Environmental Studies Courses
Fall 2015

ENVS 001 Introduction to Environmental Studies
90197 / 4 Credits / Amy Seidl / MWF 10:50-11:40 am / Billings Lecture Hall
A broad-based survey course intended to provide a comprehensive introduction to the multi-disciplinary field of environmental studies through a combination of lectures, discussion seminar, field walks, and site visits. This course examines the ecological, social and political-economic aspects of contemporary environmental issues from an interdisciplinary perspective. Grading is based on three exams and discussion seminar assignments. Prerequisite: First year or sophomore standing, or instructor permission. Students must register for the lecture and a lab section; see registrar’s website for details. Enrollment Limit: 275.

ENVS 095 Eco-Reps: Environmentally Responsible Behavior
92069 / 1 Credit / Julie Nash / TBA / for 2015-2016 Eco-Reps only, and required for the position / Aiken 112
This course will complement employment in the Eco-Reps Program. Instructor permission required. For more information on the Eco-Rep Program and becoming an Eco-Rep, visit: http://www.uvm.edu/eco reps/be-involved/apply-be-uvm-eco-rep.

ENVS 095 Energy Alternatives
96115 / 3 Credits / Richard Watts / M 4:05-7:05 / Cross-listed with CDAE 006 / Lafayette L108
This course examines at the environmental impacts of our energy use and examines alternative examine energy sources such as wind, solar, hydro, efficiency, methane, bio-mass, algae and tidal power through speakers and field trips. Students take field trips to local renewable energy sites and are strongly encouraged to network through dinners and lunches with speakers in the energy field. The course is structured around ten energy seminars (also offered as ENVS 195 Energy Action Seminar for 1 credit) with renewable energy practitioners and experts. Students are also introduced to various energy internships and meet recent graduates in the energy field. Go to: http://www.uvm.edu/cdae//?Page=bio-watts.php#courses to see the list of past speakers and syllabus. UVM's Clean Energy Fund supports the speakers in this course and field trips, which are open to all UVM students.

ENVS 095 Introduction to Vermont
96267 / 3 Credits / Richard Watts / TR 2:05-4:05 / Cross-listed with VS 052 / Jeffords 112
In this course we seek to better understand Vermont through an examination of the culture, people and physical and social environments. Vermont is a physical place but also a state of mind. How did Vermont get to be what it is today? What does Vermont represent? What are some of the stories told about Vermont? What is the Vermont brand? What is Vermont? We will critically examine the myths and reality of Vermont today through readings, class discussion, field trips and guest lectures. For the course syllabus on-line, go to: http://www.uvm.edu/cdae//?Page=bio-watts.php#courses.

ENVS 137 Landscape Design Fundamentals
91498 / 4 Credits / Stephanie Hurley / MW 1:10-4:50 / Cross-listed with CDAE 137, NR 137 and PSS 137 / Hills 234
Studio course to learn techniques of landscape design and analysis, develop graphic communication skills for representing the landscape, and apply sustainable design principles to a site. Pre/co-requisites: Junior standing; at least one course in drawing, design, or mapping, or consent of instructor. Cross-listings: CDAE 137, ENVS 137, PSS 137. Enrollment Limit: 20.

ENVS 141 Introduction to Ecological Economics
93431 / 3 Credits / Jon Erickson / MWF 9:40-10:30 am / Cross-listed with NR 141 / Votey 105 / SS
This course will introduce ecological economics as a transdisciplinary framework to economic, social, and environmental problem solving. "Transdisciplinary" implies a problem-orientation that draws from a diverse web of knowledge across the natural sciences, social sciences, and humanities. As such, the class will build on a diverse body of student knowledge and experience from across the UVM campus, draw on each perspective to address complex problems, and build a shared understanding of solutions that are sustainable in scale, equitable in distribution, and efficient in allocation. The class serves two broad goals: (1) to establish a knowledge base in ecological economics from which to build subsequent problem-based learning courses at UVM, and (2) acquire problem solving skills to address complex social challenges. To serve these goals, weekly readings from a textbook in ecological economics will introduce topics, and student groups will then apply course material to a class project. Prerequisite: Sophomore standing. Enrollment Limit: 85.

ENVS 142 Introduction to Environmental Policy
94671 / 3 Credits / Curtis Ventress / MW 3:30-4:45 / Cross-Listed with NR 153 / Lafayette L300 / SS
This course covers the basic literature on policy formulation and implementation as it relates to major issues in environmental policy. This course will expose students to policy approaches ranging from climate change to land use issues. Case studies will
be an integral part of this course. Students will also be involved in doing a policy analysis on an environmental issue of their choosing. Prerequisite: ENVS 001, 002 or NR 001, 002 or ENSC 001, sophomore standing. Enrollment Limit: 40.

ENVS 151A and B Intermediate Environmental Studies
90530 or 90600 / 3 Credits / Cecilia Danks / TR 1:15 - 2:30 / Hills 122 / ENVS MAJORS ONLY
This is a core course for all 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 potential capstone projects that will serve them at UVM and beyond. This course is a hybrid course 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 written assignments focusing on college and career planning. Note: Both sections of ENVS 151 (A and B) will usually meet together. Enrollment Limit: 90.

ENVS 153 D2: Ethnobotany
94666 / 3 Credits / Kit Anderson / TR 10:05-11:20 am / Lafayette L300 / SS
Ethnobotany is the study of people-plant interactions as mediated by culture. It includes how people use and think about plants, as well as how plants in turn influence humans and their habitats. This course considers plants used for food, medicine, shelter, transportation, household items, ornament and ritual by different cultural groups. Many examples will be drawn from within our region here in the Northeast. They will be used to demonstrate applied and theoretical aspects of ethnobotany including the role of plants in cultural identity, strategies for maintaining and passing on local knowledge, links with conservation and biodiversity, and projects intended to address specific social needs. Perquisite: ENVS 1 or NR 1 or permission. Enrollment Limit: 25.

ENVS / PSS 156 Permaculture
91560 or 91740 / 3 Credits / Keith Morris / T 4:25 - 7:25 or R 4:25 - 7:25 / First of a two-part course. You must be co-enrolled with PSS 196 Permaculture Practicum / Jeffords 101 / NS
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 167 D2: Global Environmental History
92311 / 3 Credits / Frank Zelko / TR 2:50 - 4:05 / Cross-listed with HST 067 / Fleming 101 / HUM, IN
In addition to introducing students to the basic principles and concepts of environmental history, this course will explore the influence of nature—climate, topography, plants, animals, and microorganisms—on human history and the way people, in turn, have influenced the natural world around them. The course will be global in scope and will examine how humans have interacted with their environment from the Paleolithic era to modern times. In particular, it will focus on how some of the world’s major civilizations changed their environment, how the environment limited their development, and how they coped— or failed to cope—with the environmental problems that civilizations inevitably produce. Prerequisite: ENVS 002 or NR 002. Enrollment Limit: 64.

ENVS 170 Nature Drawing
92058 / 3 Credits / Libby Davidson / T 1:15-5:40 / Allen 104 / HUM
The core of this course will be our on-site drawing sessions in the field. Along the river, at UVM natural areas, in the woodlands, fields and gardens of the Intervale we will cover a range of methods and tools for translating what we observe into meaningful graphic form. Our practice will be informed by the study of the prints, journals, sketchbooks and drawings of natural history, botanical and landscape artists. We will also explore and employ some of the distinctive pictorial conventions of East-Asian and western landscape traditions. Students will be guided in advancing their confidence in drawing skills, producing a portfolio of drawings and a final graphic project. Enrollment Limit: 15.

ENVS 170 Landscape Photography
92060 / 3 Credits / Dan Wells / R 1:15-5:40 / Allen 104 / HUM
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**  
**91285 or 91884 / 3 Credits / Ian Worley (M) or Alicia Daniel (W) / M 12:00 - 4:45 or W 12:00 - 4:45 / Off-Campus / NS**  
Consisting entirely of field trips, this course will explore the nature of Vermont's landscapes from an interdisciplinary perspective. Through site visits and projects, students will learn skills to help understand why landscapes look the way they do. We'll investigate a variety of locations including lakeshores, cliffs, uplands, and ravines—looking at the interactions among rocks, soil, water, plants, animals, weather, and human activity, emphasizing how the past has shaped the present. Perspectives from natural history, landscape ecology, historical analysis, agriculture and forestry, conservation biology, and aesthetics will be integrated during site assessments. Prerequisites: ENVS 1 or NR 1 or Intro. Natural Science; ENVS major; sophomore standing. Enrollment Limit: 15.

**ENVS 177 Introduction to Landscape Restoration**  
**91579 / 3 Credits / Rick Paradis / W 4:05 - 7:05 / Lafayette L411 / NS**  
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 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. Enrollment Limit: 25.

**ENVS 179 D2: Ecofeminism**  
**94685 / 3 Credits / Annika Ljung-Baruth / F 12:00 - 3:00 / Cross-listed with GSWS 179 / Dewey 212 / HUM**  
Investigation of the parallel dominations of women and nature, through analysis and reflection on ecofeminist theory, activism, and spirituality. This class 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 189 Introduction to Systems Thinking**  
**92360 / 3 credits / Lance Polya / T 1:15 - 4:15 / Aiken 112**  
How can we make the systems that we work and live in to be more environmentally, socially and economically sustainable? Systems thinking is integral to understanding sustainability. Systems thinking enables you to see “the big picture” by synthesizing information from many different perspectives and disciplines in both your personal and professional lives. In this course, you will learn to better understand the long-range cross-impacts and unanticipated consequences of your decisions. You will develop high-leverage solutions for transitioning to tomorrow’s most challenging problems in your personal and academic lives, such as planning sustainably, allocating scarce resources, and making trade-offs. You will be part of a team project that will, from a systems thinking perspective, analyze an environmental case study and formulate policy recommendations to solve the problem. Case studies will be drawn from the intersection of natural and human systems, like climate change and population dynamics. This course is hands-on, highly participatory course, and non-technical, with no computer use. Prerequisite: One of the following: ENVS 001, ENVS 002, NR 001, NR 002, ENSC 001. Enrollment Limit: 25. Much more information can be found at: [http://www.uvm.edu/~lpolya/ENVS%20189/Syllabus/2015%20Syllabus.pdf](http://www.uvm.edu/~lpolya/ENVS%20189/Syllabus/2015%20Syllabus.pdf).

**ENVS 191 Environmental Practicum**  
**91148 / 0.5 - 9 Credits / Rick Paradis / TBA**  
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. Prerequisites: Sophomore standing.

**ENVS 195 Energy Action Seminar**  
**94694 / 1 Credit / Richard Watts / M 4:05-5:20 / Lafayette L411**  
This special seminar series, supported by UVM's Clean Energy Fund, features top-level thinkers engaged in identifying best practices for implementing renewable energy. Energy has major environmental impacts, both in how we use it and how we extract it, contributing, for example, from 30 to 40 percent of our total greenhouse gases. Renewable energy resources can
ENVS 195 Environmental Literature, Arts and Media
93494 / 3 Credits / Adrian Ivakhiv / TR 11:40-12:55 / Terrill 108 / HUM
An introduction to the environmental humanities exploring the range of values and cultural expressions of the human-nature relationship. We will explore contemporary and historical works of literary, visual, and performative art to see the role the expressive humanities have played in shaping social-cultural attitudes toward nature and the human dilemma of depending on nature as source and sustenance. Through readings, discussion, short response papers, and small group work, students will gain exposure to U.S. and global artists and movements in the environmental arts and literature as well as eco-media studies. Enrollment Limit: 50.

ENVS 195 Climate Justice and Advocacy
94668 / 3 Credits / Brian Tokar / W 4:05-7:05 / Waterman 458 / SS, IN
After some years of dormancy, a popular global climate movement now appears to be on the rise, reflecting a diversity of public responses to the threat of escalating climate disruptions. This course aims toward a comprehensive critical outlook on this emerging movement, with a focus on various international perspectives, emerging policy debates, diverse local responses to new modes of energy extraction, and possible directions for the future. Additionally, students will critically examine current news on climate issues and movements, explore a variety of current campaigns, and develop hands-on group projects that will apply this knowledge to addressing current local and regional issues. Enrollment Limit: 25.

ENVS 195 Permaculture Fundamentals
91703 or 91469 / 2 Credits / Keith Morris / T 4:25-7:25 or R 4:25-7:25 / Jeffords 101 / NS
This is the second of a two-part course for a total of 5 credits. You must be co-enrolled with PSS 156 Permaculture. Taken together, these two courses fulfill the requirements for an internationally recognized Permaculture Design Certification Course. Part one, ‘Permaculture’ 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 Fundamentals (PSS/ENVS 195) must have successfully completed Part I, Permaculture (ENVS/PSS 156). No one will be allowed into Part II without previously completing Part I, ideally in the same semester. Enrollment Limit: 20.

ENVS 195 Plant-Based Healing Medicine
91603 / 3 Credits / Barbara Raab / M 5:05-8:05 / Lafayette L 210 / NS
Objective of this course is to familiarize students with both the science and art of herbalism/herbology/phytotherapy and its approach as a holistic modality. Students explore the historical perspectives of Herbalism, as well as its present-day context within both the realms of complementary/integrative and Western allopathic medicines. Plant constituents, the sustainable harvesting, preparation, and storage of herbs are covered, in addition to specific herbs as support for specific organ systems of the body. Crafting an individual holistic lifestyle by addressing such factors (such as diet and stress alleviation) to support one's health and well-being is discussed. A walk to view medicinal plants growing outside is included. For more info, email braab@uvm.edu. Enrollment limit: 25.

ENVS 195 SL: Natural History of Centennial Woods
91453 / 3 Credits / Teage O'Connor / R 1:15-4:05 / Off-Campus / NS
Ski slopes, army bunkers, abandoned beaver ponds, pine plantations, mile-high glaciers, and a multitude of other characters have all played a part in shaping what we now know as Centennial Woods. In this field-based class we will take an in-depth look at the 65-acre natural area embedded within a much larger matrix of rivers, highways, houses, and power lines. While learning how to tell the story of a landscape from what we still see, we will calibrate and attune our own senses to perceiving change as it happens and as it has happened. Prerequisite: ENVS 1 or NR 1 or GEGO 40. All classes will be conducted in the field. Contact instructor for meeting place. For more info email: badger.meli@gmail.com. Enrollment Limit: 15.
ENVS 195 Wilderness Education & Leadership
91404 / 3 Credits / John Abbott / W 4:05-7:05 / Cross-listed with PRT 188 / Old Mill Annex A207
The primary objective of this class is to provide understanding of the history, global evolution, current issues, leadership skill standards, ethics and future trends in wilderness education and leadership. Secondly, students will pursue skill mastery in concrete leadership "hard skills" (map & compass, stove use & maintenance, group travel management, campsite selection & shelter construction, Leave No Trace (LNT) and general expedition behavior) and more interpersonal "soft skills", leadership skills emphasizing group development and dynamic challenges (understanding leadership & learning styles, risk management, judgment & decision-making etc). Finally, students will be expected to place these personal leadership skills and passion into a professional context. Enrollment Limit: 24.

ENVS 195 The Southwest Borderlands
96246 / 3 Credits / Mary Mendoza / MW 8-9:15 am / Cross-listed with HST 195 & CRSE 195 / Lafayette L400 / HUM
In the wake of the U.S.-Mexican War in 1848, Anglo-settlers, Native Americans, Asians, and Mexicans struggled over competing visions of an American future that would take root in the Southwest Borderlands. In this semester long course, we will examine how cross-cultural encounters shaped policy, changed the landscape, and heightened racial tensions. Using a variety of texts—documentary and feature films, magazine and newspaper articles, travelers’ accounts, academic monographs and articles, and popular literature—we will explore a range of topics: territorial expansion, Native dispossession, racial formation and anxiety, the creation of the sunbelt, Mexican and Asian migration and labor, and cultural change and negotiation. Our course will begin with a close examination of the U.S.-Mexican War and then follow a series of selected historical events that lead up to some of the current political and cultural debates that continue in the borderlands today. Drawing on these items, we will ultimately reflect on how past and present collide in the U.S.-Mexican borderlands, shaping the United States in countless ways. Enrollment Limit: 20.

ENVS 195 Sustainability from a Non-Human Perspective: What Does the Fox Say
96276 / 3 Credits / Trish O’Kane / W 8:00-9:15 am / Terrill 308
An urban ecology and wildlife observation course that charges students to find urban wildlife around campus and in Burlington, and to study how these animals survive. The types of energy sources we use, the foods we eat, the waste we produce, the way we move from one place to another, the types of structures we build, and the noise we make—all greatly affect non-human species. This course explores these impacts through weekly walking lectures and field outings on campus where we will study how a red fox survives in Centennial Woods and why a tiny migrating bird that winters in Latin America spends the summer on the edge of the UVM campus. We will walk, observe and learn together, and teach each other. Half of the classes will be held outside in Centennial Woods or other urban wild areas. Guest speakers range from exterminators to wildlife rehabilitators. Readings will help you see urban nature from the viewpoint of wildlife biologists, fanatical birders, an artist who is a turtle detective, and from the perspective of the urban animals, themselves. The three main course goals: 1) to get you outside; 2) to connect you with this place and our non-human neighbors; and 3) to teach you the science of phenology and how to record field notes. The heart of this course is a daily 30-minute nature observation and research practice (five days a week). This nature observation and journaling practice is worth 50% of the final grade; reading and writing exercises comprise the remainder of the grade. Prerequisite: boundless curiosity and an adventurous spirit. Enrollment Limit: 15.

ENVS 197 STS Human Ecology: Body Earth Mind
92303 / 3 Credits / Amelie Rey ‘16 and Brooke Sambol ‘16 / W 4:05-7:05 / Marsh 122
This course seeks to explore the connection between the human body and mind, to the planet, and environmental issues. In this course, we will use yoga, mindfulness, and eco-art as a vehicle to address the dynamics of human and earth connection. Class is discussion based and features a weekly 45-minute beginner yoga practice. We explore human intentions in regards to nature, and discuss place and identity as a way to create connection and meaning. We will facilitate discussions surrounding topics such as transpersonal ecology, deep ecology, yoga philosophy, and mindfulness practice. We will use our discussions to fuel the creation of eco-art and other practices of reflection. Prerequisite: One of the following: ENVS 001, ENVS 002, NR 001, NR 002, ENSC 001. Enrollment Limit: 15.

ENVS 201 Research Methods
90527 / 3 Credits / Kit Anderson / TR 1:15-2:30 / Allen 204
This course covers the planning, design, and methods for the ENVS 202 senior capstone thesis or project. Includes the literature review and proposal writing. Prerequisite: ENVS 151, Junior standing, ENVS major. Enrollment Limit: 15.

ENVS 202 A and B Senior Project and Thesis
90814 or 91406 or 91420 / 1-9 Credits / Kit Anderson / T 4:00-5:15 or W 3:30-4:20 or TBA / Old Mill Annex A303
Weekly check-in sessions for students working on their Senior Project or Thesis.
promulgating the car
by examining the reproduced through music, TV, movies and advertising among other venues. We will break down the "love affair with the car" expression that motorization, because about 85 percent of the trips we take (for a purpose) are in automobiles. Central to the growth in 92350 / 3 Credits / Robert Williams / R 1:15-4:15 / Waterman 400 / SS In the U.S., car use has steadily increased since the early part of the 20th century. Today, mobility is defined as automobility, or motorization, because about 85 percent of the trips we take (for a purpose) are in automobiles. Central to the growth in automobility has been the size, power and force of the automobile industry. Cars have become woven into American culture so much that it has become cliche to say that we have a "love affair with the car." Culture can be defined as the symbols of expression that individuals, groups and societies use to make sense of their daily lives and to articulate their values. Culture is reproduced through music, TV, movies and advertising among other venues. We will break down the "love affair with the car" by examining the culture that surrounds the automobile, the promotion of that culture over time and the role of the media in promulgating car-related cultural artifacts. Enrollment Limit: 25.
ENVS 295  Ecopolitics and the Cinema
94674 / 3 Credits / Adrian Ivakhiv / M 4:05-7:05 / Jeffords 127 / HUM
This seminar course will examine the intersections between films/filmmaking and ecological politics and philosophy. It will apply the tools of ecocritical cultural studies to cinematic practice and to representations of the relationship between humans and the natural world. Themes to be explored include the ecopolitics of Hollywood and its alternatives (including independent and experimental film), representations of landscape and national identity, film and sense of place, ecological utopias and dystopias, cinematic animals, energy and resource use, and eco-documentaries and protest movements. The summer semester’s course will be divided into 5 thematic sections as follows: Land/Territory, Life/Animality, Resource/Energy, Future/Apocalypse, and Action/Utopia. The class will include daily screenings, readings, reaction papers and writing assignments, and a final term paper. Attendance & participation 25%. Reading and response journals 30%. In-class quizzes 20%. Term paper 25%. Prerequisite: Junior standing. Enrollment Limit: 25.

ENVS 295  Applied Natural Areas Conservation and Stewardship
92427 / 3 Credits / Rick Paradis / W 12:00-3:00 / Cross-listed with NR 285 / Aiken 103 / SS
This hands-on senior seminar addresses the strategic needs of UVM’s Natural Areas. A combination of classroom activities and practical fieldwork provides opportunities to investigate many of the challenges of natural areas conservation and stewardship. Prerequisites: ENVS 174 preferred; Junior standing, one 100-level environmentally-related course. Excellent senior capstone course for ENVS majors with a concentration in Ecology and Conservation. Enrollment Limit: 20.

ENVS 295  Community-Based Natural Resource Management
92010 / 3 Credits / Cecilia Danks / F 12:00-5:30 / Cross-listed with NR 285, FOR 285 / Rowell 102 / SS
Community-based resource management (CBNRM) is a diverse and growing set of integrative, place-based and collaborative approaches to sustainably using and conserving natural resources. In practice, it often combines local knowledge with scientific management for social, ecological and economic benefits. This advanced, service learning course covers foundational theory (e.g. community, common property, public goods, collective action), history, and empirical evidence of community-based management of forest, wildlife and water resources in the US and abroad. We will review recent research on community governance and market-based initiatives related to CBNRM. Case studies will provide insights into international examples. Typically four field labs explore community-based management close to home and service learning is integrated into several of the field labs. In fall 2015, the class service learning project and several field trips will help in celebrating the centennial anniversary of the Vermont Town Forests. We will partner with the Vermont Forest, Parks & Recreation as they organize and host a Town Forest Summit, a daylong event for community members and forest stewards in Vermont. When we go on field trips, expect to use the whole class period (12:50-5:20 pm). On days when we are in the classroom, we will generally meet 1-4 pm. This class may contribute towards the 200-level ENVS course capstone and social science graduate course requirements. Prerequisites: NR 104 or ENVS 151, or graduate standing recommended. Enrollment Limit: 25.

ENVS 295  Eastern Wilderness
91408 / 3 Credits / Jim Northup / R 4:35-7:35 / Waterman 458 / SS
This course will focus on eastern North America’s rich, living tradition of wildlands restoration and protection from the perspectives of history, science and policy. We will ground our thinking in the natural and cultural landscapes of the region and in the wilderness advocacy of prominent conservationists with roots in the northeastern North America. We will look briefly at the cultural contexts and public policy debates underlying establishment of: the Adirondack Forest Preserve, the nation’s first and best protected wilderness area, and the National Wilderness Preservation System. We will also consider recent efforts to restore and protect keystone predators as essential elements of healthy, whole wildland systems, and will look closely at an exciting transboundary, landscape-scale, science-based effort by Two Countries, One Forest, a network of Canadian and U.S. scientists and conservationists working in the Northern Appalachian eco-region—our home. Enrollment Limit: 25.

ENVS 295  The Real Cost of Food
92145 / 3 Credits / Eric Garza / TR 4:25-5:40 / L/L B B132
What is the real cost of food? Food production in the United States, and in all other countries, requires a range of inputs and creates a range of waste outputs and impacts. For most people in developed countries, the only connection they have to the complex system that delivers the food they eat is the process of eating it; most modern people are not intimately involved in food production. This course will explore the real costs of food, including units on the energy requirements of food production, the environmental impacts caused by food production, and social impacts associated with food production. Life Cycle Assessment will serve as an organizing framework for the class, and assignments will include brief reflects on key articles and other media, quantitative problem sets, a book review and a group research project will supplement readings as pedagogical tools. The goal of the course is to teach the value of seeing the food system and the products it delivers in a multifaceted way, rather than judging based solely on one or just a few outcomes or impacts. Enrollment Limit: 25.