



**ENVS 590: Special Topics in Environmental Sciences:**  
**Environmental Impact Assessment (EIA) SYLLABUS**

**Instructor:**     **Dr. Bassam S. Al-Tawabini;**  
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**Text Book:**     Methods of Environmental Impact Assessment by Morris, Peter, Therivel, Riki, 2004.

**Description:**   The aim of the course is to introduce the components and structure of an Environmental Impact Assessment (EIA). This course provides students with a working knowledge of the environmental impact assessment process and the information, including environmental studies, needed to prepare an environmental impact assessment document or an environmental impact statements.

**Objectives:**    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 set regulations. In this course, students will obtain essential skills to critically read, review and conduct impact assessments to balance environmental, social and economic needs.

**Reference Books:**

- Environmental impact assessment of recycled wastes on surface and ground waters by Apul, D. S. Springer-Verlag 2005
- Environmental assessment by Jain, R. K. (Ravinder Kumar), - McGraw-Hill 2002.
- Class Notes

**Faculty Participation:**

Other Faculty members from within and/or outside KFUPM will participate in the course by delivering certain lectures within their respected area of expertise.

**Assignments:**

The Required assignments to be submitted on or before the deadlines for the class are:

- Two (2) take-home mid-term exercise
- A final Term Project Paper
- A class presentation based on final paper assignment

**Course Grades:**

The students' performance in this class will be based for the following:

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Attendance & Class Participation	10%
Exercises	20%
Final Paper	50%

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**COURSE OUTLINE**

Week #.	Description
1	Introduction Course Objectives and Course Structure
2	Overview on Environmental Considerations International NEPA Environmental Regulations
3	PME General Environmental Regulations and Rules For implementation in the KSA Saudi Aramco SAEP-13 Procedures Royal Commission Environmental Regulations
4	Basic Steps in the Process <ul style="list-style-type: none"> <li>• Defining Objectives of the Project</li> <li>• Alternatives Screening and Scoping</li> <li>• Potential Impact Identification</li> <li>• Baseline Data</li> <li>• Existing Conditions</li> <li>• Expected Impacts</li> <li>• Public Involvement</li> </ul>
5	Predication and Assessment of Impacts - Human Resources <ul style="list-style-type: none"> <li>• Social and Economic</li> </ul>
6	Predication and Assessment of Impacts - Physical and Biological Environment <ul style="list-style-type: none"> <li>• Geology, soils, minerals</li> </ul>
7	<ul style="list-style-type: none"> <li>• Contaminated Sites</li> </ul>
8	<ul style="list-style-type: none"> <li>• Water Resources</li> </ul>
9	<ul style="list-style-type: none"> <li>• Waste Management</li> </ul>
10	<ul style="list-style-type: none"> <li>• Noise</li> </ul>
11	<ul style="list-style-type: none"> <li>• Ecology</li> </ul>
12	<ul style="list-style-type: none"> <li>• Traffic</li> </ul>
13	<ul style="list-style-type: none"> <li>• Agriculture, landscape and Archeology &amp; Heritage</li> </ul>
14	<ul style="list-style-type: none"> <li>• Air Quality</li> </ul>
15	Final Report and Student Presentations

Good Luck

Dr. Bassam Tawabini