

CRP 5072/3072 Land Use/Environmental Planning & Urban Design Workshop

Instructor: George Frantz, Visiting Lecturer
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Location: B-10 W. Sibley Hall

Meets: M - W. 11:30 AM - 12:55 PM

4 credit hours

Course Overview

This workshop will be an advanced, intensive exercise in land use planning and community development, with focus on the delivery of a professional grade product to the client community. The workshop is designed as an experiential learning exercise in which participants will be actively engaged in collecting and analyzing data from the field. Class members will function as a planning team charged with producing a report on the subject that can be utilized by local municipal officials and others. Competency in planning and environmental inventory and analysis techniques will be required.

In recent years new technology has made it economically feasible to tap natural gas deposits located within layers of dense shale bedrock. The technology has opened up to exploitation natural gas deposits in the Marcellus Shale formation that underlays much of the Southern Tier region of New York State. The gas reserves within the Marcellus Shale are considered to be one of the largest in the US. Large scale drilling has already commenced across the border in Pennsylvania, and communities throughout the Southern Tier are face with the prospect of hosting a major natural gas drilling boom in the coming years, pending approval of new regulations for natural gas drilling operations by the NYS Department of Environmental Conservation.

There has been much debate regarding the potential hazards of the high volume hydraulic fracturing techniques utilized by the industry to open up the natural gas deposits, including potential for groundwater contamination and damage to local roads. In contrast there has been little attention focused on what may be a more critical issue in the region: the lack of local government land use planning or implementation of even primitive growth management tools. Possibly as many as 2 out of 3 municipalities in the region lack a basic comprehensive plan, and those that do have plans that are outdated and inadequate in the light of a pending resource extraction boom.

While the lack of planning could be traced at least in part to regional culture, the very rural nature of the region and very limited resources of local governments in the region has made land use and environmental planning a difficult proposition. Many local governments are run by lay boards and part-time staff, and have limited tax bases with which to fund even basic services such as road maintenance and fire protection. Planning, while it may be recognized as an important community exercise, is also an unaffordable luxury.

The task of the field workshop will be to develop a simplified comprehensive plan for use by a rural municipality, as well as a guidebook to accompany the plan and be utilized by the community as it creates its own comprehensive plan.¹ The objective is to provide the typical lay board or committee with a basic "off the shelf" framework of a comprehensive plan that they can re-work and adapt to fit their specific needs, and guidance on how to complete the process.

This comprehensive plan template and guidebook will then placed in the public domain and be made available in digital form via the 'web for use by local governments throughout the state.

¹ If enrollment in the class is large enough, a second team will be formed to develop a primitive zoning ordinance and guidebook

Course Objectives

The course meets the following specific learning objectives:

- 1) **General Planning Knowledge:** course addresses application of planning theory and planning law in the small town and rural context; investigates human settlement patterns and history of planning in study region.
- 2) **Planning Skills:** as part of a class project, students will gain experience in research, quantitative and qualitative methods and comprehensive plan creation and implementation.
- 3) **Values and Ethics:** Students will encounter issues of governance and participation, sustainability and environmental quality, growth and development in a rural context.

Course Grading

Grades for the course will be based upon:

1. **Class Attendance.** Attendance at class sessions will be a critical component because they will be used for substantive learning, and organizational and group working sessions. (10% of grade)
2. **Individual Assignment.** There will be one individual assignment that will involve observation and analysis outside of the classroom and preparation of a technical report. (25% of grade)
3. **Class/Team Project.** (40% of grade)
4. **Mandatory Class Field Trips.** This is a field workshop and participation in one or more field trips is a critical component of the course. (15% of grade)
5. **Self- and Peer-Evaluations.** A critical aspect of success in professional practice is the ability to fairly assess and critique the quality of your work, and the work of your peers. At the end of the semester you will complete a questionnaire assessing your performance and that of your peers in the class. (10% of grade)

Course Readings

Course readings will be available either on reserve in the Fine Arts Library, online, or as PDF in a course DropBox folder. Also sample plan documents and other resources will be posted to DropBox for use.

Academic Integrity

Each student in this course is expected to abide by the Cornell University Code of Academic Integrity. Any work submitted by a student in this course for academic credit will be the student's own work. For this course, collaboration is allowed for group assignments. For more information, please refer to the Cornell University Code of Academic Integrity, located online at <http://cuinfo.cornell.edu/Academic/AIC.html>.

Course Schedule

Week 1

Mon. January 21 Introduction to course, administrative details, the project and the site

Wed. January 23 Community and Regional Context

Week 2

Mon. January 28 **Lecture: Planning in the Small Town & Rural Context**
Readings: Small Town Planning Handbook, pp. 1-30; Rural and Small Town Planning, pp. 1-17

- Wed. January 30** **Lecture: Planning & Zoning at the Town Level in New York**
 Readings: Guide to Planning and Zoning Laws of New York State, pp.51-89; Zoning and the Comprehensive Plan, pp. 1-18; Subdivision Review in New York State, pp.1-79; Creating the Community You Want: Municipal Options For Land Use Control, pp. 1-22 (PDFs provided)
- Week 3**
- Mon. February 4** **Lecture: Implications of Marcellus Shale Natural Gas Drilling I**
 Readings: Draft Revised Supplemental Generic Environmental Impact Statement for High Volume Hydraulic Fracturing, Chap 5; Assessment of the Potential Impacts of High Volume Hydraulic Fracturing (HVHF) on Forest Resources Tioga County, New York.
- 1st Individual Assignment Distributed***
- Wed. February 6** **Lecture: Implications of Marcellus Shale Natural Gas Drilling II**
 Readings: Economic Consequences of Marcellus Shale Gas Extraction: Key Issues; Bradford County Guidebook; The Frocking Conundrum (PDFs provided)
- Week 4**
- Mon. February 11** **Lecture: Planning for Agriculture**
Readings: American Farmland Trust, Planning for Agriculture in New York, pp.18-71; Town of Nichols Agriculture & Farmland Protection Plan, pp. 1- (PDF provided); NYS Dept. of Agric. & Markets, Circular 1150 (PDF provided); NYS Dept. of Agric. & Markets, Guidelines for Review of Local Zoning and Planning Laws (PDF provided)
- Wed. February 13** **Lecture: Natural Areas Protection Strategies**
 Readings: Daniels & Daniels, Environmental Planning Handbook. pp.99-124; 229-241; 323-330; Local Open Space Planning Guide, pp.21-55 (PDF provided)
- Week 5**
- Mon. February 18** **Lecture: Local Infrastructure Needs**
 Readings: Recreation, Park and Open Space Standards and Guidelines, pp. 55-89; NYS Department of Health Overview of Water Systems in NY (http://www.health.ny.gov/environmental/water/drinking/facts_figures.htm)
 Small Town Planning Handbook, pp. 137-146
- Wed. February 20** **Lecture: Planning for Disaster Resilience**
 Readings: Daniels & Daniels, Environmental Planning Handbook. pp.257-276; FEMA Best Practice Case Studies, (scan through various case study web pages <http://www.fema.gov/mitigationbp/bpSearch.do?action=Scroll&pageInfo.pageStart=1>)
 The 1993 Great Midwest Flood: Voices 10 Years Later, pp. 1-68 (PDF provided)
- Week 6**
- Mon. February 25** **Lecture: New York Environmental Review Process**
 Readings: NYCRR Part 617, Sects 1-12 (<http://www.dec.ny.gov/regs/4490.html>)
 The SEQR Handbook, pp. 1-98, pp. 174-187
 (http://www.dec.ny.gov/docs/permits_ej_operations_pdf/seqrhandbook.pdf)
- 2nd Individual Assignment Distributed***
- Wed. February 27** **Lecture: Zoning in the Rural Context**
 Readings: Small Town Planning Handbook, pp. 95-136

Week 7

Mon. March 4 **Presentations of 1st individual Assignment**
Wed. March 6 **No Class due to Saturday, March 9 Field Trip.**

Saturday, March 9: Class Field Trip: leave Ithaca 7:00 am, return 7:00 pm

Week 8

Mon. March 11 **Project Work Session: Debrief from March 9th Field Trip**
Wed. March 13 **Project Work Session: Introduction to the class project**

Week 9

Mon. March 18 **No Class – Spring Break**
Wed. March 20 **No Class – Spring Break**

Week 10

Mon. March 25 **Project Work Session**
Wed. March 27 **Project Work Session**
2nd individual Assignment Due

Week 11

Mon. April 1 **Project Work Session**
Wed. April 3 **Project Work Session**

Week 12

Mon. April 8 **Project Work Session**
Wed. April 10 **Project Work Session**

Week 13

Mon. April 15 **Project Work Session**
Wed. April 17 **Project Work Session**

Week 14

Mon. April 22 **Project Work Session**
Wed. April 24 **Project Work Session**

Week 15

Mon. April 29 **Project Work Session**
Wed. May 1- Fri. May 10 **Final Presentations (Date & Time TBA)**