Environmental Studies Courses
Spring 2015

Note: Day students may register for all ENVS Continuing Education (CE) courses during the regular undergraduate registration time in November. Check the Registrar’s web site for the registration schedule.

ENVS 002  International Environmental Studies
10427 / 4 Credits / Ingrid Nelson / MWF 9:35-10:25 am
This course explores some of the most pressing global environmental issues of our time, including biodiversity and protected areas, agriculture and food systems, fresh water, energy, waste, and climate change. We examine these issues using a variety of disciplines and approaches, with a particular focus on the economic, political, and social disparities that affect people's access to natural resources. Case studies from around the world help ground environmental issues with real-world examples. Students will be evaluated with a combination of exams, reading quizzes, written assignments, and lab participation. Note: ENVS 001 is not required as a prerequisite for this course. Students must register for the lecture and a lab section; see registrar’s website for details.

ENVS 150 / GEOG 190 Battle Over Oil & Biodiversity in Yasuni
14432 / 3 Credits / Pete Shear / Travel course to Ecuador, December 27, 2014 – January 9, 2015, with pre-trip meeting TBA
During this field course in Ecuador’s Amazon, students will learn from guest lectures from government officials, indigenous leaders, and world-prominent scholars regarding tropical ecology, altitudinal zonation and biodiversity, and the politics of oil and energy. Students will have the opportunity to examine complex questions such as: Where is the line between corporate and human rights lie? How important is biodiversity to the survival of humans? Why doesn’t modern economic theory incorporate the value of ecosystem services provided by the natural world? To what extent can carbon credit markets be utilized to mitigate global warming? What are the socioeconomic factors preventing a swift transition to a post-oil economy? Are there viable economic options to non-renewable resource extraction? Notes: Student course fee $1799; Mandatory pre-departure meetings will be announced; Prerequisite: Instructor permission. For more info contact instructor, nshear@uvm.edu. Enrollment Limit: 14.

ENVS 150 / NR 185 / PRT 188 Ecotourism & Sustainable Development in Costa Rica
11463 / 3 Credits / David Kestenbaum / Travel course to Costa Rica December 27, 2014 – January 9, 2015, with 3 TBD pre-trip meetings and 1 post-trip meeting
This course will explore the forces and processes of social change in Costa Rican communities given the rise of nature-based travel to this Central American destination. We will consider the processes of how communities in service sector enterprises relate to concepts of sustainability, including environmental, social and economic impacts. From a conceptual and operational point of view, we will explore the concept of sustainability/sustainable development, with an emphasis on community-based sustainable development. Program fee: $1970. Enrollment Limit: 16.

ENVS 150 / NR 185 / PRT 188 Communities, Conservation, and Development in Costa Rica
11803 / 3 Credits / David Kestenbaum and Walt Kuentzel / Travel course to Costa Rica, February 28, 2015 - March 8, 2015
This course will introduce students to: a) the foundations of community development and sustainability b) the fundamentals and principles of service learning, c) the methodologies of participatory rural research and rapid rural appraisal. Course material will be delivered in a service-learning context that engages students in reciprocal learning relationships with community members and organizations in the buffer zone of Costa Rica’s Corcovado National Park. Program fee: $1729. Enrollment Limit: 16.

ENVS 150 / PBIO 195 Natural History and Conservation of the Galapagos Islands & Tropical Andes
12863 / 3 Credits / Monique McHenry and Pete Shear / Travel Course to Ecuador, February 28, 2015 - March 8, 2015
A hands-on exploration of the unique biodiversity found in the tropical Andes and the Galapagos Islands. Students will contemplate ideas of how this great diversity came to be and learn about current conversation efforts in place that aim to protect this diversity. We will keep detailed daily field journals to develop skill in natural history field observation. Program Fee: $2975. Enrollment Limit: 15.

ENVS 151A and B  Intermediate Environmental Studies
10440, 11323, or 12211 / 3 Credits / Cecilia Danks and Rick Paradis / TR 1:00 - 2:15 pm
This is a core course for all ENVS majors, designed to help students gain understanding of the field of environmental studies and develop skills and knowledge for charting a life path as environmental citizens and/or professionals beyond college. Through guest speakers, reflection, and independent research, students develop programs of study, career options, and ideas for capstone projects that will serve them at UVM and beyond. This course is a hybrid that typically has 25-75 percent of the course content delivered outside of the classroom, usually via the internet. Students will be evaluated on attendance, participation, and various written assignments focusing on college and career planning. ENVS MAJORS ONLY. Note: Both sections of ENVS 151 (A and B) will usually meet together. Enrollment Limit: 75.

ENVS 154 D2: Traditional Ecological Knowledge
12928 / 3 Credits / Kit Anderson / TR 10:00 – 11:15
We will examine the basic characteristics of traditional ecological knowledge in a variety of contexts and study the relevance of this way of knowing in relation to current environmental concerns. The relationship between science and traditional knowledge is central, as is learning to identify key cultural factors that can help or hinder the development of mutual respect and understanding. Students will be evaluated through participation, keeping a journal, essays, a group project and a final project. Enrollment Limit: 25.
ENVS / PSS 156 Permaculture
11695 or 11488 / 3 Credits / Keith Morris / M 4:05 - 7:05 or R 4:00 - 6:45 / First of a two-part course. You must be co-enrolled with PSS 196 Permaculture Practicum.

Taken together, these two courses fulfill the requirements for an internationally recognized Permaculture Design Certification Course. Part one, “Fundamentals” will cover the theory of permaculture design, including the history of permaculture and ecological design, permaculture ethics and principles, and explore the application of ecological, anthropological, ethnobiological, and evolutionary sciences to agriculture and human ecosystems, the built environment, and social and economic organization (“invisible structures”). We present a whole systems approach that integrates plants, animals, buildings, people, communities, economies, and the landscapes that surround us through careful analysis and thoughtful design. Students explore various food production, energy production, waste management, and shelter systems, and assess their potential for integration to meet human needs while improving ecosystem health. Students enrolled in Part II, Permaculture Design Practicum (PSS/ENVS 156) must have successfully completed Part I, Permaculture Fundamentals (PSS 195 or 196). No students will be allowed into Part II without previously completing Part I, ideally in the same semester. Enrollment Limit: 22.

ENVS 170 Environmental Art Practice: Landscape Photography
12093 or 12094 / 3 Credits / Dan Wells / M 11:45 - 3:50 or R 11:30 – 3:45

This is a relatively unconventional course combining photography and natural history. All levels of photographic skill are welcome, as are all levels of previous experience in the Vermont landscape. We use the camera as a tool to explore and learn about the world around us. While we spend some time on basic photographic concepts like aperture, shutter speed, composition and lens choice (and there is plenty of opportunity to learn as much as you want in these areas), the more important focus of the course is learning to see in nature, and the use of photography as a tool for seeing. This is almost entirely a field course. Except for the first class, one class on a bad-weather day in the middle of the semester when we'll share images with each other, and a few minutes at the beginning of each session, we'll be outdoors, exploring and photographing the Vermont landscape. Grading is almost entirely based on a weekly journal and two semester-long project assignments. Occasional five-minute quizzes will help me figure out who I need to work with on technical concepts (which count for only 5% of the grade). Enrollment Limit: 15.

ENVS 173 Landscape Natural History
11309 or 13287 / 3 Credits / Alicia Daniel (W) or Heather Fitzgerald (T) / T 11:30 - 3:45 or W 11:45 – 3:50

This field course is designed to acquaint you with a variety of Vermont landscapes and provide you with an integrative framework for “reading” the land. Although we will focus on Chittenden County, you will be able to take what you learn here and use it in other landscapes that are important to you. This framework involves an understanding of the pieces, patterns, and processes that shape the natural world. We will spend time on each site reviewing the geology, soils, plants and animals, human land use history, and signs of processes like wind, fire, or deer browse. We will think of these as the layers of a cake. When we put it all together we will have a good understanding of why each site looks the way it does. While this process will involve learning to find and examine evidence, you are invited to enter each of these places with an open heart, enjoying the beauty and connection to nature that have drawn us together. The course includes keeping a field journal, an individual presentation, a team presentation and a final field exam. Enrollment Limit: 15.

ENVS 174 Natural Areas Conservation and Stewardship
12101 / 3 Credits / Rick Paradis / R 4:05 - 7:05

Natural areas serve many functions, from maintaining regional biological diversity to providing important open space for contemplative and recreational activities. Protecting and managing these areas in fragmented and human influenced landscapes is an increasingly formidable challenge. This course examines the land protection and stewardship activities of conservation organizations, land trusts, and public natural resource agencies, along with the principles of ecology, conservation biology, and landscape ecology in an effort to better understand the important issues, approaches, and concerns in conserving and managing natural areas in diverse and often fragile settings. A premise of this course is that sound ecological thinking and information should fuel decision-making in land protection and management. Students will be graded on their active participation in classroom discussions and other activities, and on the completion of several short assignments and a final comprehensive take-home exam. Enrollment Limit: 25.

ENVS / GSWS 179 D2: Ecofeminism
15088 / 3 Credits / Annika Ljung-Baruth / M 12:50 – 3:50

Investigation of the parallel dominations of women and nature, through analysis and reflection on ecofeminist theory, activism, and spirituality. This course is an introduction to the developing field of ecofeminism, which is both an academic subfield or philosophy and environmental ethics and a type of activism. We will read some of the most influential writers in the field—theorists, historians, activists, and spiritual revisionists—and consider the implications of their ideas for environmental thought and analysis. We will also undertake hands-on action projects reflecting ecofeminist principles. Enrollment Limit: 11.

ENVS 180 Radical Environmentalism
14760 / 3 Credits / Brian Tokar / W 4:05 – 7:05

As environmental problems escalate, a variety of radical currents have come to influence ecological thought and activism, representing a critical alternative to traditional environmentalism. This course will describe the historical emergence of radical environmentalisms, examine several ecologically-based philosophies, and explore new ideas that have emerged from environmental resistance movements in the US and around the world. Readings, class discussions, and guest presenters will include a wide range of perspectives— scholarly and popular, analytical and prescriptive, political and philosophical. Students will have the opportunity to examine today's pressing environmental issues through the lens of these emerging movements and philosophical traditions, and develop a hands-on group project that serves to apply this knowledge to a local or regional environmental campaign. Students are evaluated on the basis of class participation and presentations, two comparative response papers, a research paper based on current news, and their final project. Enrollment Limit: 25.
This course is an exploratory “deep dive” into the culture of 21st century consumerism. Students will consider consumerism in all of its manifestations, including the global supply chain, where specific goods come from, how advertising propaganda convinces us that buying = being, and how we might “unlearn” consumerism in an age of limits. Students will be assessed via weekly quizzes and writing reflections, hands-on mini-labs, and longer-term research projects. Enrollment Limit: 25.

This service-learning course focuses on key operational aspects of campus sustainability using the University of Vermont as a case study. The course explores campus sustainability through the lens of the Sustainability Tracking, Assessment and Rating System (STARS), a framework of the Association for Advancement of Sustainability in Higher Education (AASHE). Guest lectures, class field trips, readings, and project work will be organized around nine categories of campus operations: buildings, climate, dining services, energy, grounds, purchasing, transportation, waste, and water. This year the class project will build on students’ field trip experiences to develop tours for UVM faculty interested in using the campus as a living laboratory. Evaluation consists of a group project (40%); two versions of a paper (draft 5%, final 10%); participation (15%); weekly reading reflections (15%); and reflection on field trips building towards the final project (15%). Enrollment Limit: 25.

This course will consider the emerging discipline of sustainability science from an integrative natural and social science perspective. We will focus on the study of carrying capacity and research and critique practices and technologies that aim to enlarge it. The course is predicated in natural science approaches but considers social and humanistic intersections as well. Students will be evaluated with a combination of weekly quizzes, two exams, and a research paper linked to real-world sustainability challenges. Enrollment Limit: 60.

Students engage in independent study or internships which have been developed with a site supervisor and faculty sponsor. Proposals must be approved by course coordinator before the activity begins. Students are required to submit a final reflection paper that demonstrates how well they achieve their learning objectives and project goals, and how these they may have changed over the course of their activity. We recommend keeping a journal log of your activities to help you review your experience as you are writing your final paper. Prerequisites: Sophomore standing.

“So, what are you doing after you graduate with that ENVS major?” This one-credit winter session or spring course aims to assist ENVS seniors in answering this question and to support and empower you as you approach the threshold of commencement and seek environmentally-related work in conscious careers and livelihoods. A range of activities will challenge and help you assess and represent well your background, values, knowledge, skills, and experience to successfully direct your employment search toward desirable, appropriate and rewarding work that serves the social and environmental challenges of our times. Expect readings, journal writings, career and graduate school exploration, discussion board participation, revision of your ENVS 151 job search tools (resume, cover letter, etc.), and a final self-assessment and strategic plan toward graduation and beyond to employment. ENVS Majors Only, Senior standing or Permission. Enrollment Limit: 20.

This course will examine childhood environmental health issues from both a scientific and a policy perspective. Students will be able to explain how chemical exposures (i.e. air pollution and endocrine disrupting chemicals) and social trends (i.e. growing use of technology) influence children’s developing bodies and minds, and how outdoor play and a well-designed built environment can ameliorate some environmental stresses. Students will work with community partners on projects serving children, on topics related to environmental health education, healthcare, nutrition, or toxins. Grades will be based on participation in class including discussion of course readings, a research paper and presentation, and assignments related to a Service Learning Project of the students' choice. Enrollment Limit: 20.

ENVS 195 / CDAE 171 Community and International Economic Transformation
14305 / 3 credits / Daniel Baker / R 4:30-6:30
Models of economic development, including constraints to economic transformation and policy approaches and strategies for promoting social welfare and sustainable development. This year’s course is focused on Peru. Climate change and extractive industries (mining) are huge issues in Peru, causing problems with both quality and quantity of water. Competition for water between extractive industries, agriculture, and other forms of economic development in combination with dysfunctional water management at local and national levels exacerbate the negative potential impact of climate change on the environment, economic sustainability, and citizen well-being in the Cusco region. Prerequisites: CDAE 2, CDAE 61 or equivalent. NOTE: This course includes a travel element in May to Peru. Enrollment Limit: 20.
ENVS 195  Controversies in Vermont Agriculture
12941 / 3 Credits / S’ra DeSantis  ENVS ’99 / T 1:00 - 3:45
A number of controversial agricultural stories have made Vermont news headlines – the use of undocumented migrant farm workers on Vermont dairy farms, phosphorus runoff into Lake Champlain, flooding from Tropical Storm Irene, the shrinking number of dairy farms in Vermont, the use of genetically modified crops, and pesticides getting into our water supply. How do these events affect Vermont’s environment, economy and social networks? Why does a farmer choose to use pesticides or hire undocumented migrant farm workers? This course will explore these subjects and more through an agroecological lens and the point of view of a farmer. We will start with an overview of agriculture in Vermont, and then take up organic and conventional farming techniques, economic pressures farmers face, how farmland interacts with the surrounding environment, and how climate change is affecting Vermont farms. The course will use a combination of lectures, class discussion, guest speakers, weekly reading assignments, films, and field trips to explore the above topics. Course work will include three response papers, two exams, four reading quizzes, a group presentation, drafting of mock agricultural legislation, and participation in a debate. Enrollment Limit: 25.

ENVS/ CDAE 195  Design & Application of Solar Concepts in Wood Structures
15226 / 3 Credits / Brian Bright & Dale Bergdahl / W 12:50 – 3:50 / Course to take place in Fairfax, VT at Vermont Woodworking School and on the Vermont Land Trust’s BUCT property in Cambridge, VT
This course introduces students to design thinking, the design-build process, 3-D Modeling Software and different solar strategies that can be employed in wood frame structures. We will focus on addressing the need to dry hardwood for furniture-makers in a sustainable way by effectively using solar energy. Students will participate in the design and building of a solar kiln for drying hardwood lumber. This course is most appropriate for students with interests in practical, hands-on experience and in preparing to work with a contractor to build their own home or outbuilding, or with a particular interest in energy efficiency, the wood drying process, or in incorporating solar energy into housing work. Student Evaluation/Assessment and Grading: Design Presentations 60% (3-D models 25%, working drawings 25%, presentation 10%) and attendance/participation 40% (in-class 20% and in the field 20%). Enrollment Limit: 12.

ENVS 195  Environmental Entrepreneurship
11450 / 3 Credits / Todd Comen / W 12:50 - 3:50 pm
Environmental Entrepreneurship is designed to meet individual student interests as well as to introduce broad management concepts that will help every student make informed entrepreneurial decisions. The course is organized around topics derived from student interests, including but not limited to tourism, the built environment, and agriculture. Students will learn how organizations strive to minimize their impact on the environment and make meaningful contributions to society. Students will study environmental entrepreneurship at a variety of organizational scales, conducting independent research and learning from case studies. The building blocks of business planning will be introduced so that students without a business background will understand the key components of creating and operating a successful organization, with emphasis on the business planning process. Students will design a comprehensive business plan, write reflection papers on readings and guest speakers, and engage in class discussion on various topics relevant to business and the environment. Enrollment Limit: 25.

ENVS/CDAE 195  Holistic Design Studio
12696 / 3 Credits / Elizabeth Calabrese / W 10:40 – 1:20
An introduction to biophilic design and the design process. We’ll focus on analyzing, understanding and designing built environments that improve our health and well-being by encouraging a sense of community, sense of place, and a connection with nature - which is known as “biophilic design.” Learn about the conceptual design and design development processes and how to create site plans, floor plans, sections, elevations and study models. Hand drawing and presentation skills are explored. This is not a computer drafting course, but a design course that celebrates the creative process. Grading is based on class participation, effort, growth in understanding the design process, and effectiveness in solving the design problems. Contact the instructor,  calabrese@architects@gmail.com  with questions. Lab Fee: $50. Enrollment Limit: 18.

ENVS 195 Introduction to Ecopsychology
11805 / 3 credits / Andy Fisher / MTWRFSS 9:00am - 2:00pm / February 28 – March 8
This spring-recess course introduces students to the full sweep of what is currently meant by the term ecopsychology, covering the field’s psychological, philosophical, practical, and critical/political dimensions. By expanding the focus of psychology to include the relationship between humans and nature, ecopsychology aims not only to develop a truer picture of human psychology, but also to draw attention to the psychological dimensions of the ecological crisis. Students are expected to dedicate as much time as possible to the course in order to benefit from its intensive nature; to engage in personal explorations, sharing some of their experience with the rest of the class; and to participate in an all-day field trip to a nearby wilderness location, with appropriate winter gear. As this is an introductory course, no prior formal knowledge of psychology is necessary. Grades will be based on: 1. Attendance and class participation. 2. Reflection journal. 3. Ecological autobiography. 4. Final project (due 3 weeks after the final class). Enrollment Limit: 25.

ENVS 195 Introduction to Sustainable Energy Policy
14763 / 3 Credits / Dave Lamont / MW 4:05 – 5:20 pm
This course will weigh the environmental, economic, technical, scientific, and social issues surrounding conventional and renewable energy resources including coal, oil, natural gas, nuclear, biofuels, biomass, wind, hydropower, solar, geothermal, etc. Students will critically examine energy policy at the international, federal, and state levels and will be introduced to tools for interdisciplinary and collaborative approaches to solve energy challenges. Students will be evaluated through several short and long written assignments, class participation and exams. Enrollment Limit: 25.
ENVS 195 New York Winter Wilderness Education & Leadership
14654 / 3 Credits / John Abbott and Douglas Connelly / W 4:00-7:00 / Includes two field practicals in the Adirondacks February 14 - 15, 2015 & March 28 - 29, 2015
The primary objective of this course is to provide understanding of the history, global evolution, current issues, leadership skill standards, ethics and future trends in wilderness education and leadership. Class time will be committed to sharing readings, expedition planning, presentations on teaching and wilderness living skill development. A student planned and led field practical trip to the Adirondacks will be the culmination of our learning and group experience. To reflect the importance of student-centered learning in wilderness environments, students will collectively plan the expedition, implement lessons & facilitate group debriefs. Students will present written projects to their community of peers. In addition, students will develop a portfolio of teaching leadership skills and personal experience as a means of understanding the process of professional development in the field of wilderness education. Program fee is $302. Enrollment Limit: 24.

ENVS 184 / CDAE 195 SL: Sustainable Transportation Planning
11804 / 3 Credits / Richard Watts / W 4:05 - 7:05
The United States is the most auto-dependent country in the world. We examine our automobile, reviewing how we got here, some of the ramifications of this dependence and what it suggests for our future. The course has three primary objectives: 1) examine the underlying causes of U.S. automobility and present trends using transportation planning data and other approaches and perspectives, such as personal narratives, travel music and movies 2) develop grounded solutions to reduce automobility and increase sustainable solutions that provide mobility and access, and 3) engage students in transportation issues. The environmental and energy impacts of auto-dependence will be explored in depth and the class will focus on several future-oriented policy solutions that include switching transportation fuels, reducing driving or switching travel modes (walking, biking, public transit). Expect several short writing assignments, in-class writing exercises and a semester-long project in which students work in groups with a community sponsor. Enrollment Limit: 25.

ENVS 195 Therapeutic Herbalism
11400 / 3 Credits / Barbara Raab / M 4:05 - 7:05 pm
This course builds on ENVS 195 (Plant-Based Healing medicine) in the study of holistic, preventative health, natural medicine, and using plants for medicine. Students learn about current issues in herbalism, herb-drug interactions, herbal monographs, and factors that affect dosage determinations. Students are also familiarized with the phytotherapeutic approach to treating a sampling of specific pathologies and conditions. Prerequisites: ENVS 195 Plant-Based Healing Medicine, and a sound understanding of anatomy and physiology. Expect two exams, one reflection paper, and two take-home worksheets. Enrollment Limit: 25.

ENVS 195 Toxics Policy and the Public
12100 / 3 Credits / Eric Garza / TR 4:00 - 5:15
The course will develop students’ skills analyzing the scientific, legal, social, and communication aspects associated with toxic compounds and toxic exposures. It will offer students a general background in toxicology and environmental chemistry, and will cover important pieces of federal and international legislation that pertain to the regulation of toxic substances. Important goals for the course include learning quantitative skills that accompany issues of toxicology and environmental chemistry, as well as learning to think critically about toxics legislation and regulation. Students will be evaluated based on problem sets, written reflections, a book review, a research paper and associated presentation, and class participation. Enrollment Limit: 25.

ENVS 195 Vermont Food Systems
11807 / 3 Credits / Jessica Sanford / R 4:00 - 6:45 pm
We are in a time when more and more people are becoming interested in the food they eat, the journey their food takes and the implications of food on social, political and economic levels. But what exactly is a food system and, more intriguingly, what is YOUR local food system? This seminar-based course will take an in-depth view of food systems with special focus given to the Vermont food system. This course will increase your capacity to think critically and identify opportunities and barriers to healthy, vibrant food systems. You will begin to look at the food system from environmental, economic and social vantage points. The course will include in-depth consideration of topics ranging from stakeholder and consumer preferences, federal and state policies, food safety and land access. We will aim to touch on all components that are involved in or affect the process of getting food from field to fork. We will approach these topics by reading reports, peer reviewed articles, scholarly texts, and other sources. Classes will be composed of a combination of lecture, discussions, writing, and small group work. Students will be evaluated through a combination of written papers, reflections, group work/projects, one exam and class participation. Enrollment Limit: 25.

ENVS 196 / PSS 196 Permaculture Practicum
11451 or 11697 / 2 Credits / Keith Morris / M 5:10 - 8:10 pm or R 5:30-8:15 / This is the second of a two-part course. You must be co-enrolled with PSS 156 Permaculture.
Taken together, these two courses (5 credit total) fulfill the requirements for an internationally recognized Permaculture Design Certification Course. Part two, “Practicum” will build on the foundations, skills, and perspectives developed during “Fundamentals,” and bring them into practical application. The Practicum consists of facilitating a collaborative design by the students as a group, and culminates with students presenting their own in-depth designs for a site of their choosing. Skills and techniques for “reading the landscape,” developing site-responsive design, and representing interpretations and plans through visual maps and public presentations are developed. You must be co-enrolled with PSS 196 Permaculture Fundamentals. Students enrolled in Part II, Permaculture Design Practicum (PSS/ENVS 156) must have successfully completed Part I, Permaculture Fundamentals (PSS 195 or 196). No students will be allowed into Part II without previously completing Part I, ideally in the same semester. Enrollment Limit: 22.
ENVS 197 Environmental Impacts of Non Conventional Weapons
14838 / 3 Credits / Jonathan Karp (POLS ’15) & Anna Myers (PSYC ’15) / MW 6:15 – 7:30
This course aims to fill a gap in most history and environmental lectures. The development of nuclear, chemical, and biological weapons is and has been a military pursuit from antiquity through modernity. Weapons development has had a major impact on the environment as well as the social and political fabric of the world’s governments and citizens. Students will be evaluated through class participation, homework assignments, a presentation, two case studies and a final project. Enrollment Limit 15.

ENVS 197 STS: Positive Resistance: Re-Skilling for a Just Transition
14839 / 3 Credits / Joseph O’Brien (ENVS ’15) Maddie Rabin (ENVS ’15) / T 4:00 – 6:45
In the course, we will form a community intended to take immediate action as positive resistance to environmental destruction. We will look at different realms of resistance (mitigation of destruction, leverage points, and shifting personal paradigms) as a guide for action. In this learning community, everyone is a student and a teacher. Classes are workshop based, where students will leave with hands-on skills. We will work towards a just transition for a sustainable future, while addressing equity issues and our privilege as students. Students will be evaluated through class participation (30%), two projects (40%), journal entries (15%) and Skillshare Book entries (15%). Enrollment limit: 15.

ENVS 201 A, B Research Methods
10468 or 12256 / 3 Credits / Kit Anderson / TR 1:00 - 2:15 or TR 10:00 - 11:15
This course covers the planning, design, and methods for the ENVS 202 senior capstone thesis or project. It is taught in seminar style and includes instruction and guidance for preparing the literature review and final proposal. Students will be evaluated through various written assignments in preparation for writing your thesis. This includes an annotated bibliography, drafts of your thesis methods, literature review and proposal. Students will also be evaluated by class participation which means you are present and engaged; contribute to class discussions with thoughtful comments; show respect for others and are willing to help each other; and complete ungraded class assignments. Prerequisite: ENVS 151, Junior standing, ENVS major or RSENR Honors students. Enrollment Limit: 20.

ENVS 202 A, B, or C Senior Project and Thesis
10474, 11181 or 11189 / 1-9 Credits / Kit Anderson / T 4:00 - 5:15, W 4:05 - 5:20 or TBA
Weekly voluntary check-in help/support sessions for students working on their ENVS 202 Senior Project or Thesis. Prerequisite: ENVS major; Junior standing, ENVS 201 or concurrent registration.

ENVS 202 D Senior Capstone Internship
12096 / 1-6 Credits / Amy Seidl / R 4:00 - 5:15
Weekly voluntary check-in help/support sessions for students working on their ENVS 202 Capstone Internship. Prerequisite: ENVS major; Junior standing, ENVS 151. Enrollment Limit: 40.

ENVS 204 SL: Creating Environmentally Sustainable Communities
11827 / 3 Credits / Tom Hudspeth / TR 10:00 - 11:15 am
This service-learning seminar considers the process of creating communities which are environmentally sound, economically successful, and socially just. After gaining an understanding of sustainability from conceptual and operational points of view and becoming familiar with successful sustainability initiatives at the local, national, and international levels, participants complete a term/research project for which they write and videotape a Sustainability Story on an individual or group in the area who serves as a Sustainability Exemplar or Role Model (with the possibility of being included in Sustainability Stories: A Field Guide to Sustainability in the Greater Burlington Area) for others to follow or emulate in bringing about the transition to more environmentally-sustainable communities. They help make the concept of sustainability come alive, make it more concrete, humanize it, put a face on it. Readings, seminar discussions, several short papers, term project. Enrollment Limit: 25.

ENVS 204 Contemplative Approaches to Environmental Literature
15215 / 3 Credits / Stephanie Kaza / TR 2:30 - 3:45
Senior seminar exploration of environmental poetry, fiction, nonfiction, and memoir genres from a contemplative perspective. We will read and write for depth of reflection and subjective engagement. Classes will include mindfulness exercises to increase attention to inner resonance with writers' ideas, use of language, sense of place, and relevance to current issues, explored through extended reading aloud of selected passages. Environmental writers may include: Gary Snyder, Mary Oliver, Terry Tempest Williams, Rick Bass, Sandra Steingraber, Maya Angelou, Gary Nabhan, Wendell Berry, and others. Evaluation will be based on 4-5 reflective response papers and two writer profiles, and class participation in contemplative reading and reflection. Enrollment Limit: 25.

ENVS 284 Teaching Assistantship
10484 / 1-2 Credits / Ingrid Nelson / F 12:50 - 3:50
Assist instructor in teaching and administration of ENVS 002 International Environmental Studies. Primary responsibilities will include leading at least one weekly discussion session of 15 students each; planning and preparation of instructional materials for discussion sessions; maintenance of student records; and assisting with student grading of course examinations. Teaching assistants are expected to attend all ENVS 2 lectures; lead one or two weekly discussion sessions (3 hrs. ea.); and attend a weekly morning team meeting. Prerequisite: ENVS 2 TA’s only, Permission.

ENVS 291 Advanced Environmental Practicum
10466 / 1-12 Credits / Amy Seidl
Students engage in advanced level independent study or internships developed with a site supervisor and faculty sponsor. Proposals must be approved by course coordinator before the activity begins. Students are required to submit a final reflection paper that demonstrates how well they achieved their learning objectives and project goals, and how they may have changed over the course of their activity. Many faculty sponsors recommend keeping a journal log of your activities to help you review your experience as you are writing your final paper. Prerequisite: ENVS 1, 2; Senior standing; Permission.
ENVS 295 SL Adaptation to Climate Change
14922 / 3 Credits / Amy Seidl / TR 1:00 – 2:15
We have entered a new geologic age: the Age of Warming. Every species and ecosystem is now affected by the consequences of climate change. Some are in flux while others head toward extinction, yet others are adapting. In this course, students will assume the role of climate adaptation consultants. As consultants, they will work in small groups to provide adaptation and resilience planning to a community partner. In preparation for this service work, course content will focus on adaptation in both ecological and human systems. We’ll examine how ecological systems are responding to climate change and discuss concepts of resilience, threshold, adaptive capacity, plasticity, and persistence. And, we’ll examine how human communities are adapting via planning, technologies, design, and emerging social movements. Students will be evaluated with a combination of quizzes, a research paper, group work, and a presentation to community partners. Enrollment Limit: 25

ENVS 295 OL Circumpolar Climate
12103 / 3 Credits / Kathleen Osgood / Online Course
Across the North, anthropogenic – or human-caused – change is happening at an accelerated rate. The hole in the ozone layer, the waning of Arctic Sea ice, the disappearance of permafrost, the release of methane from peat bogs—not only are these indicators of human-caused climate change, but they are also multipliers of that process. Writing-intensive and research-based, this course considers the impacts of climate change from a human perspective, with a special emphasis on indigenous peoples in the North, including human adaptations, community capacity for change, and regional cooperation. Working in regional groups, students will research the situation on the ground and review current literature (80%). In lieu of a final exam, students make recommendations for responses to climate change in the North (20%). Prerequisites: one 100-level ENVS course, Junior standing. Enrollment Limit: 20.

ENVS 295 / NR 285 / ENSC 285 Climate Change, Energy & Development
14840 / 3 Credits / Jennie Stephens / TR 2:30 – 3:45
This course explores climate change, energy and development from multiple perspectives, disciplines and scales. Climate change is considered as both a physical phenomenon and a novel social phenomenon that represents an alteration of relationships among humans, technology and the earth's systems. We examine the evolving science and policy of climate change, energy system change, the uneven global distribution of greenhouse gas emissions, climate change impacts, fossil-fuel reliance, and energy technology innovation. Climate change and energy are explored through multiple lenses including economics, science, engineering, religion, psychology, policy, risk assessment, ethics, communication, gender, and governance. Climate-energy connections related to resilience, climate preparedness, climate mitigation and climate adaptation are assessed, as are associated challenges, conflicts and opportunities for individuals, communities, states, countries, and global society. This course includes a weekly reading response, an oral presentation, a mid-term quiz, and two papers. Enrollment Limit: 30.

ENVS 295 / HLTH 250 / CDAE 295 / NR 285 SL: Community Participatory Research
13117 / 3 Credits / Kate Westdijk / R 1:00 - 3:345
This course will critically examine the approach and process of conducting community participatory research (CPR) with the community as full partner. Students will explore conceptual, philosophical and practical dimensions related to CPR, including the unique problems regarding protection of human rights that arise. Service-learning partnerships with community groups will be developed so that students can begin to identify the factors and social forces of community issues while practicing their skills. By the end of the course, interdisciplinary groups of students will have developed a CPR proposal and/or contributed to a CPR initiative in collaboration with their community partner. Course includes readings with online discussion forum, four critical reflection papers, and a presentation/final report on the community project. Enrollment Limit: 25.

ENVS 295 Sustainability Communication & Interpretation
14766 / 3 Credits / Tom Hudspeth / TR 11:30 – 12:45
Learn how to effectively communicate to a variety of audiences regarding sustainability issues through engaging in hands-on, real-world projects employing visual, written, and oral techniques (videos, blogs, personal and non-personal interpretive media, storytelling, etc.). Capstone service-learning option geared especially for students in ENVS's Sustainability Studies concentration. After gaining an understanding of sustainability communication and interpretation principles and methods/media, participants complete a term/research project. Readings, seminar discussions, several short projects, term project. Enrollment Limit: 25.

ENVS 295 SL: Sustainability Education
14767 / 3 Credits / Karen Nordstrom / TR 11:30 – 12:45
Service-learning course partnering with local schools, Greenhouse RLC, and local NGOs, in which students learn about the potential of education to address many of our most pressing sustainability issues. Examine formal education (K-12 and higher education, emphasizing curriculum but also examining campus operations [higher education/green schools [K-12]] as well as non-formal education (NGOs, businesses, government agencies, faith communities, and electronic and print media, etc.). Students should expect rubrics to be applied to written reflection and course projects for assessment purposes. Quizzes and a final exam will assess conceptual gains. Enrollment Limit: 25.