

EST 550: Environmental Impact Analysis, Spring 2011
Tuesdays and Thursdays 5:00-6:20 319 Marshall

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Required Textbook: Bass, et.al. The NEPA Book. Solano Press Books, 2001.

****Your textbook is out of stock from the publisher, so it has been duplicated (with permission) and is available through the SU Bookstore. You may also be able to find a used version of the text online.****

Course Description and Objectives

EST 550, Environmental Impact Analysis, is a graduate level course designed to introduce students to the field of Environmental Impact Assessment and Analysis. Historically, The United States has been characterized by massive development and industrialization, which, unchecked for decades, have taken a heavy toll on the *natural* environment. By the late 1960s, it became clear that uncontrolled industrialization and development, heretofore embraced as “progress”, were resulting in severe environmental degradation. Widespread public outcry led to two complementary types of executive and legislative policy actions. Some funding and regulatory programs were aimed at addressing specific issues (Clean Air, Super Fund, Endangered Species Protection), while the other form of response included a more holistic view of the environment and aimed to establish a more integrated, participatory process for improving public decisions. This more holistic, participatory approach is the basis of the National Environmental Policy Act (NEPA), and New York’s State Environmental Quality Review Act (SEQR). The core of both NEAP and SEQR is the Environmental Impact Assessment (EIA) process, and it is on this process that we will focus for the duration of the semester.

The course is organized into three ‘modules’: the first module will focus on background, history, and the evolution of NEPA; the second will cover the content of the environmental impact statement (EIS); and the last module will focus on New York’s State Environmental Quality Review Act (SEQR) and related case studies.

Upon completion of the course, students should be able 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

TENTATIVE COURSE SCHEDULE

Tuesday, Jan 18 – Introduction to the class

Module I: Background, Historical Context, Evolution of NEPA

Thursday, Jan 20 – Historical Context, diagramming

Tuesday, Jan 25 – NEPA – the law (Guest Speaker)

- Text Appendix A - NEPA
- Web Resources

Thursday, Jan 27 – Public Sector Decisions

- Public Lands Management, Construction Projects
- Web Resources

Tuesday, Feb 1 – Public/Private Sector Decisions: Regulations & Permits

- Web Resources
- **Assignment #1 Handout**

Thursday, Feb 3 – NEPA's Evolution

- Text Chapter 1

Tuesday, Feb 8 – Triage I: Does NEPA Apply?

- Text Chapter 2, NEPA, CEQ Regs
- Class F.R. Handout
- Web Resources
- **Assignment #1 Due**

Thursday, Feb 10 – Triage II: EA and FONSI

- Text Chapter 3, NEPA, CEQ Regs

Tuesday, Feb 15 – Triage III: EIS Preparation and Review

- Text Chapter 4, NEPA, CEQ Regs

Thursday, Feb 17 – Exam 1

Performance Evaluation

Exams: There will be two exams in the course, following modules 1 and 2. They will be short answer/essay in format.

Team Projects: There will be two out of class team projects:

1. A comprehensive review of an existing Environmental Impact Statement (EIS)
2. The preparation of a preliminary State Environmental Quality Review (SEQR) Environmental Assessment Form (EAF) for a hypothetical project

Grading:

2 Exams: 100 points each (25% each)

Team EIS Review: 120 points (30%)

Team SEQR EAF: 80 points (20%)

Total Possible Points: 400

Course Grading Scale: The grade you will earn in this course is based on the number of points you accumulate during the semester. The following scale lists the letter grades, the point range each letter grade represents, and the approximate percentage of the course each point range represents.

Grade	Point Range	Minimum Percent
A+	400+	100
A	355-399	95
A-	310-354	90
B+	283-309	87
B	247-282	83
B-	220-246	80
C+	193-219	77
C	157-192	73
C-	130-156	70
D+	103-129	67
D	67-102	63
D-	40-66	60
F	0-39	0

Module II: EIS Content

Tuesday, Feb 22 – Summary; Purpose & Need; Form EIS Teams

- Team EIS Review Handout
- Text p. 76, 87-91, 121-126
- CEQ Regs. 1502.6-1502.13
- Web Resources

Thursday, Feb 24 – Proposed Action, Alternatives; Team EIS Projects Selected

- Text p. 90-98, 246, FAQ #1-5
- CEQ Regs. 1502.14

Tuesday, March 1 – Affected Environment

- Text p. 56-58, 98-100
- CEQ Regs. 1508.3, 1508.8, 1508.14

Thursday, March 3 – Forecasts, Predictions, and Models

- Text p. 111-112
- Handouts

Tuesday, March 8 – Consequences: Physical; Team EIS Task 1 Due

- Web Resources
- Handouts

Thursday, March 10 – Consequences: Socio-Economic

- Web Resources
- Handouts

Tuesday, March 15 – No Classes – Enjoy your Spring Break!

Thursday, March 17 – No Classes – Enjoy your Spring Break!

Tuesday, March 22 – Mitigation

- Text p. 117-119
- 40 CFR 1502.16(h), 1508.20
- FAQ #s 19, 39, 40
- Handout: NEPA 2001 Conference

Thursday, March 24 – Decisions; Team EIS Preliminary Submission Due; Exam Q&A

- Text p. 80-83, 120-121, 166-169
- FAQ #s 6, 29, 30, 34
- 40 CFR 1502.9(b), 1503, 1505, 1506.1
- Web Resources

Tuesday, March 29 – Exam 2

Module III: SEQR: Case Studies: Issues & Challenges

Thursday, March 31 – “Little NEPAs”; NY State and Local Government Agencies

- Text p. 135-139
- Web Resources

Tuesday, April 5 – SEQR I: History; “Triage”; Hand Out Team EAF Assignment

- Web Resources

Thursday, April 7 – SEQR II: Full EAF; **Team EIS Review Due**

- Web Resources

Tuesday, April 12 – On-line and Field data

- Web Resources

Thursday, April 14 – Guest Speaker: Bob Hargrove - USEPA

Tuesday, April 19 – Guest Speaker

Thursday, April 21 – SEQR-EAF Project Field Working Session

Tuesday, April 26 – Adaptive Management

Thursday, April 28 – Wrap-up

Tuesday, May 3 – Team SEQR-EAF Due