

**Syllabus August 25**

## Syllabus for Planning Techniques

Fall 2014

Lecture: Wed 9-11am, Avery 114

Updated August 25, 2014

Professor:

David King

Office Hours 2-4pm Mondays and by appointment

304 Buell

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Teaching Assistants:

Jonas Hagen

Siobhan Watson

Jose Ramirez-Orozco

Lab sessions:

Students will be assigned to one lab session (either Monday 2-4pm or Wednesday 2-4pm and 4-6pm) for weekly meetings (attendance is required). Lab sessions will use exercises that cover materials presented in lecture, as well as time to work on assignments and the final project. Lab sessions meet in 201 Fayerweather and are led by the PhD students.

Course description:

This is an introductory course designed to help prepare students for original data collection and common analysis methods used in planning research and practice. Common methods of analysis are covered using publicly available data sets and data collected through assignments. Through weekly readings, lectures and lab sessions students will gain a basic understanding of the tools and methods required in planning practice. For more in depth instruction on statistical methods students are encouraged to look into other courses on campus.

Assignments:

Review of planning research (research documents provided) (10%)

Lab assignments using U.S. Census (20%)

Assignment for population projections and economic base analysis (15%)

Mid-term exam (20%)

Final group project: Evaluating cycling on campus (35%)

Readings:

There is one required textbook. It is:

*Even You Can Learn Statistics: A Guide for Everyone Who Has Ever Been Afraid of Statistics* . (2010) David M. Levine and David F. Stephan. FT Press

I strongly recommend buying this through Amazon.com. You can choose either a paperback (new or used) or the Kindle edition.

Additional readings are journal articles which are available through Courseworks.

Also on Courseworks is a folder of supplemental readings. These are not required. They may be of use as additional resources for statistics and the R programming language (which is open source though we don't use it).

Week 1 (September 3): Introduction to the Course (Assignment 1: Review of planning research)

Lab assignments

Overview of final project

Expected knowledge

Planners use of research

Week 2 (September 10): Fundamentals of Statistics (Lab sessions begin; Assignment 2 started in Lab)

*Even You Can Learn Statistics* Chapters 1-3

Descriptive statistics

Week 3 (September 17): Data Sources and Sampling Distributions

U.S. Census and American Community Survey

Primary vs. secondary sources

Using online resources

Making tables, cross tabs and presenting information

*Even You Can Learn Statistics* Chapter 6

Week 4 (September 24): Probability

*Even You Can Learn Statistics* Chapters 4 and 5

Week 5 (October 1): Hypothesis testing and Chi-Square

*Even You Can Learn Statistics* Chapters 7-9

Week 6 (October 8): Linear regression-one variable, data transformation and correlation

*Even You Can Learn Statistics* Chapter 10

In Lab: Intro to final projects, group assignments

Week 7 (October 15): Planner's Toolbox: Pop Projections, Econ Base, Financial Math (Assignment 3 started in lab)

Chapter 4 in Wang, Xinhao and Rainer vom Hofe. (2007) *Research Methods in Urban and Regional Planning*. New York: Springer

Week 8 (October 22): Planner's Toolbox (continued) and review of concepts covered to date

Week 9 (October 29): (No Lab This Week)

Mid-term Exam in Lecture

The exam covers all materials covered to date.

Week 10 (November 5): Surveys and Sampling

## Readings on Courseworks

## Week 11 (November 12): Land Use Inventory and Observation

"Measuring urban design qualities: an illustrated field manual" Otto Clemente, Reid Ewing, Susan Handy and Ross Brownson

Day, K., Boarnet, M., Alfonzo, M. & Forsyth, A. (2006). "The Irvine-Minnesota Inventory to Measure Built Environments: Development," *American Journal of Preventive Medicine*, 30(2), 144-152.

## Week 12 (November 19): Interviews and Focus Groups

Readings at these links:

Forester, John. Interviewing (web site section), [http://instruct1.cit.cornell.edu/courses/practicestories/CP\\_I.htm](http://instruct1.cit.cornell.edu/courses/practicestories/CP_I.htm).

Forester, John. Transcribing (web site section), [http://instruct1.cit.cornell.edu/courses/practicestories/CP\\_T.htm](http://instruct1.cit.cornell.edu/courses/practicestories/CP_T.htm)

## Week 13 (November 26): (No Lab This Week) Case Study Research

Readings on Courseworks

## Week 14 (December 3): Final Presentations in lecture and Wednesday lab