



**Art, Architecture + Ecology in the California landscape:
A working research and visitor center for Sedgwick Ranch and
Reserve**

**Margot McDonald, AIA, Professor
ARCH 451-06
Fall 2004**

In this studio we will explore as a class how a deeper understanding of a California landscape – its geology, botany, and hydrology together with the cultural history of a site -- can inform and decidedly influence building and site design. The studio will be based on a real project -- with an existing Master Plan by Seattle “green” architects Miller-Hull and a first building (in design development) by another Seattle firm. Our focus will be on designing additional buildings proposed in the Master Plan including dormitories, science labs, staff housing, etc., for use of the reserve as a center for art and ecological research according to ecological design principles of building form, materials, infrastructure, and systems.

This studio will include some field observation with hiking (and maybe camping at the site) so students should expect field trips to the ranch in Santa Ynez, a sketch outing/field trip to Santa Barbara and the possibility of one additional 2 to 4 day field trip to San Francisco and/or Seattle (if the class interest is sufficient).

It is not expected that students will come to the class having perfected design or drawing skills or even with previous knowledge of new tools for design. Rather, what is expected is that students come with an open attitude towards learning through a process of discovery and collaboration with their peers in order to expand their current capabilities as each individual prepares himself or herself for fifth year design.

Students in this class will be challenged to:

- Improve their visual and environmental perception and observation skills through freehand drawing and/or painting on site.
- Develop intensive site analysis capabilities for solar and resource assessment used in design including an introduction to the tools of geographic information systems (GIS) and hemispherical photography in design and planning.
- Generate and evaluate multiple intermediate design solutions through a range of media in relatively short periods of time for regular review and critique. Emphasis will be on aesthetic and spatial qualities as well as green building and site criteria.
- Develop a final comprehensive design solution for the assigned building cluster program that addresses green building and site issues, and preliminary understanding of constructability, ecological footprints, triple-bottom-line economics and environmental impact assessment as related to the practice of architecture.

Note that this studio will work in tandem with Rob Pena's 451 class, specifically on the theme of ecological design. Other activities may also be shared with other fourth year design studios in the spirit of collaboration.

If you have questions about the studio, contact the instructor at mmcdonal@calpoly.edu.



To read more about the project site and goals refer to:
<http://www.sblandtrust.org/sedgwick.html>
<http://nrs.ucop.edu/publications/sedgwick.pdf>
<http://nrs.ucop.edu/publications/transect/TR20.3-V02.pdf>