Environmental Studies 165A - Environmental Impact Analysis
Fall 2017
Chemistry 1171
Tues. and Thurs. 3:30 – 4:45 p.m.

David Stone, Senior Lecturer e-mail: stone@es.ucsb.edu

OFFICE: Bren 4021 (or in the patio outside of class!)
OFFICE HOURS: Tues\Thurs. 4:45 – 5:15 P.M., or by appointment

Objectives of this course are to explore:

1. The historical basis for undertaking environmental impact assessment (EIA).
2. The difference between EIA and land suitability assessments (LSA).
3. The structure of EIA documents, and how it provides for public disclosure of development consequences.
4. Qualitative vs. quantitative analysis and presentation of environmental data, and the pros and cons of each.
5. Subjectivity vs. objectivity in presenting environmental data and determining what is a potentially significant environmental problem.
6. The balance between economic development and environmental stewardship.
7. How EIA is used in making short-term and long-term decisions that shape our environmental community.
8. Examples of how the tools of EIA can be used to understand daily issues of environmental concern and make you an aware steward of the environment.

Texts:
- Bass, Ron, Kenneth Bogdan, and Terry Rivasplata. CEQA Deskbook Third Edition; 2012 (ON RESERVE)
  * = Reading unique to this edition- worth checking out!
- Canter, L. W. Environmental Impact Assessment; 1996; Irwin/McGraw-Hill (ON RESERVE)
- County of Santa Barbara. Environmental Thresholds and Guidelines Manual (Revised 2008)

Grading:

Midterm (Thursday, October 27) 40%
EIR Critique (Due Thursday, November 10) 10%
Final Exam (Due Thursday, December 8) 50%
Class Participation (Every Lecture) Extra Credit! SERIOUSLY!!!!
## Course Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic Outline and Reading</th>
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<tr>
<td><strong>1. Thursday</strong></td>
<td><strong>Course Initiation/ Introduction to Environmental Impact Assessment &amp; Environmental Planning</strong></td>
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<tr>
<td>September 28</td>
<td>Course Orientation/ Overview &amp; Objectives</td>
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<td>Reading assignments, Grading Policy</td>
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<td>Historical Foundations of Environmental Impact Assessment</td>
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<td>Reading:</td>
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<td></td>
<td>Bass et al <em>3rd Ed.</em> pp 1-26, 124-127</td>
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<td>Bass et al: <em>2nd Ed.</em> pp 1-16, 78-79</td>
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<td>Canter pp 1-54</td>
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<td></td>
<td><em>How did environmental impact assessment come about? Why do we do it? Is it still a valuable tool, or does it just add to development costs?</em></td>
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<td><strong>2. Tuesday</strong></td>
<td><strong>CEQA Framework- Linkages to Urban Planning, Resource Management and Land Use Development</strong></td>
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<td>October 3</td>
<td>Project Exemptions from CEQA</td>
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<td>Determining the Significance of Environmental Impact</td>
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<td>Types of Impacts; Existing Setting Effects on a Project</td>
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<td>Master Environmental Assessment</td>
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<td>Reading assignment due:</td>
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<td>Bass et al <em>3rd Ed.</em> pp 26-78; 104-109*; 113; 143-145*; 176, 178-184*, 182-301-311</td>
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<td>Bass et al <em>2nd Ed.</em> pp 17-45; 96-100; 204-207; 393-396*</td>
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<td><em>Can the determination of impact significance be both qualitative and quantitative and still be reasonable and effective?</em></td>
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<td><strong>3. Thursday</strong></td>
<td><strong>NEPA and CEQA Framework and Processes</strong></td>
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<td>October 5</td>
<td>Project Description, Setting, Impacts, Mitigation</td>
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<td>Scoping, Initial Study, Mitigated Negative Declaration, EIR/EIS, and Alternatives.</td>
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<td>Reading Assignment Due:</td>
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<td>Bass et al <em>3rd Ed.</em>: pp 78-92; 96; 115-151; 205-225; 368-377</td>
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<td>Bass et al <em>2nd Ed.</em>: pp 45-52; 69-139; 303; 313-324</td>
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<td>Canter: pp 102-143</td>
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<td><em>What are the major differences between CEQA and NEPA regarding environmental document format and how public disclosure is addressed?</em></td>
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4. **Tuesday**  
**October 10**  
**Air Quality Assessments**  
Regulatory framework, numerical modeling, short-term vs. long-term impacts, global climate change assessment.  
Reading assignments due:  
- *Bass et al: 3rd Ed:* pp 160-166*; 367  
- *Bass et al 2nd Ed.:* pp 312  
- *Canter:* pp 145-185  
*How can we effectively mitigate project impacts on global climate change?*

5. **Thursday**  
**October 12**  
**Cultural Resources Assessment**  
Archaeology, History and Heritage Values  
Reading assignment due:  
- *Bass et al: 3rd Ed:* pp. 46; 76-77; 152-155; 185-186*  
- *Bass et al 2nd Ed: Bass et al:* pp. 42*; 45; 103-105; 317  
- *Canter:* pp 435-464  
*Why should project applicants be responsible for funding archaeological investigations and preserving artifacts in museums?*

6. **Tuesday**  
**October 17**  
**Noise**  
Short-term, long-term impacts; quantitative vs. qualitative.  
Reading assignments due:  
- *Bass et al: 3rd Ed:* pp. 374;  
- *Bass et al 2nd Ed:* pp 43  
- S.B. County Environmental Noise Thresholds,  
- *Canter:* pp 304-340  
*How do we determine what amount of increased noise is considered substantial to a residential neighborhood?*

7. **Thursday**  
**October 19**  
**Aesthetics and Visual Resources**  
Reading assignments due:  
- *Bass et al: 3rd Ed:* pp. 371;  
- *Bass et al 2nd Ed:* pp 42  
- S.B. County Environmental Visual Resources  
- *Canter:* pp 467-496  
*Who should establish (or on what basis should define) significant impact criteria for aesthetic issues?*

8. **Tuesday**  
**October 24**  
**Geology and Soils**  
Soil characteristics, faults, and related hazards.  
Reading assignment due:  
- *Bass et al 2nd Ed:* pp 42*  
- *Canter:* pp 248-299  
*Is it reasonable to mitigate for geologic events that may be relatively rare in occurrence?*
9. Thursday  
**October 26**  
**Biological Resources**  
Species and habitats  
ESH, Policies and Significance  
Mitigation strategies  
Reading assignment due:  
*Bass et al: 3rd Ed*: pp. 165*; 187*  
*Bass et al 2nd Ed*: pp 42*,  
*Canter*: pp 343-387  
SB County Environmental Thresholds  
*Is it appropriate to allow for biological impacts to be mitigated off-site instead of on-site?*

10. Tuesday  
**October 31**  
**Water Resources and Planning**  
Alteration of site hydrologic characteristics  
Water Quality and Public Safety  
Groundwater extractions, overdraft  
Stormwater pollution prevention  
Reading assignments due:  
*Bass et al 2nd Ed*: pp 42, 105-106, 227-228, 318-319  
*Canter*: pp 189-243  
*Is a project applicant responsible for mitigating existing significant water quality impacts?*

11. Thursday  
**November 2**  
**MIDTERM**  
**TOTALLY SPOOKY!**

12. Tuesday  
**November 7**  
**Public Services/Infrastructure**  
Recreation, Police, Fire, Schools, Libraries  
Water storage & distribution, wastewater treatment  
Reading assignment due:  
*Bass et al: 3rd Ed*: pp 375, 377  
*Bass et al 2nd Ed*: pp 43, 320-321  
SB County Environmental Thresholds  
*What is a fair contribution a developer should pay to ensure project impacts to regional infrastructure are mitigated?*  

**EIR Critique Assignment Introduced**

13. Thursday  
**November 9**  
**Transportation/ Circulation /Parking**  
Roads and Public Transportation, Parking,  
Construction Traffic, Traffic Safety  
Reading assignment due:  
*Bass et al 3rd Ed*: pp 107- 110* 376  
*Bass et al 2nd Ed*: pp 43  
Santa Barbara County Environmental Thresholds  
*Are road improvement fees appropriate mitigation?*
14. **Tuesday**  
**November 14**  
**Agricultural Resources; Significance**  
Thresholds Development  
Reading assignment due:  
- Bass et al 3rd Ed: 151-152, 371  
- Bass et al 2nd Ed: pp 42, 103  
- County of Santa Barbara Thresholds of Significance  
Why should we try to preserve agricultural lands? What methods are appropriate?

15. **Thursday**  
**November 16**  
**Land Use Compatibility / Policy Consistency**  
Socioeconomic Effects, Growth Inducement  
Reading assignment due:  
- Bass et al 3rd Ed: 70; 144 – 146*; 219-220  
- Bass et al 2nd Ed: pp 4-5; 42; 102-103; 118-119; 135  
- Canter: pp 343-387  
Does "who came first" carry any precedence? How to assess "non-conforming" uses against proposed new use?

**IMPORTANT NOTE:**  
**EIR CRITIQUE DUE THURSDAY, NOVEMBER 16!!**

16. **Tuesday**  
**November 21**  
**Project-Level Vs Program Level Impact Assessment**  
& Decision Making Process  
Recirculated, Subsequent, Supplemental, Addendum Documentation  
Level of detail for description and analysis  
Findings / Overriding Considerations  
Reading assignment due:  
- Bass et al 3rd Ed: 112-114; 128-129; 191-195; 200-204  
- Bass et al 2nd Ed: pp. 56-67; 80-89;  
What are some of the possible problems in reusing previous environmental assessments for a revised project?

**Thursday**  
**November 23**  
**THANKSGIVING HOLIDAY**  
Got stuffing?

17. **Tuesday**  
**November 28**  
**Hazardous Materials/Risk of Upset**  
Definitions, history of regulation – hazardous wastes  
Frequency / severity of consequence for upset  
Reading assignment due:  
- Bass et al 3rd Ed: pp. 167-169*  
- County of Santa Barbara Thresholds of Significance  
Who should be responsible for cleaning up toxic wastes?
18. Thursday  
November 30  
**Socioeconomic Effects, Environmental Justice**  
Reading assignment due:  
*Bass et al 3rd Ed:* pp 150, 221*, 224-225*  
*Bass & Herson:* pp 42, 102-103, 139;  
County of Santa Barbara Thresholds of Significance  
*Should CEQA pay more attention to environmental justice issues?*

19. Tuesday  
December 5  
**Special Issues in Impact Assessment**  
Cumulative Impacts, Alternatives, Mitigation Monitoring  
Reading assignments due:  
*Bass et al 3rd Ed:* 146-150; 170-182; 188-190; 198  
*Bass et al 2nd Ed:* pp 99-102, 107-111, 117-121, 151-158, 339-346*  
*Canter:* pp 499-543; 545-584; 637-651  
*Why are alternatives to a project important to appropriate project decision-making?*

20. Thursday  
December 7  
**Decision Makers and Environmental Impact Assessment**  
An informative interview with a Planning Department Manager!

Thursday  
December 14  
**FINAL TAKE-HOME EXAM DUE**  
5:00 P.M. (ELECTRONIC SUBMISSION)

All Lecture Outlines Available on Electronic Reserve!

- Go to: [https://ares.library.ucsb.edu/ares/](https://ares.library.ucsb.edu/ares/)
- Login with your UCSB NetID and Password.
- A list of your classes will appear. Click on ENV S 165A.
- Click on the item you want to view; a "view this item" link will appear.
- Click on the link and you will view a downloadable and printable PDF.