

## ENVI 413/513 Environmental Impact Statements

Spring 2016  
10:05-11:30 a.m. T/Th  
Science 1, 162

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Office Hours: Tues 1-2; Wed 10-11, or by appointment

With the enactment of the National Environmental Policy Act (NEPA) on January 1, 1970, the federal government of the United States ushered in a new era of environmental policy. A core component of NEPA, a requirement that federal agencies create environmental impact statements on proposed action, has become a regular—and costly—part of the inner-workings of federal bureaucracies. In the state of New York, state agencies also must compile environmental impact statements under state legislation known as SEQR and in New York City, city agencies also must compile environmental impact statements under city ordinance known as CEQR. Additionally, environmental impact statements are an increasingly common part of international development projects funded by the World Bank, IMF, and others. Anyone interested in a career in municipal, state, or federal government, or with non-governmental organizations will invariably find environmental impact statements a large, at times burdensome, requirement for many actions taken.

This is a senior capstone course for the Environmental Studies degree. Therefore, there will be a diverse group of students, representing different tracks of natural and social science concentrations. We will use this diversity as strength when completing group assignments and semester-long group projects. Students are expected to be available to conduct a real Environmental Impact Statement on a project in the Binghamton region—this involves independent travel to sites off campus and meeting with public officials and, possibly, private business owners. The group project, which is assigned, will form a core component of the course and therefore much in-class time will be devoted to helping you complete your group project EIS (especially later in the semester). However, you are also expected to contribute significant time outside of class towards the completion of an industry-ready EIS.

In-class attention will be split between discussing the mechanics and requirements of completing an environmental impact analysis commiserate with the filing of an environmental impacts statement; and with exploring the day-to-day requirements of working in a public bureaucracy (or as a private contractor hired on behalf of governmental actors), respectively. Many weeks are split up between the two topic-areas, though some weeks will focus on one side over the other. Students are expected to come to class prepared, having read that day's assignment and prepared to contribute actively to class discussion.

***This course is largely a hands-on “learn by doing” format that requires students to keep up on readings and assignments. Therefore, while attendance does not form an independent grade-component, the instructor reserves the right to deduct points from a student's final grade if the instructor determines that a student has missed a significant number of classes and/or is regularly distracted by computers, phones, or sleep during class.***

### **Course Goals and Expectations**

Enhance your understanding of the nature of environmental impact assessment: societal basis, legal basis, applications. Why we do it, what we do, and how the public plays a role.

Enhance your analytical abilities, by assessing the strengths and weaknesses of published documents, including papers and a published impact statement.

Get real-world experience examining environmental impacts of an actual proposed project in the local Binghamton area.

Work in teams and apply the environmental knowledge gained through the whole of your major/minor.

### **Grading**

Course grades will be determined by student performance on a critique of a real-world EIS, performance on one in-class exam, performance on two take-home impact analyses, the completion of (in groups) and presentation of a real-world EIS in the greater Binghamton region. In particular, final grades will be calculated as:

EIS Critique:	(10% of final grade)
In-class exam:	(20% of final grade)
Take-home Impact Assessment:	(20% of final grade)
EIS Presentation:	(5% of final grade)
EIS Project:	(45% of final grade; broken down as explained below)

More detailed instructions on each assignment will be handed out in-class. Final letter grades will be assigned on the scale: A [93%-100%], A- [90%-93%), B+ [87%-90%), B [83%-87%), B- [80%-83%), C+ [77%-80%), C [73%-77%), C- [65%-73%), F < 65%.

Note: Because this is a capstone course, a letter grade of 'D' will NOT be used.

**“This course is a 4-credit course, which means that in addition to the scheduled meeting times, students are expected to do at least 9.5 hours of course-related work outside of class each week during the semester. This includes time spent completing assigned readings, participating in lab sessions, studying for tests and examinations, preparing written assignments, and other course-related tasks.”** (sample statement regarding expected work-load, provided in Binghamton University Faculty Handbook adopted March, 2014).

There will be a *substantial* time commitment involved with your capstone project. Plan early, plan often, and prepare!

### **In-class Exam**

This course operates under a policy of “make arrangements *before* a problem arises”. Under no circumstances will a make-up exam be given *unless prior express approval* is given by the instructor. The instructor reserves the right to determine what constitutes an “emergency situation” and to determine whether a student missing the exam has, in fact, experienced an emergency.

### **Critique and Impact Assessment Policies**

On the date that your critique and impact assessments are due, respectively, it is to be uploaded to TurnItIn on the Blackboard course site by the time specified on the assignment handout (critique) or is to be turned in by the beginning of class on the due date (impact assessment).

Turning in an assignment 1 minute late is the same as turning it in 1 day late, ***NO EXCEPTIONS***. For each 24-hour day extending from the time an assignment is due, the assignment will be penalized 10%. Computers crash; flash drives are lost. **PLAN ACCORDINGLY.**

### **Final Group Project**

A substantial portion of the class will be devoted to conducting a real-world EIS on a project in the Binghamton region. Students are expected to participate fully with their (assigned) group towards completing this project. 10% of your final grade is determined by the quality and promptness of a scoping document and a draft Chapter 1 document to be turned in on dates specified in the course calendar below. Another 10% of your final grade will be determined, holistically, by your participation within the group towards the completion of the project—a core component of determining that grade will be a group self-evaluation towards the end of the semester. The remaining 25% of your final grade determined by the final group project will be based on the quality, organization, and effort of your final ~100 page environmental impact statement.

### **In-class Project Presentation**

The last 3-4 class periods are devoted to presentations of your final group projects. A breakdown for the 5% of your final grade determined by this process, as well as information on how to assemble the presentation will be provided later in the semester.

### **Electronic Device Policies**

**NO CELL PHONE USE IS ALLOWED IN CLASS.** Should you be seen to be texting or otherwise engaged with your cell phone during class, the Instructor reserves the right to deduct points from your final grade as a penalty. Similarly, while the use of laptops *is* permitted for students who wish to take notes in that manner, should the Instructor notice you using your laptop for anything other than note taking during class, he similarly reserves the right to deduct points from your final grade as a penalty.

### **Disability-related Equal Access Accommodations**

Students who wish to request academic accommodations to insure their equitable access and participation in this course should notify the instructor by the second week of class. Authorizations from Services for Students with Disabilities (SSD) are generally required. We encourage you to contact SSD at (607) 777-2686 and to schedule an appointment with the Director or Learning Disabilities Specialist. Their website ([www.binghamton.edu/ssd](http://www.binghamton.edu/ssd)) includes information regarding their Disability Documentation Guidelines. The office is located in UU – 119.

### **Required Textbook and Readings**

The *required* textbook for this course is:

Bass, Ronald E., Albert I. Herson, and Kenneth M. Bogdan. 2001. *The NEPA Book; A Step-by-Step Guide on How to Comply with the National Environmental Policy Act* (2<sup>nd</sup> Edition): Point Arena, Solano Press Books, 475 p.

Readings from the required textbook are listed as “Bass et al., Chapter X” below. Additional assigned readings will be available on Blackboard. Readings listed for a particular day are expected to be conducted *prior* to that day’s class. **Other readings not listed on the syllabus may—indeed, likely will—be assigned during the semester!**

***The Instructor reserves the right to make changes to this syllabus at any time and for any reason***

**Daily Schedule**

*Please note that readings listed for each day should be completed prior to that day's class start. Additional reading will be assigned as the semester progresses—pay attention to announcements made in Blackboard for these additional reading assignments.*

**Week 1**

January 26—Introduction to course

*Reading:* None

January 28—Setting the stage I: Federal authority, early environmental policy/context of NEPA

*Reading:* A Citizens Guide to the NEPA pp 1-9 (on Blackboard)

**Week 2**

February 2—Setting the stage II: Structure and goals of NEPA; Limitations of federal authority

*Reading:* Bass et al. Chapter 1, Appendix S

Glasson et al. Chapter 1 (on Blackboard)

February 4—Setting the stage III: When NEPA applies, when SEQR applies, when none apply

*Reading:* Bass et al. Chapter 2, Appendix A

Houck (2009) (on Blackboard)

**Week 3**

February 9—NEPA Implementation: Overview of impact assessments & FONSI

*Reading:* Bass et al. Chapter 3

A Citizens Guide to NEPA pp 10-21 (on Blackboard)

February 11—NEPA Implementation: Scoping & designing an EIS project

*Reading:* Bass et al. Chapter 5 through page 100, Appendix E

Glasson et al. Chapter 4 (on Blackboard)

**Week 4**

February 16—Tools of EIS & Limitations to EIS [*Assignment of EIS Critique*]

*Reading:* Bass et al. Chapters 4 & 11

A Citizens Guide to NEPA remaining pages (on Blackboard)

February 18—Evaluating an EIS

*Reading:* Tzoumis 2007 (on Blackboard)

EPA Guidelines (on Blackboard)

EIS example (on Blackboard)

### **Week 5**

February 23—Navigating a full EIS: SDGEIS and others [*Assignment of group projects*]

*Reading:* Stern and Predmore 2012

EIS example (on Blackboard)

February 25—First group meeting

*Reading:* None

**EIS Critique Due**

### **Week 6**

March 1—Evaluation of alternatives & overview of impact assessments

*Reading:* Bass et al. pages 100-117

Glasson et al. Chapter 5 (on Blackboard)

Case study (on Blackboard)

March 3—Public participation and judicial review

*Reading:* Bass et al. Chapters 7 & 8

Glasson et al. Chapter 6 (on Blackboard)

### **Week 7**

March 8— Monitoring, auditing, mitigation; Exam review

*Reading:* Bass et al. pages 117-126

Glasson et al. Chapter 7 (on Blackboard)

March 10—**EXAM**

*Reading:* None

### **Week 8**

March 15—Socio-economic assessment I: Economic analysis

*Reading:* M&T Chapter 2 (on Blackboard)

March 17—Socio-economic assessment II: Social impacts analysis

*Reading:* M&T Chapter 3 (on Blackboard)

### **Week 9**

March 22—Bio-physical assessment I: Air quality & climate

*Reading:* M&T Chapter 8 (on Blackboard)

March 24—Bio-physical assessment II: Water & ecology

*Reading:* M&T Chapters 10 & 11 (on Blackboard)

**Scoping Document Due**

**SPRING BREAK (NO CLASSES 3/29, 3/31)**

**Week 10**

April 5—Cumulative Impact Assessment [*Assignment of Impacts Assessment*]

*Reading:* Canter and Atkinson 2011 (on Blackboard)

Ma, Becker and Kilgore (on Blackboard)

April 7—In-class assessments exercise

*Reading:* None

**Week 11**

April 12— Other assessment I: Noise & quality of life

*Reading:* M&T Chapters 4 &6 (on Blackboard)

April 14—Catch-up day & group meetings

*Reading:* None

**Week 12**

April 19—Strategic assessments & Working for the bureaucracy

*Reading:* Glasson et al. Chapter 11 (on Blackboard)

**Impacts Assessment Due**

April 21—Group meetings

*Reading:* None

**Week 13**

April 26—Environmental law & careers in EIS

*Reading:* TBD

April 28—Course wrap-up; Group meetings

**Chapter 1 Draft (with Executive Summary) Due**

**Weeks 14 & 15**

May 3, 5, 10—Group Presentations