Statistical Analysis in Political Science I  
GOV 391J  
Unique Number 38975  
Fall 2012  
TuTh 11:00 am to 12:30 pm  
BAT 1.104

Professor

Dr. Tasha S. Philpot  
tphilpot@austin.utexas.edu  
4.140 Batts Hall  
512-232-3681  
Office Hours: Tuesdays 1:30 pm to 4:30 pm

Description

This course is an introduction to statistics, probability, and data analysis. Topics include properties of data, probability and sampling distributions, confidence intervals, and significance tests. The course is meant to provide a solid foundation for understanding the basics in quantitative analysis but is not meant for students interested in continuing the graduate quantitative methods sequence in Government.

While the reading load for the course is not high in terms of the number of pages, students are expected to come to class prepared, having done the readings in advance and ready to ask questions on any topics they have trouble understanding. This course covers a large amount of material in a short amount of time. Therefore, it is especially important that students keep up with the material and readings and speak with the professor if they have any questions or concerns.

Prerequisites

Graduate standing and consent of the graduate advisor.

Required Text Books

There is one required text book for this course which is available at the University Co-op.


Supplementary Readings

Readings not found in the required textbook can be accessed through Blackboard (courses.utexas.edu).
Grading

Your grade in this course will be determined by your performance on weekly problem sets and two in-class exams. Problem sets, which will be posted to Blackboard each week by Wednesday evening, will be due the following Tuesday at the beginning of class. There will also be a midterm and final exam. Although the final exam is not cumulative, it will build upon concepts taught during the first half of the course. The date of the midterm exam will be determined by how quickly we get through the first half of the class material and will be held in class. The final exam will be held on our last class date. Students are encouraged to work in groups on problem sets and in studying for exams, but all work should be written up individually. Assignments will only be accepted as hard copies and should never be emailed to the professor without explicit prior approval. Late assignments will not be accepted. The weight of each assignment in determining your final grade is as follows:

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exam 1 (TBD)</td>
<td>30%</td>
</tr>
<tr>
<td>Exam 2 (December 7)</td>
<td>30%</td>
</tr>
<tr>
<td>Problem Sets</td>
<td>40%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>93-100</td>
</tr>
<tr>
<td>A-</td>
<td>90-92</td>
</tr>
<tr>
<td>B+</td>
<td>87-89</td>
</tr>
<tr>
<td>B</td>
<td>83-86</td>
</tr>
<tr>
<td>B-</td>
<td>80-82</td>
</tr>
<tr>
<td>C+</td>
<td>77-79</td>
</tr>
<tr>
<td>C</td>
<td>73-76</td>
</tr>
<tr>
<td>C-</td>
<td>70-72</td>
</tr>
<tr>
<td>D</td>
<td>60-69</td>
</tr>
<tr>
<td>F</td>
<td>0-59</td>
</tr>
</tbody>
</table>

Academic Dishonesty

According to the Institutional Rules, scholastic dishonesty includes, but is not limited to, cheating, plagiarism, collusion, and falsifying academic records. In the event that a student violates the University policy on scholastic dishonesty, he or she will be subject to disciplinary penalties, including the possibility of failure in the course and/or dismissal from the University. Since such dishonesty harms the individual, all students, and the integrity of the University, policies on scholastic dishonesty will be strictly enforced. For further information, please visit the Student Judicial Services web site at www.utexas.edu/depts/dos/sjs/.

Students with Disabilities

Students with disabilities may request appropriate academic accommodations from the Division of Diversity and Community Engagement, Services for Students with Disabilities, 471-6259, http://www.utexas.edu/diversity/ddce/ssd/.

Religious Holy Day Observance

By UT Austin policy, you must notify me of your pending absence at least fourteen days prior to the date of observance of a religious holy day. If you must miss a class, an examination, a work assignment, or a project in order to observe a religious holy day, you will be given an opportunity to complete the missed work within a reasonable time after the absence.
Emergency Evacuation Policy

In the event of a fire or other emergency, it may be necessary to evacuate a building rapidly. Upon the activation of a fire alarm or the announcement of an emergency in a university building, all occupants of the building are required to evacuate and assemble outside. Once evacuated, no one may re-enter the building without instruction to do so from the Austin Fire Department, University of Texas at Austin Police Department, or Fire Prevention Services office. Students should familiarize themselves with all the exit doors of each room and building they occupy at the university, and should remember that the nearest exit routes may not be the same as the way they typically enter buildings. Students requiring assistance in evacuation shall inform their instructors in writing during the first week of class. Faculty members must then provide this information to the Fire Prevention Services office by fax (512-232-2759), with "Attn. Mr. Roosevelt Easley" written in the subject line. Information regarding emergency evacuation routes and emergency procedures can be found at http://www.utexas.edu/emergency.

Outline of Course Topics and Readings

I. Introduction

Salkind, Part I


II. Measures of Central Tendency

Salkind, Chapter 2


III. Variability

Salkind, Chapter 3

IV. Graphing Data

Salkind, Chapter 4

V. Correlation Coefficients

Salkind, Chapter 5

**VI. Reliability and Validity**

Salkind, Chapter 6


**VII. Hypothesis Testing**

Salkind, Chapter 7


**MIDTERM**

**VIII. Probability**

Salkind, Chapter 8


**IX. Significance Testing**

Salkind, Chapter 9

**X. Independent Sample Z-test**

Salkind, Chapter 10


**XI. t-Tests**

Salkind, Chapters 11-12

**XII. Analysis of Variance**

Salkind, Chapters 13-14


**XIII. Testing Relationships Using Correlation Coefficients**

Salkind, Chapter 15


**XIV. Linear Regression**

Salkind, Chapter 16


**XV. Nonparametric Tests**

Salkind, Chapter 17


**XVI. Conclusion and Wrap-up**

Salkind, Chapter 17


**FINAL EXAM**