

## ENVS 187 CAMPUS SUSTAINABILITY Spring 2012 course syllabus

Title: Campus Sustainability (ENVS 187)

Term: Spring 2012

Credits: 3

Instructors: Stephen Posner, Tarah Rowse

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Meeting dates and times: Tue, Thur 4-5:15pm

Location: Perkins 300

Office hours: Mon 11am-12pm, Thur 12-1pm Office of Sustainability in Billings 400, or by appointment

### **Course Description**

This service-learning course will focus on key operational aspects of campus sustainability using UVM as a case study. The course will explore campus operations through the lens of the Sustainability Tracking, Assessment and Rating System (STARS), a framework of the Association for Advancement of Sustainability in Higher Education (AASHE). In addition to exploring sustainability throughout the whole campus system, guest lectures, class field trips, readings, and project work will be organized around **eight aspects of campus operation: buildings, climate, dining services, energy, grounds, transportation, waste, and water**. The class will explore the current state of each aspect and identify opportunities to improve operations based on best management practices. Emphasis will be placed on the mapping, communication, and presentation of campus sustainability aspects.

### **Learning Outcomes**

Students will...

- develop an understanding of campus sustainability aspects and their interconnections.
- gain a sense of what it means to be a sustainable campus and how to measure campus sustainability.
- have an opportunity to research and envision improvements to campus operations.
- learn about the governance and strategic development of campus sustainability, including the processes and methods used in policy change.
- produce tangible media and research deliverables of value to the UVM community for campus sustainability efforts.

### **Evaluation**

Participation and attendance: 10%

Reflections: 20%

Group Project Work: 70% (40% Maps, 10% BMP Tables, 20% Presentations)

### **Deliverables Summary**

How does sustainability look on the ground at UVM? What does it mean in terms of transportation,

food, buildings, energy, or water? The goal of the group projects is to produce a Google Earth map layer on each of these topics, as defined in the assigned Operations aspects of STARS. The research process will enable groups to develop a solid understanding and spatial representation of the current state of sustainability at UVM, and present findings to key managers and administrators at the University. This will serve as the basis for an electronic map of sustainability features on campus.

1. Maps: Spatial maps to communicate sustainability in campus operations

- Identify 10-12 points that visually represent the aspect
- Organize map layers by STARS operational aspects and specific credits
- Create first drafts on paper, and final maps using the Google Earth platform
- Enrich maps with multimedia features (photos, videos, links to resources, blogs, etc.)

2. Tables: Summary tables of best management practices (BMPs)

- Conduct field studies at UVM and introductory research into successful operations practices of other higher education institutions
- Synthesize BMP findings in well organized (by STARS aspects and credits), succinct, and visually appealing tables with links to further information
- Describe practice, benefits, challenges, and institutional examples

3. Presentations: Visual and oral communication of map and BMP research to university stakeholders

**Spring 2012 class schedule**

Week	Class Dates	Focus	Readings Due	Assignments Due
1	Jan 17	Intro, course structure What is campus sustainability?	--	--
	Jan 19	What is service learning Community partner, deliverables	Capra	Getting to know you survey
2	Jan 24	Measurement & assessment Form working groups	Tracking UVM, rating campus sustainability	
	Jan 26	AASHE and STARS	STARS overview, UVM's OP credits	
3	Jan 31	Climate and Energy lecture & resources: GHG inventory, climate action plan, energy	Online climate action plans for UVM and Cornell	<b>Reflection #1: our roles in UVM system</b>
	Feb 2	Climate and Energy <b>field trips</b>		
4	Feb 7	Climate and Energy reports Group dynamics		Field trip report
	Feb 9	Buildings and Transportation lecture & resources: green buildings and transportation systems model	BuildingGreen	Climate and Energy BMPs from other campuses

5	Feb 14	Buildings and Transportation <b>field trips</b>	Assigned through Blackboard	
	Feb 16	Buildings and Transportation reports Working group session	Assigned through Blackboard	Field trip report
6	Feb 21	Dining Services and Waste lecture & resources:	Assigned through Blackboard	Buildings and Transportation BMPs from other campuses
	Feb 23	Dining Services and Waste <b>field trips</b>	Assigned through Blackboard	
7	Feb 28	Dining Services and Waste reports Water and Grounds lecture & resources:	Assigned through Blackboard	Field trip report
	Mar 1	Water and Grounds <b>field trips</b>	Assigned through Blackboard	Dining Services and Waste BMPs from other campuses  <b>Reflection # 2: systems map</b>
8	Spring Break	---	---	---
	Spring Break	---	---	---
9	Mar 13	Water and Grounds reports Google Earth Reorient		Field trip report
	Mar 15	Project planning and management	Assigned through Blackboard	
10	Mar 20	Mapping part I	Assigned through Blackboard	
	Mar 22	Mapping part II	Mitchell Thomashow	Water and Grounds BMPs from other campuses
11	Mar 27	Education part I	STARS ER credits, UVM General Education website	<b>Reflection #3: sense-of-place map</b>
	Mar 29	Education part II	AASHE peer-to-peer sustainability resources, UVM Eco-Reps website	
12	Apr 3	First draft critiques		
	Apr 5	Working group session		BMP and Map first drafts
13	Apr 10	Planning, administration, and engagement part I	STARS PAE credits	
	Apr 12	Planning, administration, and engagement part II		Revision plan
14	Apr 17	Champlain College and St. Michael's College sustainability panel		
	Apr 19	Leverage points	Meadows, Posner	

15	Apr 24	Working group session		<b>Reflection #4</b>
	Apr 26	Working group session		
16	<b>May 1</b>	<b>Final presentations</b>		<b>Final maps, tables, presentations</b>

### ACCESS:

In keeping with University policy, any student with a documented disability interested in utilizing accommodations should contact ACCESS, the office of Disability Services on campus. ACCESS works with students to create reasonable and appropriate accommodations via an accommodation letter to their professors as early as possible each semester. They are located at A170 Living/Learning Center, and can be reached by phone at 802-656-7753, or by emailing [access@uvm.edu](mailto:access@uvm.edu). Online: [www.uvm.edu/access](http://www.uvm.edu/access)

### CODE OF ACADEMIC INTEGRITY:

See: [www.uvm.edu/%7Euvmpgg/ppg/student/acadintegrity.html](http://www.uvm.edu/%7Euvmpgg/ppg/student/acadintegrity.html) for the full policy at UVM.

All academic work (e.g., homework assignments, written and oral reports, use of library materials, creative projects, performances, in-class and take-home exams, extra-credit projects, research, theses and dissertations) must satisfy the following four standards of academic integrity:

1. All ideas, arguments, and phrases, submitted without attribution to other sources, must be the creative product of the student. Thus, all text passages taken from the works of other authors must be properly cited. The same applies to paraphrased text, opinions, data, examples, illustrations, and all other creative work. Violations of this standard constitute *plagiarism*.
2. All experimental data, observations, interviews, statistical surveys, and other information collected and reported as part of academic work must be authentic. Any alteration, e.g., the removal of statistical outliers must be clearly documented. Data must not be falsified in any way. Violations of this standard constitute *fabrication*.
3. Students may only collaborate within the limits prescribed by their instructors. Students may not complete any portion of an assignment, report, project, experiment or exam for another student. Students may not claim as their own work any portion of an assignment, report, project, experiment or exam that was completed by another student, even with that other student's knowledge and consent. Students may not provide information about an exam (or portions of an exam) to another student without the authorization of the instructor. Students may not seek or accept information provided about an exam (or portions of an exam) from another student without the authorization of the instructor. Violations of this standard constitute *collusion*.
4. Students must adhere to the guidelines provided by their instructors for completing coursework. For example, students must only use materials approved by their instructor when completing an assignment or exam. Students may not present the same (or substantially the same) work for more than one course without obtaining approval from the instructor of each course. Students must adhere to all library course reserves regulations and refrain from mutilating library material, which are designed to allow students access to course materials. Violations of this standard constitute *cheating*.

When in doubt about plagiarism, paraphrasing, quoting, or collaboration, consult the course instructor. A related set of policies are listed under Code of Student Rights and Responsibilities: <http://www.uvm.edu/~uvmppg/ppg/student/studentcode.html>