CourseNo: PLANA4208_001_2013_3

Meeting Location: AVERY HALL 114

Meeting Time: W 09:00A-11:00A

Instructor Information: David Andrew King

Syllabus for Planning Techniques

Fall 2013

Lecture: Wed 9-11am, Avery 114

Updated September 3, 2013

Professor:

David King

Office Hours 2-4pm Mondays and by appointment

304 Buell

dk2475@columbia.edu

Teaching Assistants:

Lauren Fischer

Xiaohong Pan

Jonas Hagen

Lab sessions:

Students will be assigned to one lab session (either Monday, Wednesday or Friday 2-4pm) for weekly meetings (required). Lab sessions will have 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.

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:

1.   Review of planning research (research documents provided) (5%)

2.   Descriptive Statistics Assignment using U.S. Census (10%)

3.   Probability and Hypothesis Testing Assignment (15%)

4.   Mid-term exam (20%)

5.   Population Projections and Economic Base Analysis (15%)

6.   Final group project: Proposal for Air Rights Development (30%)

The remaining 5% is attendance and participation.

Readings:

There are two required text books that are available at Book Culture on 112th between Broadway and Amsterdam. They are:

Planner's Use of Information, 2nd Edition. (2003) Hemalata Dandekar APA Planners Press

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

Week 1 (September 4): 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 11): Fundamentals of Statistics (Lab sessions begin)

Even You Can Learn Statistics Chapters 1-3

· Descriptive statistics

Week 3 (September 18): 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 25): Probability

Even You Can Learn Statistics Chapters 4 and 5

Week 5 (October 2): Hypothesis testing and Chi-Square

Even You Can Learn Statistics Chapters 7-9

Week 6 (October 9): Mid Term Exam

· Midterm covers materials presented weeks 1-5, plus material covered in Math Bootcamp

· Lab: Intro to final projects, group assignments

Week 7 (October 16): Linear regression-one variable, data transformation and correlation

Even You Can Learn Statistics Chapter 10

Week 8 (October 23): Planner's Toolbox: Pop Projections, Econ Base, Financial Math

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

Week 9 (October 30): (No Lab This Week) Planner's Toolbox Continued

Readings on Courseworks

Chapters in *Planner's Use of Information, 2ⁿᵈ Edition*

Week 10 (November 6): Surveys and Sampling

Chapters in *Planner's Use of Information, 2ⁿᵈ Edition*

Week 11 (November 13): 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 20): Interviews and Focus Groups

Chapters in *Planner's Use of Information, 2ⁿᵈ Edition*

Readings at these links:

Forester, John. Interviewing (web site section), 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

Week 13 (November 27): (No Lab This Week) Case Study Research

Chapters in *Planner's Use of Information, 2nd Edition*

Readings on Courseworks

Week 14 (December 4): Final Presentations in lecture and Wednesday lab