Environmental Studies Courses
Spring 2016

ENVS 002 International Environmental Studies
10392 / 4 Credits / Ingrid Nelson / MWF 8:30-9:20 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 different 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. Enrollment limit: 240.

ENVS 107 SU: Human Health and the Environment
15498 / 3 Credits / Christine Vatovec / M 12:00-3:00 pm
This course offers an introduction to the field of “environmental health” through a lens of sustainability. We begin with the idea that sustainability is achieved by creating a balance between ecological flourishing and human well-being, and that health is a primary component of well-being. Building upon this foundation, we explore a range of traditional environmental health topics including the methods of environmental health science (toxicology and epidemiology), environmental hazards (physical, biological, and chemical), risk analysis, communication and management, vulnerable populations, and precautionary approaches and environmental health regulations. We apply this knowledge to understanding and identifying opportunities for mitigating a variety of current environmental health challenges including climate change, food production and access, energy production, water quality and access, and waste management. A focus of the course is how we, as individuals and as a society, may best achieve healthy lifestyles and healthy communities that are supportive of the ecological systems upon which our health depends. Prerequisites: Sophomore standing. Cross-listed with: HLTH 107, NR 107. Enrollment limit: 60.

ENVS 150 / NR 195 / PRT 188 Communities, Conservation, and Development in Costa Rica
11538 / 3 Credits / David Kestenbaum and Walt Kuentzel / Travel course to Costa Rica, March 4 - 13, 2016
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: TBD. Instructor permission required. Enrollment Limit: 16.

ENVS 150 / PBIO 195 Natural History and Conservation of the Galapagos Isle
12060 / 3 Credits / Monique McHenry and Pete Shear / Travel course to Galapagos Islands, March 5 - 13, 2016
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 conservation efforts in place that aim to protect this diversity. Students will keep detailed daily field journals to develop skill in natural history field observation. Program Fee: $2,993. Instructor permission required. Enrollment Limit: 15. For more info please email Pete Shear, nshear@uvm.edu, or Monique McHenry, mmchenry@uvm.edu.

ENVS 150 / NR 195 / PRT 188 Ecotourism in Costa Rica
11248 / 3 Credits / David Kestenbaum / Travel course to Costa Rica December 28, 2015 – January 15, 2016 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: TBD. Instructor permission required. Enrollment Limit: 16.

ENVS 150 Environmental Art in Hawaii
15760 / 3 Credits / Susan Raber Bray / Travel course to Hawaii December 29, 2015 – January 12, 2016
This course examines the response of artists to their environment through the prism of the oldest of the Hawaiian Islands, Kauai. This fertile island, with its rain-soaked mountains and sun-bleached beaches, will be our guide to the profound interplay of art, traditional culture, and the natural environment. Over two weeks, students will have the unique opportunity to experience Kauai through the eyes, hands, and artworks of its dedicated artisans, honored elders, and resident scientists. Students will come to understand how the geography has given shape to native culture, past and present, and how in turn culture has re-formed earth, plants, structures and decorative arts. Program fee: $2267. Instructor permission required. If interested contact instructor ASAP. Enrollment Limit: 10.

ENVS 150 / GEOG 190 Politics of Land Use in Ecuador
15957 / 3 credits / Pete Shear / Travel course to Ecuador December 28, 2015 – January 16, 2016
This study-abroad and service-learning course focuses on issues of land use, distribution, and reform in Ecuador. Today, social movements in Ecuador are at the global forefront of grassroots political organization and egalitarian land reform. This two-week long course provides students with an experiential introduction to the Andean region through the historical, cultural, political, ecological, and physical geography of Ecuador. Stays with families, participatory agricultural work, lectures from Ecuadorian scholars and officials, visits to institutions, and guided hikes. Program fee: $1887. Instructor permission required. Enrollment limit: 20.
ENVS 151A and B Intermediate Environmental Studies
10404, 11138 or 15769 / 3 Credits / Cecilia Danks and Rick Paradis / TR 1:15 - 2:30 pm
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 various written assignments focusing on college and career planning. FOR ENVS MAJORS ONLY. Note: Both sections of ENVS 151 (A and B) will usually meet together. Prerequisites: ENVS 001 and ENVS 002. Enrollment Limit: 90.

ENVS 154 D2: Traditional Ecological Knowledge
12071 / 3 Credits / Kit Anderson / TR 10:05 – 11:20 am
The class focuses on traditional ecological knowledge (TEK) as a system of knowledge, practice and belief. Using examples from a range of the world’s biomes, we consider maintenance of biocultural diversity, the similarities and differences between “science” and indigenous ways of knowledge, strategies for combining these systems in addressing climate adaptation strategies, and give examples of the successes and challenges faced today, similarities and how traditional knowledge is transmitted, including storytelling. Students contribute regularly to class discussion, submit a series of essays that integrate what they have learned, develop and present a group-teaching project, and learn a traditional skill. Prerequisites: ENVS 001 or ENVS 002 or ANTH 021, sophomore standing. Enrollment Limit: 25.

ENVS / PSS 156 SU: Permaculture
11461 or 11271 / 3 Credits / Keith Morris / T 4:35 - 7:35 pm or R 4:35 - 7:35 pm / First of a two-part course – 156 can be taken as a stand-alone introduction to the topic, to receive certification, you must be co-enrolled with PSS 196 Permaculture Practicum.
Permaculture is the study and practice of the way human beings- as individuals and communities- can participate in the creation of ethical (socially just and ecologically regenerative) perennial support systems. 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. This course introduces students to the principles and practice of permaculture design through collaboration on real-world projects with an eye towards repairing, restoring, and regenerating human ecosystems. This is the first of a two-part course. 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; as well as social and economic organization (‘invisible structures’). Skills and techniques for ‘reading the landscape’, developing site-responsive design, and representing interpretations and plans through visual maps and public presentations will be developed through a collaborative design by students in groups. Students explore various food production, energy production, waste management, water and shelter systems, and assess their potential for integration to meet human needs while improving ecosystem health. One weekend session will be required, TBA. Course requires attendance at the Winter NOFA Conference (February 13-14, 2016). Program fee: $152. Prerequisites: 3 credits in basic biology or ecology. Instructor permission required, email arenik@uvm.edu. Enrollment Limit: 22 in each section.

ENVS 170 Environmental Art Practice: Landscape Photography
15577 / 3 Credits / Dan Wells / R 1:15 - 5:40 pm
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 class is on learning to see in nature, and the use of photography as a tool for seeing. This is almost entirely a field course; apart from 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. Enrollment Limit: 15.

ENVS 173 Landscape Natural History
11131 or 12109 / 3 Credits / Heather Fitzgerald (T) or Alicia Daniel (W) / T or W 12:00 - 3:45 pm
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 be focusing 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. People come into this class with a variety of different backgrounds and levels of knowledge about these topics, and that is fine. 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, we also invite you to enter each of these places with an open heart, enjoying the beauty and connection to nature that have drawn us together. Prerequisites: ENVS 001 or NR 001, minimum sophomore standing. Enrollment Limit: 15 in each section.

ENVS 181 D1: Race, Class and Garbage
15612 / 3 Credits / Bindu Pannikar / TR 11:40 am - 12:55 pm
Examine environmental waste through social justice analysis of pollution patterns that reflect racism, sexism, and classism, including responsive strategies of the environmental justice movement. Prerequisite: ENVS 001 and ENVS 002, sophomore standing. Enrollment Limit: 40.
ENVS 182 D2: Religion and Ecology
15613 / 3 Credits / Kit Anderson / TR 1:15 - 2:30 pm
Pope Francis and the Dalai Lama are among world religious leaders who have called the faithful, as well as political leaders, to address Earth’s changing climate. Will this help to shift attitudes and behaviors? Some scholars of religion and ecology believe this is exactly what’s needed. Others are not so sure. In this course we’ll explore connections between the world’s religious traditions and the environment, and the role of beliefs, practices and cultural contexts in shaping human/other-than-human relationships. We’ll also study recent events and documents to learn what trends are emerging that might affect the future. Class will include readings, discussions, written assignments, guest lectures, research and forays into the community beyond UVM. Several types of contemplative practices and traditional storytelling will be integrated throughout. Prerequisites: ENVS 001, ENVS 002 or NR 002; REL 020 or 021 preferred, sophomore standing. Enrollment limit: 40.

ENVS 183 Environmental Impacts of Consumerism
13168 / 3 Credits / Robert Williams Jr. / M 6:40 - 9:40 pm
Through readings, student-led research, weekly lab exercises, films, and class discussions, we will study consumerism both locally and globally as it impacts the environment. Looking at recent research, websites, and our own personal habits, we will evaluate social, environmental, and psychological habits of consumerism and materialist values. We will test some tools for analysis of consumption, consider ethical guidelines for personal and institutional choices, and review initiatives for how to move to a less consumptive society. Prerequisites: ENVS 001 or ENVS 002 or NR 001 or NR 002 or CDAE 002, minimum sophomore standing. Enrollment limit: 30.

ENVS 187 SU/SL: Campus Sustainability
11204 / 3 Credits / Wendy Verrei-Berenbach / TR 2:50 - 4:05 pm
This service-learning course focuses on key 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 measurement framework of the Association for Advancement of Sustainability in Higher Education (AASHE). This course benefits from numerous campus partners, including the Office of Sustainability, Dining Services and Real Food Challenge, Green Building Program, Campus Transportation and Socially Responsible Investment Advisory Council. Our partners guide our exploration of the elements of campus sustainability: energy, transportation, food, materials (purchasing, waste), governance, investment, curriculum, research, and engagement. Prerequisites: ENVS 001 or NR 002, minimum sophomore standing. Enrollment limit: 30.

ENVS 188 Sustainability Science
12123 / 3 credits / Brendan Fisher / TR 10:05 - 11:20 am
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 we will 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. Prerequisites: ENVS 001 or ENVS 002 or NR 002 or CDAE 002, minimum sophomore standing. Enrollment limit: 40.

ENVS 191 Environmental Practicum/Internship
10443 / 1-9 Credits / Rick Paradis
Students engage in independent study, research or internships that have been developed with a site supervisor and faculty sponsor. Course coordinator must approve proposals before the activity begins. Prerequisites: Sophomore standing. Instructor permission (by application) required.

ENVS 195 A Nonmaterial Values Ecosystems
15582 / 3 credits / Rachelle Gould / MW 5:05 - 6:20 pm
All major typologies of ecosystem services include non-material services that ecosystems provide to people. These Cultural Ecosystem Services include provision of opportunities for spiritual fulfillment, recreation, identity development, maintaining cultural heritage, and fostering psychological well-being. This course will take a deep dive into “Cultural Ecosystem Services,” this relatively little-discussed aspect of the increasingly popular ecosystem services concept. After a brief overview of the ecosystem services field, we will explore concepts of human well-being, with a focus on discerning their material and non-material aspects. We will then examine typologies of Cultural Ecosystem Services, and critique and possibly refine them. Drawing on examples from around the world, we will explore how different people benefit from ecosystems in non-material ways. Throughout this exploration, we will consider the many academic disciplines brought to bear on this topic, and practice discernment in being a consumer of interdisciplinary research. This will lead into discussion of how to “measure,” or characterize, these services. We will close by considering the ethical implications of this work: what are the impacts of including (or not including) Cultural Ecosystem Services in decision-making? How can we characterize these values in respectful and sensitive ways? This course will involve constant interaction with classmates and diverse assignments specifically designed for its content. Assignments will include a visit to the Fleming Museum, discussion groups based on podcasts, conducting original analysis of psychological data, and developing an original method for measuring Cultural Ecosystem Services. Prerequisites: ENVS 001, sophomore standing. Enrollment limit: 40.

ENVS 195 B Environmental Journalism
15599 / 3 credits / Josh Brown / T 4:35 - 7:35 pm
Covering the “environmental beat” requires that journalists have the ability to report on complex and interwoven subjects, from land use policy to laboratory discoveries; energy technologies to natural history; waste management to wilderness travel. This course will give students an introduction to finding and tackling these challenging stories. The emphasis of the class is on developing an informed and nuanced approach to reporting and writing environmental stories suitable for newspaper, magazine, radio, and multi-media formats. Through this course you’ll learn about current and emerging environmental topics—both locally and nationally—while you gain hands-on experience.
in the basics of journalism: deciding what to write about, gathering news, conducting research, investigating, and interviewing. No background in journalism is needed, but you should be a conscientious, inquisitive, determined writer with strong basic writing skills. For more info, email joshua.brown@uvm.edu. Prerequisites: ENVS 001 or ENVS 002, sophomore standing. Enrollment limit: 26.

ENVS 195 C Vermont Food Systems  
15614 / 3 Credits / Jessica Sanford / T 4:35 - 7:35 pm  
Food - it feeds more than just our body. It provides sustenance to our communities, our cultures, our economies, our environment and our pains and pleasures. The intricacy with which it weaves itself into the many spires of our world’s existence is profound. The study of this weave is the study of the food system. 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 a social, political and environmental level. 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, from soil to selves. 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. Enrollment limit: 30.

ENVS 195 D Introduction to Ecopsychology  
15615 / 3 credits / Andy Fisher / MTWRFSS 9:00am - 2:00pm / March 5 - 13, 2016  
This spring break 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). Prerequisite: Sophomore standing. Enrollment Limit: 30.

ENVS 195 E Therapeutic Herbalism  
15616 / 3 Credits / Barbara Raab and Kate Westdijk / 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. Course primary objectives are to familiarize the students with the holistic (natural medicine) approach to health and healing; the relative safety-toxicity spectrum of botanicals; and the role of nutrition, botanicals, and lifestyle support in preventive health. Students will also be introduced to aspects of clinical practice in botanical medicine. Other objectives: factors that affect dosage determination, current issues in herbalism, an understanding of herb-drug interactions, the making of a standardized tincture, and exploring herbal monographs are covered. Finally, this course aims to familiarize the students with specific pathologies and conditions, the phytotherapeutic approaches to treating them, including supportive lifestyle changes. Recommended: ENVS 195: Plant-based Healing Medicine and an anatomy and physiology class. Enrollment Limit: 30.

ENVS 195 F SU: Environmental Entrepreneurship  
15650 / 3 Credits / Todd Comen / W 4:05 - 7:05 pm  
Entrepreneurial activity is a major source of innovation and job creation around the world. An environmental entrepreneur is someone who is driven not only by the possibility of making a profit, but is also driven by environmental and social concerns. Environmental entrepreneurs want to make the world a better place by engaging in practices that minimize the environmental impact of their activities or, ideally, practices that don’t result in degradation of the natural environment. 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 food 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 environmental entrepreneurship 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. Prerequisites: ENVS 001, 002 or NR 001, 002, or ENSC 001. Enrollment limit: 30.

ENVS 195 G Land and Food Justice Movements  
15698 / 3 Credits / Brian Tokar / W 4:05 - 7:05 pm  
Recent decades have seen a flowering of new popular movements across the world, highlighting concerns about the future of food, seeds, and access to land. This course will examine both domestic and international movements for land and food justice, from the emergence of organic and local food activism in the North to the diverse “new peasant” movements in the global South, among others. We will examine the ideas and contributions of rainforest dwellers, campesino activists and “landless workers” in Latin America, farmer activists in Africa and Asia, “locavores” in New England and California, and food chain workers across the US, among others. Guest speakers and films will address both the local and international dimensions of these movements, and students will develop and critically reflect upon hands-on projects that support efforts toward just and sustainable food systems in our region. Prerequisites: ENVS 001 and one prior 100-level ENVS course, sophomore standing. Enrollment limit: 30.
ENVS 195 / PRT 149 TR1 Wilderness Education and Leadership
15987 / 3 credits / John Abbott and Douglas Connelly / 2 weekend field practicals, February 5-7 and April 1-3, 2016 in New York

Interest in wilderness education and leadership has increased rapidly in the past decade. Today it is rare to meet a college or university student who hasn’t had or isn’t aware of unique educational programs emphasizing self-motivation, leadership skill development and learning by doing in outdoor settings. Whether in the context of non-competitive, group and team-building “new games”, low and high ropes course initiatives or on a 28 day immersed wilderness trip as part of an Outward Bound (OB) or National Outdoor Leadership School (NOLS) experience, UVM students are seeking the powerful, formative, educational experiences these programs provide. Gain valuable winter wilderness travel and leadership skills. Students will develop both hard skill and group management skills necessary for safe backcountry travel in winter environments. Program fee: $280. Prerequisites: ENVS 001, ENVS 002 or NR 001, 002 or ENSC 001; Instructor permission required. Enrollment Limit: 16.

ENVS 195 ONL Careers in Sustainability
15653 / 1 Credit / Jennifer Green / Winter Session Online Course, December 28, 2015 - January 15, 2016 / ONLINE

"Careers in sustainability" is a one-credit course designed to provide a glimpse into potential employment in the sustainability field, with a specific emphasis on municipal government. It will also introduce students to the core principles and skills required for employment. We’ll briefly explore basic elements of the sector, get a solid understanding of what makes sustainability work different from work in other sectors, and then dive into some of the most contemporary questions about the field. Course work will include daily discussion assignments graded on clarity and thoughtfulness. Enrollment Limit: 25.

ENVS 195 ONL Careers In Environment
15596 / 1 Credit / Elizabeth (Ibit) Wright / Winter Session Online Course, December 28, 2015 - January 15, 2016 / ONLINE

“So, what are you doing after you graduate with that ENVS major?” This one-credit winter session 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 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 then a final self-assessment and strategic plan toward and beyond graduation to employment. ENVS majors only. Senior standing, recent graduates or permission. Enrollment Limit: 25.

ENVS 196 / PSS 196 Permaculture Practicum
11241 or 11463 / 2 Credits / Keith Morris / T or R 4:35 - 7:35 pm / This is the second of a two-part course. You must be co-enrolled with PSS 156 Permaculture.

This is the second of a two-part course. Taken together, these two courses 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 students’ individual designs for sites of their own choosing, and culminates with these individual design presentations. Sites are specific to students’ personal learning goals and will range from farms and community-scale designs to yards, apartments, urban sites, and other applications of permaculture in a wide variety of cultural and ecological contexts. We focus on the intersection of social and environmental health by exploring relationships between the built environment, food security, energy, and water; and retrofitting this infrastructure to appropriately respond to the confluent crises of the 21st century with localized resilience and abundance. The principles and design process introduced and developed through this course are applicable in any climate or area of the world. However, field trips and practical examples will focus in particular on patterns, techniques, species, and other strategies that embody the potential for ecological culture in the cold-temperate northeast of North America. Prerequisites: 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. Instructor permission required, email aresnik@uvm.edu. Enrollment Limit: 22 in each section.

ENVS 197 STS: Envisioning a Just Food System
15700 / 3 Credits / Olivia Burt, Leila Rezvani, Claire Wiggin / W 12:00 - 3:00 pm

This is a “Students Teaching Students” (STS) course. The Alternative Food Movement (AFM) is comprised of sustainable, local, and fair trade foods and their associated provisioning systems, such as community gardens, community supported agriculture (CSAs), farmers markets and cooperatives. This movement has become arguably one of the most important, albeit contentious movements of the 21st century. The AFM developed from a growing concern over the globalized, environmentally destructive and socially unjust industrialized food system. Diverging from its origins in counterculture and it goals as a vehicle for collective, radical social change, the alternative food movement has become an individualized phenomenon. Consumers are the privileged actors in these “alternative” systems: judging by the label on the food, buyers “vote with their fork” and buy the foods they believe to be the most ethical, healthy or environmentally responsible. Increasingly, participants in and scholars of the food movement are pointing out that a consumer-based effort excludes those who cannot afford or access “good” food. And even well-intentioned food justice initiatives have failed to seriously subvert this market-based logic and ingrained hierarchies based on race, class, and gender. This course will be a critical analysis of the movement. We will begin by assessing the AFM as it stands and address the privilege and positionality of its participants, leaders, and popular writers. We will then investigate the accessibility of alternative foods, Vermont’s local food system, the role of race and class in determining one’s participation in the food movement, and labor issues in the food system, existing programs that address social sustainability, as well as the interconnections between all of these issues. We will finish the course by synthesizing this knowledge and use it to create a collective image of an equitable and sustainable movement. Prerequisites: Sophomore standing, instructor permission required (Amy Seidl). Enrollment limit: 15.
ENVS 201 Research Methods  
10432 / 3 Credits / Brendan Fisher / TR 1:15 - 2:30 pm  
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. Prerequisite: ENVS 151, minimum junior standing, ENVS major or RSENR Honors students. Enrollment Limit: 25.

ENVS 202 A, B, or C Senior Project and Thesis  
10438 or 11019 or 11027 / 1-9 Credits / Kit Anderson / T 4:35 - 7:35 pm or W 4:05 - 5:20 pm or TBA  
Weekly voluntary check-in help/support sessions for students working on their ENVS 202 Senior Project or Thesis. Prerequisite: ENVS major; minimum junior standing, ENVS 201 or concurrent registration.

ENVS 202 D Senior Capstone Internship  
11742 / 1-9 Credits / Amy Seidl / R 3:30 - 4:20 pm  
Weekly voluntary check-in help/support sessions for students working on their ENVS 202 Capstone Internship. Prerequisite: ENVS major; minimum junior standing, ENVS 151. Enrollment Limit: 15.

ENVS 202 E Food, Land, Community Senior Capstone (Thesis or Internship)  
15583 / 1-9 Credits / Ernesto Mendez / T 9:00 - 10:00 am  
Weekly voluntary check-in help/support sessions for students working on their ENVS 202 Capstone Internship. For students with Food, Land, Community concentration working on a senior thesis or capstone internship with Ernesto Mendez. Prerequisite: ENVS major; minimum junior standing, ENVS 151. Enrollment Limit: 25.

ENVS 204 A Forest, Community and Climate  
15584 / 3 Credits / Cecilia Danks / MW 3:30 - 4:45 pm  
This seminar will take an interdisciplinary, international look at the special role of forests as both sinks and sources of carbon and the livelihood and equity issues involving local communities that depend on forests. We will start by reviewing the natural science of the role of forests in climate change and predicted impacts on forests and forest communities worldwide from climate change models. The course then delves into specific issues such as the explosion of wildfire in the American west, the controversy over carbon offsetting and REDD, and the pros and cons of wood-based energy. This year, the course will also examine the outcomes of the 2015 UN Climate Change Conference in Paris to unpack the implications for forests and local communities. For the final project, students may pursue independent research on an approved topic or work on a group project to assess the potential for UVM to conserve forests as one way to meet part of our climate commitment. Prerequisites: Senior or graduate standing or instructor permission. Enrollment limit: 25.

ENVS 204 B Shades of Green  
15585 / 3 Credits / Frank Zelko / W 4:05 - 7:05 pm  
This course will examine how environmentalism has become a major political, social, and cultural phenomenon in the twenty-first century. We will look at the history of the different strands of modern environmentalism and the distinctive approaches taken by various individuals and organizations. We will examine how successful each has been and explore how environmentalism will need to develop to tackle future challenges. The course assessment will involve a range of writing assignments and an exam. Prerequisites: Senior or graduate standing or instructor permission. Enrollment limit: 25.

ENVS 284 Teaching Assistantship  
10447 / 1-3 Credits / Ingrid Nelson / TBA  
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 002 TA’s only, permission.

ENVS 291 Advanced Environmental Practicum/Internship  
10430 / 1-18 Credits / Rick Paradis  
Students engage in advanced level independent study or internships developed with a site supervisor and faculty sponsor. Course coordinator must approve proposals before the activity begins. Prerequisite: ENVS 151, instructor permission required (via application), senior standing only.

ENVS 293 Environmental Law  
15654 / 3 Credits / Jody Prescott / T 6:40 - 9:40 pm  
Environmental Law is a very complex, very broad topic. It is difficult to think of a facet of our lives today that is not somehow touched by some aspect of environmental law. Jody Prescott was a zoology major as an undergrad, and as a practicing attorney he handles environmental compliance and litigation issues – to be competent he must know how environmental law issues play out legally, politically, and scientifically. Further, although the very complexity of the laws themselves militates towards specialization on the part of those who work with environmental law, the interrelationships between the different areas of law require a fairly well developed understanding of the field as a whole. In this class, using a highly regarded textbook that effectively ties together the study of pertinent legal cases with the underlying statutes, regulations and policies, we will seek to develop that appreciation. Prerequisites: ENVS 001, ENVS 002, and POLS 021, POLS 130 is strongly recommended. Junior or senior standing. Enrollment limit: 30.
ENVS 295 A Women, Health and the Environment
15586 / 3 Credits / Bindu Pannikar / T 4:35 - 7:35 pm
This course uses interdisciplinary approaches to study/analyze the connections between women’s health and environment and their role in shaping the environmental health sciences and social movements. Students will examine critical scholarship that includes feminist critiques of scientific epistemologies and practices as well as ecofeminist analysis of women’s health and environmental issues. Through the works of women scholars and activists we will examine the chemicals and hormone disrupters in our food, cosmetics, and our environment; the various ways they impact women’s health and the future generations; and the environmental health activism, and policy battles that they have lead for the benefit of humanity and the environment. This seminar will explore real-world problems, local and global. The class will be broken into groups that consist of natural and social science concentrators in order to problem solve from both perspectives. All assignments will be integrated group work. Prerequisites: ENVS 001 and ENVS 002, junior or senior standing. Enrollment limit: 25.

ENVS 295 B SU: Environmental Sustainable Education
15655 / 4 Credits / Trish O’Kane / TR 10:05 - 11:20 am and W 2:00 - 5:00 pm
This new course and service-learning program will pair UVM students as enviro-mentors and “bird buddies” with children at Flynn Elementary School. By creating an after-school birding and nature study club for fourth and fifth graders, UVM students will lay the foundation for a university pipeline program; many of Flynn’s students will become first-generation college students. Our class will cooperate with staff at Flynn Elementary School on Burlington’s New North End to provide this programming. Flynn Elementary has the largest after-school program in the Burlington school district with students from 33 different countries. The school is making herculean efforts to meet student needs by providing after-school programming and by emphasizing the sciences. Surrounded by woods and beautiful parks and gardens, this elementary school is just a five-minute walk from Lake Champlain. Based on the theoretical framework of environmental justice—that the environment is where we live, work and play—our class will help Flynn students to connect to their immediate environment and to improve it. In addition to Tuesday-Thursday indoor/outdoor lectures at UVM on birding, pedagogy, local justice issues in education, sustainability and nature study, the class will meet every Wednesday afternoon from 2-5:30pm at Flynn Elementary to work outside and inside with the children. No prior birding experience is necessary (experience working with children would be extremely helpful). Students will learn how to identify Vermont’s most common birds by sight and sound, then they will teach that skill to their Flynn “bird buddies” or "co-explorers.” We will spend every Wednesday afternoon together exploring the neighborhood surrounding Flynn to learn what the parks, woods, lake, and all the wild creatures have to teach us, and what we all have to teach each other. Junior or senior standing, instructor permission required. Enrollment limit: 25.

ENVS 295 C/ CDAE 295 / NR 295 Community Participatory Research
15934 / 1-18 Credits / Kate Westdijk / R 1:15 - 4:15 pm
This course will critically examine the approach and process of conducting community-based research (CBR) with the community as full partner. Students will explore conceptual, philosophical and practical dimensions related to CBR, 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 CBR proposal and/or contributed to a CBR 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. Prerequisites: Recommended CDAE250 or ENVS201 or research methods equivalent. Enrollment Limit: 25.