ESRM 483
Issues in Global Resource Management

Spring 2014

California State University- Channel Islands
Dr. Christopher Williamson, AICP

Version 3, January 23, 2014

Units: 3 Three hours seminar per week
Prerequisite: Senior Standing or Consent of Instructor
Selected issues in global resource management. Topics may include climate change, ocean management, desertification, air pollution, ozone depletion, patterns of consumption, water pollution, water allocation, international policy or legislative instruments, or other topics as appropriate.

OVERVIEW
This course starts with a quick review of local and California-oriented resource planning and management efforts (5 weeks), followed by students researching comparative efforts in other countries (4 weeks), and then finish with a detailed focus on local and comparative adaptations to sea-level rise (4 weeks). The course begins with traditional lecturing, followed by student research, and ends with a collaborative class project. As a senior-level profession-oriented course, student participation is extensive and the classes are largely presented in a collaborative seminar format. The syllabus is presented in 13 sessions with several local field trips on days and times of mutual agreement. All students should have access to Internet for research and access to and sharing of documents.

PART I: WEEKS 1 to 5: The course begins with a short review the background of private property, property rights, environmental review, and land use planning in the United States, and California in particular. Each student will have an Environmental Impact Report (EIR) they ‘adopt’ for the course to use as an example of professional work in a wide variety of resource topics. The class will focus on three main topics: 1) drought adaptation and “working” water management, 2) sustainable agricultural and related waste management, and 3) energy conservation and renewable energy production.

PART II: WEEKS 6 to 9: The course then shifts to students’ initiatives to research similar topics in a range of international contexts including the European Union, India or China, Japan and/or Korea, Brazil, Australia, and/or the United Kingdom. Students will need to search various websites, obtain and read documents and assigned readings, and lead class discussions on these readings. A comparative paper will be due by the end of the semester for Part II.

PART III: WEEKS 10-13: Using sea-level rise modeling developed by The Nature Conservancy (TNC) and seal-level rise guidance recently issued by the California Coastal Commission (CCC), students will work as a team to evaluate sea-level rise scenarios of the Oxnard coast, identify vulnerability risks assessments that should be prepared by experts, and suggest adaptation measures suggested by the CCC, as well as practiced in other countries.
Several local field trips likely to include: Houwelings Tomatoes, Gills Onions, and/or Agromin (sustainable agriculture): Ventura County Sanitation District and Oxnard Materials Recovery Facility (waste to energy, recycling); Oxnard Advanced Water Purification Facility and Water Yard (water management); and/or site visits to sea level rise vulnerable areas.

GOALS/OUTCOMES

- Awareness of how private coastal property is defined, rights, and obligations
- Understand U.S. local, state, and Federal resource planning context
- Understanding and working knowledge of CEQA and impact analyses
- Compare and document local sustainability practices to other nations’
- Knowledge of climate change and sea level rise research and projections
- Ability to research local sea-level rise scenarios and recommend adaptations
- Ability to research websites and interpret maps and dynamic sea-level rise simulations
- Ability to relate course material to on-site field visits

ASSIGNMENTS

- Weekly assignments related to readings
- Semester paper on comparative sustainability projects
- Assigned readings to present to class and lead discussion
- Internet research and sharing of results with the class
- Team project

GRADING:

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 Weekly Assignments</td>
<td>8%</td>
</tr>
<tr>
<td>Semester Paper</td>
<td>25%</td>
</tr>
<tr>
<td>Team Project</td>
<td>25%</td>
</tr>
<tr>
<td>Class Participation</td>
<td>10%</td>
</tr>
</tbody>
</table>

REQUIRED BOOKS


RECOMMENDED


READINGS (partial list)


Additional reading available by Internet will be assigned by the Instructor during the course.
INTERNET
Students are expected to be able to search the Internet using Google or other search applications, and download and save and refer to PDF and other documents. GIS use skills are desirable.

http://www.google.com/earth/index.html (download and install)
www.census.gov (Census Bureau)
http://www.dhs.gov/index.shtm (FEMA)
http://www.achp.gov/ (Historic Preservation)
http://www.fmc.gov/ (Maritime Administration)
http://www.nps.gov/index.htm (National Park Service)
http://www.fws.gov/ (Fish and Wildlife)
http://www.usgs.gov/ (USGS)
http://www.omao.noaa.gov/ NOAA operations
http://www.noaa.gov/ (NOAA) http://www.weather.gov/
http://coastalmanagement.noaa.gov/about/czma40.html (Coastal Zone Management)
http://www.usace.army.mil/ (Army Corps of Engineers)
http://www.coastal.ca.gov/ (California Coastal Commission)
http://coastalresilience.org/ (The Nature Conservancy)
http://cal-adapt.org/sealevel/ (Cal-Adapt)
http://www.climatechange.ca.gov/ (portal to CA State agencies)

WORD, PPT, and EXCEL
Ability to prepare Word documents in professional format (headers, footers, title and subtitles, TOC, Figures and Tables, imbedded images), prepare PPT presentation, use Excel.

CHEATING, PLAGERISM, ETC.
All work that students submit as their own must, in fact, be their own work. In accordance with CSU CI policy on academic dishonesty, students in this course who submit the work of others as their own, cheat on tests, help other students cheat or plagiarize, or commit other acts of academic dishonesty will receive appropriate academic penalties up to, and including, failing the course. Students are encouraged to consult with the instructor on when and how to document sources if they have questions about what might constitute an act of plagiarism or cheating.

DISABILITY ACCOMODATIONS
The office of Career, Health, Accommodations, and Personal Counseling Services (C.H.A.P.s) has programs to help students with disabilities realize their potential. Among the many services: disability-management counseling, computer lab with assistive software, test proctoring, recordings for the blind and dyslexic, real-time captionists, sign-language and note-taking assistance, and computer training to introduce students to specialized assistive technologies. Call (805) 437-8510.
PART I
Sessions 1 to 5: PROPERTY, PLANNING, AND CEQA

Jan 27) Land as a private commodity, Government roles:
- U.S. context, matrix of government branches by levels
- English private property system develops in 1500’s
- American colonial and early U.S. property-based expansion
- Modern property rights and obligations
- context of planning and environmental review
Assignment: Research land ownership pattern of selected area.
Reading(s): Linklater, all chapters

Feb 3) Policy and Planning Process
- ID stakeholders, determine their goals
- Opportunities and Constraints
- List Goals and Objectives
- ID Alternatives
- Find quantifiable criteria, subjective clearly defined. thresholds
- Evaluate and rank Alternatives
- Select Preferred Alternative
- Develop Implementation and Monitoring
Assignment: Go through a planning process for an example place
Discussion reading(s): Fulton chap 3, 5, 23

Feb 10) CEQA I Process
- Permits,
- Discretionary actions
- Applications and evaluations
- Project description
- Exemptions
- EIR process
Assignment: Review assigned EIR and readings

Feb 17) CEQA II Analyses
- Traffic, air quality, noise
- Geologic, etc.
- Hydrology, etc.
- Subjectives: aesthetics, design
- GHG and climate change
Assignment: Review assigned EIR and readings

Feb 24) Three Hot Topics:
1) Drought adaptation and “working” water management,
2) Sustainable agricultural and related waste management, and
3) Energy conservation and renewable energy production.
Assignment: Research assigned topic
Sessions 6 to 9: COMPARATIVE EA AND PLANNING

March 3) Review of Planning and EA in:
- EU
- China
- India
- Japan and/or Korea,
- Brazil,
- Australia,
- and/or the United Kingdom

Assignment: select a country for comparative research
Readings: TBD

March 10) In class research

March 17) Review of Blakely book

March 24 – Spring Break
March 31 – Cesar Chavez Day

April 7) Student Presentations of draft comparative paper

Sessions 10 to 13: ADAPTING TO SEA LEVEL RISE

April 14) Review of CA Draft Coastal Commission Sea Level Rise Guidance
And Burrough’s book
- Overview of Global Warming and Climate Change
- Sea-level rise modeling and best information
- California, Washington, and Oregon coastal reports
- California 2012 Third Assessment

April 21) TNC mapping application
- Dynamic modeling tools/visualizations by The Nature Conservancy
- Run visualization models

April 28) Adaptation strategies for Oxnard
- Move up
- Move back
- Move out
- Fortify
- Abandon
- Transfer rights
- Stay
- Rolling Easements
- Temporary Uses
May 5) Finalize White Paper on local Sea Level Rise

May 12) White Paper due at scheduled final