Natural Resources Management - NATR

Courses

NATR 2020 NATURAL RESOURCES FIELD METHODS (3) LEC. 2. LAB. 4. Sampling methods relevant to the evaluation of the environment. Topics include sampling methods, quality assurance procedures, and data management.

NATR 2050 PEOPLE AND THE ENVIRONMENT: AN INTRODUCTION TO CONSERVATION SOCIAL SCIENCES (3) LEC. 3. Introduction to the variety of social sciences used to understand the relationships of people and their environment. Students will develop a deeper and broader understanding of the challenges and potential solutions to natural resource issues facing society today.

NATR 4240 WATERSHED MANAGEMENT (3) LEC. 3. Pr. BIOL 1030. Introduction to watersheds, effects of land management on erosion and water quality, and mitigation techniques to reduce adverse effects.

NATR 4535 COASTAL ZONE MANAGEMENT (2) LEC. 2. Pr. BIOL 1030 or BIOL 1037. Management of shorelines and flood plains, and current legislation. Water quality and ecosystem quality management. Taught at Dauphin Island Sea Laboratory.

NATR 4930 DIRECTED STUDIES (1-3) IND. Departmental approval. Independent Study. Course may be repeated for a maximum of 6 credit hours.

NATR 4970 SPECIAL TOPICS (1-4) LEC. Overview of natural resources, classification, chemistry, ecology and sustainable management. Department approval and agreement with faculty and student. Course may be repeated for a maximum of 8 credit hours.

NATR 5050 URBAN ECOLOGY (3) LEC. 3. Examination of urban ecosystems and the influence of urbanization on rural and forested lands. Junior standing. May count either NATR 5050 or NATR 6050.

NATR 5250 WETLAND ECOLOGY AND MANAGEMENT (3) LEC. 3. Pr. BIOL 3060 or FORY 4230. Wetland ecology in the southeastern U.S. with emphasis on soils, hydrology, biology, and policies and practices related to agriculture, forestry, wildlife.

NATR 5310 ENVIRONMENTAL ETHICS (3) LEC. 3. Critical examination of environmental ethics: historical development and various ethical perspectives. Examination of current environmental issues using perspectives covered in course.

NATR 5320 ECOSYSTEM SERVICES (3) LEC. 3. Ecosystem services are the benefits that people obtain from ecosystems. Human well-being, livelihoods, and markets are covered with emphasis on watershed, biodiversity, carbon, and tourism services.

NATR 5350 WATER RESOURCE MANAGEMENT AND POLICY (3) DSL. This course examines social contexts, ecological contexts, human behaviors, institutions, laws, and policies that guide water management practices. Impacts of critical issues, including climate change, demand, conflict, and pollution, on water resources and water management behaviors are discussed.

NATR 5430 HUMAN DIMENSIONS OF WILDLIFE AND NATURAL RESOURCES (3) LEC. 3. Forests, wildlife, wetlands, and wilderness - sustaining and managing our natural resources ultimately depends on understanding people. Students will investigate the paradigms and theoretical foundations regarding our values, beliefs, attitudes and behaviors concerning human-environment interactions.

NATR 5450 COASTAL LAW (3) DSL. Course will provide students with a firm understanding of the principles of coastal and ocean law and policy and the legal and regulatory structures that are in place to protect people and the environment.

NATR 5550 WATERSHED HYDROLOGY (3) LEC. 3. Departmental approval. In depth focus on components of the hydrologic cycle in forested landscapes and how changes in the landscape and management practices impact the hydrologic regime in the watershed.

NATR 5560 ENERGY LAW (3) LEC. 3. Core principles of energy law, including various legal and regulatory structures that protect people and the environment, particularly as applied to the production, distribution, and consumption of different forms of energy within the US and other regions of the world.

NATR 5630 CONSERVATION PLANNING (3) LEC. 3. Trains students in how to build plans for conservation and management of natural resources. Covers established processes associated with developing conservation plans while addressing human concerns. Includes how to establish measurable objectives, utilize data, frame problems, and determine uncertainty/risk.

NATR 5880 ECOLOGICAL ECONOMICS (3) LEC. 3. Foundations, principles and empirical application of ecological economics to address current social and economic issues.

NATR 6050 URBAN ECOLOGY (3) LEC. 3. Examination of urban ecosystems and the influence of urbanization on rural and forested lands. May count either FOWS 5050 or FOWS 6050.

NATR 6250 WETLAND ECOLOGY AND MANAGEMENT (3) LEC. 3. Pr. BIOL 3060. Wetland ecology in the southeastern U.S. with emphasis on soils, hydrology, biology, and policies and practices related to agriculture, forestry, wildlife.

NATR 6310 ENVIRONMENTAL ETHICS (3) LEC. 3. Critical examination of environmental ethics. Historical development and various ethical perspectives. Examination of current environmental issues using perspectives covered in course.

NATR 6320 ECOSYSTEM SERVICES (3) LEC. 3. Ecosystem services are the benefits that people obtain from ecosystems. Human well-being, livelihoods, and markets are covered with emphasis on watershed, biodiversity, carbon, and tourism services.

NATR 6350 WATER RESOURCE MANAGEMENT AND POLICY (3) DSL. This course examines social contexts, ecological contexts, human behaviors, institutions, laws, and policies that guide water management practices. Impacts of critical issues, including climate change, demand, conflict, and pollution, on water resources and water management behaviors are discussed.

NATR 6430 HUMAN DIMENSIONS OF WILDLIFE AND NATURAL RESOURCES (3) LEC. 3. Forests, wildlife, wetlands, and wilderness - sustaining and managing our natural resources ultimately depends on understanding people. Students will investigate the paradigms and theoretical foundations regarding our values, beliefs, attitudes and behaviors concerning human-environment interactions.

NATR 6450 COASTAL LAW (3) DSL. Course will provide students with a firm understanding of the principles of coastal and ocean law and policy and the legal and regulatory structures that are in place to protect people and the environment.

NATR 6550 WATERSHED HYDROLOGY (3) LEC. 3. In depth focus on components of the hydrologic cycle in forested landscapes and how changes in the landscape and management practices impact the hydrologic regime in the watershed.

NATR 6560 ENERGY LAW (3) LEC. 3. Core principles of energy law, including various legal and regulatory structures that protect people and the environment, particularly as applied to the production, distribution, and consumption of different forms of energy within the US and other regions of the world.

NATR 6630 CONSERVATION PLANNING (3) LEC. Trains students in how to build plans for conservation and management of natural resources. Covers established processes associated with developing conservation plans while addressing human concerns. Includes how to establish measurable objectives, utilize data, frame problems, and determine uncertainty/risk.

NATR 6880 ECOLOGICAL ECONOMICS (3) LEC. 3. Foundations, principles and empirical application of ecological economics to address current social and economic issues.

NATR 7250 SURVEYING AND INTERVIEWING FOR SCIENTISTS (3) LEC. 3. A research design and methods course aimed at interdisciplinary students working on research with one foot in the biological or ecological sciences, and one foot in the social sciences.

NATR 7300 NATURAL RESOURCE MANAGEMENT FUNDAMENTALS (3) DSL. This course is a foundational overview of natural resource management systems. Topics include history, trends, innovations, administration, law, policy, and social-ecological connections. Focus is on exploring core concepts that guide contemporary natural resource management practices.

NATR 7560 MODELING ENVIRONMENTAL CHANGE AT MULTIPLE SCALES (3) LEC. 3. LAB. 1. Pr. FORY 7550 and FORY 6480. Modeling fundamentals to solve environmental change problems at multiples scales driven by (i) climate variability/change and (ii) land use/cover change. Problems will be tackled at both temporal (event-based and continuous) and spatial (small and large watersheds) scales to predict streamflow and water quality and develop abatement strategies. Spring, odd years. Department Approval Required or Instructor Permission.

NATR 7930 DIRECTED STUDIES (1-3) IND. Departmental approval. Directed studies in subject matter not covered by an existing course or to supplement knowledge gained from existing course offerings. Course may be repeated for a maximum of 9 credit hours.

NATR 7970 SPECIAL TOPICS (1-4) IND. Analysis of a problem in the natural resources management area involving lectures, discussions, laboratory for field work. Department approval and agreement with faculty and students. Course may be repeated for a maximum of 12 credit hours.

NATR 7990 RESEARCH AND THESIS (1-15) RES. 0. Credit to be arranged. Course may be repeated for a maximum of 15 credit hours.