

Environmental Science & Mgmt. Summer 2017 Courses

ESM 222: SCI & Policy Considerations (6/26 – 7/23)

CRN: 81722

Location: Fully Online

Instructor: Natalie Rogers

Introduction to environmental laws and the regulations promulgated under them. Includes an examination of the genesis of these laws (e.g., NEPA, Clean Air and Water Acts, RCRA Endangered Species Act) and their history of compliance and violation. Recommended prerequisite: ESM 220 and 221

ESM 342: Field Methods: Biodiversity (9/6 – 9/10)

CRN: 81737

Location: Off Campus, WRFSU

Instructor: Leslie Bliss Ketchum

Review surrogate species selection methods and use those species to monitor biodiversity in a sustainably managed forest using presence/absence monitoring and/or relative abundance protocols from birds, invertebrate pollinators, and mammals. Data collected will be summarized and presented to the forest managers.



ESM 342: Field Methods: Beaver Habitat (9/13 – 9/17)

CRN:81736

Location: Off Campus, WRFSU

Instructor: Erin Poor

Explore the complexities of beaver habitats in urbanized landscapes. This course offers an introduction to basic field methods for analyzing the spatial and temporal variability of stream temperature throughout a beaver reach. Students will visit and explore a USGS urban beaver research site, following which they will have the opportunity to formulate their own hypothesis and conduct a group research project.

ESM 355U: Understanding Environmental Sustainability (6/26 – 7/23)

CRN: 81723

Location: Fully Online

Instructor: Arick Rouhe

Emphasizing sustainability, study of the scientific and ecological principles that govern human interactions with the physical and biological systems of the earth. Topics will include ecosystem properties, earth system properties, human population dynamics, and the roles of technological and ethical decisions. Not intended for science majors.

ESM 410/510: TOP: Community - Based Natural Resource Mgmt. (9/5 – 9/15)

CRN: 81394

Location: Off Campus

Instructor: Dr. Max Nielsen – Pincus

See instructor for course description/details.

ESM 417/517: Applied Watershed Restoration (8/14 – 8/18)

CRN: 80450

Location: SRTC 149, MTWRF

Instructor: Dr. Patrick Edwards

Fundamentals of applied watershed/stream restoration: hydrologic, hydraulic, geomorphic, and ecological principles and tools applicable to the assessment of watershed and reach-scale processes and evaluation of stream channel condition. Emphasis on the inter-related nature of physical processes and aquatic and riparian ecology at both the watershed and reach-scale.

Prerequisite: ESM 416.



SCI 311U: Teaching Everyday Science (6/26 – 7/23)

CRN: 81892

Location: SRTC B1-82 (MW)

Instructor: Dr. Amy Larson

Two-term sequence designed to immerse potential mathematics and science teachers in laboratory and thinking experiences that they can use as a foundation for their own understanding of the physical sciences and related mathematics and curriculum development in future teaching experiences. In addition to experiences in the laboratory, environmental impact issues will be investigated. Includes laboratory and/or fieldwork. This is the first course in a sequence of two: Sci 311 and Sci 312. Recommended prerequisite: Natural Science Inquiry.

SCI 327U: Oceans and Society (6/26 – 7/23)

CRN: 81004

Location: SB1 424, TR

Instructor: Dr. Amy Larson

Provides a working knowledge of how the physical, chemical and biological ocean environment impacts the development and distribution of marine communities. Discussions on how humans interface with marine systems, how marine systems impact global sustainability, the environmental, economic and ethical responsibilities humans have for our marine systems.

