teaching to see how the church addresses these issues. The social encyclicals as well as the work of prominent theologians and members of the magisterium will be the primary sources. Credit: 3 semester hours.
- International Communication and Global Development: International communication specialist is the emerging profession in the global market driven by informatics. This specialist, whether at the governmental, non-governmental or corporate level is required to have proficiency in a wide range of global affairs, which are taking place in a pluralistic and yet interdependent global community. This course is intended to educate proficient international communication specialists with a mission to promote justice and human rights within the context of their professional functioning. This course will explore, teach and propose communication as a vehicle for promoting justice and human rights in a pluralistic society. The course will encompass a broad range of theoretical and historical studies of communication and media, their role in shaping and effecting public policy, understanding development of global communication structures and world order; a particular focus will be paid to development media and the inter-relationship between communication and development, advocacy communication, communication as an instrument of integration, and to the issues of peace and war and communication. Credit: 3 semester hours.

• Department of Government and Politics-(Environmental)

156 Global Environmental Politics: The emergence of environment into the
political arena and the consequent nature of international relations; sustainable
development; the available avenues for cooperation within the international
political system. Credit: 3 semester hours.

• Department of Anthropology and Sociology:

 118 Global Communication: Cultural differences in learning, perception and communication styles. The importance of cultural and subcultural differences in

- paralinguistic phenomenon such as body language, proxemic and silence. Selected issues in intercultural education. Credit: 3 semester hours.
- 223 Urban Sociology: The interrelations among population, technology, environment and political economic structure in urban settings, the impact on social class structure, lifestyle, labor resources, consumer markets and housing. Credit: 3 semester hours.
- 233 CRM-Environmental Crime and Justice: Foundations of global environmental justice. The investigation and prosecution of environmental crime emphasizing the use of forensic science and GIS for uncovering environmental racism and injustices in the U.S. and abroad. Credit: 3 semester hours.
- 234 Global Poverty" An examination of the daily lives of poor people throughout the world in their social context. This course will look critically at the failures of global policies to substantially change the conditions of the world's poor and the conditions that would have to be changed if poverty is to be ended. Credit: 3 semester hours
- 245 GIS Applications for Global Development and Social Justice: Learn Geographic Information Systems (GIS) computer applications and data analyses as research tools for mapping and critically analyzing factors that assist in global development and the promotion of social justice. Credit: 3 semester hours.

Peter J. Tobin College of Business:

- Department of Law-(Social/Economic)
 - Law 501 Law, Ethics and Society: This course introduces the legal and ethical environment of business and covers legal principles essential for proper managerial decisionmaking. Students analyze corporate problems with special emphasis on the ethical implications for business persons. Credit: 3 semester hours.

Sustainability Courses:

- Global Development and Social Justice (All)
 - MGD 150: Sustainable Food Systems, Water and the Environment: This course will critically evaluate the synergistic relationship between food systems (production –consumption-disposal), water and the environment. It will evaluate the political-economy of development policies to reduce global hunger, and assess the impact of fluctuating climate, biodiversity, and natural resources on agricultural production, food security, public health and poverty reduction strategies. The promotion of social justice through sustained development will be a primary theme of the course utilizing the

frameworks of food, water and environmental justice. Participants will appraise the impact of the close association between food security, nutrition and public health on achieving sustained global development. Past and present case studies that represent both "best practice" and "unsuccessful" sustainable development projects will be investigated. Emphasis will be placed on examining participatory, community-based, and locally originated projects as a key to promoting long-term integrated and sustainable development. A key component of the course will be to provide a working knowledge and set of research tools for investigating the barriers and challenges that the synergistic relationship between food, water and the environment pose to sustainable development. A review of methods for assessing the impact of climate change, biodiversity, and natural resources on agricultural production, food security and public health will include a focus on GIS (Geographic Information Systems) mapping and analysis. Participants will also formulate an applied sustainable project for implementation in their own country. In addition, the political, economic, and sociocultural dimensions of global disparities and poverty and their impact on food and agricultural policy will be assessed.

Graduate Bulliten Link:

http://www.stjohns.edu/sites/default/files/documents/academics/2010-2012_grad_bulletin2.pdf