

Planning, Policy, and Design U228 (code 54510)
University of California at Irvine
Kenneth Chew, PhD

Winter 2010
Version 1.0

DEMOGRAPHICS for PLANNING & POLICY

Seminar Meets: MW 3:30-4:50, Bren Hall (DBH) room 1200.
Office: 205 Social Ecology, 949.824.6990, chew@uci.edu.
Office Hours: Thursdays 2-3:30 and by appointment.
Student e-mail: Instructor updates will be sent via "@uci.edu" addresses
Drop box: The course's EEE drop box will be used extensively.

What this course is about:

Plans or policies should start with a description of the affected population and an assessment of its likely changes over the life of the plan or policy. The need for such "demographics" is acute in local practice, yet solid estimates and forecasts of population at the local level (areas the size of counties or smaller) are seldom available. Thus, the task of wisely adapting and interpreting, if not actually constructing such estimates and forecasts, often falls to local planners and practitioners who lack demographic training.

Completion of this course should enable you (1) to locate, select, analyze, and communicate elementary population, housing, and socioeconomic statistics; (2) to construct basic local-area population projections using demographic, extrapolation, and structural methods; and (3) to appreciate the strengths and limitations of those methods. Because the methods used to project population are also used to project other trends, including housing, jobs, crime, consumer behavior, school enrollments, health care demand, and environmental quality, to name only a few, this course will interest students from a variety of disciplines.

Prerequisites:

- (1) Completion of an undergraduate statistics course or equivalent.
- (2) Microsoft *Excel* literacy.
- (3) Exposure to *SPSS* or an equivalent social statistics program.
- (4) Hardware and software notes: the default setup for class presentation is Windows-based PowerPoint 2003 with input via flash drive. Required software for Problem Set 2, *SPECTRUM/DemProj*, runs under Windows (<http://www.healthpolicyinitiative.com/index.cfm?id=demProjE>). Any incompatibilities arising from use of alternative hardware or software systems (e.g., Apple) are entirely the user's responsibility.

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Seminar Requirements and Grading:

Work will center on constructing alternative population projections for a set of census tracts ("neighborhoods") that you will select and follow throughout the quarter. There are five problem sets (and corresponding in-class presentations). The last problem set will synthesize and annotate parts of the previous four. Submit all problem sets both in print and electronic form.

TWO SUB-TEXTS

One sub-text of this course concerns the synthesis of numeric and qualitative measurement. This begins in the first problem set, where students are asked to take site visit photographs to complement their later numeric analyses.

Another sub-text concerns technical communication: a phrase and concept that joins two equal parts, "technical" and "communication." Technical excellence in forecast construction is only the first half of a job well done; excellence in communicating the result must follow. Thus we devote much to the critique and revision of our communications (oral and written).

Grading will be based on problem sets (75%), and on seminar participation (25%) including regular attendance, discussion and presentation of work in progress, and completion of the course's EEE evaluation.

NO COURSE INCOMPLETES WILL BE GIVEN FOR ANY REASON WHATSOEVER. (Please see the detailed statement at the end.)

Required Text:

1. Smith, Stanley, Jeff Tayman and David Swanson. 2001. *State and Local Population Projections: Methodology and Analysis*. New York: Kluwer Academic.
2. Selected mass media excerpts will be available in the course's EEE drop box.

Fervently recommended:

3. Miller, Jane E. 2004. *The Chicago Guide to Writing About Numbers*. Chicago: University of Chicago Press.

Also recommended:

4. Best, Joel. 2001. *Damned Lies and Statistics: Untangling Numbers from the Media, Politicians, and Activists*. Berkeley: University of California Press.
5. Myers, Dowell. 1992. *Analysis with Local Census Data: Portraits of Change*. San Diego: Academic Press.
6. California Department of Finance. *California Statistical Abstract*. The entire current volume or selected tables can be downloaded from www.dof.ca.gov.
7. Tufte, Edward R. 1983. *The Visual Display of Quantitative Information*. Cheshire, CT: Graphics Press.

Week 1 (Jan 4, 6)	Menand, Louis (2005) ¹ ; STS, Chapter 1 (Introduction)	Miller, Chapter 1 (Why write about numbers)
Week 2 (Jan 11, 13)	STS, Chapter 2 (Fundamentals of population analysis) and 3 (Overview of the cohort-component method)	Miller, Ch.2 (Seven basic principles); Ch.3 (Causality, statistical significance, and substantive significance)
Week 3 (Jan 18, 20)	STS, Chapter 4 (Mortality) and 5 (Fertility)	
Week 4 (Jan 25, 27)	STS, Chapter 6 (Migration) and 7 (Implementing the cohort-component method)	Problem Set # 1 due³
Week 5 (Feb 1, 3)	STS, Chapter 8 (Trend extrapolation models)	Problem Set # 2 due³ Miller, Ch.5 (Types of quantitative comparisons)
Week 6 (Feb 8, 10*)	STS, Chapter 9 (Structural models I-economic demographic)	Problem Set # 3 due³ <i>*Special arrangements possible: UC-wide Faculty Senate</i>
Week 7 (Feb 15, 17)	STS, Chapter 11 (Special adjustments)	Miller, Chs.6-7 (Creating effective tables and charts)
Week 8 (Feb 22, 24)	STS, Chapter 12 (Evaluating projections) and 13 (Forecast accuracy and bias)	Problem Set # 4 due³
Week 9 (March 1, 3)	STS, Chapter 14 (A practical guide to small area projection)	Miller, Ch.12 (Speaking about numbers) concerns EFFECTIVE PowerPoint delivery!
Week 10 (March 8, 10)	<i>Student presentations of Problem Set # 5</i>	
Exam Week (March 15-19)	Due 11:59 PM, Wed, March 17: Problem Set 5, final document	

Complementary readings (recommended) in Miller (2004) shown in small type.

TABLE NOTES

- (1) Menand, Louis (2005). "Everybody's an expert." *The New Yorker*, December 5, pp. 98-101.
- (2) STS = Smith, Tayman, and Swanson (2001).
- (3) Designated students to present in class; all students to submit electronically via EEE.

PROFESSIONAL CONDUCT

First and foremost, our conduct should exemplify the UCI Principles of Community, which are based on civility and mutual respect. In addition, I endorse, and vigorously enforce University policies regarding academic integrity. Please take a moment to review these important principles, set forth in the *UCI General Catalogue*. Finally, our conduct should reflect the principles of personal responsibility and promotion of the public good, as embodied in the best practices of the urban and regional planning profession <http://www.planning.org/ethics/ethicscode.htm>.