Courses Description:
This course is a doctoral level research seminar primarily focusing on methods for analyzing categorical and event history data, and continuous time series data. The focus of this course is different methods that can be utilized to analyze even histories and their applications in social sciences. Event history analysis has applications in economics, management, marketing, political science, sociology and many other areas. The goal of this course is for students to learn powerful methodological tools that they can apply to their own research. For each topic students will be assigned core readings and, when appropriate, data to apply the methods that they learn. Students are required to bring laptops with Stata to each class.

Required Text:

Stata is required. Please contact Rutgers Business School computing services and also check software.rutgers.edu.

Course Requirements:
Students are expected to read weekly readings and come to class prepared to discuss and debate the material. Absences and unpreparedness are not acceptable since class discussion is an integral part of this course. Students will be assigned several exercises during the semester that will be an application of the methods being covered. Students will also be required to complete an empirical research paper that addresses a research question of their choice.

Assignments: 20%
Participation: 20%
Research Paper: 60%

Assignments and Participation
Half of the assignment grade will be based on assigned article summaries. Each student is expected to summarize on one page (single spaced, Times new roman 12 font) the article he/she is assigned. The student is responsible to bring copies of the one page summary for everyone in the class, including the professor. The student is going to lead the discussion of the article in class, and he/she should be ready to answer any questions from the professor and other students. The remaining portion of the assignment grade will be based on the exercises that will be assigned in class and the students are expected to bring one hard copy of their results to the following class.

Research Paper
Each student will write a research proposal for a study that uses the methods learned in this class. The student will present his/her proposal in the last two weeks of classes. Completed papers are due a week after the course ends. Please use grammarly to check for errors before submitting the paper.
Class Schedule:

**Jan 22 - Class #1 Introduction**
- Event coding, Dummy variables, Interpretation, Basics of Event Data Modeling

**Jan 29 - Class #2 DISCRETE TIME: models for single destinations.**

Methods:
- BGR Chapters 1-2

Application:

**Feb 5 - Class #3 DISCRETE TIME: models for multiple destinations.**

Methods:

Application:

**Feb 12 - Class #4 CONTINUOUS TIME: Descriptive methods and distribution tests.**

Methods:
- BGR Chapters 3, 8
Application:


Feb 19 - Class #5 CONTINUOUS TIME: Exponential and piecewise exponential.

Methods:

- BGR Chapters 4, 5

Application:


Feb 26 - Class #6 CONTINUOUS TIME: Time-varying covariates.

Methods:

- BGR Chapter 6

Application:


March 5 - Class #7 Parametric Models of Time Dependence

Methods:

- BGR, Chapter 7

Application:

March 19 - Class #8 Cox model.

Methods:
- BGR Chapter 9

Application:

March 26 - Class #9 Shared frailty, Repeated Events

Application:

April 2 - Class #10 Diffusion Models

Application:

**Apr 9 - Class #11** Market Entry Models

**Application:**

**Apr 16 - Class #12** Problems of Model Specification  
**Class #13** Event Study Models

**Method:**
- BGR Chapter 10

**Application:**

**Apr 19 – Class #14** Negative Binomial Models

**Applications:**

Apr 30 - Paper Proposal Presentations

May 7 – TERM PAPER SUBMISSION