

San José State University
Urban and Regional Planning Department
URBP 204B: Quantitative Methods II: Modeling
Fall 2010

Instructors:	Hing Wong	David Roemer
Telephones:	(510) 464-7966	(408) 771-3572
E-mail Addresses:	hingw@abag.ca.gov	der_gis@earthlink.net
Office Hours:	Thursdays: 6:00pm to 7:00pm	
Office Location:	WSQ 218B	
Class Days/Time:	Thursdays: 7:15pm to 10:00pm	
Classroom:	WSQ 208	

Course Catalog Description

The modeling of basic social, economic and physical data required for urban and regional planning. Topics include economic base analysis, input-output analysis, housing market analysis, population analysis, fiscal impact analysis, and transportation-land use models. Prerequisite: URBP 204A with a grade of “C” or better.

Course Learning Objectives

Upon successful completion of the course, students will be able to:

1. Identify the overall strengths and weaknesses of a broad range of quantitative modeling methods (as described in #2 below) and assess which model(s), given resource constraints, are most appropriate for solving a given urban and regional planning problem.
2. Construct and apply the following quantitative models:
 - Population and employment projections;
 - Gravity models;
 - Multivariate regression analysis, including both ordinary least squares (OLS) regression and binary logistic regression analysis
3. Identify the policy implications of modeling results.
4. Present quantitative data and results in text and graphic formats so that is easily comprehensible to the target audience.
5. Critique journal articles or reports that use the above-mentioned models to assess whether the methods were appropriate to address the research question and whether the conclusions were drawn logically from the results.

Required Course Readings

Klosterman, R.E., 1990. *Community Analysis and Planning Techniques*, Savage: Rowman and Littlefield Publishers, Inc.

Course Assignments and Grading Policy

Your grade for the course will be based primarily on the following:

Assignment	Percent of Total Grade
Data Scavenger Hunt	10%
Extrapolation	20%
Regression	20%
Cohort Component	20%
Economic Analysis	20%
Class Participation	10%

The course will consist of lectures and class discussions coordinated with assignments. Assignments will involve using spreadsheet templates on personal computers. Class sessions will often include computer lab time. However, students will be expected to complete some computer exercises outside of class.

Other grading/assignment issues

The first three assignments may be resubmitted once (only one resubmittal per assignment) within two weeks of receiving the original graded submittal from the instructors. All resubmittals must be accompanied by the complete, original submittal with comments from the instructors. All resubmittals must be complete packages — no resubmittals will be accepted that are only portions of the assignment. All assignments must be submitted by the last day of class.

Academic integrity statement, plagiarism, and citing sources properly

SJSU's Policy on Academic Integrity states: "Your own commitment to learning, as evidenced by your enrollment at San Jose State University, and the University's Academic Integrity Policy requires you to be honest in all your academic course work. Faculty members are required to report all infractions to the Office of Student Conduct and Ethical Development" (Academic Senate Policy S07-2). The policy on academic integrity can be found at <http://www.sjsu.edu/senate/S07-2.htm>.

Plagiarism is the use of someone else's language, images, data, or ideas without proper attribution. It is a very serious offense both in the university and in your professional work. In essence, plagiarism is both theft and lying: you have stolen someone else's ideas, and then lied by implying that they are your own.

Plagiarism will lead to grade penalties and a record filed with the Office of Student Conduct and Ethical Development. In severe cases, students may also fail the course or even be expelled from the university.

If you are unsure what constitutes plagiarism, it is your responsibility to make sure you clarify the issues before you hand in draft or final work.

Learning when to cite a source and when not to is an art, not a science. However, here are some examples of plagiarism that you should be careful to avoid:

- If you use a sentence (or even part of a sentence) that someone else wrote and don't reference the source, you have committed plagiarism.
- If you paraphrase somebody else's theory or idea and don't reference the source, you have committed plagiarism.
- If you use a picture or table from a webpage or book and don't reference the source, you have committed plagiarism.
- If your work incorporates data someone else has collected and you don't reference the source, you have committed plagiarism.

The University of Indiana has developed a very helpful website with concrete examples about proper paraphrasing and quotation. See in particular the following pages:

- Overview of plagiarism at <http://www.indiana.edu/~istd/overview.html>
- Examples of plagiarism at <http://www.indiana.edu/~istd/examples.html>
- Plagiarism quiz at <http://www.indiana.edu/~istd/test.html>

If you still have questions, feel free to talk to us personally. There is nothing wrong with asking for help, whereas even unintentional plagiarism is a serious offense.

Citation style

It is important to properly cite any references you use in your assignments. The Department of Urban and Regional Planning uses Kate Turabian's "A Manual for Writers of Research Papers, Theses, and Dissertations, 7th edition" (University of Chicago Press, 2007, ISBN-10: 0-226-82336-9). Copies are available in the SJSU King Library. Additionally, the book is relatively inexpensive, and you may wish to purchase a copy. Please note that Turabian's book describes two systems for referencing materials: (1) "notes" (footnotes or endnotes), plus a corresponding bibliography, and (2) in-text parenthetical references, plus a corresponding reference list.

Accommodation for Disabilities

If you need course adaptations or accommodations because of a disability, or if you need to make special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible, or see me during office hours. Presidential Directive 97-03 requires that students with disabilities requesting accommodations must register with the DRC (Disability Resource Center) to establish a record of their disability.

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Course Schedule

The schedule below outlines the lecture topics and the recommended pace of the reading. The readings are for the week of the lecture. The assignments are due the day they are listed. Additional reading will be assigned for the regression unit. Any changes to this schedule will be announced in class with as much notice as possible.

Date	Topic	Reading	Assignments
8/26	Intro		
9/2	Extrapolation	Klosterman, pages 1-31	
9/9	Extrapolation	Klosterman, pages 33-48	Data Scavenger Hunt due
9/16	Regression	To be announced	
9/23	Regression	To be announced	Extrapolation due
9/30	Regression	To be announced	
10/7	Public Engagement	<i>Field trip</i>	
10/14	Cohort-Component	Klosterman, pages 49-64	Regression due
10/21	Cohort-Component	Klosterman, pages 65-99	
10/28	Cohort-Component	Klosterman, pages 101-109	
11/4	Economic Analysis	Klosterman, pages 111-124	Cohort-Component due
11/18	Economic Analysis	Klosterman, pages 125-167	
12/2	Economic Analysis	Klosterman, pages 169-204	
12/9	Conclusion		Economic Analysis due