Course Description: The course will provide an introduction to graduate-level econometrics. We will discuss the classical linear regression model, estimation, hypothesis testing, and prediction. We will also cover more advanced topics such as panel data, simultaneous equations, time-series methods, and qualitative-dependent variables.

Course Prerequisites: Calculus, Basic Statistics, Intermediate Micro and Macro Theory.

Primary Texts:
Basic Econometrics by Damodar N. Gujarati and Dawn C. Porter (5th edition)
A Guide to Econometrics by Peter Kennedy (6th edition)

Course Objectives:
The primary objective of this course is to teach you how to apply econometrics in your own research. To do this we will need to cover some econometric theory, but the focus is definitely on the application of econometrics. We will work extensively with real data sets and the econometric issues that arise in applied research.

Course Requirements:

- **Computer Software Package.** We will use STATA extensively throughout the course.
- **Examinations.** There will be two exams – a midterm exam and a comprehensive final.
- **Problem Sets.** There will be a total of five problem sets, which will be made available on our class webpage. The due date will be clearly printed at the top of each assignment. No late assignments will be accepted. Collaborative work is encouraged; however, each student is required to turn in an independently composed set of answers.
- **Research Project.** Each student is required to write a research paper and present the findings. Additional information about the research project will be made available on our class website.
**Grading:** Examinations and problem sets will be weighted as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 Problem Sets</td>
<td>100 pts</td>
<td>20%</td>
</tr>
<tr>
<td>Midterm Exam</td>
<td>100 pts</td>
<td>20%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>100 pts</td>
<td>20%</td>
</tr>
<tr>
<td>Research Project</td>
<td>200 pts</td>
<td>40%</td>
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<tr>
<td><strong>Total</strong></td>
<td>500 pts</td>
<td>100%</td>
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I am using the +/- grading method. A score of 90% or above guarantees an A- or better. A score of 80% or above guarantees a B- or better. I’m reluctant to give a letter grade of C or lower, but it is possible if you score below 80%.

**Attendance Policy:** Regular attendance is expected.

**Academic Dishonesty Policy:**
UNIREG 802, Revision 2, defines academic dishonesty as “an act attempted or performed which misrepresents one’s involvement in an academic task in any way, or permits another student to misrepresent the latter’s involvement by assisting the misrepresentation.” Academic dishonesty will not be tolerated in this class; any instances will be referred to the university’s established procedure for judging such cases, with severe penalties as found appropriate.

**Disclaimer:**
Subsequent changes may be made to any aspect or detail of this Syllabus if and when necessary. Any changes will be announced in class as soon as practical.

**Course Outline (tentative schedule; chapters are from Basic Econometrics):**

Single Equation Regression Models (Chapters 1-9)
- Two-variable regression model
- Classical assumptions
- Hypothesis testing
- Multiple regression analysis
- Dummy variables

**Midterm Exam**

Relaxing the Classical Assumptions (Chapters 10-13)
- Multicollinearity
- Heteroscedasticity
- Autocorrelation
- Model specification

Panel Data (Chapter 14)
Qualitative Response Regression Models (Chapter 15)
Simultaneous Equation Models (Chapters 18-20)
Time Series Methods (Chapters 21-22)

**Final Exam**