



# NSCC Green Curriculum Project

## CURRENT FACULTY PARTICIPANTS & GREEN CONTENT DESCRIPTIONS

Green Curriculum courses incorporate discipline-related sustainability and/or environmental topics through a specially designed component, assignment, or thread. Green Curriculum courses seek to promote sustainability and environmental literacy at NSCC and beyond. EVT students should select green curriculum courses for directive electives in the Science and Awareness/Sustainability Tracks, whenever possible.

(The following are descriptions of the green content and approach developed by the participating faculty member for his or her course(s). The semester(s) when the Green Curriculum course is usually offered is listed. For scheduling and the general college course description of each course, please visit the **NSCC online catalog** at: <http://www.northshore.edu/search/courses>.)

**ANT102 Cultural Anthropology (Paul Bates) [pbates@northshore.edu](mailto:pbates@northshore.edu)**

This course examines the nature of culture in simple tribal communities living in various regions and natural environments on the planet. Inuit/Eskimo peoples of the Arctic, African, Villagers, Asian cultures, and American Indians of the Americas are groups that may be discussed. Industrial/hi-tech cultures will be compared to pre-industrial/low-tech tribal cultures. Sustainability and environmental topics related to various groups will be explored through reading and writing assignments.

**BIO 101 Biology 1: The Basics of Life (Maureen Farley) [mfarley02@northshore.edu](mailto:mfarley02@northshore.edu)**

In this Green Curriculum course, students will research assigned topics such as genetically modified foods, biological pesticides (BT), organic vs. factory farming, etc. and present projects to share information.

**BIO 102 Biology 2: Diversity of Life (Maureen Farley) [mfarley02@northshore.edu](mailto:mfarley02@northshore.edu)**

In our survey of living organisms, we will incorporate environmental topics such as the use of biological herbicides and pesticides, GMO plants/animals/foods, the use of bacteria in oil spill and other hazardous materials cleanup, the effect of global warming on phytoplankton, alternative fuels, and other related topics. Students will research assigned topics and present projects to share information.

**BIO 101 Biology 1: The Basics of Life (Sandra Buerger) [sbuerger01@northshore.edu](mailto:sbuerger01@northshore.edu)**

This biology course incorporates green/environmental topics along with course objectives related to major concepts of biology and how biologists address questions through research. There will be a final project consisting of a final paper and a short presentation. The paper will focus on a topic relevant to biology and to environmental issues.

**BIO 101 Biology 1: The Basics of Life (Christine Hezzey) [chezey01@northshore.edu](mailto:chezey01@northshore.edu)**

An introduction to the basic principles of biology. The course covers the chemistry of the cell, cell structure and function, cell division, genetics and some evolution. This course is also designed to incorporate green curriculum concepts that connect to life, this includes: sustainability, carbon footprint and global warming. The lab sessions are designed to enhance lecture and to develop investigative skills.

**Bio 101 Biology 1: The Basics of Life (Robert Paul Mason) [pmason04@northshore.edu](mailto:pmason04@northshore.edu)**

This class will have students identify major challenges faced by the human race and, in particular, major environment issues. We will address questions on how Biology can help our survival and assist with the challenges we identify. The course will focus on the issue of Climate Change, in particular, and study its relation to biology and biological sciences. Students will view interesting audio visuals and power point slide presentations on this topic.

**BIO130 Neotropical Ecology (Andrea Cutone) [acutone@northshore.edu](mailto:acutone@northshore.edu)**

A field study in the rainforests of Central America led by trained naturalists. The course will include hikes into different types of rainforests where the ecology of the area will be studied. The areas explored may be different each trip. Students in this course return from Costa Rica having obtained a personal understanding of the incredible biodiversity and importance of the rainforest, and also an awareness of the many threats rainforests face globally. (92 hours of field study and 12 hours of seminar)

**BIO 140 Marine Biology (Scott Stimpson) [sstimpson@northshore.edu](mailto:sstimpson@northshore.edu)**

This course examines in depth the effect that rising ocean temperatures are having on coral reef habitat worldwide, the effect ozone layer depletion has on plankton productivity in the polar seas, and especially the effect increased ocean acidification will have on marine life and life on our planet.

**BIO144 Biology 2: Wetlands Ecology (Andrea Cutone) [acutone@northshore.edu](mailto:acutone@northshore.edu)**

Pre: BIO 101 or permission of instructor / An introduction to the basic principles of ecology and their applications in the context of eastern Massachusetts wetland ecology. The course covers basic knowledge of ecological field study concepts, introduction to dichotomous keys and species recognition techniques. The laboratory is designed to prepare for and implement student-run biological field surveys with the goal of identifying and documenting obligate vernal pool species for state certification. (3 hours of lecture, 2 hours of lab per week) Fulfills open, liberal arts, science and lab science sequence elective when taken with BIO 101.

**CHE 103 General Chemistry 1 (Alex Eisen-Cuadra) [aeisencu@northshore.edu](mailto:aeisencu@northshore.edu)**

The laboratory component of this course will include a focus on two distinct green content topics: green chemistry and environmental chemistry. The subject matter of the green chemistry topic will be based on, but not limited to, the definition proposed by Anastas and Warner (Green Chemistry: Theory and Practice, Anastas, P. T. and Warner, J. C., Oxford University Press, 1998): green chemistry is the utilization of a set of principles that reduces or eliminates the use or generation of hazardous substances in the design, manufacture and application of chemical products. The subject matter of the environmental chemistry topic will be based on, but not limited to, the definition proposed by

Baird, C. and Cann, M. (Environmental Chemistry, Fifth Edition, Baird, C. and Cann, M., Freeman, W. H. & Company, 2005): environmental chemistry deals with the reactions, fates, movements, and sources of chemicals in the air, water, and soil.

**CMP 101 Composition 1 (Janet Burt) [jburt@northshore.edu](mailto:jburt@northshore.edu)**

In this Green Curriculum section of Composition 1, students will examine literature and writing through the lens of ecology, as seen in writings over the years. As we look at what people wrote about, reflections of the environment and social issues involving sustainability, we will discuss those same issues and how they relate to today's view of environmental issues. We will discuss issues and obstacles through literature and how they are seen in today's society.

**CMP 101 Composition 1 (Joseph Modugno) [jmodugno@northshore.edu](mailto:jmodugno@northshore.edu)**

Students will read literary works on environmental issues and conflicts, choose a topic related to sustainability for the required research paper, and view the documentary film "The 11<sup>th</sup> Hour," which dramatically introduces the topics of climate change and sustainability.

**CMP 101 Composition 1 (Janis Soferr) [jsoferr@northshore.edu](mailto:jsoferr@northshore.edu)**

This course is a Green Curriculum course which incorporates environmental and sustainability topics through reading, writing and discussion. Students are encouraged to reflect on these topics and on responsible citizenship regarding their relationship with the natural world. Students will read, research, and discuss *Refuge* by Terry Tempest Williams. (fall) [Honors section]

**CMP104 Composition 2: Introduction to Literature (Lynn Clarkson) [lclarkso@northshore.edu](mailto:lclarkso@northshore.edu)**

This course emphasizes that literature is about life; therefore, the issues of critical thinking, consumerism, personal and social responsibility within our communities is an on-going thread in the course and a natural fit with the topics of sustainability and the environment, which turn up in literature often and particularly in poetry. Through the study of a long literary work or multiple short works with environmental and/or sustainability themes, this course will examine and emphasize how our choices and actions have broader implications in society and the natural world.

**CMP 122: Composition 2 Children's Literature (Cari Jo Keebaugh) [ckeebaug@northshore.edu](mailto:ckeebaug@northshore.edu)**

Students in this green curriculum course will spend a unit examining the ways that animal rights have been portrayed in children's literature both during and after the "Golden Age" of children's literature. We will analyze this literature for its implicit assumptions, its goals, and its effectiveness. Students will then write a formal research paper critically analyzing the function and effectiveness of pre-and post-1914 children's literature using specific examples.

**CMP 148 Composition 2: Literature and the Environment (Joseph Modugno) [jmodugno@northshore.edu](mailto:jmodugno@northshore.edu)**

Emphasis is on observational and analytical writing based on American literary works of all genres that focus on the relationships between humans and the natural world. "Nature Writing," as a genre will be explored. Some major authors to be studied include, Edward Abbey, Henry David Thoreau, John Muir, Rachel Carson, Aldo Leopold, Barry Lopez, Annie Dillard, Gary Snyder, Terry Tempest Williams, and Mary Oliver. The major green assignment

for the course will be a Place Paper, which will help students achieve ecological literacy by writing their own work of Nature Writing based on semester-long observations and research into a natural area in their home environment.

**COM 011 College Writing 1 (Russell Green) [rgreen@northshore.edu](mailto:rgreen@northshore.edu)**

This course develops writing and critical thinking skills through a combination of reading, thinking, discussing, and writing on current topics. Instruction emphasizes the use of the writing process to develop both informal and formal paragraphs relevant to personal, academic, and career needs. The course will also encourage students to think about environmental/sustainability issues and their own relationships with the natural world, primarily through reading and writing activities related to Italo Calvino's book *Marcovaldo or Seasons in the City*. Themes to be studied include pollution, appearance vs. reality, failure, poverty, consumerism, and urban vs. natural environments.

**CPS122 Operating Systems (Huiwei Guan) [hguan@northshore.edu](mailto:hguan@northshore.edu)**

This course will demonstrate sustainable practices by being totally paperless, thereby protecting trees and the natural environment. While studying topics on input and output devices of computers, printers, and copy machines, students will become aware of the negative effects of these technologies on the natural environment (topics such as, how printing hardcopies cost more trees; how deforestation speeds up global warming; how over use of copy machines increases carbon exposure in the atmosphere and has harmful effects on human health.) The course will also explore what environmental protections are available for new technology and what are user responsibilities given the current environmental predicament.

**ECE101 Child Growth and Development (Victoria Hackett) [victoria@outdoor-classrooms.com](mailto:victoria@outdoor-classrooms.com)**

GREEN CURRICULUM PROJECT: The recipe for this assignment includes demonstrating creatively your understanding of the role of the natural environment on the development of young children. A list of possible projects will be provided and discussed in class.

**ECE110 Foundations of Early Childhood Education (Jan Plourde) [jplourde03@northshore.edu](mailto:jplourde03@northshore.edu)**

Field observation and research will augment classroom activities and enable students to: describe the role of teacher of young children and devise a plan for their own professional development; trace the historical traditions of ECE and describe their impact on current practice; identify issues and trends in the field and articulate a professional position; analyze and evaluate approaches to ECE using the principles of developmentally appropriate practice and construct a personal philosophy of ECE based on this analysis.

**ECO 103 Principles of Macroeconomics (Moon Su Han) [mhan@northshore.edu](mailto:mhan@northshore.edu)**

This course implements sustainability and environmental issues to promote awareness in daily life. Students are required to do research projects, using three steps: Step 1.) Answer the question WHY we need to think about green economics and sustainability; Step 2.) Choose one environmental issue from the following: air pollution, saving electricity, saving paper, saving gas or coal—alternative energy sources and conduct original research to answer why we need to think about sustainability using cost benefit analysis related to there chosen issue; Step 3.) Suggest applications/solutions in their own lives to achieve sustainability.

**ECO 104 Principles of Microeconomics (Tomohide Yasuda) [tyasuda01@northshore.edu](mailto:tyasuda01@northshore.edu)**

In this course, students will often use environmental assets and natural resources as commodities traded in the market place. They will learn the process in which the efficient level of resource use is achieved through voluntary transactions between market participants (free markets). Student will learn the difference between socially efficient resource utilization, where the satisfaction of individuals in society is maximized, and perfect preservation of environmental assets and natural resources. The course then introduces some cases where the free market may not maximize the satisfaction of different individuals in society (market failures). Students will use environmental issues such as air pollution and fish resource depletion to examine the social conditions necessary for the free market to achieve socially efficient resource utilization. The course discusses various ways which can potentially overcome environmental market failures. It examines some cases which call for government interventions to rectify market failures while paying attention to new problems caused by these government interventions (government failures). The course also introduces some examples of green entrepreneurs who started innovative businesses which harnessed people's economic incentives to protect the environment.

**EGS 101 Introduction to Engineering (Mary Steigerwald) [msteiger@northshore.edu](mailto:msteiger@northshore.edu)**

This freshman level course in engineering investigates the various fields of engineering. The course will provide an introduction to problem solving techniques used throughout an engineering education and career as well as examine the engineering design process. Additionally EGS101 is a Green Curriculum course. Students will explore the connections that engineering has to innovation and technology in the context of the economic, social and environmental impact. Project work will examine areas such as renewable energy, sustainable products and systems and be introduced to the thermodynamic processes involved in energy systems design. We will explore the resulting effects of past engineering decisions on the environment and consider environmental constraints on the engineering design process and sustainability as an engineering design objective.

**EGS 206 Materials Science (Joyce Jeong) [jjeong@northshore.edu](mailto:jjeong@northshore.edu)**

This course will implement sustainability and environmental issues to promote the awareness and gain the technical knowledge that an environmentally responsible engineer should possess. In the research projects, students will learn about environmental issues such as pollution, natural re-sources, conservation, green economy, clean design, consumption, waste management, and the green politics of their choices of research products.

**FSN 104 Technology of Food Processing (Gregory Reppucci) [greppucc@northshore.edu](mailto:greppucc@northshore.edu)**

This course covers modern and ancient methods of food preservation, food additives and sustainable agriculture and students spend an average of 15 hours per semester doing service learning projects with The Food Project, a non-profit organization which connects people to each other, the land and the food we eat.

**GEO 108 Environmental Science (Barbara Ikalainen) [bikalain01@northshore.edu](mailto:bikalain01@northshore.edu)**

In Geo 108 students will view episodes from the PBS series "Journey to Planet Earth" which depict four themes: water issues, the threat of food shortages, human population growth, and global warming. Students will also view some of the DVD series "The Habitable Planet: A Systems Approach to Environmental Science," which depicts current research on greenhouse gases, climate change, diversity of rainforests and water conservation measures. News events will be discussed throughout the semester in terms of sustainability: what is the issue, how does it affect the future, what can be done to manage it more sustainably? The course will emphasize connections and stress that people everywhere need: clean water, fertile soil (food), and a means of economic support (self-support) and that social injustice can result from over consumption. Geo 108 provides an introduction to the science basis for understanding the functioning of the natural world.

**GRA 102 Graphic Production (Sandra Fuhs) [sfuhs@northshore.edu](mailto:sfuhs@northshore.edu)**

"Green" and sustainability best practices are widely used in the graphics and printing industries. These include recycling, recycled papers, environmental management organizations, smart preparatory, production and printing practices. Graphic designers must embrace these processes and materials to be more "green." Graphic Production trends, practices, and specifications for a sustainable, eco-friendly process are introduced and monitored in this course.

**HIS 103 United States History I (Julia Greene) [jgreene03@northshore.edu](mailto:jgreene03@northshore.edu)**

This is a Green Curriculum Course focusing on environmental history. Subjects we will explore are the radical change in the ecology of the Americas and the rest of the world after 1492, Native American vs. European Values, the impacts of industrialization, the local environmental history of Lynn and its surroundings, and the rise of the conservation movement.

**HIS 131 History of World Civilizations 1 (Jessica Burt) [jeburt@northshore.edu](mailto:jeburt@northshore.edu)**

In this Green Curriculum section of the History of World Civilizations 1, students will examine history through the lens of ecology, defined as the interaction between humans and their environment. By examining how humans have interacted with their environments in the past, and how their environments have shaped the type of societies that inhabited the ancient world, students will begin to comprehend the evolutionary nature of ecology throughout history. Using the lens of ecology, students will not only gain a better understanding of the importance of ecology throughout history, but also students will begin to comprehend how the obstacles/solutions ecology posed to the ancient world can shed light on the obstacles/solutions of today's world.

**HIS 132 History of World Civilizations 2 (Jessica Burt) [jeburt@northshore.edu](mailto:jeburt@northshore.edu)**

In this Green Curriculum section of the History of World Civilizations 2, students will examine the relationship between modernization and nature throughout modern history. By examining this relationship, students will analyze the challenges that modernization has posed to ecological diversity, sustainability, and, more importantly, the value ascribed to the environment by societies of modern history. This examination will lead students to a better understanding of the challenges modernization poses to today's society and the value that

today's society places on environmental issues. Moreover, by examining the changing nature of the modernization/nature relationship, students will be able to examine their own personal relationship with the environment in light of those that promote a more sustainable future.

**HIS 140 American Environmental History (Jessica Burt) [jeburt@northshore.edu](mailto:jeburt@northshore.edu)**

American Environmental History examines through time the changing relationship between human beings and the natural world of North America. Emphasis will be placed on how Americans acted to shape their environment, how they perceived that environment, and how these interact with each other to determine who we are and shape what we might become. Fulfills history, liberal arts, and open electives.

**HRT 110 Plant and Soil Science (Barbara Heath) [bheath@northshore.edu](mailto:bheath@northshore.edu)**

HRT 110 provides students a basic study of plant structure and function. Students learn the fundamental processes of plant growth and reproduction. Structures such as the stem, root, leaves, flowers and seeds are examined in detail along with the important role of soil in providing plant nutrition. Hands on exploration is included as part of the students laboratory experience. This course is part of the new Environmental Horticulture Program.

**HRT 206 Landscape Design (Barbara Heath) [bheath@northshore.edu](mailto:bheath@northshore.edu)**

An introduction to landscape design including site analysis techniques, and development of site organization. Selection of design elements such as plant material, paving and site furnishings are included. Homes Located nearby are used as case studies for evaluation, analysis and design consideration.

**HRT 210 Plants for the New England Landscape (Barbara Heath) [bheath@northshore.edu](mailto:bheath@northshore.edu)**

This course places the emphasis on landscaping with native plants, using natural systems and the importance of choosing the right plant for the right place.

**IDS 102D Popular Culture in the U.S. (Lance Eaton) [leaton@northshore.edu](mailto:leaton@northshore.edu)**

Within popular culture, consumerism and waste are at the center of day-to-day life, and this is largely a product of mass production which is extremely detrimental in terms of sustainability. A main focus in the course will be on consumerism and the correlation among personal health, consumer capitalism, and wastefulness. Sustainable practices will be explored along with what it means to exhibit a "green" identity within popular culture. Other topics include, citizenship/responsibility, globalization, food, green politics, pollution, and manufacturing/industry.

**IDS 106 Understanding Nutrition (Bernadette Lucas) [blucas@northshore.edu](mailto:blucas@northshore.edu)**

Students will read chapter readings on environmental issues related to nutrition and global hunger and will complete a dietary analysis and personal ecological footprint activity. Students will discuss aspects of basic nutrition and examine how everyday life choices can support personal and environmental health. The class will also cover the topics of food safety and technology, with a discussion board focus on the impact of food production on the environment—ocean and waterways, in particular. (Online classes fall and spring)

**IDS 112 Artistic Vision (OL) (Terri Whitney) [twhitney@northshore.edu](mailto:twhitney@northshore.edu)**

In this Green Curriculum section of Artistic Vision Online: An Introduction to Art, Music, and Literature, students will examine works of art that encourage a heightened awareness of nature, address problems of sustainability, or in some way invite students to consider the importance of protecting the environment and how this might be achieved. Students will discuss the way in which these artistic works convey these ideas in reading response replies to topics for each chapter, online discussion, and, if they wish, as a topic of their final paper.

**IDS 122 Music and Healing (Mary Beth Stemp) [mstemp01@northshore.edu](mailto:mstemp01@northshore.edu)**

In the Green Curriculum section of Music and Healing, students will explore how sound and music works as a complementary healing method that can support the health of the environment as well as the therapeutic sound experiences nature can offer to people. The class will address the issues of sound pollution and review a variety of cultures and researchers whose music and sound healing methods focus in the directions indicated above. Students will watch and read related films and articles as well as complete 4 personal sound projects. The students will participate in an end-of-semester project, taking part in small group discussions and writing a reflective piece that focuses on integrating their acquired knowledge and awareness. They will be asked to identify ways they can apply this information to caring for themselves and their environment.

**IDS 128 Environmental Law and Policy (Kathleen Hirbour) [khirbour@northshore.edu](mailto:khirbour@northshore.edu)**

Pre: Communications Proficiency. This interdisciplinary course is designed to introduce the philosophical, policy, statutory, regulatory and common law implications of protecting natural areas, public health, environmental justice, and related environmental concerns.

**IDS166 Introduction to Sustainable Living (Joseph Modugno/Greg Reppucci) [greppucc@northshore.edu](mailto:greppucc@northshore.edu)**

This course provides an introduction to the concept and principles of sustainability. The course will examine major environmental issues and will challenge students to see themselves as part of a web of interactions connecting the environment, economy, and society. While offering both science and humanities perspectives on environmental problems, the course will stress personal and collective action as pathways to solutions for sustainable living. *(EVT Program Requirement)*

**IDS 168 Exploring the Landscape of Sustainability (Barbara Heath) [bheath@northshore.edu](mailto:bheath@northshore.edu)**

This course examines a range of sustainability issues that affects us all. Students will be encouraged to think about how their various choices in life and careers can and do affect their local communities, the environment and future generations. Topics include calculating and reducing carbon footprints, green building design, green roof and wall technologies, water conservation, community gardens, composting and low impact sustainable landscapes. Students will also complete a service learning project.

**IDS 182 Organic and Sustainable Food Production (Barbara Heath) [bheath@northshore.edu](mailto:bheath@northshore.edu) (spring)**

An introduction to organic and sustainable food production in both urban and suburban communities. The three spheres model, embracing economic, social and environmental principles as they relate to the sustainable food movement will be examined. History of modern industrial agriculture and the consequences of that system will be explored. Students will gain experience in garden planning, plant culture, organic plant health, composting and building healthy soils as tools to build a more sustainable, secure and local food movement.



**IDS 939 ADMIT ONE: Amusement Parks and the Mechanics of Leisure (Cari Keebaugh) [ckeebaug@northshore.edu](mailto:ckeebaug@northshore.edu)**

This new course will examine how large, guest-centered corporations – specifically, theme and water parks – impact the environment. Amusement parks consume massive amounts of electricity, water, and other resources. They launch chemicals into the air every night in their fireworks displays (though Disney has invented and patented “eco-friendly” fireworks, the recipe for which they have made public so other companies can use them) and dump chemicals into their pools every morning. They also use helium in millions of balloons every month, which could be used in hospitals (for MRI machines), instead. Disney, in particular, prides itself on its Green Initiatives (there is an entire website devoted to their projects and charities), and they are part of the Green Hotels Association and have won awards for their green efforts. They also have quite an interesting situation in the Animal Kingdom – a part-zoo-part-theme-park generates a lot of topics for such a class as mine to discuss. This course will ask students to explore such paradoxes and will debate if it is truly possible for such massive parks to really “go green” and whether or not the initiatives they take are enough to make up for the areas where they produce non-biodegradable waste and consume limited natural resources.

**LIT 214 Literature of the American Peoples 1: American Indian Literature (Joseph Modugno) [jmodugno@northshore.edu](mailto:jmodugno@northshore.edu)**

In Native American literatures, the natural world and all aspects of the human-nature relationship are central subjects. Through the assigned literary works and selected background readings, the course will examine traditional and contemporary Native American views, responses, and issues related to the environment, while emphasizing the sustainability methods and models of various tribal groups. (fall)

**LIT 216 Literature of the American People 2: Latin American Literature (Tiffany Magnolia) [tmagnolia@northshore.edu](mailto:tmagnolia@northshore.edu)**

In Latin American Literature students will examine sustainability and ecological consciousness as they study, in particular, Mayan, Aztec, Caribe, and Inca writings. Environmental issues will be referenced throughout the course. Topics include environmental awareness as spiritual belief, cycles in nature reflecting cosmological cycles, and how ecological consciousness in ancient times is translated into contemporary authors. (spring)

**MAT 143 Introduction to Statistics (Suchitra Amritkumar) [samritku01@northshore.edu](mailto:samritku01@northshore.edu)**

The course will emphasize data summarization, descriptive statistics, basic probability and principles of inferential statistics to understand environmental issues such as global warming. Environmental applications will be provided for relevant concept. Topics examined are: frequency distributions, measures of central tendency, measures of dispersion, normal distributions, confidence intervals, sampling, introduction to hypothesis testing, correlation, and linear regression. The students are required to submit two research projects utilizing technology to analyze, interpret data and draw conclusions on environmental issues such as pollution, conservation, green economy and global warming. The project segments spiral throughout the course with increasing sophistication. The purpose of statistical tests will help responsible citizens to interpret news paper and research theories and numbers correctly and take actions at a time when it is needed. All the course materials, including class notes and assignments for this course will be housed in ANGEL. (fall and spring)

**PHI106 Introduction to Philosophy (John Rollins) [jrollins01@northshore.edu](mailto:jrollins01@northshore.edu)**

Students work in groups to complete projects that cover multiple perspectives on humankind’s relationship to the

natural world. There will be four main world historical perspectives on the environment students will be expected to know: the Abrahamic Tradition, Chinese Tradition, Native American Tradition, and Ecofeminism. Within the framework of these four perspectives, students might address the following topics: Human/Animal Relations; Hierarchy of Being(s); Intrinsic/Extrinsic Value of Humans and Other Beings; Individualization/Socialization; Social Justice, Responsibility and Citizenship.

**PHI 126 Environmental Ethics (Fred Altieri) [faltieri@northshore.edu](mailto:faltieri@northshore.edu)**

A philosophical approach to environmentalism examining the ethical presuppositions that underlie our conception of value, the diverse worldviews offered by environmentalists, and the potential responses to ecological degradation. Topics include animal liberation, deep ecology, ecofeminism and environmental activism, among others. Fulfills open, liberal arts, humanities, and green electives.

**REL 102 Great Religions of the World (Yusef Hayes) [yhayes@northshore.edu](mailto:yhayes@northshore.edu)**

The Green component of REL 102 both adds to and integrates with the current objectives for the course. Students will learn skills for the study of religion and apply them in an environment sensitive to issues of sustainability. Readings, media, and class discussion will be used to provide a common base of understanding in regards to environmental awareness.

**RSP126 Respiratory Care Pharmacology (Patricia Adam) [padam01@northshore.edu](mailto:padam01@northshore.edu)**

Presents the general principles of pharmacology and action of the major drug groups that Respiratory Therapists should be familiar with. In addition, the anatomy and drugs, including the effect on the body as an integrated physiology of the autonomic nervous system and its role in drug action will be covered. Drugs will be studied as groups and individually for site and mechanism of action, indications, contraindications, side effects, and routes of administration. Dosage calculations will be included for drugs given via inhalational route.

**SCI 101 Integrated Science 1 (Scott Stimpson) [sstimpson@northshore.edu](mailto:sstimpson@northshore.edu)**

This course will cover the environmental issues of Acid Rain, Ozone Layer Depletion, Greenhouse Gasses and Ocean Acidification. Students will be encouraged to understand the specific causes and the potential negative consequences of each of these issues. The Integrated Science sequence fosters an understanding of topics from the disciplines of chemistry, geology, meteorology and biology and uses inquiry-based learning activities.

**SCI 102 Integrated Science 2 (Scott Stimpson) [sstimpson@northshore.edu](mailto:sstimpson@northshore.edu)**

This course will continue from part 1 with a focus on the environmental issues of Acid Rain, Ozone Layer Depletion, Greenhouse Gasses and Ocean Acidification. Students will be encouraged to understand the specific causes and the potential negative consequences of each of these issues. The Integrated Science sequence fosters an understanding of topics from the disciplines of chemistry, geology, meteorology and biology and uses inquiry-based learning activities.

**SOC106 Introduction to Sociology (Carlos Marin) [cmarin01@northshore.edu](mailto:cmarin01@northshore.edu)**

This course is an Introduction to the study of society, employing all the basic concepts of sociology, such as: the structure and functions of society, culture, norms, roles and status. Attention is given to the origins of sociology, its methods and its place as one of the social sciences. Also, as a part of the "NSCC Green Curriculum Project", this course looks at the impacts of social activity on the planet and analyzes how these impacts in turn affect social groups. Upon successful completion of this course students should be able to define the "sustainability" concept and have gained awareness about the interconnectedness between people and the natural environment to the extent that leads to the development of values and lifestyles required for a sustainable future.

**SOC 106 Introduction to Sociology (Richard Adelman) [radelman@northshore.edu](mailto:radelman@northshore.edu)**

Sociology provides an excellent lens through which to view and understand the concepts of sustainability. Development of "the sociological imagination", understanding the relationship between social, economic and political institution lends itself very well to activities related to sustainability education. Options for introduction to sociology include: Films, field trips, research projects, class discussions, readings, the "create a society" projects and service learning opportunities such as the Essex Conservation District, town agriculture commissions, conservation commissions, National Resource Conservation Services (USDA), the Essex National Heritage Commission, the Massachusetts Department of Agricultural Resources, the Massachusetts Farm Winery and Growers Association, and the Essex Agricultural Society.

**SOC 126 Race, Gender, and Class (Richard Adelman) [radelman@northshore.edu](mailto:radelman@northshore.edu)**

This course will highlight the sustainability issues of environmental discrimination, racism, and justice. It will look closely at the "The Politics of Food," using an interview Bill Moyers conducted with author/critic Michael Pollan.

**SOC126 Race, Gender and Class (Carlos Marin) [cmarin01@northshore.edu](mailto:cmarin01@northshore.edu)**

This course examines how race, ethnicity, gender, social class and sexual orientation shape life in American society. We will discuss the historical construction of these concepts and their impacts on minority groups in the framework of economic, social, political and cultural factors. As a green curriculum course we also explore the impacts of "environmental injustices" on minority groups. Upon successful completion of this course students should be able to define the "sustainability" concept, gain awareness about the need for sustainable human-natural environment interaction, and understand why environmental pollution often has a disproportionate negative impact on minority groups.

**SOC 903 Environmental Sociology (Richard Adelman) [radelman@northshore.edu](mailto:radelman@northshore.edu)**

This course investigates the study of societal and environmental interactions with emphasis on studying the social, economic, and environmental factors that contribute to environmental problems and sustainability; the impact these problems have on human societies; and the current efforts to solve these problems including the key figures in establishing policy. The role of environmental issues in contemporary American politics will be examined, as well as how the public views environmental issues. Lastly, the examination of what can be accomplished through social changes, public policies, or both will be presented.

**SPE 102 Speech (Yusef Hayes) [yhayes@northshore.edu](mailto:yhayes@northshore.edu)**

The Green component of SPE 102 both adds to and integrates with the current objectives for the course. Students will learn the same speech skills but they will apply them in an environment sensitive to issues of sustainability. Readings, media, and class discussion will be used to provide a common base of understanding in regard to environmental awareness.

**SPE 102 Speech (Deborah Finkelstein) [dfinkels01@northshore.edu](mailto:dfinkels01@northshore.edu)**

The Green component of SPE 102 both adds to and integrates with the current objectives for the course. Students will learn the same speech skills but they will apply them in an environment sensitive to issues of sustainability. Readings, media, and class discussion will be used to provide a common base of understanding in regard to environmental awareness.

*Upcoming classes...*

**IDS Climate Change, the Environment, and Society (Barbara Ikalainen) [bikalain01@northshore.edu](mailto:bikalain01@northshore.edu)**

Global climate change is emerging as one of the most compelling issues of our time. This course will use an interdisciplinary lens to examine climate change and its impacts on local and global society, as well as the environment and economy. Students will consider the value of taking personal action and living with conviction to shift society towards sustainable living. (3 hours of lecture per week) *Fulfills open and liberal arts electives.*

**CMP Comp 2: Introduction to Literature: Utopias, Dystopias, and the Environment (Laurie Carlson) [lcarlson@northshore.edu](mailto:lcarlson@northshore.edu)**

In this course we will look closely at a broad range of science fiction short stories, essays, novels, and films in order to learn how to closely read, analyze, thoughtfully discuss, and write critically about literature. Along the way, we will consider the utopias and dystopias contained in select works of science fiction. We will explore how these works show the consequences of the ways humans and technology impact the environment around them. Particularly, we look at the lush landscape of Ecotopia in contrast to the dark, poor vegetated worlds of Philip K. Dick's *Do Android's Dream of Electric Sheep*, and Octavia Butler's *Parable of the Sower*. One of the projects in this course will be for students to invent their own fictitious utopia and dystopia, write a report on this imagined place in which they consider economics, environmental landscape, human and animal rights, and how different social groups might be impacted differently.