

Statement of how ENR 203, Society and Natural Resources meets the general principles of the GEC Model Curriculum and the General Learning Objectives for the Human, Natural, and Economic Resources Section of the Social Science Category

Goals/Rationale: Courses in social science help students understand human behavior and cognition, and the structures of human societies, cultures and institutions.

Learning Objectives: The following learning objectives apply to the social science category of the GEC:

1. Students understand the theories and methods of scientific inquiry as they are applied to studies of individuals, groups, organizations, and societies.
2. Students comprehend human differences and similarities in various psychological, social, cultural, geographic, and political contexts.
3. Students develop abilities to comprehend and assess individual and social values, and recognize their importance in social problem solving and policy making.

Environment and Natural Resources 203, Society and Natural Resources, helps students to understand human behavior and cognition, and the structures of human societies, cultures, and institutions through the lenses of three different theoretical orientations and case studies. The theoretical orientations and cases include: structural-functional theories of human society and the human ecosystem as applied to the controversy over old-growth logging and Spotted Owl protection in the Pacific Northwest; social dilemma theory and the tragedy of the commons as applied to ocean over fishing; and, theories of the social constructions of nature as applied to the controversy over the re-introduction of wolves to Yellowstone National Park. The theories and main case studies are presented in lectures and reinforced through weekly Recitation assignments. Three videos are also shown during the course that help students understand the case studies, the main players in the controversies, and the environments and how they are effected by human actions like logging, fishing, and species re-introductions. The three videos are Bill Moyer's The Politics of Trees, Steve Cowan's Empty Oceans, Empty Nets, and a combination of three videos on wolf re-introduction at Yellowstone National Park - excerpts from National Geographic's Return of the Wolf, Rosen & Howard's Wolf, An Ancient Spirit Returns, and Campbell's Wolves in Paradise, Ranchers and Wolves in the New West.

Structural-functional theories are mainly presented through Bernard Lewis' adaptation of Talcott Parsons' AGIL scheme to understand the social dimensions of ecosystem management. Following the first week's introduction to the course and to structural-functional theories, each of the next four weeks is then devoted to one of Lewis' social dimensions:

- Week 2, the Community dimension. Structure - role relationships between individuals in groups and society; Institutions - law, legal system, public sphere;

Function - social integration; Relation to natural world - element of communal experience.

- Week 3 the Culture dimension. Structure - symbolic relationships based on beliefs, values, attitudes, and norms; Institutions - family, education, science, religion, arts, etc.; Function - pattern maintenance; Relation to natural world - source of knowledge, value, experience.
- Week 4 the Economy dimension. Structure - market relationships between producers and consumers; Institutions - contract, property, occupation; Function adaptation to the environment; Relation to the natural world - resources for productive relations.
- Week 5 the Polity dimension. Structure - power relationships between individuals, organizations, and governments; Institutions - leadership, authority, regulation; Function - goal attainment; Relation to natural world - object of control in the collective interest.

In addition I also present relevant components of Machlis, Force, and Burch's Human Ecosystem model that adds different insights about human societies and their relationships with the environment and natural resources. The dominant themes through these first five weeks all help students to understand human behavior within the structures, cultures and institutions of society in the United States and the Pacific Northwest.

In 1968 Garrett Hardin published his essay on the tragedy of the commons in *Science*. This was an important perspective that influenced the emergence and development of the environmental movement during the 1970s. Since then considerable research has gone in to studying environmental tragedies as social dilemmas and commons management as common pool resources and open access or common property regimes. Weeks 6 and 7 develop these ideas from the perspective of game theory and the social dilemmas of social traps, as tragedies that result from over harvesting, like over fishing the oceans, and social fences, as tragedies that result from insufficient numbers of individuals contributing to the long term achievement of collective benefits or public goods, like recycling. This portion of the course helps students to understand how cognitions affect human behavior when individuals must chose between self-interests and collective interests. Social dilemmas, and possible eventual tragedies, can occur because individuals benefit more by maximizing self-interests, but when all or most individuals chose self-interests everyone is worse off than if all or most individuals chose collective interests.

Conflicts over environmental and natural resource issues frequently revolve around elements that are given different symbolic meanings by different groups in a society. One way to understand these conflicts is by deconstructing them from the perspective of social construction theories. In the last portion of the course three weeks are spent considering social construction approaches in terms of symbolic interaction, the sociology of everyday life, and group's claims about reality. The case study of wolf reintroduction to Yellowstone National Park provides a basis for considering the symbolic meaning of the wolf to pro- and anti-wolf interests groups. Wilson's article deconstructs

the wolf conflict from a social construction perspective and argues that the wolf has different symbolic meaning to the pro- and anti-wolf interests based on their conflicting views of nature, differential access to power, and views of private property and social control. Lectures also present conflicts over other environmental restoration efforts, for example, restoring Forest Preserves in Cook and DuPage Counties Illinois to savannahs, and over nuclear waste disposal (both low level and high level) from the social construction perspective. This portion of the course helps students to understand how cognitions based on the symbolic meanings of environmental elements are often the foundations of environmental and natural resource conflicts. The ability of groups and sub-cultures within a society to influence policy and management actions changes over time as alternate social constructions gain power and social control.

Assessment Plan for ENR 203 as a GEC course

Environment and Natural Resources 203, Society and Natural Resources is critically assessed throughout the quarter by the Instructor and Teaching Associate(s). The Instructor and TAs meet once per week throughout the quarter to review course objectives, lecture content, recitation assignments, and student participation in recitation discussions. As a GEC course these assessments will also be used to determine how well the course is meeting the Learning Objectives of the Social Science category of the GEC.

A general course objective, in bold in the course syllabus, is assessed weekly through Recitation assignments and discussions, and three times throughout the quarter by objective examinations. Specific objectives concerning the three theoretical orientations and case studies are assessed during their corresponding week in written Recitation assignments and discussions and one of the three exams. During the six years the course has been offered it has continually been revised and updated based on the Instructor's and TA's assessments.

The course has been peer reviewed by an ENR faculty member once, and will undergo peer review every three years. As a required course for all ENR majors, it has provided a foundation for developing more advanced concepts in other required higher level courses and for specific majors. As a GEC course future peer reviews will also consider whether the course is meeting the Goals/Rationale and Learning Objectives of the Social Science GEC category.