

IOWA STATE UNIVERSITY
Department of Community and Regional
Planning

CRP 272
Planning Analysis and Techniques I
3 Credits--Fall Semester 2009

Lecture: Tuesday and Thursday 8 – 8:50 a.m., 2115 Pearson
Lab: Section A: Tue. 9 – 10:50 a.m., 440 Design Building
Section B: Thu. 9 – 10:50 a.m., 440 Design Building
Section C: Fri. 8 – 9:50 a.m., 440 Design Building

Instructor: Dave Swenson
Office: 177 Heady Hall
Phone number and voice mail: 515-294-7458
e-mail: dswenson@iastate.edu

Class URL address: www.econ.iastate.edu/prosci/swenson/swensonpage.htm

Office Hours: Immediately after class (during lab) or by appointment
Teaching Assistant: Steve Michael

COURSE DESCRIPTION

CRP272 introduces techniques for the analysis of planning data and the preparation of community planning studies using sound social science research methods. It also serves as the prerequisite for the CRP 274 (Planning Analysis and Techniques II) course. CRP 272 is designed to provide a practical, working knowledge of quantitative data analysis in community and regional planning. It emphasizes the collection, description, analysis, presentation, and interpretation of planning data within the general context of traditional social science research methods.

This course relies upon only fundamental statistics and relates various statistical techniques to planning analyses. Many of you will not have had a statistics course. That should not prevent you from understanding basic research methods. You will learn the basics of social science research and learn to integrate them, eventually, into your planning education. Planning is, in the main, applied social and policy science and research in support of community policy and program development.

Another emphasis of the course is effective communication techniques commonly used in the planning profession. Word processing, spreadsheets, presentation graphics, and database management have become increasingly essential in the creation, manipulation, analysis, and presentation of planning information. This

course provides students hands-on opportunities to learn and practice those applications in lab sessions (located in Design 440).

Because this course has a lab component, the introduction to social methods portion of this course will be abridged and focused on aspects that I consider most essential to being an informed and competent planning professional.

REQUIRED SKILLS AND READINGS

Students taking this course should already be familiar with personal computing in the Microsoft Windows environment. A scientific calculator may occasionally be required for in-class exercises, quizzes, and exams.

There is one main text book for the course:

William M. K. Trochim, Research Methods: The Concise Knowledge Base. This text book can be purchased from the ISU Memorial Union Book Store. Most of those books are used so costs shouldn't be awful.

You may also purchase this text directly from the company at this web address:
<http://www.atomicdogpublishing.com/BookDetails.asp?Session=0A5255E9-A10E-45BC-A27A-A79F16552AB2&BookEditionID=136>

I do not care where you get your book, but be warned that I will rely on the book significantly for lectures, for structure, and as the basis for quizzes. There will be no reserve text book.

There will be a few other readings, as well, as the spirit moves me. They will all be posted on the class web site in electronic form.

COURSE FORMAT

There are two lecture sessions (in 2115 Pearson) and a supervised lab session (in 440 Design) each week. I attend and assist during the first hour of every lab session, while the TA will supervise the remainder of the session.

Lecture will be of a standard format: I talk, you listen. A portion of the lecture time may be used for discussions, demonstrations, presentations, quizzes, or exams. The lab sessions are provided so that students can practice various techniques useful in the planning profession (using word processing, spreadsheet, presentation graphics, and database management applications). All lab assignments must be handed in for credit to be recorded. You are allowed 4 weeks of grace on labs: a lab assignment that is more than 4 weeks late receives no credit.

Note: All students need to prepare a USB memory device for file transfer and backup purposes. **It is your responsibility to keep a backup copy of ALL your work in a safe place just in case the original is damaged or lost.**

GRADING

Your final grade is based on overall performance measured by points assigned to five quizzes, 10 lab exercises, four assignments, a midterm exam, and a final exam. All assignments are expected to be typewritten. Listed below are the percentages of quizzes, lab exercises, assignments, and exams in relation to the final grade:

5 Quizzes	20%	<i>(pop quizzes based on lectures and readings)</i>
10 Lab Exercises	30%	<i>(using Microsoft Office applications)</i>
Assignment # 1	5%	Descriptive Planning Data Analysis
Assignment #2	5%	Secondary Data Analysis
Midterm Exam	10%	
Assignment #3	5%	Multivariate Analysis
Assignment #4	10%	Small Research Project
Final Exam	15%	

*Note: Late assignments will be accepted; however a **10% deduction of points per missed class day** will be applied up to a 50 percent deduction.*

Other things:**Grading is done strictly on this scale:**

100 pts. Scale	Letter Grade	100 pts. Scale	Letter Grade
95.00-100	A	73.00-76.99	C
90.00-94.99	A-	70.00-72.99	C-
87.00-89.99	B+	67.00-69.99	D+
83.00-86.99	B	63.00-66.99	D
80.00-82.99	B-	60.00-62.99	D-
77.00-79.99	C+	0.00-59.99	F

There is no “curve”.

If you have a disability:

Please address any special needs or special accommodations with me at the beginning of the semester or as soon as you become aware of your needs. Those seeking accommodations based on disabilities should obtain a Student Academic Accommodation Request (SAAR) form from the Disability Resources (DR) office (phone 515-294-7220). DR is located on the main floor of the Student Services Building, Room 1076.

Tenative Course and Reading Schedule (I may change this some)

Week	Date	Topic	Reading*
1	25-Aug	Course Overview: Planning and social science research foundations.	
	27-Aug	Planning and social science research foundations.	RM 1-10
	<i>Lab</i>	<i>Lab Tour (Design 440)</i>	
2	1-Sept	Quick review of statistical measures	
	3-Sept	Understanding basic data types (primary, secondary, spatial, etc.)	RM 10-24
	<i>Lab</i>	<i>L1: Microsoft Word Formatting</i>	
3	8-Sep	Sampling	RM 25-33
	10-Sep	Sampling continued	RM 33-45
	<i>Lab</i>	<i>L2: Word Tables and Page Design</i>	
4	15-Sep	Measurement: Validity issues	RM 48-59
	17-Sep	Measurement: Reliability	RM 60-73
	<i>Lab</i>	<i>L3: Microsoft Excel Introduction</i>	
5	22-Sep	Survey research: Construction	RM 76-86
	24-Sep	Survey research: Interviews	RM 86-92
	<i>Lab</i>	<i>L4: Excel Formulas and Functions</i>	
6	29-Sep	Survey research: Surveys	RM 92-99
	1-Oct	Scales and indices	RM 100-116
	<i>Lab</i>	<i>L5: Pivot Tables, Filters, and Look-ups</i>	
7	6-Oct	Qualitative and other measures	RM 118-131
	8-Oct	A review of all kinds of data sources & midterm review	None
	<i>Lab</i>	<i>L6: Excel Goal Seek</i>	
8	13-Oct	Midterm Exam	
	15-Oct	Research design: internal validity	RM 134 to 143
	<i>Lab</i>	<i>L7: Introduction to Power Point</i>	
9	20-Oct	Experimental design	RM 150-170
	22-Oct	Quasi-Experiments	RM 172-182
	<i>Lab</i>	<i>L8: Using Power Point for Presentations</i>	
10	27-Oct	Other design considerations	RM 192-201
	29-Oct	Analysis: just what the heck do planners study?	
	<i>Lab</i>	<i>L9: Using Excel to Manage and Process Data</i>	
11	3-Nov	Analysis: validity	RM 204-211
	5-Nov	Analysis: data preparation	
	<i>Lab: TBD</i>		
12	10-Nov	Analysis: descriptive statistics	RM 211-223

* RM = Research Methods: The Concise Knowledge Base

13	12-Nov	Analysis: inferential statistics	RM 224-230
	Lab	<i>L10 Descriptive Statistics and Correlation</i>	
	17-Nov	Analysis: linear models	
	19-Nov	Analysis: other considerations	RM 224-242
14	Lab	<i>Project Work Session</i>	
	24 & 26 Nov	No Class -- Thanksgiving break	
	1-Dec	Topic to be determined	
	3-Dec	Topic to be determined	
15	Lab	Project Work Session	
	8-Dec	Class projects handed in and discussion	
	10-Dec	Review for Final Exam	
	Lab	<i>Project Work Session</i>	
16	Date TBD	FINAL EXAM	