

# ECOLOGICAL LANDSCAPE DESIGN

## PSS 238 (CDAE 238, ENVS 238, NR 238)

### Meeting Time:

Spring Semester: Tuesday 3:30-4:45, Thursday 2:00-4:45, Hills Building, Room 228

### Instructor:

Sarah Taylor Lovell, Ph. 802-656-0466, Email: [Sarah.Lovell@uvm.edu](mailto:Sarah.Lovell@uvm.edu)  
Office Hours: Tuesday 2:00-3:00 or by appointment, 201 Hills Building  
TA: Dan Erickson, [derickso@uvm.edu](mailto:derickso@uvm.edu)

### Prerequisites:

Minimum junior standing; at least one design course; at least one ecology course; or consent of instructor.

### Course Description:

Ecological Landscape Design will *engage* students in the *analysis* of ecological design as it relates to the landscape. This studio/discussion course will provide students with the opportunity to *explore* principles of ecological design and *apply* these principles in the design of an existing landscape at the regional, local, and site scales. The class will *produce* a professional-quality portfolio documenting the process and solutions for the design problem. In addition to the standard assignments, **graduate students** will be required to develop a paper exploring design guidelines for ecological landscape designs.

### Objectives:

1. Synthesize work from fields of Landscape Ecology and Landscape Design to develop an understanding of ecological design as it applied to the landscape.
2. Explore and evaluate ecological design alternatives for the landscape at the regional, local, and site scales.
3. Develop and communicate multifunctional landscape solutions that address economic, ecological, and social dimensions.

### Format:

Tuesday class period will typically consist of a lecture followed by class discussion on the readings (more on this under “expectations”). Thursdays will be studio-style, using the 2.75 period for group work, desk crits, pinups, and presentations.

### Grading:

The grades for each student will be based on class participation and performance on group projects and individual efforts. Students’ understanding of the ecological design principles will be assessed through class discussions and application in the design outcomes. The academic honesty policy as outlined in the *Cats Tale* is in effect for all assignments.

30%	Group Project 1:	Regional scale design
30%	Group Project 2:	Local scale design
20%	Group Project 3:	Site scale design
10%	Individual Portfolio	
10%	Class participation and presentations	

Grade Scale: A+=98, A=95, A-=91, B+=88, B=85, B-=81,  
C+=78, C=75, C-=71, D+=68, D=65, D-=61

## **Expectations:**

**Attendance – mandatory.** Because this is a studio class, attendance is necessary for learning design guidelines, obtaining regular critiques on performance, and participating in group projects. More than three unexcused absences will result in a drop of one full grade from the final calculated grade for the semester. Excused absences include: illness with doctor's note, field trips for other classes, and attendance at conferences.

**Readings – required.** I will typically provide 2-4 articles each week, and suggest each person read at least one article/week, but that within the group, all articles are covered to facilitate discussion. One primary goal for this course is to develop the ability to integrate ecological principles from recent literature into the design of the landscape.

## **Resources (not required):**

Davis, A.P., McCuen, R.H., 2005. Stormwater Management for Smart Growth. New York: Springer Science & Business Media, Inc. 368 p.

Forman, R. T. T., and M. Godron. 1986. Landscape Ecology. John Wiley & Sons, New York, NY, USA.

Hellmund, P. C., and D. S. Smith. 2006. Designing Greenways – Sustainable Landscapes for Nature and People. Island Press, Washington DC.

Marsh, W.M., 2005. Landscape Planning – Environmental Applications. Fourth Edition. Hoboken, NJ: John Wiley & Sons. (Approx \$70)

Sustainable Sites Initiative 2007 – Standards & Guidelines, Preliminary Report (available at: <http://www.sustainable-sites.org/report.html>)

Thompson, J.W., Sorvig, K., 2000. Sustainable Landscape Construction – A Guide to Green Building Outdoors. Washington DC: Island Press. (Approx \$40).

Viljoen, A., editor. 2005. Continuous Productive Urban Landscapes: Designing Urban Agricultural for Sustainable Cities. Architectural Press, UK.

K. Helming and H. Wiggering, editors. 2003. *Sustainable Development of Multifunctional Landscapes*. Springer-Verlag, Berlin, Germany.

## **PROPOSED PROJECTS:**

- Essex Junction 38-acre park – Brad Luck, Interim Director, Essex Junction Rec & Parks
- Intervale (Multifunctional group) – Client: Travis Marcotte, 660-0440, ext. 107
- Lovell “Green Village” Subdivision – Client: Jeff and Sarah Lovell
- Brewster Farm, Cambridge – Client: Matt Kolan, City of Cambridge (For FN, EDP?)