

# ENVIRONMENT AND RESOURCES, DOCTORAL MINOR

Environment and Resources is an interdisciplinary program intended to prepare its graduates to undertake scholarly or professional work that requires a breadth of vision sufficient to encompass the complexity of environmental issues. We seek to strengthen our students' ability to integrate across areas of knowledge so they can create, apply, and transfer world-class data, concepts, and skills about the environment and its sustainability in a flexible, interdisciplinary way to serve the people of the state, region, and world. As a program our learning objectives entail the following. Our students should gain: (1) familiarity with methods and concepts from a range of disciplines relevant to environmental issues and outcomes (interdisciplinarity); (2) a broad understanding of environmental issues and solutions (breadth requirement); (3) knowledge from a coherent and rigorous course of study related to the thesis topic (depth requirement); (4) familiarity with quantitative and qualitative methods and methods of data analysis and presentation appropriate to the study of the environment (measure and analysis requirement); (5) a capacity to integrate knowledge and to make original contributions that improve understanding of environmental problems; (6) the ability to communicate research findings and environmental information generally in writing and orally to a broad audience, including stakeholders and the general public (thesis and defense); and (7) an understanding of professional and ethical responsibility (literature review).

Those minoring in Environment and Resources are expected to present a rationale for how they will use their coursework and related activities to accomplish our objective of strengthening a student's ability to understand and be able to address environmental problems in an integrative, interdisciplinary way.

## ADMISSIONS

The responsibility of overseeing the administration of the minor rests with the Environment and Resources program chair. The chair may, at his or her discretion, delegate aspects of the oversight to a subcommittee of the Environment and Resources faculty executive program committee. For example, such a subcommittee could be charged with reviewing and ultimately approving the plans submitted by doctoral students wishing to minor in Environment and Resources. Staff in the Nelson Institute's Academic Programs Office are charged with maintaining the paper and database records relevant to the minor.

For admission to the minor, students submit a form detailing the minor. On the form, the student is to (a) list the courses for the minor, (b) provide a title and brief (few sentences) description of the minor (e.g., water resources, remote sensing, energy analysis, public policy, environmental history), and (c) include the signature of the student's academic advisor indicating an endorsement of the proposed minor. Up to 3 of the 9 credits required for the minor may come from previous graduate coursework taken elsewhere. Any previous graduate coursework is to be clearly denoted as such, and the student is to include a transcript verifying where and when the course was taken.

## REQUIREMENTS

The minor requires 9 credits of coursework. Because of the breadth of environmental studies, a fixed sequence is not prescribed, since the appropriate selection of courses will be dictated in large part by the coursework in the major degree. However, students are required to select courses that collectively give them insight into an area that can be understood only by combining insights from multiple disciplines. In most cases this will build off of a student's major field of study. For example, a student majoring in a laboratory or physical science might want to emphasize coursework in social sciences or humanities to give perspective on how natural science interfaces with social or humanistic concerns. Minor and major credits/courses cannot overlap or double-count.