CRIM 7716
Multivariate Analysis II
Spring 2016

Class Information:
Meeting Time: Thursday 5.30-8.00
Location: Churchill Hall 418
Instructor: Professor Jacob Stowell, Ph.D.

Contact Information:
Office: Churchill Hall 429
Office Phone: 617.373.4246
Google Voice: 415.685.3269
Email: j.stowell@neu.edu
Office Hours: 11:00-12:30 Monday and Thursday, and by appointment

Required Texts:

Recommended Supplements:

Additional Readings:
Throughout the semester, a number of research articles on these topics will also be assigned. Electronic copies of these articles will be made available to you through Blackboard.

Course Description
In this course we will build on the material covered in Multivariate I. Although linear regression techniques provide the foundation for social scientific research, often times scholars are not able to estimate OLS models in an effort to address a particular research question. For reasons to be covered in class, alternative regression estimation techniques are better suited for a given research project. The methodologies to be discussed will focus on situations for which the dependent variable of interest prevents the use of a standard linear regression multivariate approach.
Course Objectives
1. Provide students with exposure to a number of multivariate analytical techniques that are used when it is not appropriate to rely on OLS estimations. This will include thorough discussion of the strengths of said methodologies as well as their limitations.

2. Continue to strengthen analytical and data management skills that will be applied in future research projects.

3. Extend familiarity and comfort with Stata, which will be used while enrolled in this program and in the students' professional careers.

Course Requirements
You must attend class each week, complete and return all assignments, and take all quizzes. There will not be any opportunities for extra credit. This syllabus and other class materials are available in alternative format upon request.

Note that students are expected to complete the assigned readings prior to the scheduled class meeting. Should you fall behind in the reading and/or assignments it will be difficult to catch up, and your grades on the assignments will likely suffer. I also recognize that much of this may be new and not intuitive. Please don't let yourself fall behind. If you find yourself in need of additional explanation or guidance (with the lecture material or the computer assignments), please come see me during office hours or make an appointment.

Course Grading
Your grade for the course will be based on your performance in three areas:

1. **Take-home assignments (25%)**:
   You will be given several assignments throughout the semester that you must complete outside of class. These will involve using Stata to conduct and interpret the statistical analysis that we are learning in class. You are free to discuss the assignments with fellow students, but the work you turn in must be your own.

2. **In-class quizzes (25%)**:
   Throughout the semester we will have a number of quizzes administered in class. They will be based on the readings and class discussion. The dates of the quizzes will be announced in class a week in advance and on Blackboard. The dates are to be determined based on the pace of the course.

3. **Term paper (50%)**:
   Similar to last semester, each student is required to submit a term paper on any topic that interests you within the field of criminology and criminal justice. You will choose the topic of the paper, but it must be approved by me no later than March 17th (including a discussion of the analytical strategy). The paper must be of graduate student quality, double-spaced, and formatted in accordance with the standards of a major social science
journal (e.g. Criminology, JRCD, JQ, SP, etc). The analyses conducted for this paper will need to be based on one or more of the statistical techniques covered during the semester. A more detailed explanation of paper requirements will be provided in class and on Blackboard.

Preliminary Course Schedule:

<table>
<thead>
<tr>
<th>Date:Topic</th>
<th>Reading</th>
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<tbody>
<tr>
<td>01/21/16 Direct, Indirect, and Spurious Effects</td>
<td>Gordon Ch. 10</td>
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<tr>
<td>01/28/16 General Introduction to Alternate Regression Techniques</td>
<td>Long/ Freese</td>
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<tr>
<td>02/04/16 Estimation, Testing, Fit and Interpretation</td>
<td>1,2</td>
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<tr>
<td>02/11/16 Regression for Binary Outcomes</td>
<td>3</td>
</tr>
<tr>
<td>02/18/16 Regression for Binary Outcomes (cont.)</td>
<td>4</td>
</tr>
<tr>
<td>02/25/16 Regression for Ordinal Outcomes</td>
<td>4</td>
</tr>
<tr>
<td>03/03/16 Regression for Nominal Outcomes</td>
<td>5</td>
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<tr>
<td>03/10/16 No Class-- Spring Break</td>
<td>6</td>
</tr>
<tr>
<td>03/17/16 Regression for Nominal Outcomes (cont.)</td>
<td>6</td>
</tr>
<tr>
<td>03/24/16 Regression for Count Outcomes</td>
<td>7</td>
</tr>
<tr>
<td>03/31/16 Regression for Count Outcomes (cont.)</td>
<td>7</td>
</tr>
<tr>
<td>04/07/16 Additional/Special Topics</td>
<td>8</td>
</tr>
<tr>
<td>04/14/16 Research Presentations</td>
<td>6</td>
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<tr>
<td>04/25/16 Term Papers Due</td>
<td>6</td>
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The final course grades are based on the following scale:

- A    =  93-100%
- A-   =  90-92%
- B+   =  87-89%
- B    =  83-86%
- B-   =  80-82%
- C+   =  77-79%
- C    =  73-76%
- F    =  <73%

Academic Dishonesty:

Students are expected to do their own work in this class. Students found cheating (or plagiarizing) on any assignment will receive a “0” for that assignment. I will also report such cases to the appropriate University office for investigation. Below is a link to the University’s official policy on academic dishonesty:

http://www.northeastern.edu/gradhandbook/

Please note that I will try to follow this syllabus as closely as possible. However, the subjects covered and course policies are subject to change at the discretion of the instructor. Changes to
the syllabus will be announced in class and on Blackboard.