Sustainability Practicum 2009

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Class Purpose:

The goal of this class is to explore global issues, but also to move beyond classroom knowledge to implementation of student-led environmental performance enhancements on (or off) campus. This class represents an opportunity for you to gain credit while pursuing an environmental performance enhancement of your choice. Successful implementation strengthens your tie to the physical campus, and constitutes a small but important contribution toward meeting environmental challenges we face personally, as a campus, and even as a society.

The course does not focus on a particular scale or topic area of sustainability. Much depends on the makeup of the student population. After the initial survey of sustainability, we jump into projects of your choice. We (the instructors) will facilitate your exploration and implementation of these projects. We have a list of active, ongoing, or potential projects. We use this list to stimulate your generation of project ideas. You can choose projects from our seed list, or create your own. Upon choosing a project you will select project mentors and an advisory team. The second half of the semester is largely devoted to weekly progress reports where the instructors will moderate the reports and engage the entire class to provide feedback, constructive criticism, etc. The final product is either a report or presentation to the client or a completed product delivered to an appropriate audience.

Readings:

To facilitate discussion and place our efforts in the global context, we will assign periodic readings from two sources:

- 1) Environment: The Science Behind the Stories by Withgott and Brennan
- 2) Hot, Flat, and Crowded by Thomas Friedman

Course grades:

Grades will be based upon classroom participation and energy demonstrated in project choice, exploration, and implementation. It is not expected that all projects will implemented; rather, demonstrated adjustments in response to fiscal, technical, political, and aesthetic obstacles and assessment of tradeoffs in making these adjustments is as important as actual implementation.

Tentative Course Schedule (subject to change – last updated 2-24-09):

Date	Topic	Reading Assignment				
Week 1						
1/13	Topic: Introduction and Defining Sustainability					
Week 2						
1/20	Topic: Global Sustainability	1				
1/20	Guest: Fred Montague, Global Sustainability	I				
Week 3						
1/27	Topic: U. Campus Sustainability	2				
1/21	Guest: Jen Colby, U. Office of Sustainability – Projects					
Week 4						
2/3	Topic: Sustainability and Utah Climate and Energy Policy	3				
2/0	Guest: Lis Cohen, Governor's Office – Projects	3				
Week 5						
2/10	Topic: Sustainability and Policy	4				
2/10	Guest: Renee Zollinger, SLC – Projects	т				
Week 6						
2/17	Topic: Renewable Energy – Geothermal	5				
2/17	Guest: Joe Moore, EGI – Geothermal Energy	J				
	Week 7					
	Topic: Energy Efficiency (Utah Plan)					
2/24	Guest: Patti Case, ETC Group	6				
	Project Topic Presentations					
	Week 8					
3/3	Project Scope and Objectives	7				
Week 9						
3/10	Project Progress Reports	8				
Week 10						
3/17	Spring Break – No Class					
Week 11						
3/24	Project Progress Reports	9				
Week 12						
	Topic: Rainwater Harvesting Systems					
3/31	Guest: Curt McCuistion and Koby Morgan, Nolte Associates	10				
	Project Progress Reports					
Week 13						
4/7	Project Progress Reports	11				
Week 14						
4/14	Project Progress Reports	12				
Week 15						
4/21	Project Progress Reports	13				
	Week 16					
4/28	Final Project Presentations					

Reading:

- 1. W&B, Ch. 1, Ch. 8; HFC 1-110
- 2. W&B, Ch. 15; HFC 111-199

- 3. W&B, Ch. 3; HFC 200-296
- 4. W&B Ch. 19 & 20; HFC 297-412
- 5. W&B Ch. 21
- 6. W&B Ch. 13
- 7. USGBC LEED Manual
- 8. USGBC LEED Manual
- 9. W&B 15; Additional reading to be provided
- 10. USGBC LEED Neighborhoods
- 11. Additional reading to be provided
- 12. W&B Ch. 23

Titles of W&B Chapters to read:

- 1. An Introduction to Environmental Science
- 3. Environmental Policy: Decision Making and Problem Solving
- 8. Population
- 13. Urbanization and Creating Livable Cities
- 15. Freshwater Resources: Natural Systems, Human Impact, and Conservation
- 17. Atmospheric Science and Air Pollution
- 18. Global Climate Change
- 19. Fossil Fuels, Their Impacts, and Energy Conservation
- 20. Conventional Energy Alternatives
- 21. New Renewable Energy Alternatives
- 22. Waste Management
- 23. Sustainable Solutions