

Special Topics in Environment

Environment 299

Section: D100

Term: 2011 Fall

Instructor: D. Burns, J. Clague, V. Williams, D. Zandvliet

Discussion Topics: This course is about environmental controversy and how controversy can inform our thinking about complex socio-scientific issues. In our teaching we will use experiential, issues-based, and problem based forms of education to deeply consider three environmental controversies that we present as socio-scientific issues (SSI). Topics are examined in their scientific, social, environmental, cultural, ethical, legal, and personal context. The nature of socio-scientific issues;

\x09\x09\x09-have a basis in science

\x09\x09\x09-involve forming opinions

\x09\x09\x09-deal with incomplete information due to the nature of science

\x09\x09\x09-address local, national, and global dimensions of society and politics

\x09\x09\x09-involve cost-benefits analyses in which risks interact with values

\x09\x09\x09-involve values and ethical reasoning

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Socio-scientific issues can be described as, ill-defined, multidisciplinary, value-laden, and constrained by missing knowledge as opposed to more traditional issues that are based on approaches using disciplinary knowledge, are objectively oriented, engage the right procedures, and often result in a single right/wrong answer.

SSI is also a pedagogical strategy with clearly defined goals: it aims to stimulate and promote individual intellectual development in morality and ethics, as well as awareness of the interdependence between science and society.

Grading: The final letter grade will be based on the following weights:

Individual assignment 50% (position paper)

Final group assignment 30% (problem dissection)

Seminar / Fieldtrip and Tutorial participation 20% (journal)

Information re: assignments will be discussed in the first class.

Required Texts: n/a

Recommended Texts: n/a

Materials/Supplies: n/a

Prerequisite/Corequisite: 15 units and CGPA of 2.75

Notes: Mandatory participation in field experiences. The course will involve Panel presentations, guest lectures and project-based group work.

This outline is derived from a course outline repository database that was maintained by SFU Student Services and the University's IT Services Department. The database was retired in 2014 and the data migrated to SFU Archives in 2015.