

EST 550 Environmental Impact Analysis Spring 2008

T/Th 3:30- 4:50 PM 319 Marshall Hall

last updated 12/27/07

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Background

Following World War II, the U.S. went on one of the largest building booms in the history of the world (Now being surpassed by China). Interstate highways, dams, nuclear power plants, suburban sprawl, and urban renewal were all embraced as "progress". Government and private sector activities jointly fueled this transformation. By the late 1960's it became clear that uncontrolled development was causing severe environmental degradation. Widespread public outcry led to two complementary types of executive and legislative policy actions. A number of topical funding and regulatory programs were created to address specific "crisis" issues, such as Clean Air, Super Fund (hazardous waste), and Endangered Species protection. The other form of response was to view the environment holistically and to establish an integrated, participatory process for improving public decisions. This second approach is the basis of the National Environmental Policy Act (NEPA), and New York's State Environmental Quality Review Act (SEQR). The heart of both NEPA and SEQR is the Environmental Impact Assessment process (EIA).

Course Objectives:

Upon completion of this course students should have the capacity to:

1. Demonstrate comprehension of the historical and legal basis for Environmental Impact Analysis, and its roles in public decision- making;
2. Identify the key stages of, and participants in the three alternative assessment tracks used in EIA under the federal NEPA, and the NY State Environmental Quality Review Act;
3. Understand the basic methodologies used in forecasting and predicting impacts from projects and associated mitigations, their strengths and limitations; and
4. Critically discuss emerging EIA issues.

Workload:

1. Students are expected to attend classes, review readings BEFORE class, bring the assigned readings to class, and actively participate in discussions.

The required text : Bass (2001). *The NEPA Book*. Point Arena, CA. Solano Press is available at Follet's Orange Book Store in the Marshall Sq. Mall. This will be supplemented by class handouts and web site resources. Each week this web site will be revised to identify the key terms and concepts which may show up on an exam, and should be used in course projects.

2. There will be two course exams.

3. There will be two out of class team projects: a comprehensive review of an existing EIS; and the preparation of a preliminary SEQR EAF for a hypothetical project.

Grading:

25% Exam 1

25% Exam 2

30% Team EIS Review

20% Team SEQR EAF

Schedule (updated weekly on the web):

#	Date	Topic	Readings; Assignments; Terms
		I. EIS Framework	Web Resources
1	T 1/15	Intro; Historical Context	<u>Power Point</u> <u>Terms/Concepts</u>
2	Th 1/17	NEPA- the Law	Text: Appendix A NEPA <u>Web Resources</u> <u>Terms/Concepts</u>
3	T 1/ 22	Public Sector Decisions: Public Lands Management; Construction Projects	<u>Web Resources</u> <u>Terms/Concepts</u>
4	Th 1/24	Public/Private Sector Decisions: Regulations and Permits <u>Assignment #1 Handout</u>	<u>Web Resources</u> <u>Terms/Concepts</u>
5	T 1/29	NEPA's Evolution	Text Ch. 1
6	Th 1/31	Global Warming	
7	T 2/5	Triage I: Does NEPA Apply? * Assignment 1 Due	Text Ch. 2; NEPA; CEQ Regs <u>Web Resources</u> Class F.R. Handout <u>Terms/Concepts</u>
8	Th 2/7	Triage II: EA and FONSI <u>Some EISs To Consider For Team Project</u>	Text Ch. 3; NEPA; CEQ Regs <u>Terms/Concepts</u>
9	T 2/12	Triage III:EIS Preparation and Review Exam Q and A	Text Ch.4; NEPA; CEQ Regs <u>Web Resources</u> <u>Terms/Concepts</u>
10	Th 2/ 14	* <u>EXAM 1</u>	
		II. EIS Content	

11	T 2/19	Summary; Purpose & Need Form EIS Teams	Text p. 76, 87-91, 121-126 CEQ Regs. 1502.6-1502.13 Handout: Shipley p. 24-31 <u>Web Resources</u> <u>Terms/Concepts</u>
12	Th 2/ 21	Proposed Action, Alternatives - Review EIS Project Handout	Text p. 90-98, 246, FAQ#1-5 CEQ Regs. 1502.14 Handout: Shipley p. 41-57 <u>Web Resources</u> <u>Terms/Concepts</u>
13	T 2/ 26	Affected Environment Team EIS Task 1 Due	Text p.56-58; 98-100; CEQ Regs.: 1502.15, 1508.3, 1508.8, 1508.14 <u>Terms/Concepts</u>
14	Th 2/28	Forecasts, Predictions, and Models	Text p. 111-112 handouts: Karplus; TR-55 Runoff <u>Web Resources</u> <u>Terms/Concepts</u>
15	T 3/4	Consequences: Physical	<u>Web Resources</u> handouts: Moran in Sarewitz <u>Terms/Concepts</u>
16	Th 3/6	Consequences: Socio/Economic Team EIS Prelim. Submission	Handout: Dziegielewski; Wilson; Henderson <u>Terms and Concepts</u> <u>Web Resources</u>
		Spring Break	
17	T 3/18	Mitigation	Text p. 117-9; 40CFR 1502.16(h),1508.20 FAQ #19, #39, #40 Handout: NAEP 2001 Conference <u>Terms and Concepts</u> <u>Web Resources</u>
18	Th 3/20	Decisions Hand back Prelim. Reports Exam Q/A	Text p. 80-3, 120-1, 166-169; FAQ #6 #29, #30, #34 40CFR 1502.9(b),1503,1505, 1506.1 <u>Web Resources</u> <u>Terms and Concepts</u>
19	T 3/25	III. SEQR; Case Studies; Issues and Challenges	
20	Th 3/27	"Little NEPAs"; NY State and Local Governments	Text p. 135-9 <u>Web Resources</u>
21	T 4/1	SEQR I: History; "Triage"	<u>Web Resources</u>
22	Th 4/3	SEQR II: Full EAF * Team EIS Review Due	<u>Web Resources</u>

23	T 4/8	Guest Lec. -TBA	
24	Th 4/10	(Tent.) Topo Maps, 'Sheds	Handouts
25	T 4/15	Guest Lec.- TBA	
26	Th 4/17	Guest Lec.- TBA	
27	T 4/22	(Tent.) SEQR-EAF project Field Working Session	
28	Th 4/24	Adaptive management	handouts Web Resources
29	T 4/29	Wrap-up	
	F 5/2	* Team SEQR- EAF Due 12 NOON Prof. Felleman's faculty mailbox 107 Maeshall	