Implementing Sustainable Principles: Water and the Human Environment

Instructors: J. Reich(Arch), C. Corlett (Landscape Arch), P. Wack (CRP)
Class meets Tuesdays 7-9:30pm in Building #34 Room #249 (plus outside lectures and fieldtrip to be arranged)

Cal Poly Catalogue Description:
“A primarily project-based course, intended to aid students who wish to collaborate with the purpose of implementing sustainability principles by developing tools, process or designs, for community-based projects and proposals at various scales of planning, architecture and design of the human environment to address social, environmental and economic issues. 3 lectures. Prerequisite: Third year standing and EDES 406 or consent of instructor.”

Expanded Description
This course gives students the opportunity to work in interdisciplinary teams to analyze a crucial community issue and to then hypothesize and illustrate how concepts and principles of sustainability can be applied to address the issue. Application of these principles demands a holistic and interdisciplinary understanding of the environment at various scales. New approaches to the integration of knowledge of human and natural ecosystems within an environmental, social and economic framework are encouraged. This course provides a global-to-local perspective of the inter-relatedness of sustainability issues applicable across disciplines.

Winter 2003 Project
The class will investigate the critical issue of water in the San Luis Obispo creek watershed and propose approaches for how an adequate supply of water can be sustained in SLO to accommodate projected and/or desired population growth. Environmental, physical, social, political, legal, economic issues will be researched. The emphasis will be on finding holistic and realistic, community-based means to address the need for water.

The Work
Students will be assigned to interdisciplinary teams which will then select and work on some aspect of the project issue (water in SLO) for the entire quarter.
Students are asked to do conventional academic research (library etc.) on the project issue as well as to go out into the community to investigate, and to meet people knowledgeable about water. Students are invited to develop outside consultants for their teams, and to invite them to the in-class presentations.
Each team will make two interim presentations and a final presentation of their quarter-long project.
The final presentation will conform to a required format in order that the work can be assembled into a consistent package for exhibition and dissemination in various ways.
The presentations will typically be 2-dimensional, digitally developed combinations of words and images into graphically clear and appealing full color posters sufficient to explain the team’s research and proposals. Digital video and/or animations are also invited as applicable.
Teams will be required to submit both physical and digital versions of the project.
Students may also be assigned pertinent readings, attend outside lectures and presentations, and to go on a class field trip outside of regularly scheduled class time.

Method of Instruction
In the spirit of improvisation, the faculty contributing to the formulation and delivery of this course would like you to understand that this course is a collaboration-in-process. As such, the precise nature of its content and activities are not entirely predetermined. The course will evolve in a direction determined by the topic and the team’s inquiries into the topic and in response to the development participation and dialogue of students, faculty and outside consultants.

In-Class Time: Attendance is mandatory for all scheduled hours.
This course meets 1 evening per week for 2 1/2 hours to enable students and faculty from several disciplines the best opportunity to interact, to share information and learn about each other as a basis for future cooperation regarding sustainability issues in education and the professions.
Each 2 1/2-hour meeting will follow a format of:
7:10pm Announcements and/or Introductions
7:20-9:20pm Team work time with faculty and guests circulating to work with the teams. Sometimes a 20-50 minute presentation to everyone by faculty or guest may be part of the evening’s activities
9:20-9:30 Wrap-up, with info for next week.

Grading
No late work will be accepted.
Students will be graded for the depth of inquiry and clarity of presentation of their team’s project.
Students will also be graded individually as well by faculty and by their team mates for their participation and collaboration.
Students are required to keep a (neatly bound) notebook of all notes, references, sketches, ideas, etc for review.

Expected Outcomes
• An awareness and appreciation for the complexity of environmental design issues
• A basic understanding of issues surrounding the provision & use of water from an environmental designer’s point of view
• Some familiarity with the agencies, groups, players in the local debate about water in SLO.
• Experience collaborating on an interdisciplinary team.
• Enhanced awareness of the impact of environmental, human & economic resource limitations for various past, present and future physical settlement patterns and building technologies.
• Ability to analyze proposals for planning & design of various scales of the built environment, as well as other interventions to environmental systems, to identify alternatives for regenerative and sustainable processes.

Readings and Other Resources: Books, websites, films, and other resources will be suggested throughout the quarter.