

UPP 502 Planning Skills: Computers, Methods and Communication

Fall 2011
Tuesday 6:00 PM to 9:00 PM
Winkle

2232 ADH, Computer Training in 2058 SEL on
Dates Shaded
Course Request Number 32221



Instructor

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2232 CUPPA Hall, 412 S. Peoria St., Chicago

I have walk-in office hours from 4:00 PM to 5:00 PM on Tuesdays. While I am available many other times as well, it is best to confirm my availability by calling ahead or emailing to make an appointment.

Teaching Assistant

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Summary

This course focuses on skills commonly used in planning practice to collect information, analyze it and present it. Particular skills include quantitative reasoning, basic data analysis, benefit cost analysis, basic economic analysis, population projections, written reports, oral presentations, conflict management, negotiation and creating images using computer programs such as Photoshop, Illustrator and SketchUp.

This course is a prerequisite to UPP 505 and 506, in which you will apply skills to making plans.

Objectives

By the end of the course, students should be able to do the following:

- Primary
 - Be able to use tools to describe the economic conditions of a community.
 - Demonstrate proficiency in writing, speaking, enumerating, visualizing and computing skills

- Be able to demonstrate knowledge about a range of secondary data sources
- Be able to develop and present a community profile
- Apply quantitative reasoning and appropriate analysis techniques to problem identification, detailing alternatives and selecting among alternatives

➤ Secondary

- Be able to compose professional advice combining writing, speaking, enumerating, visualizing and computing skills to offer practically relevant and professional competent products.
- Be able to frame research questions and possess basic skills to conduct research.

Note that computer programs are just introduced in class. You will need to make time to explore the programs on your own or with a study group in order to become proficient enough to do the homework. All homework and assignments must be your own work, unless otherwise noted.

Requirements

The course is taught using lecture, discussion and some hands-on training in the computer lab. Course requirements include the following:

145 points **Weekly homework or major assignments.** You receive points for doing the homework successfully and on time. See points in syllabus. The population projection, benefit cost analysis and the economic analysis home work are worth more points and will involve more time so plan accordingly. Homework is due on paper in class. Due dates are shown in the syllabus.

55 points **Final project: Community Profile**
Written Presentation (35 points)
Oral Presentation (20 points)

200 points **TOTAL**

Required Materials

- Dandekar, Hemalata. 2003., *The Planner's Use of Information, 2nd Edition*. Chicago: American Planning Association.
- Rowntree, Derek. 2004. *Statistics Without Tears, Classic Edition*. Boston: Allyn and Bacon.
- Some required course materials are posted on <http://blackboard.uic.edu>

Strongly Recommended Materials

- Steiner, Frederick and Kent Butler. 2007. *Planning and Urban Design Standards:*

Student Edition. John Wiley & Sons.

- Fisher, Roger; Ury, William; and Patton, Bruce. 1991. *Getting to Yes: Negotiating Agreement Without Giving In, 2nd Edition.* New York: Houghton Mifflin.

Useful Resources

- Susskin, Lawrence and Patrick T. Field (contributor). *Dealing with an Angry Public: The Mutual Gains Approach to Resolving Disputes.* Free Press: 1996.
- Turabian, Kate L. *A Manual for Writers of Term Papers, Theses, and Dissertations (Chicago Guides to Writing, Editing, and Publishin).* University of Chicago Press:1996.
- Kraybill, Ronald S; Robert A. Evans and Alice Frazer Evans. *Peace Skills Manual for Community Mediators* Jossey-Bass: 2001.
- Patton, Carl and David Sawicki. *Basic Methods of Policy Analysis and Planning.* Prentice-Hall, 1993.
- Daniels, Thomas L.; John W. Keller; and Mark B. Lapping. *The Small Town Planning Handbook.* American Planning Association, 1995.
- Klosterman, Richard E. *Community Analysis and Planning Techniques.* Rowman and Littlefield: Savage, Maryland: 1990.
- Macris, Natalie. *Planning in Plain English.* Chicago: American Planning Association.
- Streibel, Barbara. 2003. *The Manager's Guide to Effective Meetings.* New York: McGraw Hill.

Course Outline
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Week	Date	Topic	Readings Due Before Class	Assignment Due in Class
1.	August 23	Introduction <ul style="list-style-type: none"> • Planning Process • Quick Techniques 	Dandekar: Introduction and Planning Case Study pp. 1-20	
2.	August 30	Basic Data Analysis I <ul style="list-style-type: none"> • Graphs and Tables • Descriptive analysis • Short Excel Review 	Rountree: Introduction, 1, 2, 3 and 4 http://www.uic.edu/depts/adn/seminars/semmatframe.html http://www.uic.edu/depts/adn/seminars/excel-intermed/index.html http://www.uic.edu/depts/adn/seminars/excel-intermed/excel-intermed.html	HW 1 Paragraph describing Community to be profiled (5 points)
3.	September 6	Basic Data Analysis II <ul style="list-style-type: none"> • Research Design • Primary Data Sources – Survey Research – • Secondary Data Sources–Census Data 	Dandekar: 1, 2 and 3 and 4 Explore www.census.gov	HW 2 Excel Homework (2 points) Data Analysis Homework (3 points)

Week	Date	Topic	Readings Due Before Class	Assignment Due in Class
4.	September 13	Population Projection <ul style="list-style-type: none"> • Extrapolation • Cohort Survival Method 	Daniels et al.: 7 Recommend: Steiner and Butler: 299-302 (blackboard)	HW 3 Descriptive Analysis of Community Census Data using graphs and tables (15 points)
5.	September 20	Basic Data Analysis III <ul style="list-style-type: none"> • Inferential Statistics 	Rountree: 5, 6, 7 and 8	
6.	September 27 Room SEL 2058	GIS and Maps <i>Guest Lecture: Max Dieber</i>	Chopra, Chapters 3, 7 and 10 Steiner and Butler: 336-344 (blackboard)	HW 4 Population Projection (25 points) HW 5 Summary of article on the impact of bike paths on property values (5 points)
7.	October 4 Room SEL 2058	Visualization using Google SketchUp	Materials in Class	HW 6 GIS Lab Exercise (5 points)
8.	October 11	Economic Analysis <ul style="list-style-type: none"> • Shift Share • Economic Base • Location Quotient 	Daniels et al.: 8 (blackboard) Steiner and Butler: 303-304 (blackboard)	HW 7 SketchUp Homework (5 points)

Week	Date	Topic	Readings Due Before Class	Assignment Due in Class
9.	October 18	Land Use <ul style="list-style-type: none"> • Land Use Inventory • Map • Plans • FAR 	Careful Review of Subdivision Sketch Plan Materials Daniels et al.: 10 and 17 (blackboard) Conducting a Land Use Inventory at: http://www.uwsp.edu/CNR/landcenter/Publications/elementguides/Land_Use_Element_Guide/LUG-Chapter3.pdf Steiner and Butler: 312-335. (blackboard)	HW 8 Economic Analysis (20 points)
10.	October 25	Decision Making <ul style="list-style-type: none"> • Benefit-Cost Analysis • Fiscal Impact Analysis • Decision Trees 	Patton 5, “Establishing Evaluation Criteria” (blackboard) Patton 7: “Evaluating Alternative Policies” (blackboard) Steiner and Butler: 314-316. (blackboard)	HW 9 Land Use Inventory (20 points)
11.	November 1 Room SEL 2058	Graphics: <i>Photoshop</i> <i>Guest Lecture: Nina Savar</i>	Select a tutorial from blackboard Dandekar: 10	HW 10 Photoshop Homework in Class (5 points)
12.	November 8 Room SEL 2058	Graphics: <i>Illustrator</i> <i>Guest Lecture: Nina Savar</i>	Select a tutorial from blackboard	HW 11 Downtown Development Analysis (30 points)

Week	Date	Topic	Readings Due Before Class	Assignment Due in Class
13.	November 15	Conflict, Negotiation and Mediation <i>In Class Exercise</i>	Strongly Recommend: Fisher, Ury, and Patton. <i>Getting to Yes: Negotiating Agreement Without Giving In</i>	HW 12 Illustrator Homework in class (5 points)
14.	November 22	Project Planning, Writing and Presenting <ul style="list-style-type: none"> • PowerPoint • Gantt Chart 	Dandekar: 8, and 9 http://www.uic.edu/depts/adn/seminars/powerpoint-intro/index.html http://www.uic.edu/depts/adn/seminars/powerpoint-intermed/index.html	
15.	November 29	Student Presentations of Community Profiles		Presentation of Final Project (15 points) COMMUNITY PROFILE DUE (40 points)
16.	December 6	FINAL WEEK: Student Presentations of Community Profiles		Presentation of Final Project

Homework 1: Community to Profile (5 points)

Please turn in one paragraph that names the city that you have selected to profile for the final project. Include a brief description of the community and indicate that you will have access to data, and that you either will or have visited the place. You should select a city in the Chicago metropolitan area with a population of at least 60,000. I recommend that you select a community with which you are not very familiar. Indicated that you have checked American Factfinder at the U.S. Census page and are sure that data are easily available for the community that you have chosen.

Homework 2: Excel and Descriptive Data Analysis (5 points total)

Please analyze the Excel data file “Town Employee Data” on Blackboard and submit two parts:

Excel Homework (2 points): Please send me the modified “Town Employee Data” file showing your work in Excel to answer questions below.

Data Analysis Homework (3 points): Please submit a **very** short written report that summarized data in response to the questions below:

Questions:

1. How many female employees are there?
2. How many male employees are there?
3. What percentage of the workforce is female?
4. Show a bar chart of the number of males and females.
5. What is the average current salary?
6. What is the maximum, minimum and median difference in current and starting salaries?
(note that you will need to create a new column that shows the difference between current and starting salaries for each employee)
7. Do men or women have higher salaries, on average?

Homework 3: Secondary Data Analysis for Your Community (15 points)

Turn in a very short paper describing the following characteristics of the community that you have chosen for your final project:

1. Describe educational attainment of people in your community using quantitative data.
2. Display and describe a table comparing educational attainment of men and women in your community.
3. Display and describe a graph comparing homeownership in your community to homeownership in two other contiguous communities of your choice.

All graphs and tables should be in appropriate form, including a number, a descriptive title and source. The text should describe your key findings from the table or graph and make reference to the table or graph by number or name. All data for this homework assignment is available from American Fact Finder at www.census.gov. You may have to manipulate the data using a

calculator or spreadsheet in order to present it the way you want it.

Homework 4: Population Projection for Community (25 points)

Develop cohort survival population projection and a trend analysis projection for your community and present it in a short, double spaced paper of about three pages, plus tables and graphs. Be sure to describe the methods, assumptions and limitations of your analysis. Include a population pyramid.

Homework 5: Summary of Report that Uses Inferential Data (5 points)

You are the planner for Suburbtown. The regional planning authority is promoting reuse of an abandoned railway as a greenway that will start in Centracity and go through eight suburban towns, including yours.

The mayor has asked you to read and summarize the article “Public Choices and Property Values” (which is posted on the course blackboard site) and to give her your advice on whether or not you think the greenway will harm property values.

Write a one or two page doubled-spaced memo to the mayor summarizing the article and giving your recommendation based on your reading of the article. Pay attention to how you describe inferential statistics.

Homework 6: GIS as directed in class (5 points)

Homework 7: SketchUp as directed in class (5 points)

Homework 8: Economic Analysis of Community (20 points)

Develop an economic analysis of your community and present it in a short, double spaced paper of about three pages plus tables and graphs. It should contain a location quotient analysis and a shift-share analysis.

Homework 9: Current Land Use Inventory and Analysis of Community (20 points)

Develop a description and short analysis of the land use of your community. The paper should be about two pages of text plus a map and any tables or graphs. It should include the following:

- A Current Land Use Map (as opposed to a zoning map). Use GIS to generate land use map using CMAP/NIPC land use data
- Ideally a table of percent of land by land use
- Descriptive overview of land use

- Identification of two strengths and two weaknesses in current land use based on one or more of the approaches below:
 - Regional Context Analysis
 - Community Opportunities Analysis
 - Community Visualization Techniques
 - Demographic and Economic Data Interpretation
 - Natural Resources and Soils Analysis
 - Natural Resources and Soils Analysis
 - Cultural Resources Analysis
 - Utility Analysis
 - Transportation System Analysis
 - Growth Factors Analysis
 - Existing Zoning/Build-out Analysis
 - Land Use Demand Projections

Homework 10: Photoshop as Directed in Class (5 points)

Homework 11: Displaying Alternatives --Downtown Case Study (30 points)

You have been asked by the mayor to develop a memorandum with a one-page executive summary. The memorandum should explore the three alternatives in the attached case study: building the parking garage; put the land out for bid; or, if you should find compelling reasons, delay and commission a special study of key factors. Please limit your memorandum to no more than 10 double-spaced type pages and place highly quantitative material in appendices.

Homework 12: Illustrator as Directed in Class (5 points)

Final Project**Community Profile****(55 points, 15 for presentation and 40 for paper)**

Your final project is to write and present an analysis of a city with a population of over 60,000 people in the Chicago metropolitan area. It is not a plan, but it should identify issues to be considered as a plan is developed. The profile is worth 55 points, 40 of which are for the written version and 15 of which are for the presentation. The paper is due November 29 and the presentation will be either November 29 or December 6. The paper should be no longer than 20 double-spaced pages, excluding tables and appendices. Tables, maps and graphs should be numbered and labeled. The document and presentation should be of professional quality. **It must address all of features in bold below**, but should include many of the others as well.

1) Identification of community

- a) Size, legal, metaphorical

2) Very brief history of area**3) Major features**

- 4) History of planning in area

5) Utilities and services**6) Housing characteristics****7) Transportation****8) Population trends**

- a) Projection

9) Economic analysis

- a) Employment

- b) Shift-Share analysis

- c) Location quotient

10) Hydrology

11) Community Resources and Public Facilities

12) Natural Environment

13) Land Use

- a) Current Zoning

- b) Nonconforming uses

- c) Runoff

14) Visual Representation

- a) Using Photoshop or Illustrator

b) **Using Sketchup**

c) GIS

15) Overview of major issues that should be addressed in next step of the planning process.