Environmental Studies 4800, Fall - 2012

Instructor: Bradley A. Wilson, RC-2006A

Office hours: Mondays – 11am till 1:20, and Tuesdays – noon till 2:20

Lectures: Tuesdays, 2:30 – 5:20pm, RC-2003

Textbooks: 1. Cradle to Cradle, 2002, McDonough and Braungart

2. The Sustainability Revolution, 2005, Edwards

Grading: Participation/Attendance 20% (-4% for unexcused missed classes)

Readings notes handins 10% (2% each) Midterm Exam 25% (**Oct. 16)

NGO Report 2.5% (begins on Oct. 23) Sustainability Presentations 7.5% (begins on Oct. 23) Term Project Presentations 10% (begins on Nov. 13*)

Term Project Report 25% (*due one week after your term

project presentation)

Course Description:

The course begins with an in-depth look at the concept of true sustainability and zero-impact industries and economies. Students will research and present information on a business or industry moving towards true sustainability. The last portion of the course is comprised of student presentations and reports on a wider range of topics related to this course.

Student Responsibilities: - read assigned chapters or readings before class

please attend class and arrive on timeparticipate, ask questions, be skeptical

OUTLINE OF TOPICS

Part 1: Sustainable Future?

(wk 1) C2C: Intro: This book is not a tree (video: The Next Industrial Revolution)

SR: Intro: Portrait of the sustainability revolution

(wk 2) C2C: Ch 1: Where to start? With Design.....

SR: Ch 5: Sustainability and Ecological Design

(wk 3) C2C: Ch 2: Why being less bad is no good

SR: Ch 1: The Birth of Sustainability

(wk 4) C2C: Ch 4: Waste equals food

SR: Ch 3: Sustainability and Commerce

(wk 5) C2C: Ch 5: The importance of diversity

SR: Ch 6: Sustainability and the Biosphere

** Week 6: midterm exam (25%)

Part 2: NGO Report

Non-Government Organizations are a terrific way to meet people and expand your contacts. Students will research an NGO found locally (or near future work place) that is working in a discipline that they are interested. Student will informally present to class information regarding the: 1) mandate of the NGO, 2) history of the NGO, 3) details on how to join the NGO, and 4) examples of projects where members can volunteer (and network!!). Students are advised to follow thru and actually join their choice of NGO, many benefits will arise.

Part 3: Student Presentations on Achieving Sustainability

Students will research a company or industry that is making progress towards true sustainability. Students will make a presentation briefly describing the problems created by doing things the "old way" and detailing how the activity can be done sustainably.

- Where do their raw materials come from?
- Do they use recycled materials? (what type of recycling do they use?)
- Where does their energy come from?
- Do they treat their own water pollution?
- How are their employees treated?
- Does the company contribute to the local community (i.e., not economy)

Part 4: Term Projects - Student Presentations

Students will **research one specific aspect of this topic** and complete a class presentation and term paper on this topic. General topics such as "wind power" or "invasive species" are very poor choices as topics for this assignment. Better choices, more specific choices such as "advances in wind power generator technology" or "effects of mountain pine beetle on BC's forests" are much better topics. The challenge here is to become an expert (to a certain degree) in this topic. Find detailed information, not general information on your topic.

Grading for this assignment is heavily weighted on the amount of hard science and research you include in your presentation and term paper. Very little weight will be given to general or overview types of information. Good topics will have a lot of factual information from more than 20 scientific references.