CP6214/4210 Sp06

ENVIRONMENTAL PLANNING AND IMPACT ASSESSMENT

William J. Patton Adjunct Professor 404.872.3432

Public officials, professionals and business managers need a general understanding of the potential impacts of proposed policies, plans and projects. Environmental Planning and Impact Assessment provides an introduction to the important aspects of major environmental legislation and prepares students to manage a multi-disciplinary team of specialists assessing the impacts of both public and private actions.

Students will explore the practice of present-day environmental assessment by analyzing a current Environmental Impact Statement for stated purpose, environmental and institutional settings, various impacts, significance of impacts, mitigation, methods of decision making, and public participation. Through a series of small group sessions, the student will present his/her analysis to the others in the group. Each group will analyze EISs, prepared by diverse entities, assessing highway projects, airports, military base closures, and water resource projects, to provide a broad look at environmental assessment as it is practiced today. EISs studied are not more than 3 years old.

Upon completion of this course, the student will be able to organize and lead a group of environmental specialists in the preparation of an assessment of a proposed project of modest scale. The student will be able to anticipate the biggest potential impacts, list the professionals s/he will need for the assessment team, outline the public participation requirements, diagram a study time line and present findings and recommendations to decision makers. These are skills valued by business, industry and government in any entry-level employee or mid-level manager.

Date	Class	Lecture	Test	Seminar	Readings
01/10	1	Why laws are necessary			1 - 6, 8
01/12	2	Participants in environmental protection			7, 9,42,43
01/17	3	Enforcing environmental laws			10 - 15
01/19	4		yes	yes	
01/24	5	Calculating risk			16,41
01/26	6	National Environmental Policy Act			
01/31	7	The assessment process			17, 19
02/02	8		yes	yes	
02/07	9	Public participation			18
02/09	10	class exercise GRAD STUDENTS			20
02/14	11	Informing decision makers			
02/16	12	class exercise UNDERGRADUATES		·	20
02/21	13	Air Impacts & Tradable credits			21-23, 32-35
02/23	14		yes	yes	
02/28	15	Water Impacts			24 - 26
03/02	16			yes	

TESTS

- > Tests start at 4:35 and end at 5:00.
- > Tests cover the previous four lectures and/or exercises.
- > Homework assignments will be collected at random and will count as a test question on the day they are collected.
- > Tests will be returned for student review one week following administration. The instructor will take questions and then collect the tests for recording. If a student decides not to return a test to the instructor, said test will be recorded as a zero.

The Course readings may be accessed from the CoA computers or the CoA VPN by using this address

\\gtcoa.coa.ad.gatech.edu\Courses\Patton

The PDF file is large, close to 10MB.

By default, anyone logged into any computer on campus or the LAWN with their prism I.D. can follow that link and can open or copy the file.

If they're not in the CoA, they can log to GT computers here as long as they're taking a Arch, CRP, BC or CFY class and get it that way so access shouldn't be a problem.

Thanks,

Paul Cook
College of Architecture
Georgia Institute of Technology
404-385-1056 (helpdesk)
404-385-1058 (fax)

Grading for Students in 4210

Grading instrument	Weight Each	Percent of final grade	
6 tests	16.667%	100%	
Optional Final Exam (If at least ten students petition the instructor, a final will be administered to them and them only)		The Exam's score will count as 33% of the semester grade	

Grading for Students in 6214

Grading instrument	Weight	Notes
Seminar Presentation	20%	See below
2-4 page handout to class	5%	
Summary of EIS		See Below
> Approval of selection by first class in February	5%	
> Presentation on date scheduled	35%	
Paper		See Below
> Approval of outline by first class in March	5%	
> Final product no later than first class in April	30%	

Note: Late submittals will be docked 10% per day. Nothing will be accepted later than one week after the due date.

IMPORTANT PLEASE READ THIS <u>TWICE</u>

The Georgia Institute of Technology Academic Honor Code is in effect for this course. Make absolutely certain you understand your responsibilities under the Code.

Office Hours

Ordinarily I am available to meet with students for any length of time before or after each class or group meeting. We can also get together for lunch during the week. Please call me a couple of days ahead of time and we can settle on a place. Underground Atlanta is near my office, close to a MARTA station, and offers a wide variety of luncheon choices.

I can also consult with you via phone. Please feel free to contact me even if you have the slightest question regarding a reading assignment, take-home quiz, or lecture point. I am always ready, willing, and available to discuss environmental protection.

Miscellaneous

Please see me if you need course or classroom adaptions due to a physical disability or if there is emergency medical information you believe I need to know.

Please see me if you need special arrangements to be made in the unlikely event the building needs to be evacuated.

Web Pages of Interest

http://www.epa.gov This is EPA's home page.

http://www.fws.gov This is US Fish and Wildlife's page [Endangered Species List] http://www.sierraclub.org The Sierra Club's home page.

Homework Assignments CP 4210

Complete the first assignment no later then the first test, and the second no later then the second test, and so on.

Select a state which starts with the first or last letter of your last name (example, Mr Smith could select South Dakota, New Hampshire, or South Carolina). This is your <u>assigned</u> state.

Number One

Where does the environmental protection function reside in your assigned state? Draw an organizational chart to the Governor. Does the state have its own version of National Environmental Policy Act? Describe how the law works.

What is the Toxic Release Inventory? Log onto www.epa.gov/tri/ and generate a chemical report for your state. Discuss trends from the past 5 years of data.

Number Two

Select an environmental non-governmental organization [NGO] and write a one-pager describing the mission, budget and recent accomplishments.

Find an article describing enforcement of state or federal environmental statues within the boundaries of your state. Summarize the article in one page.

Number Three

Describe two instances in your state where citizen action stopped projects.

Number Four

Summarize the problems caused by the Stringfellow acid pits [California].

Number Five

Locate an EIS in your state. Print off the title page and submit it with an abstract discussing purpose, need, overview of alternatives, and preferred alternative.

Number Six

Provide a narrative of the environmental assessment process (not a diagram).

Graduate Student presentations

Date	Class Topic	Presentation
	Introduction	
Jan 19	Participants Enforcement	Massachusetts Strike Force Florida DEP organization
Feb 02	NEPA Risk	3. [any] State Environmental Policy Act 4. State Site Planning [select a state]
Feb 23	Environmental Management	5. Environmental Management Systems [EMS's] 6. EPA's Performance Track Program
Mar 02	Public Participation	7. [any] NGO Profile 8. Case history of recent intervention by the public 9. EPA's Project XL
Mar 09	P2	10. Florida Recycling Program 11. Georgia Pollution Prevention Program
Mar 14	Air Impacts	12. Florida Citrus Program (helping to control VOCs)
Mar 16	Water Impacts	13. National Acid Rain Program 14. Florida Forever
Mar 30	Managing Wastes	15. Brownfields 16. State Superfund Program
Apr 4		17. [student-selected topic] 18. [student-selected topic]

Suggested Reading Material

Environmental Regulation and Impact Assessment by Leonard Ortolano, Wiley, 1996. Two copies of this book are on reserve in the library of the School of Architecture.

Environmental Impact Assessment by Larry Canter, McCraw-Hill, 1996.

Additional Readings

Some students may wish to supplement their course of study with additional readings. The following are recommended and are available in the main campus library, or from the instructor.

Environmental Assessment, R.K.Jain, McCraw-Hill, 1993. Appendix B is an outstanding and detailed description of environmental attributes and threshold values..

Environmental Methods Review: Retooling Impact Assessment for the New Century, Alan Porter and John Fittipaldi, The Press Club, 1998. A series of papers by several professionals in the field of environmental impact assessment. A snapshot of environmental assessment today.

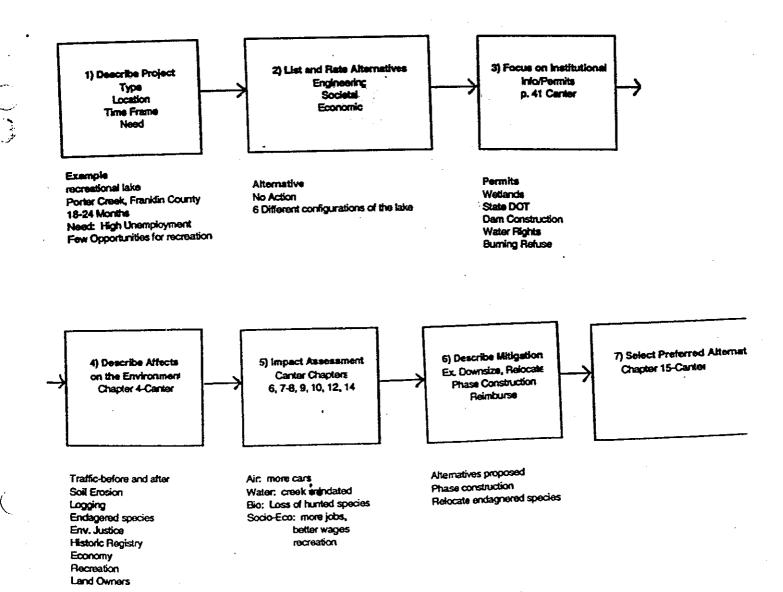
Mastering NEPA: A Step-by-Step Approach, Ronald Bass and Albert Herson, Solano Press Books, 1993. A good book for a professional faced with preparing an Environmental Impact Statement for the first time.

Generic EIA Process

The flow diagram below illustrates the generic environmental impact assessment process taught in *Environmental Planning and Impact Assessment*. This diagram is purposely skeletal. Inside each box is additional information or sub-steps concerning that step, for instance in the "List and Rate Alternatives" box, the rating factors are listed. References to Canter are included to assist the student in relating the diagram to reading assignments in the text.

Information under each box refers to an environmental impact assessment completed in 1998 on a proposed recreational lake in Franklin County, Mississippi.

Missing from the diagram is a time line for public participation. Public participation should be drawn as a continuous line running under the flow diagram starting with the second box.



W.J. 'Bill' Patton 1139 Morningside Place Atlanta, Georgia 30306

404.872.3432

- > 4 years United States Navy
- > 5 years engineering/planning consultant
- > 23 years United States Environmental Protection Agency

Masters City Planning BSCE

GaTech Duke University