

Syllabus
Natural Resources Planning
NR 5984; UAP 5414 (CRN 96263)

Alexandria Center
Virginia Polytechnic Institute and State University
Urban Affairs and Planning; College of Natural Resources

CLASS LOCATION:

Virginia Tech Alexandria Center
1021 Prince Street, Alexandria, VA

MEETING TIMES:

Wednesdays, 7:00 – 9:30 p.m.
August 26 – December 9, 2009

INSTRUCTOR:

Shelley S. Mastran Ph.D., (703) 927-4584, smast@vt.edu

Office Hours: Wednesdays, 2:00 – 4:00 p.m

Office: 1021 Prince Street, Room 215

COURSE DESCRIPTION:

This course deals with land use analysis and management to protect environmental resources and improve land development. Its focus is local, state, and regional planning in the U.S., although some federal resource management and laws will be considered. The major components of the course include:

- the relationship between land use and the natural environment
- methods and techniques of environmental land analysis
- technologies for mitigating environmental impacts
- environmentally sensitive land use, design, and development
- policies and programs to control land use impacts and to protect and restore environmental resources

COURSE OBJECTIVES

The objectives of this course are to

- Understand the role of natural resource planning as a key component of local and regional comprehensive planning

- Understand the critical role of identifying environmentally sensitive lands in the comprehensive planning process
- Become familiar with the key federal legislation governing natural resource planning
- Appreciate the complexity of managing ecosystems and watersheds, particularly across jurisdictional boundaries
- Become familiar with the basics of watershed planning, wetlands, soils, urban forestry, biodiversity, and natural hazard mitigation
- Understand strategies and techniques for natural resource conservation

SCHEDULE:

August 26 – No Class (Metropolitan Lecture Series)

September 2 – Introduction: Environmental Planning and Land Use

September 9 – No Class

September 16 – Natural Hazard Mitigation and Environmental Protection

September 23 – Ecosystem and Watershed Management

September 30 – Soils, Topography, and Land Use

October 7 – Stream Flow and Runoff Protection

October 14 – Stormwater Management, Stream Restoration, and Groundwater

October 21 – Urban Forestry and Wetlands

October 28 – No Class in lieu of Field Trip

October 31 – Tentative Field Trip

November 4 – Wildlife Habitat and Biodiversity

November 11 – Planning for Sustainability

November 18 – Land Conservation and Smart Growth

November 25 - Thanksgiving Vacation

December 2 – State, Regional, and Federal Natural Resource Management

December 9 – Final Presentations

COURSE REQUIREMENTS AND GRADING:

The course will involve a number of class projects and a final paper and presentation.

Grades will be computed on the following basis:

- Class assignments and projects – 50%
- Final paper and presentation – 40%
- Class participation – 10%

Please use the *Chicago Manual of Style* as a writing guide, especially for footnotes and references. A Citation Quick Guide is available at:

http://www.chicagomanualofstyle.org/tools_citationguide.html

LATENESS POLICY

For every day (from 2 to 24 hours) an assignment is turned in late, your paper will drop one letter grade, unless you have received my permission for lateness due to extraordinary circumstances.

GRADUATE HONOR CODE:

The tenets of the Virginia Tech Graduate Honor Code will be strictly enforced in this course, and all assignments shall be subject to the stipulations of the Graduate Honor Code as outlined in the 2009-2010 Graduate Catalog. For more information on the Graduate Honor Code, please see <http://ghs.grads.vt.edu>. Please take the time to read this document and make sure that you understand your responsibilities as a student. Be informed of the potential violations of the Graduate Honor Code: Cheating, Plagiarism, Falsification, and Academic Sabotage. Plagiarism or other forms of violations of the Graduate Honor System will not be tolerated. Please contact the instructor immediately if you have questions.

All students should review a useful document, entitled *Avoiding Plagiarism: A Guide for Graduate Students at Virginia Tech*, available at:

<http://ghs.grads.vt.edu/student/avoiding.html>

SPECIAL ACCOMMODATIONS:

Students with special needs or circumstances are encouraged to meet with the instructor after the first class or a.s.a.p. Please do not wait until later in the semester. In all cases, please feel free to contact the instructor, should you have any questions.

READING MATERIALS:

The textbook for the course is John Randolph's *Environmental Land Use Planning and Management* (Washington, D.C.:Island Press, 2004).

A recommended supplement is Daniels and Daniels, *The Environmental Planning Handbook* (Chicago: Planners Press, 2003).

Other readings will be introduced to supplement the text.