COURSE DESCRIPTION

This is an introductory course covering common methods of data collection and analysis that planners will use in practice. The course is not intended to train you to be an expert in any of these methods, though you will emerge understanding the essentials. Other courses provide more in-depth instruction in some of these topics. This course introduces a set of tools that are widely used in urban and regional planning practice. The focus is on introducing you to qualitative and quantitative problem solving. Four major topics include the following:

1. **Gathering Your Own Data**: In planning practice, it is frequently the case that standardized data are not available and you must collect your own. You will receive a brief introduction to observation, interviewing, focus groups, and charrettes.

2. **Estimating Needs**: Planners need to understand the characteristics of the population they serve. This requires learning how to describe the current size, age distribution, vital statistics, and composition of that population. It also means learning how to project the characteristics of the future population, using models of growth, migration, and interregional population dynamics. It further involves estimating the resulting demand for facilities and services ranging from housing to transportation.

3. **Understanding Economic Conditions**: The open nature of most urban and regional economies has led to the development of special tools for studying their performance. There are simple methods for evaluating shopping behavior, regional industrial specialization (economic base multipliers) and change (shift-share analysis). There are more complex tools of regional, interregional and multi-regional input-output analysis. You will also gain an understanding of the strengths and weaknesses of several measures of inequality.

4. **Making Decisions**: Informing real, risky decisions – often nearly in real time – is one of the key tasks of practicing planners. Quantitative analysis of planning options, relevant uncertainties, and decision-makers' preferences allows the effective management of information in the decision making process. You will learn techniques that estimate costs and benefits from the distinct perspectives of developers, municipalities, and society as a whole.

LEARNING OBJECTIVES

By the end of this course, you should be able to:

- acquire primary and secondary data.
- understand a set of qualitative planning techniques.
- perform a series of quantitative analyses in support of a variety of planning decisions.
- clearly explain and interpret their own quantitative analyses.
- critically evaluate the quantitative work of others.
REQUIREMENTS

1. **Reading and active participation in class discussion (10%)**
   I do not take attendance, but I do grade on class participation.

2. **Completion of weekly assignments (70%)**
   Weekly assignments will be posted after class and most of them will be due by next Wednesday 11:55pm. You will have one week to work on each assignment in general. An extra week will be given to selected larger assignments. Guidelines for each assignment will be posted in a variety of formats on the class Sakai site, including a video, PowerPoint, and Excel. Following these guidelines and completing the assignments will account for the online section of this hybrid course.

   All assignments must be submitted via Sakai where cutoff times are strictly set by the system. **Late submissions will not be accepted.** If you anticipate missing an assignment due date due to serious illness, confidential, or sensitive personal reasons, you should also consult with Steve Weston of Student and Academic Services by phone (848-932-2728) or e-mail (sdweston@rutgers.edu). Excuses not filtered through his office are not accepted.

3. **Preparation of a 5 page final paper and a 10 minute in-class presentation (20%)**
   Most assignments are related to a single regional entity of your choice. The completion of the series of assignments will give you an insight of the regional entity’s past, present, and future. Summarize your findings from the perspective of a planner, prepare a paper with a maximum of 5 pages (including tables and figures if needed), and give a 10 minute in-class presentation.

   Unless there is any calculation error, grades are not negotiable.

ACADEMIC INTEGRITY

You are encouraged to study with other students in this course, but the assignments you submit must be entirely your own work. Plagiarism or cheating will result in a grade of “F” for the corresponding assignment, and may jeopardize your enrollment in the program. The University’s policy is available at [http://academicintegrity.rutgers.edu](http://academicintegrity.rutgers.edu).

RECOMMENDED TEXTBOOKS

Required and recommended readings will be posted on Sakai. The following textbooks, however, will provide you with a deeper understanding of the topics:

CLASS SCHEDULE AND REQUIRED READINGS

Part I: Gathering Your Own Data

September 14  Introduction and overview, Use of planning information
Assignment 1 (Excel training) is posted. (Due September 20)

September 21  Observation
Assignment 2 (observation) is posted. (Due October 4)

September 28  Interviewing, Focus group, Charrette
Assignment 2 continues. (Due October 4)

Part II: Estimating Needs

October 5  Demography: Census data, describing static populations
Williamson, Christopher, 2008. Planners and the Census: Census 2010, Factfinder, and Understanding Growth, Planning Advisory Service Report Number 553, Chicago: American Planning Association. (Selected sections will be posted on Sakai.)
Assignment 3a (county selection, data collection) is posted. (Due October 11)

October 12  Demography: Population projection models, Migration
Assignment 3b (modeling) is posted. (Due October 18)

October 19  Demand Models: Need for infrastructure and facilities
Assignment 4 (housing need assessment) is posted. (Due October 25)

Part III: Understanding Economic Conditions

October 26  Shopping: Gravity and retail market models
Exercise (pass/fail) is posted. (Due November 1)

November 2 Income account, Location quotient, Economic base multiplier
Assignment 5 (location quotient, base multiplier) is posted. (Due November 8)

November 9 Input-output multiplier, Shift-share analysis
Assignment 6 (shift-share analysis) is posted. (Due November 15)

November 16 Measuring inequality
Assignment 7 (inequality indices) is posted. (Due November 29)

November 21 Transportation: Trip generation and distribution models
Assignment 7 continues. (Due November 29)

Part IV: Making Decisions

November 30 Benefit-cost analysis, Fiscal impact analysis
Final paper is announced. (Due December 13)

December 7 Development finance
Exercise (pass/fail) is posted. (Due December 13)

TBD Summary of class topics, Student presentations
Each of you will give a 10 minute presentation. Note that this class is expected to take longer than a regular class.