

Information subject to change, including assignments and points for grading.

UPP 502: Planning Skills -Computers, Methods and Communication

Fall 2009

Instructor – Michael Iversen

(email: miversen@uic.edu)

Thursday 9:00 - 11:50 AM

ADH 2232

(along with various other venues, as noted)

Summary

This course focuses on skills commonly used in planning practice to collect information, analyze and present it. Particular skills include conceptualization, quantitative reasoning, basic data retrieval, data inventory, benefit cost analysis, basic economic analysis, population projections, ecological footprint, GIS, written reports, oral presentations, and creating images using computer programs such as Adobe Photoshop, Adobe Illustrator, Google SketchUp and ESRI ArcGIS.

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, environmental and social attributes and 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, in terms of scoping, inventory, and assessment.
 - 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.
 - Understand a community in terms of the flux and cyclic processes of energy, materials, information, people, and costs that interact on a complex and dynamic urban scale.

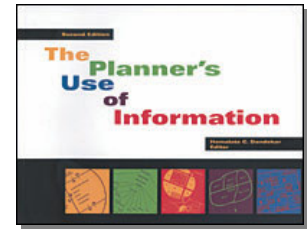
Requirements

The course format is lecture/discussion. Course requirements include the following:

- Weekly assignments: 150 points
- Final project: Community Profile: 50 points
- Total 200 points

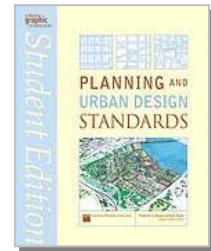
Required Text Books

Dandekar, Hemalata C. 2003. *The planner's use of information*. Chicago: Planners Press, American Planning Association.



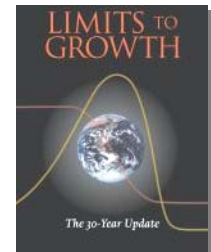
- This book has traditionally been the mainstay text of UPP 502. This updated second edition describes the capabilities, uses, and impacts of computers, the Internet, telecommunications networks, and a changing population that has revolutionized the practice of planning. Edited again by Hemalata Dandekar, with chapters by leading experts in data collection, analysis, presentation, and management.
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Steiner, Frederick R., and Kent S. Butler. 2007. *Planning and urban design standards*. Wiley graphic standards. Hoboken, N.J.: J. Wiley.



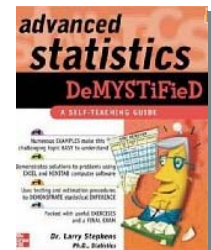
- The Student Edition is intended to teach students best practices and guidelines for urban planning and design. This book provides essential information for various types of plans, environmental factors, building types, transportation planning, mapping and GIS. In addition, expert advice guides readers on practical and graphical skills, such as mapping, plan types, and transportation planning. This recent 2007 edition will serve as a core reference text for other courses and studies throughout the MUPP degree program.
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Meadows, Donella H., Jørgen Randers, and Dennis L. Meadows. 2004. *The limits to growth: the 30-year update*. White River Junction, VT: Chelsea Green Publishing Company.



- This update on the 1972 classic *The Limits to Growth* brings 30 additional years of data on the consequences of overshoot in terms of ecological footprint and the dynamics of growth in a finite world. It provides a short course in the World3 computer model, types of growth, and the various kinds of overshoot likely to occur in the current century.
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Stephens, Larry J. 2004. *Advanced statistics demystified*. New York: McGraw-Hill.



- This free online book includes basics on inferential statistics, variance analysis, and parametric and nonparametric testing to simple linear regression, correlation, and multiple regression. Available at no charge via UIC Daley Library > Ebrary > <http://site.ebrary.com.proxy.cc.uic.edu/lib/uic/home.action>.
- For those students without any statistics background, you may refer to *Statistics demystified* (Gibilisco, Stan. 2004. New York: McGraw-Hill), which is also available at no charge via Ebrary. This online book provides basics on randomness and uncertainty, probability principles, distributions, obtaining and interpreting data, correlation, causation, and more.

Course Outline and Schedule

UPP 502 Planning Skills: Computers, Methods and Communication

Fall 2009 (as 11.18.09)

Week	Date	Topic	Readings Due Before Class	Assignment Due in Class
1.	August 27	Introduction <ul style="list-style-type: none"> • Planning Process • Quick Techniques 	Review Blackboard and course texts.	
2.	September 3	Basic Data Analysis I <ul style="list-style-type: none"> • Graphs and Tables • Descriptive analysis 	Gibilisco 2004: chap. 1 (pp.20-31), 2 and 5. http://www.uic.edu/depts/accs/seminars/excel2000-intro/ http://www.uic.edu/depts/accs/seminars/excel2000-intermed/	HW 1 Community to Profile (5 points)
3.	September 10	Basic Data Analysis II <ul style="list-style-type: none"> • Research Design • Primary Data Sources – Survey Research – • Secondary Data Sources–Census Data 	Dandekar 2003: chap. 1, 2, 3 and 4. Explore www.census.gov	HW 2 Excel Data Analysis (2 points) Descriptive Data Summary (3 points)
4.	September 17	Population Projection <ul style="list-style-type: none"> • Extrapolation • Cohort Survival Method • Guest: Erin Aleman, CMAP (keypad polling, Chicago regional population projection) 	Daniels, Keller, and Lapping 1995: chap. 7 Steiner and Butler 2007: pp. 299-302 (blackboard).	HW 3 Secondary Data Analysis Using U.S. Census (20 points)

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5.	September 24	Limits to Growth <ul style="list-style-type: none"> • Overshoot • Exponential Growth • Ecological Footprint 	Meadows et al. 2004: chap. 1 and 2	
6.	October 1	Visualization using Google SketchUp Note: Class held at ACCC Computer Lab located at SES 204B&C	Chopra 2008: chap. 3, 7 and 10. Steiner and Butler 2007: 336-344 (blackboard).	HW 4 Ecological Footprint (20 points) Extra Assignment-1 Planning Skills Interview (20 points)
7.	October 8	Information Technology Guest: John Shuler, Bibliographer for Urban Planning, Librarian / Richard J. Daley Library at UIC	none	
8.	October 15	Economic Analysis <ul style="list-style-type: none"> • Shift Share • Economic Base • Location Quotient 	Daniels, Keller, and Lapping 1995: chap. 8 (blackboard) Steiner and Butler 2007: pp. 303-304 (blackboard).	HW 5 Visualization Using Google <i>SketchUp</i> Homework in Class (10 points)
9.	October 22	Land Use <ul style="list-style-type: none"> • Maps • Plans • Analysis • Regulation 	Daniels, Keller, and Lapping 1995: 10 and 17 (blackboard) Steiner and Butler 2007: pp. 312-335. (blackboard). Conducting a Land Use Inventory Subdivision Sketch Plan Materials	HW 6 Economic Analysis (20 points) (<i>may be submitted 10.29.09</i>)
10.	October 29	GIS Using ESRI ArcGIS Note: Class held at ACCC Computer Lab located at SEL 2249F	In-class assignment materials posted on Blackboard.	HW 7 Land Use Inventory (20 points)

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Week	Date	Topic	Readings Due Before Class	Assignment Due in Class
11.	November 5	Graphics Using Adobe Photoshop <i>Guest Lecture: Urban Data Visualization Lab / CUPPA</i> Note: Class held at ACCC Computer Lab located at SEL 2249F	Dandekar 2003: chap. 10.	HW 8 GIS Lab Exercise in Class (10 points) Extra Assignment 2 Event Summary (10 points)
12.	November 12	Municipal Budgets <ul style="list-style-type: none"> • Capital Budgets • Operating Budgets 	handouts	HW 9 <i>Photoshop</i> Lab Exercise in Class (10 points)
13.	November 19	Project Planning, Writing and Presenting <ul style="list-style-type: none"> • <i>PowerPoint</i> • <i>Gantt Chart</i> 	Dandekar 2003: chap. 8 and 9. http://www.npguides.org/ http://www.uic.edu/depts/accc/seminars/ppt2000/ http://www.uic.edu/depts/accc/seminars/ppt2000-intermed/ http://www.uic.edu/depts/accc/seminars/webuic/	
14.	November 26	<i>Thanksgiving Holiday. No class.</i>		
15.	December 3	Student Presentations of Community Profiles	none	COMMUNITY PROFILE DUE (35 points) Presentation of Final Project (15 points)
16.	December 10*	Student Presentations of Community Profiles	none	Presentation of Final Project (15 points)

Shaded weeks indicate class is being held at a different venue.