

NATURAL RESOURCES (NR)

Courses

NR 1010. Natural Hist & Human Ecology 1. 0 or 4 Credits.

Integrates the science of ecology and the science of humans and society to understand the relationship between the natural landscape's effects on society and social organization, and society's effects on the natural landscape. Catamount Core: N2.

NR 1020. Natural Hist & Human Ecology 2. 0 or 4 Credits.

Integrates the science of ecological sciences and the science of humans and society to understand the relationship between the natural landscape's effects on society and social organization, and society's effects on the natural landscape. Pre/Co-requisite: NR 1010. Catamount Core: S1.

NR 1050. Critical Reflection & Dialogue. 1 Credit.

An opportunity for First-Year students to develop skills of critical reflection and dialogue through the examination of several environmental issues, and to build strong working relationships with peers and faculty. Includes nuanced, personal conversations in small and large groups, and will consider disparate viewpoints and experiences. Pre/Co-requisites: RSENR First-Year student standing.

NR 1060. Race & Culture in NR. 0 or 3 Credits.

Introduces First-year students to issues of race and culture and their relevance to society, natural resources, and the environment. Prerequisite: NR 1050. Catamount Core: D1.

NR 1090. VT: Natural & Cultural Hst. 0 or 4 Credits.

Introduction to the Vermont landscape that combines elements of natural history, field ecology, and environmental history. Students visit locations around the Champlain Valley as they build observational skills, study natural systems, and examine past and present human relationships with nature. Pre/Co-requisite: RSENR transfer students only. Catamount Core: N2, SU.

NR 1100. Mindfulness & the Anthropocene. 3 Credits.

Studies the history, theories, concepts, cultural constructs, and practice of mindfulness meditation. Denial, anxiety, and helplessness are common reactions to rapidly escalating global socioecological crises; investigates how mindfulness can develop capacity to respond to uncertainty, loss, and change, and explores how contemplative practices can transform external instability into insight and action. Catamount Core: AH3, SU.

NR 1101. Nature and Belonging. 3 Credits.

A unique focus on the intersections of nature, identity, and belonging that supports students in cultivating a wider, deeper, and more nuanced understanding of nature and the dynamics of belonging. Students will gain practices to connect more deeply with nature, themselves, and the community and understand how our worldview and relationship with nature can help address growing global environmental challenges. Catamount Core: D2.

NR 1990. Special Topics. 1-18 Credits.

Introductory topics in environmental and natural resource issues beyond the scope of exiting courses.

NR 1991. Internship. 1-3 Credits.

On-site supervised work experience combined with a structured academic learning plan directed by a faculty member or a faculty-staff team in which a faculty member is the instructor of record, for which academic credit is awarded. Offered at department discretion.

NR 1993. Independent Study. 1-18 Credits.

A course which is tailored to fit the interests of a specific student, which occurs outside the traditional classroom/laboratory setting under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.

NR 1996. Aiken Scholars Seminar. 1-6 Credits.

Seminar discussions on current environment issues. Guest speakers and field trips. Prerequisite: Open only to First-Year Aiken Scholars.

NR 2030. Ecology, Ecosystems & Environ. 3 Credits.

Major ecological concepts and their application. Analysis of form, structure, and function of organisms, populations, communities, ecosystems, and landscapes. Prerequisites: RSENR students or Agroecology or Landscape Design or Environmental Studies majors; minimum Sophomore standing. Catamount Core: N1.

NR 2040. Social Proc & the Environment. 3 Credits.

Social science theories and their application to environmental issues. Analysis of issues using theories of government, economics, and social movements. Emphasis on integrating frameworks to analyze environmental issues. Prerequisite: NR 1020 or NR 1090. Catamount Core: S1.

NR 2100. Environmental Communication. 3 Credits.

Focuses on the types of oral communication common in environmental professions, with a focus on an environmental issue that students adapt communications for throughout the semester. Designed to teach students common frameworks for effective science communication and stakeholder engagement, while providing opportunities for students to expand their oral communication, critical analysis and listening skills for a variety of audiences and purposes. Catamount Core: OC.

NR 2210. Ecosystems' Nonmaterial Values. 3 Credits.

Explores the nonmaterial ways ecosystems benefit people (that is, spiritually, psychologically), and how those benefits might be incorporated into decision-making. In addressing these Cultural Ecosystem Services, its approach is both appreciative and critical. Ethical implications figure prominently. Prerequisite: ENVS 1500, ENVS 1510, NR 1010, or NR 1090.

NR 2300. Landscape Restor & Leadership. 4 Credits.

Offers students in the Fellowship for Restoration Ecologies and Cultures an experiential course in landscape restoration and leadership. Aims to contend with anthropogenic disturbance of ecosystems through an interdisciplinary approach while developing collaborative leadership skills among students. Prerequisites: ENVS 1500, ENVS 1550, BIOL 1000, BIOL 1400, BIOL 1450, NR 1010, NR 1020, ENSC 1010, GEOG 1200, GEOG 1760, ALE 1210, CDAE 1020, or NR 1090. Catamount Core: GC2, N2.

NR 2400. Applied Environ Statistics. 0 or 4 Credits.

Introduction to the biostatistical analyses for natural resource applications. Covers disciplinary software and analyses to prepare students to independently design, analyze, interpret and communicate environmental data. Includes parametric and non-parametric methods focused on real-world environmental data-sets. Prerequisite: Minimum Sophomore standing. Catamount Core: QD.

NR 2401. Intro Environmental Statistics. 0 or 3 Credits.

This course is designed for students who want to develop basic competency in designing, conducting and interpreting statistical analyses for environmental applications. Students will be introduced to experimental design and sampling, data interpretation, description and visualization, distributions and probability, and common inferential tests. Students will leave the class with the ability to assess and conduct a wide range of common statistical analyses independently using the R and R Studio. Prerequisite: Sophomore standing. Catamount Core: QD.

NR 2430. Intro to Geog Info Systems. 0 or 3 Credits.

Understanding and application of computer-based, geographically-referenced information systems. Prerequisite: Minimum Sophomore standing.

NR 2460. Remote Sensing. 3 Credits.

Examinations of the earth's surface from aerial photographs and satellite imagery. Emphasis is on image interpretation, classification, change detection, multivariate analysis (e.g. principal components analysis). Prerequisite: Sophomore standing. Cross-listed with: GEOG 2520.

NR 2730. Landscape Natural History. 3 Credits.

Field-based; examines patterns and processes on local landscapes from an interdisciplinary perspective, with an emphasis on geology, soil science, plant ecology, and ecosystem geography. Prerequisite: ENVS 1500, NR 1010, or NR 1090.

NR 2740. CR: Sustainability Theory&Prac. 4 Credits.

In theory and practice, sustainability can be expressed differently depending on ideological, political, academic or normative commitments. Alongside local partners in Costa Rica, students will study and apply frameworks from traditional communities, and the biophysical and social sciences to understand how sustainability is interpreted and being operationalized in Central America and beyond. Prerequisite: Minimum Sophomore standing. Co-requisite: Enrollment in the Costa Rica Semester Abroad Program. Catamount Core: SU.

NR 2750. Rural Lives in Global World. 3 Credits.

Uses political economic development theory to explore the livelihoods of rural Costa Ricans on the Osa Peninsula, and the tension between external demands made by a global economy vs. their local capacity for self-determination and control of employment opportunities, cultural identity, and quality of life. Co-requisite: Enrollment in the Costa Rica Semester Abroad Program. Catamount Core: D2.

NR 2760. Tropical Ecology in CR. 4 Credits.

A field-based, travel study course where students will learn the major ecological patterns in tropical (and other) ecosystems and on the factors that generate, maintain, and threaten biodiversity. Students will also gain experience in critical thinking, research design, framing hypotheses, data collection techniques, basic statistics, science communication and collaborative research. Prerequisite: Minimum Sophomore standing. Catamount Core: N2.

NR 2990. Special Topics. 1-18 Credits.

Special topics in natural resources beyond the scope of existing formal courses.

NR 2991. Internship. 1-18 Credits.

On-site supervised work experience combined with a structured academic learning plan directed by a faculty member or a faculty-staff team in which a faculty member is the instructor of record, for which academic credit is awarded. Offered at department discretion.

NR 2993. Independent Study. 1-18 Credits.

A course which is tailored to fit the interests of a specific student, which occurs outside the traditional classroom/laboratory setting under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.

NR 2994. Teaching Assistantship. 1-3 Credits.

Undergraduate student service as a teaching assistant, usually in an introductory level course in the discipline, for which credit is awarded. Offered at department discretion.

NR 2995. Undergraduate Research. 1-18 Credits.

Undergraduate student work on individual or small team research projects under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.

NR 2996. Honors Seminar. 1-6 Credits.

A discussion and readings seminar that features guest speakers, and is part of the SNR Spring Seminar Series. Focus of the seminars change annually. Can be repeated. Prerequisite: Sophomore standing; open only to SNR Honors Students.

NR 2999. Undergrad Teaching Fellowship. 1-3 Credits.

This fellowship experience is designed for undergraduate teaching assistants with the goal to build their skills as an instructor, facilitator and peer mentor. Students will develop a teaching statement and provide curricular feedback based on instructional best practices. Students wishing to earn 2-3 credits will work 1:1 with course instructors to develop new curricula and instructional materials as part of a teaching portfolio. Co-requisite: Students must be currently serving as teaching assistants in an RSENR course.

NR 3010. Research Methods. 3 Credits.

Provides a big-picture understanding of what research is, how to do it, and conceptually learn some methodological approaches to research in the environmental realm and helps effectively structure and write a literature review and thesis proposal. Prerequisite: Minimum Junior standing. Catamount Core: WIL2.

NR 3050. Integrating Sci, Soc & Policy. 3 Credits.

Analysis of the interaction between science and politics in ecosystem management. Consideration of various types of science and their roles in shaping environmental management, politics, and policy. Interdisciplinary application of course concepts to case studies of complex ecological problems. Prerequisites: NR 2030, NR 2040. Catamount Core: S1, SU.

NR 3370. Human Ecology & Health-Arctic. 3 Credits.

An unstable Arctic poses threats, not only to the future of the Arctic but to the world itself. Provides an interdisciplinary overview of histories and approaches to human-environment interactions in the circumpolar Arctic, with a focus on the contexts of sustainability and justice. Prerequisite: Minimum Junior standing.

NR 3430. Adv Geospatial Techniques. 1-3 Credits.

Advanced course encompassing a wide range of topics in GIS, remote sensing, GPS, modeling, and visualization designed to provide technical expertise in geospatial techniques. Topics vary by offering; periodic offering at intervals that may exceed four years. Prerequisite: NR 2430, GEOG 2510, NR 6430, NR 2460, or GEOG 2520.

NR 3990. Special Topics. 1-18 Credits.

Advanced special topics in natural resource planning beyond the scope of existing formal courses.

NR 3991. Internship. 1-18 Credits.

On-site supervised work experience combined with a structured academic learning plan directed by a faculty member or a faculty-staff team in which a faculty member is the instructor of record, for which academic credit is awarded. Offered at department discretion.

NR 3993. Independent Study. 1-18 Credits.

A course which is tailored to fit the interests of a specific student, which occurs outside the traditional classroom/laboratory setting under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.

NR 3994. Teaching Assistantship. 1-3 Credits.

Undergraduate student service as a teaching assistant, usually in an introductory level course in the discipline for which credit is awarded. Offered at department discretion.

NR 3995. Undergraduate Research. 1-18 Credits.

Undergraduate student work on individual or small team research projects under the supervision of a faculty member for which credit is awarded. Offered at department discretion.

NR 3996. Honors. 1-6 Credits.

Honors project dealing with aquatic resources, terrestrial ecology, or integrated natural resources.

NR 4060. Env Prob Sol & Impact Assessmt. 0 or 4 Credits.

Group dynamics, impact assessment, risk assessment, and decision making. Emphasis on the process of solving complex environmental problems, interdisciplinary team work, and the National Environmental Policy Act. Prerequisites: NR 3050. Catamount Core: GC2.

NR 4430. GIS Practicum. 3 Credits.

An applied course in geospatial technology with a focus on ESRI's ArcGIS software suite. Prerequisite: NR 2430 or NR 6430.

NR 4640. C Ross Env Pb Srv Practicum. 4-5 Credits.

Creating proposals for modification and implementation of natural resource and environmental policy in Vermont with emphasis on critical thinking, problem solving and leadership. Prerequisites: NR 2040 or POLS 1300.

NR 4680. Soil Ecology. 0 or 4 Credits.

Underlying concepts and theory of modern soil ecology will be reviewed including spatial and temporal distributions, sampling methods, biogeochemical cycles, and ecological functions of soil. Prerequisites: BCOR 2100 or NR 2030; ALE 2610. Cross-listed with: ALE 3680.

NR 4990. Special Topics. 1-18 Credits.

See Schedule of Courses for specific titles.

NR 4996. Honors. 1-6 Credits.

Honors course.