Course Syllabus [Fall 2015]

UP503 : Physical Planning

Time: T,TH, 3:30pm – 4:50pm
Room: T – 225 Temple Buell Hall, TH – 227 TBH
Instructors: Brian Deal  deal@illinois.edu
            TA: Lori Morgan  lmorga8@illinois.edu
Credits: 4 Hours
Prerequisite: Graduate standing in DURP or Consent of Instructor

Course Background
An urban area changes to keep pace with the shelter, work, recreation, shopping, and travel needs
of its inhabitants. In accommodating these human activities, land is consumed, and current trends
suggest that land in the United States is being consumed by expanding urban areas at an
unprecedented rate. In the St. Louis metropolitan region for instance, the urbanized area grew by
around 50% between 1990 and 2000 even though its population grew by less than 1%. This
suggests that the physical space that our cities occupy is changing and evolving without, or in some
cases despite, changes in population.

This consumption of land triggers several questions:
• What do we do on the land?
• How much land do we use?
• What is the type, manner, and intensity of our use of land?
• What are the environmental, economic, and social consequences of land use change?

Physical planning—managing the way land is used and reused to support human activities—has been
a significant and longstanding part of a professional planner's responsibilities. Physical planning in
the United States is typically a function of local government. Physical planners use land-use
controls (ordinances and regulations) along with site plan review to shape physical planning
decisions.

Course Objective
This course seeks to prepare you to deal with a variety of complexities that characterize physical
planning through hands on tasks. Rather than learn about issues at an arm's length, you engage
intensely with information and through this experience learn about the possibilities and limitations in
physical planning.

By the end of this course you should:
• understand contemporary, effective physical planning
• understand the process of physical planning decisions
• know how to work with digital spatial data and create effective maps
Course Organization

To achieve these objectives, the course brings together some preliminary work and key components all built around regional analysis and related as shown below:

- Preliminaries - map interpretation/making skills, software introduction
- Natural systems & Socio-economic analysis (exercises leading to natural systems suitability report & region selection)
- Engineering analysis (exercises outlining engineering basics for developing selected region)
- Context and Design analysis

All components will be worked on individually. While you are encouraged to discuss the work with each other and with the course instructors, the work and material you hand in must be your own.

The deliverables include one assignment per week and two reports through the semester. The intermediate suitability analysis report would be due towards the middle of the semester leading to the engineering analysis and final report. It is crucial that you complete assignments on time since after the preliminaries; all exercises and assignments will include work that will be useful for the final and intermediate reports.

The course allows flexibility for conducting the analyses and much of the work depends on how you use the tools introduced in class. Towards the latter half of the semester, we hope to have each student arrive upon an area to develop and conduct a detailed feasibility analysis in terms of environmental and socio-economic parameters. Engineering analysis methods would be introduced and you would be expected to apply them to the selected area.

Course content will be covered in lectures and discussions, labs, tutorials, and a final project. Attendance in tutorial sessions is optional; if you have already dealt with the material or feel confident of being able to handle the material covered on your own.

Course Materials

The are no required books for this course all required readings will be made available online (accessed using NetID and password) and can be printed or read on screen. Additional other materials and printing (about $50 worth) may be required from time to time.

This course involves considerable computer-based work. You must have an account on the Department's network and be able to use the network. If you do not have an account or you need an introduction to using the network, please see me right after the first class meeting.

Learning Philosophy

This course is designed around the idea of learning by doing. You grasp concepts and develop skills by applying them in a real-world situation rather than only reading about them. You engage your classmates and instructors in conversations about the work. While this is often a more effective way to learn the material covered in this course, you must expect to spend more time working on tasks than you would in a course with only reading and homework assignments.

All of the course material is available on the Web, and it is critical that you read and understand all of this material. This will make classroom time more effective and enhance your experience in the course. Please inform the course instructor if there are any errors or discrepancies on this Web site.
Course Policies and Grading

The course grade earned will be the weighted average of the following components:

- Class participation (10%)
- Preliminaries (10%)
- Natural systems analysis (10%)
- Suitability report (20%)
- Context analysis (10%)
- Site engineering and land use (10%)
- Final report (30%)

Class participation grades will reflect your command of the assigned readings and contribution to class discussion. Attendance is mandatory, and any unexcused absence will reflect in your participation grade. All other grades will depend on the quality of ideas generated and of the presentation of these ideas, on the effectiveness of responses to comments, and on the timely completion of work. Late submissions will be penalized one point and subsequently one point for each week that they are further delayed. Letter grades assigned are to be interpreted as follows:

A (4.0-5.0): Excellent. Goes beyond requirements.
B (3.0-4.0): Good. Satisfies all the requirements.
C (2.0-3.0): Average. Satisfies most requirements.
D (1.0-2.0): Poor. Does not meet many requirements.
E (0.0-1.0): Failed. Does not meet most requirements.

Letter grades will be modified by a '+' or a '-' when appropriate. These modifiers signify the upper and lower one-third of the scale. The course grade will be determined by converting the letter grade on each course component to a number and computing the weighted average of the actual points scored in each section.

Special Circumstances

Due to the participatory nature of this course, please also communicate any expected or unexpected absences with the instructor as early as possible.

Every effort will be made to work with students with unusual or unexpected obligations outside the course (family emergencies, health issues, participation in University sanctioned activities, etc.)

Students with disabilities or special needs who require any accommodations to facilitate full participation and completion of the course should contact the instructor as soon as possible.

Student conduct

From the University Student Code, Article 1, Part 3: Students enrolling in the University assume an obligation to conduct themselves in a manner compatible with the University’s function as an educational institution and suitable to members of the academic community.

Students are responsible for knowing their rights and responsibilities as found in the student code at http://www.admin.uiuc.edu/policy/code/index.html