

C&RP 762: URBAN PLANNING DATA AND FORECASTING

Credit: 4 hours
Call No.: 04228-1
Place: 223 Brown Hall
Time: M, W 3:30-5:30 p.m.
Instructor: Jean-Michel Guldmann
281 Brown Hall
Tel.: 292-2257
Email: Guldmann.1@osu.edu

Teaching

Assistant: Mehmet Kucukmehmetoglu
Office hours: To be announced
Prerequisites: CRP 780 or permission of Instructor.

COURSE OVERVIEW

The basic objectives of this course are to acquaint students with (1) models and methods used in the analysis and projection of population, employment, transportation, and land uses, and (2) the principal data sources for such analyses, including data shortcomings and problems of comparability. The overall goal is to foster an awareness of the use of data and projection methodologies by planners, with an emphasis on translating results into policy implications understandable by the nontechnical reader.

Homeworks and group projects will help students familiarize themselves with these data and methods. Group projects using data at the county level will help to simulate as closely as possible problems encountered in "real world" situations. These projects will be done in small groups of 2 to 4 students. It will become apparent from the projects that forecasting efforts are rarely straightforward. There usually is not a single best or right model and the choice of model is determined as much by data availability and cost, time and money constraints, desired scope, and detail of model output, as by concern over soundness and elegance of theory.

EVALUATION

There will be a midterm, a comprehensive final exam, homeworks, and projects. Grades will be calculated with the following weights:

Midterm	20%
Final	30%
Homeworks	20%
Projects	30%

Each project is of equal weight. You will lose 10% per day for late projects. These items are on time if they are received by the end of class on the due date. No credit will be given for homework or projects handed in after they have been returned to the class. If you are going to miss an exam you must let us know in advance.

Class attendance is strongly encouraged. Reading assignments are required. Not all material covered in class will be contained in the readings, and handouts will be distributed on specific topics.

PROJECTS

There are three class projects required for this course. Because of the amount of work involved (and because employers tell us that people need this skill), you will work in groups for the projects. We recommend that you select your group carefully.

Each group will choose an Ohio county as the study area for all three projects. Each county may be selected by only one group and we will assign them on a first come first served basis. This is to protect you from a situation in which someone else is using your county and has taken all the library materials away. Please be careful with materials. Lost or damaged materials mean higher fees and delays in course work. Much of the data you need will be on CD ROM but not all of it. More details will be given in each individual assignment. Let us know (in writing) as soon as you have chosen your group and your county, no later than April 5. Consider selecting a county that is fairly close so that you can visit it sometime during the Spring quarter.

All names must appear on each project when it is turned in. Group projects should be more detailed and more carefully thought out than if they were done by only one student. This does not necessarily mean that they will be longer. You will keep the same group throughout the quarter. Your projects must be clearly and demonstrably original to your group members (see the departmental handout on academic misconduct). Academic misconduct is a serious offense and will be treated as such. At the end of the quarter you will all turn in an evaluation of your own work as well as the work of all members of your groups. Each individual's final project average will reflect these evaluations.

REQUIRED READINGS

As much as possible the required readings are taken from the following book:
Klosterman, Richard E. 1990. **Community Analysis and Planning Techniques**.
Roman and Littlefield, Savage, Maryland.

Other required readings will be on reserve in the Engineering library or handed out in class. You are responsible for all required readings.

COMPUTER WORK

For all the projects you will need to work with spreadsheet programs. We recommend using EXCEL in Windows because it is available in the lab and is what most people have been working with in classes during this academic year. You may also use LOTUS 1-2-3 or QUATTRO in its LOTUS emulation mode.

COURSE OUTLINE

1. Extrapolation Techniques and Projections (Klosterman, chapters 1 - 3).
2. Review of Matrix Algebra (handout).
3. Population Projections with the Cohort-Component Technique (Klosterman, chapters 4-8).
4. Employment Projections: Economic Base and Shift-Share Analysis (Klosterman, chapters 9-13)
5. Input-Output Analysis (handout).
6. Land Use and Travel Demand: Introduction to the Gravity Model (handout).