

ENVIRONMENTAL IMPACT EVALUATION

Margaret MacDonell

Email: macdonell@anl.gov

Phone: 630-252-3243; fax: 630-252-4336

TEXTBOOK: *Notebook material* provided by instructor*Supporting resource:* Larry Canter, Environmental Impact Assessment, McGraw-Hill

GRADING:	<u>Number</u>	<u>Points Each</u>	<u>Total Points</u>
Homework	3	10	30
Quiz	1	15	15
Critique (oral + written)	1	15	15
Project report (oral + written)	1	40	40

OFFICE HOURS: After class and additional, as requested**GENERAL SCHEDULE:**

3/30 National Environmental Policy Act (NEPA), Council on Environmental Quality guidelines, scoping for an environmental impact statement (EIS), regulatory context.

4/6 NEPA; ecological resources.

4/13 Climate & meteorology, climate change (*guest lecture*). **Hwk 1 due.**4/20 Soil, geology, topography; economic analysis of climate change (*guest lecture*).4/27 **Present EIS critiques.**5/4 Water and air quality. **Present remaining EIS critiques; hold public scoping meeting.**5/11 Archaeological, historical, cultural resources; worker and transportation risk; land use/demography, infrastructure, noise, aesthetics; health risk assessment overview, conceptual model, contaminant fate and transport. **EIS critiques due.**5/18 Exposure and toxicity assessment, health risk characterization. **Hwk 2 due.**5/25 *Memorial Day holiday (no class).*6/1 Risk management, risk communication. **Project presentations; Hwk 3 due.**6/8 **Project presentations (mock public meeting); take-home quiz due.**6/10 **Project reports due.****COURSE OBJECTIVES:**

This course has three key objectives: (1) provide a framework for integrating multidisciplinary data and methods, and applying a team approach to solve environmental problems; (2) encourage critical thinking and synthesis of technical information from other courses and applications to support practical decisions, including making judgments in the absence of substantial data; and (3) promote personal development within scientific areas of interest to each student. Upon completion, the students should be able to (1) critically evaluate information on environmental issues, and objectively assess the bases of environmental decisions; (2) contribute to environmental projects in the workplace; and (3) participate in integrated environmental analyses at work and in their lives.