

## End-of-Program Review 2007-08

### Compelling Intellectual Experience(s) and Successful Pedagogical or Innovative Practice

#### Environmental Studies Programs

Program name	Faculty	For purposes of helping reflect on the range of teaching practices and experiences at the college, please identify the most compelling intellectual experience(s) in your program or the most successful or innovative pedagogical practice in your program.
Ecological Agriculture	Steve Scheuerell, Michael Paros	Prominent guest speakers/workshops. Multi-day field trips to visit diverse farms/ organizations - see/hear their issues - reality check. Students working with local farms to analyze real examples. Lecture/lab/workshop combos to learn theory and put it into practice.
Ecology of Harmful Algal Blooms	Gerardo Chin-Leo	Seminar in journal club format where students presented and explained technical papers from the scientific primary literature. Field and lab research using advanced research-grade microscopes.
Field Ecology	Dylan Fischer	Extended field trips.
Introduction to Environmental Studies: Natural Resources, Oceans and Global Climate Change	Gerardo Chin-Leo, Ralph Murphy	Seminar structured to include many roles: facilitators, scribes, focused essay writers, summary essay writers, etc. Students rotated roles each session.
Invertebrate Zoology and Evolution	Erik Thuesen	Field trips were great. Using MediaWiki worked surprisingly well.
Landscape Processes	Paul Butler, Wendy Gerstel	People often talk about the "100-year" flood, but they have no real idea what that means on the ground. Students did a statistical analysis of flood levels on the Deschutes River in Tumwater, and then visited Pioneer Park to see how much of the park is covered in water for various recurrence intervals. They also evaluated damage due to channel migration that occurred last December.
Plant Ecology and Physiology	Dylan Fischer, Carrie LeRoy	Extended field trips and one-on one instruction with students on field trips and labs probably provided the most lasting intellectual experiences.
Practice of Sustainable Agriculture-2007	David Muehleisen	To help the students understand problem solving, I had them work in small groups to identify a plant disease found on the Organic farm, confirm the identification using all resources available to them, (i.e. school library, State Extension services, etc.) and then come up with a plan to manage the pest for the farm. Finally they were required to implement the plan for the farm. This was group learning, student focused and driven. This also required active learning, improving their communication skills and hands on implementation and challenging them to be better problem solvers. It was a great success.

Sustainable Practice	Karen Gaul	I think the personal sustainability practices are challenging for students. We had them record their progress in weekly tracking sheets. For some, this work was transformational. They took the challenge seriously, and really reconsidered what they were doing in their own lives. Others did what they could, but perhaps didn't take these practices as far as they could. I really think having a yoga and meditation element to the program helped students to "think" differently (by not thinking), and to learn some things somatically (like show up and stay there, even when it feels "painful" and difficult). They expressed a great deal of respect for our guest yoga teacher, and across the board there were positive responses on the yoga element of the program.
Temperate Rainforests	Dylan Fischer, Paul Butler	Having students generate, critique, and analyze their own field studies.
Tropical Rainforests	Jack Longino, Paul Butler, David Phillips	Providing a set of scientific papers in pdf; having students write technical report of field lab that incorporates and correctly cites those papers.
Vertebrate Evolution	Heather Heying	1. Interactive, student-question driven lectures, aided by powerpoint. 2. Weekly take-home quizzes and study questions designed to help students integrate scientific theory, critical thinking skills, logic, and philosophy into coherent, well-argued essays. First program meeting of every week (Monday mornings) were spent in focused discussion on these topics; respectful disagreement between individuals was encouraged, focus on careful analysis of the available data and theory were required to further discussions.