COURSE OBJECTIVES
This graduate seminar is intended to prepare students to understand the nature, assumptions, and logic of quantitative methodology. The course will focus on issues of design, conceptualization, analysis, and interpretation of quantitative research procedures. The aim of this course is to help students acquire skills and gain experience in using a variety of research techniques for the purposes of understanding and making sense of public policy.

Learning objectives:

Upon completion of this course, students are expected to:
1. Understand the nature of quantitative procedures and how they compare to more traditional qualitative procedures;
2. Demonstrate skills necessary to engage in quantitative inquiry;
3. Identify various ways of collecting quantitative data (survey, cross-sectional, longitudinal, etc.);
4. Have a working knowledge of descriptive and regression analysis and the strengths of these techniques;
5. Demonstrate skills necessary to critique quantitative analysis;
6. Understand how to summarize, compile, interpret, and report quantitative data; and
7. Put together a research paper that utilizes quantitative methods to better understand a policy problem.

COURSE FORMAT
The graduate seminar is a space of open discussion, inquiry, and discovery. The success of the seminar rests on the free and uninhibited intellectual and emotional engagement of all participants. Effective participation and learning requires that students read class material, reflect on the readings, and come to the seminar prepared to share their ideas.
with classmates. In addition to class discussions, there will be analytical exercises, discussion of computer assignments and individual student presentations.

**ASSIGNMENTS AND GRADING**

**There are seven components to students’ grades:**

1. Class attendance and participation – 10%
2. Article critique – 5%
3. Chapter Exercises – 15%
4. Midterm Assessment – 20%
5. Paper Drafts – 10%
6. Final presentations – 5%
7. Final paper – 35%

**Late Assignment and Missing Class**

Late assignments will not be accepted. In rare occasions and at my discretion a student who misses a deadline may be given an extension. Whether or not a penalty will be assessed on the late assignment depends on the reason.

Missing two class sessions or more will lower your overall grade for the class.

If you do miss class:

*Please tell me in advance, if possible.*
*Arrange to submit any assignments due for that class sessions.*

**Classroom Participation**

Classroom participation includes attendance, weekly class discussion, prepared questions or comments, in-class activities and student presentations.

**Article critique**

You will be given a quantitative article to critique (4-6 pages, dlb-spaced). The critique will be due in class on **February 12**. In your critiques, please consider the following as a template for your critique:

1. Is the problem clearly stated;
2. Does the review of the literature adequately address the topic;
3. Is the particular methodology appropriate;
4. Are key variables described;
5. Are the results clearly presented;
6. Are conclusions drawn substantiated by the results; and
7. Are policy implications addressed
In addition to the above questions, please consider including in your article critiques, suggestions for improving the study (i.e. alternative use of variables, different methodological procedures, etc…)

**Chapter Exercises**

Course assignments will consist of exercise problems, primarily from the Pollock book. These will be due during the class session that they are assigned for.

**Midterm Assessment**

You will be given a midterm assessment after parts one and two of the course. This will take place during the class session of **March 18**.

**Paper Drafts**

In an effort to ensure that you progress on your final paper in a timely manner, drafts of sections of the paper will be due throughout the semester, beginning with a two-page policy paper proposal due on **March 4**. A draft of your literature review will be due on **April 8**. Finally a draft of your methodology section will be due on **April 22**.

**Final Presentation**

Final papers will be presented to the class (conference style) using power point slides and orally peer-reviewed by the class during the last two weeks of the semester. Presentations should be no longer than 12 minutes. Presentations should include at the very least, the following slides:

- Introduction
- Literature Review
- Methodology
- Results
- Conclusions and Implications

**Final Paper**

Final papers (12-15 pages, dbl-spaced) will be due on the Wednesday of finals week. A two-page prospectus that outlines your final paper topic is due on week 6. I encourage you to discuss your paper topic with me prior to week 6. Drafts of sections of the paper will be due throughout the semester. In addition, you will be required to include at least **10** references that help contextualize your topic within the existing body of literature.

For your final paper, you will be required to make use of an existing data set. From this data set you will select a dependent variable to analyze. The dependent variable you choose, along with a set of independent variables from the same data source will form the basis for all of your quantitative analysis. Most of you will use the data sets that come with the Pollock book. You also have the option of utilizing an external data set of your choosing, assuming you have access to such data set. If you decide to do this, please let me know as soon as possible.
Required Texts


3. SPSS Base 15.0 (Graduate Pack): Applications Guide and CD-ROM - must be purchased at CSUS Bookstore in computer department.

4. Additional readings will be distributed and assigned throughout the semester

Outline of Topics and Assignments

PART 1: CONCEPTUALIZING AND DESIGNING QUANTITATIVE RESEARCH

- **January 29**
  ASSIGNMENTS:
  - Introduction and course overview
  - Designing sound quantitative research
  - Identify and discuss possible research topics

REQUIRED READINGS:

*Please note that when you go to the website, the title of the report link is slightly different that the actual title of the report. The report link will read, “California Community College Transfer Rates…”.

- **February 5 (no class)**

- **February 12**
  REQUIRED READINGS:
  Article can be accessed online at: [http://muse.jhu.edu/journals/review_of_higher_education/v027/27.3astin.html](http://muse.jhu.edu/journals/review_of_higher_education/v027/27.3astin.html)

  ASSIGNMENTS:
  - Article Critique Due (4-6 page double-spaced)
  - Using secondary data sets
-Learning SPSS

- **February 19**
  - REQUIRED READINGS:
    - Pollock, Introduction
    - Pollock, chp1- Introduction to SPSS
    - Pollock, chp2- Description statistics

  - ASSIGNMENTS:
    - Pollock, chp2 exercise due.

**PART 2: DESCRIPTIVE ANALYSIS**

- **February 26**
  - REQUIRED READINGS:
    - Pollock, chp3- Making Comparisons
    - Pollock, chp4- Transforming variables in NES2000.sav

  - ASSIGNMENTS:
    - Pollock, chp3 exercise due
    - Pollock, chp4 exercise due

- **March 4**
  - REQUIRED READINGS:
    - Pollock, chp5- Making controlled comparisons
    - Pollock, chp6- Making Inferences about sample means

  - ASSIGNMENTS:
    - Pollock, chp5 exercises due.
    - In-class assignment; Pollock exercise chp6.
    - 2 page typed POLICY RESEARCH PROPOSAL DUE.

- **March 11**
  - REQUIRED READINGS:
    - Pollock, chp7- Chi-square and measures of association
    - Review Pollock chp1-7 for midterm

  - ASSIGNMENTS:
    - In-class assignment; Pollock exercise chp7.

- **March 18**
  - REQUIRED READINGS:
    - Allison, chp1- What is multiple regression?

  - ASSIGNMENTS:
    - MIDTERM ASSESSMENT!
PART 3: REGRESSION ANALYSIS

- **March 25**
  REQUIRED READINGS:
  Pollock, chp8- Correlation and Linear Regression
  Allison, chp2- How do I interpret multiple regression results?
  Allison, chp3- What can go wrong with multiple regression?
  Allison, chp4- How do I run a multiple regression?

  ASSIGNMENTS:
  - In-class assignment; Pollock exercise chp8.

- **April 1 (Spring Recess, NO CLASS!)**

- **April 8**
  REQUIRED READINGS:
  Pollock, chp9- Dummy Variables and interaction effects
  Allison, chp5- How does bivariate regression work?
  Allison, chp6- What are the assumptions of multiple regression?

  ASSIGNMENTS:
  - In-class assignment; Pollock exercise chp9.
  - **Draft of Literature Review Due**

- **April 15**
  REQUIRED READINGS:
  Pollock, chp 10- Logistic Regression
  Allison, chp7- What can be done about multicollinearity?

  ASSIGNMENTS:
  - Pollock exercise chp10 due

- **April 22**
  REQUIRED READINGS:
  Allison, chp8- How can multiple regression handle nonlinear relationships?
  Allison, chp9- How is multiple regression related to other statistical techniques

  ASSIGNMENTS:
  - **Draft of Methodology Section Due**

- **April 29**
  REQUIRED READINGS:
  Independent research reading for final papers

  - We will not meet formally as a class this week. Instead you will be required to meet with me individually to discuss the progress of your statistical analysis for
your final papers.

- **May 6**
  Final student presentations

- **May 13**
  Final student presentations

*FINAL PAPERS DUE MONDAY MAY 20 IN MY OFFICE BY 6PM!*