## ENVIRONMENTAL & SOCIETY (ENS)

## ENS 601 Dynamics of Socio-Environmental Systems 3 cr

It is now widely recognized that many modern environmental problems cannot be solved without effectively considering the complex dynamics of people. A major advance in our approach to studying and addressing the challenging issues facing current and future societies has been a renewed emphasis on the coupled and interdependent relationships among people and the environment. Often described as socio-environmental systems (SES), this rapidly developing field of interdisciplinary science demands simultaneously working to understand how complex drivers of human behavior (e.g, social norms, attitudes) impact the environment (e.g., patterns of biodiversity, ecosystem function), as well as how changes in environmental conditions influence people (e.g., livelihoods, well-being). In this course, we will study and gain hands-on experience with key frameworks, theories, and approaches for conducting SES research. A major emphasis of the course will involve participatory modeling as a tool for both scientific inquiry and stakeholder engagement. Students will complete a participatory modeling project, including all steps of the scientific process, gaining experience with research design, data collection, analysis, interpretation, and communication.