UP 116: Analytical Planning Research Methods
Spring 2006
Section A

Department of Urban and Regional Planning
College of Fine and Applied Arts
University of Illinois at Urbana-Champaign

Class Meetings: Lectures: Tuesday and Thursday, 9:00 am-10:20 am
Room 225 Temple Buell Hall

Instructor: Todd BenDor, PhD Candidate
Department of Urban and Regional Planning
111 Temple Buell Hall

Office Hours: Tuesday, 10:30 am – 11:30 am
Thursday, 10:30 am – 11:30 am
Room 20, Temple Buell Hall
(Please knock on door, if locked)
By appointment

Email: bendor@uiuc.edu

Teaching Assistant: Peter McAvoy
pmcavoy2@uiuc.edu

Program Staff: Glenda Fisher, Program Secretary
Jane Terry, Admissions and Records Officer
111 Temple Buell Hall
Monday – Friday 8:30 am - 12:00 pm and 1:00 pm - 5:00 pm
Phone: 333-3890
Fax: 244-1717

Course Description:

UP 116 is intended to introduce students to the basic methods and concepts used in the analysis of social data. Specifically, this course covers descriptive statistics and inferential statistics, including hypothesis testing and multiple regression analysis. These tools provide the foundation for advanced statistical methods (as encountered in UP 316). This course also introduces students to the Microsoft EXCEL software program.

Classes will be held in a lecture/discussion format twice a week and labs and help sessions will be organized as needed. In addition to attending class on a regular basis, taking an active role in class discussions and being prepared for class, students will be required to complete a project, three exams and several homework assignments.
Textbook:

There is one required textbook available at the bookstore:

Course Information and Policies:

**Exams:** You may use a calculator and a formula sheet for each of the three exams. Absents during exams will only be excused for illness, and will require a doctor’s note. Missed exams will then need to be taken during office hours.

**Labs:** We will schedule labs as needed throughout the semester during regular class time. Labs will provide the opportunity to work on problems using statistical procedures available in Microsoft Excel.

**Homework:** Individual practice is critical to learning quantitative methods. For this reason, homework assignments will be assigned throughout the semester. *Please bring both your textbook to every class, as we will work on problems out of the text during many classes.* Late homeworks will be penalized 5% per day. Homework more than a week late will not be accepted.

**Project:** A project will be assigned later in the semester. It is intended to expose students to the collection and statistical analysis of data to solve real problems. Students will work in groups of 4-5.

**Disabilities:** Students with disabilities that may affect their learning need to alert instructors during the first two weeks of the class. Accommodations will be made for these individuals.

**Grading:**

Grades will be assigned as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Homework Assignments</td>
<td>15%</td>
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<tr>
<td>Class Participation</td>
<td>5%</td>
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<tr>
<td>Exam I</td>
<td>20%</td>
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<tr>
<td>Exam II</td>
<td>20%</td>
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<tr>
<td>Exam III</td>
<td>20%</td>
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<tr>
<td>Project: Regression Analysis</td>
<td>20%</td>
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**Course Schedule:**

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<thead>
<tr>
<th>Week 1</th>
<th>Jan. 17</th>
<th>Introduction</th>
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<tbody>
<tr>
<td></td>
<td>Jan. 19</td>
<td>Chapter 1: How We Reason</td>
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<tr>
<th>Week 2</th>
<th>Jan. 24</th>
<th>Chapter 2: Levels of Measurement</th>
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<tr>
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<td>Jan. 26</td>
<td>Chapter 3: Defining Variables</td>
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Week 3  Jan. 31  Chapter 4: Measuring Central Tendency  
Feb. 2  Chapter 5: Measuring Dispersion  

Week 4  Feb. 7  Chapter 6: Contingency Tables  
Feb. 9  Exam I Review  

Week 5  Feb. 14  Exam I  
Feb. 16  Chapter 7: Tests of Significance  

Week 6  Feb. 21  Lab: Introduction to EXCEL  
Feb. 23  Tests of Significance  

Week 7  Feb. 28  Tests of Significance  
March 2  Chapter 8: One-Sample z and t Tests  

Week 8  March 7  Lab: One-Sample z and t Tests  
March 9  Chapter 9: Two Sample t Tests  

Week 9  March 14  Two Sample t Tests  
March 16  Chapter 12: Chi Square Tests  

Week 10  March 18 - March 26  Spring Break  

Week 11  March 28  Chi Square Tests  
March 30  Exam II Review  

Week 12  April 4  Exam II  
April 6  Chapter 10: ANOVA  

Week 13  April 11  Lab: ANOVA  
April 13  Chapter 13: Correlation and Regression Analysis  

Week 14  April 18  Lab: Correlation and Regression Analysis  
April 20  Chapter 14: Regression Analysis  

Week 15  April 25  Regression Analysis  
April 27  Group Project Presentations  

Week 16  May 2  Group Project Presentations  
TBA  Exam III Review  

Exam III:  Friday, May 5, 7:00-10:00 PM (may change)