ESR 429/529
ENVIRONMENTAL IMPACT ASSESSMENT
Winter 2006

Course Time: T, Th 2:00 to 3:50pm
Room: 211 Shattuck Hall

Instructor: Joseph Maser, Ph.D.
Office: 218 Science Building 2
Office Hours: T, Th 12:30 to 1:30pm and by appointment
Office Phone: (503) 725-8042
E-mail: maserj@pdx.edu

Course Objective: The objective of this course is to expose the students to the need for environmental impact assessments and how to prepare the various documents required by state and federal regulations.

Course Description: This course will introduce and discuss in detail the National Environmental Policy Act., its implementation and implications. This act, which has been referred to as the “Magna Carta for the environment,” is intended to ensure that balanced decision making occurs regarding the environment. Over a thousand environmental impact assessments are prepared annually. This course will explore the need for environmental impact assessments, the different types of assessments, and the regulatory and technical requirements of preparing an assessment. This course will include a series of lectures and student presentations.

Grading: Grades will be based on one examination and the student’s project paper and presentation (graduate students only). The exam will be in-class and open book/notes. Each student will be required to prepare a paper which could act as a comment to a Draft Environmental Impact Statement or Environmental Assessment. The paper will review the purpose of the proposed project and focus on one environmental attribute. The student will critically review the methodology and results of the environmental study associated with that attribute and write a comment addressing that study. The environmental attribute and the EIS or EA investigated in the paper are the student’s choice, but must be approved by the instructor. In addition to the written assignment, the graduate students will be required to present a summary of their paper to the class. The students’ performance in this class will be based for the following:

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<tr>
<th>Component</th>
<th>Points</th>
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<tr>
<td>In-class exam</td>
<td>100</td>
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<tr>
<td>Project Paper (graduate)</td>
<td>100</td>
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<tr>
<td>Presentation (graduate)</td>
<td>50</td>
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<tr>
<td>Project Paper (undergrad)</td>
<td>150</td>
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<tr>
<td>Participation</td>
<td>50</td>
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<td>Total</td>
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Course Web Site: [http://web.pdx.edu/~maserj/ESR 429_529/ESR 429-529.htm](http://web.pdx.edu/~maserj/ESR 429_529/ESR 429-529.htm)

**Readings:** Appropriate sections of EISs may be listed for specific topics. Each student will be required to select three EISs (by January 17th) and be prepared to co-lead discussions pertaining to different environmental attributes featured in their EISs throughout the quarter.

**Course Outline:**

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<tr>
<th>Weeks</th>
<th>Course Outline</th>
<th>Chapters</th>
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<tr>
<td>Week 1:</td>
<td>Introduction&lt;br&gt;Course Objectives&lt;br&gt;Course Structure</td>
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<td>The Need for the National Environmental Policy Act (NEPA) 1&lt;br&gt;A Brief History of Environmental Considerations&lt;br&gt;Environmental Regulations before NEPA</td>
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<td>The National Environmental Policy Act 2&lt;br&gt;Goals&lt;br&gt;Title I/ Title II&lt;br&gt;NEPA Guidelines and Regulations</td>
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<td>Week 2:</td>
<td>The Environmental Impact Assessment Process 2/3&lt;br&gt;Types of Assessments&lt;br&gt;Categorical Exclusions&lt;br&gt;Environmental Assessments&lt;br&gt;Environmental Impact Statements</td>
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<td>Basic Steps in the Process&lt;br&gt;Defining Objectives of the Project&lt;br&gt;Alternatives&lt;br&gt;Scoping&lt;br&gt;Potential Impact Identification&lt;br&gt;Existing Conditions&lt;br&gt;Impacts&lt;br&gt;Public Involvement</td>
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<td>Week 3-4:</td>
<td>Predication and Assessment of Impacts - Physical Environment 5&lt;br&gt;Geology, soils, minerals&lt;br&gt;Climate&lt;br&gt;Water Resources&lt;br&gt;Water Quality&lt;br&gt;Air&lt;br&gt;Noise</td>
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Week 4-5: Predication and Assessment of Impacts - Biological Environment
  Terrestrial Ecosystems
  Wetland Ecosystems
  Aquatic Ecosystems
  Threatened and Endangered Species

Week 6: Predication and Assessment of Impacts - Human Resources
  Demographics
  Economics
  Land Use
  Infrastructure

Week 7: Predication and Assessment of Impacts - Human Resources
  Archaeological and Historic
  Visual
  Safety – Hazardous waste

Week 8: Evaluation of Alternatives
  Scaling, Rating, Ranking
  Decision Matrix
Exam – March 2

Week 9: Public Participation
  Regulations
  Objectives
  Types of Publics
  Methods

  Management of Environmental Impact Assessments
    Expertise Needed
    Time Needed
    Money Needed

  Writing an Environmental Impact Assessment
    Audience
    Special Studies
    Pages

Week 10: Student Presentations
All Students -- Term Paper Due at March 16th

Final Week: Student Presentations
  Monday, March 20, 10:15am

The topics and schedule of discussions listed in this syllabus may change.