

Syllabus
Natural Resources Planning
UAP 5414, NR 5984

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 27 – December 10, 2008

INSTRUCTOR:

Shelley S. Mastran Ph.D., (703) 318-0276, shellmast@comcast.net

Office Hours: Wednesdays, 2:00 – 4:00 p.m
Office: 1021 Prince Street, 2nd Floor
Phone: 703-318-0276; 703-927-4584 (cell)

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 27 – **Introduction: Environmental Planning and Land Use**

September 3 – **Natural Hazard Mitigation and Environmental Protection**

September 10 – **Ecosystem and Watershed Management**

September 17 – **Soils, Topography, and Land Use**

September 24 – No Class

October 1 – **Stream Flow and Runoff Protection**

October 8 – **Stormwater Management, Stream Restoration, and Groundwater**

October 15 – **Urban Forestry and Wetlands**

October 22 – No Class in Lieu of Field Trip

October 25 – **Field Trip**

October 29 – **Wildlife Habitat and Biodiversity**

November 5 – **Planning for Sustainability**

November 12 – **Land Conservation and Smart Growth**

November 19 – **Case Studies in Natural Resources Planning**

November 26 - **Thanksgiving Vacation**

December 3 – **State, Regional, and Federal Natural Resource Management**

December 10 – **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%

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 2006-2007 Graduate Catalog. For more information on the Graduate Honor Code, please refer to the GHS Constitution, located online at <http://fbox.vt.edu/studentinfo/gradhonor>. Please contact the instructor immediately if you have questions.

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.