ENVIRONMENTAL SCIENCE AND POLICY

College of Social Science

800  Principles of Environmental Science and Policy  
Fall. 3(3-0)  
Overview of scholarship and research in environmental science and policy

801  Physical, Chemical, and Biological Processes of the Environment  
Fall. 3(3-0)  
RB: Bachelor's or Master's in appropriate discipline for specialization. SA: SSC 801  

802  Human Systems and Environment  
Spring. 3(3-0)  
RB: Bachelor's or Master's in appropriate discipline for specialization. SA: SSC 804  
Anthropological, economic, geographical, legal, political, and sociological concepts of human systems and environmental change.

803  Human and Ecological Health Assessment and Management  
Fall. 3(3-0)  
RB: Bachelor's or Master's in appropriate discipline for specialization. SA: SSC 805  
Concepts and techniques used to evaluate human and ecological health impacts from anthropogenic activities. Policy formulation and management strategies to mitigate health effects.

804  Environmental Applications and Analysis  
Spring. 3(3-0)  
A student may earn a maximum of 6 credits in all enrollments for this course. P: ESP 801 and (ESP 802 or concurrently) and ESP 803 or approval of department RB: Bachelors or Masters in appropriate discipline for specialization. SA: SSC 806  
Global, regional and local environmental issues. Use of systems approach to identify and solve environmental problems.

845  Environmental Risk Perception and Decision-Making  
Spring of odd years. 3(3-0)  
Interdepartmental with Criminal Justice and Fisheries and Wildlife. Administered by Criminal Justice. R: Open to masters students or doctoral students in the Department of Fisheries and Wildlife or in the School of Criminal Justice or approval of school.  
Theoretical underpinnings of individual decision-making and risk perception processes. Case studies of the interplay of risk perception and decision-making in an environmental and or criminological context.

846  Corporate Environmental Crime and Risk  
Spring of even years. 3(3-0)  
Interdepartmental with Criminal Justice and Fisheries and Wildlife. Administered by Criminal Justice. R: Open to masters students or doctoral students in the Department of Fisheries and Wildlife or in the School of Criminal Justice or approval of school.  
Theoretical accounts and multiple interventions relevant to corporate environmental crime and risk. Use of “Smart Regulation” principles to design interventions to match specific problems.

847  Global Risks, Conservation, and Criminology  
Fall. 3(3-0)  
Interdepartmental with Criminal Justice and Fisheries and Wildlife. Administered by Criminal Justice. R: Open to graduate students or approval of school.  
Theories, actors, characteristics and legal instruments associated with risk, conservation, and criminology related to globalization. Current case studies in criminological conservation.

851  Modeling Natural Resource Systems  
Spring. 3(3-0)  
Interdepartmental with Community Sustainability and Fisheries and Wildlife. Administered by Community Sustainability. RB: ecology, statistics, and calculus SA: ACR 851  
Introductory quantitative modeling of environmental systems.

869  Geosimulation  
Spring. 3(3-0)  
Interdepartmental with Geography. Administered by Geography. RB: Basic understanding of data structures and algorithms covered in an introductory course of any programming language. R: Approval of department.  
Theoretical concepts related to simulating dynamic geographic phenomena in the intersection between human and natural systems. Innovative agent-based methodology applied to complex social-environmental systems. Hands-on experience of agent-based modeling, with special emphasis on modeling human decision-making and its impact on the natural environment.

883  Multi-Equation Quantitative Models  
Spring. 3(3-0)  
Interdepartmental with Sociology. Administered by Sociology. P: SOC 881 and SOC 882 or approval of department R: Open to graduate students in the Department of Sociology and open to graduate students in the Environmental Science and Policy Specialization or approval of department.  
Quantitative methodology: multilevel modeling; structural equation modeling. Applications in sociology and environment.

891  Selected Topics in Environmental Science and Policy  
Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course.  
In-depth study of selected environmental science and policy issues.