Psychology 2101: Statistics and Research Methods

Fall 1988

Charles M. Judd
Muenzinger E318
x2-7492
Office Hours: Monday 9:00-10:30

Lectures: Tues. and Thurs. 12:30-1:45 E417

Labs: L 410 8-9:50 Tues. D346
      L 411 3-4:50 Wed. D144
      L 412 10-11:50 Thurs. D156

General purposes of the course:
1) To facilitate critical evaluations of claims to truth made by social scientists or in everyday life
2) To facilitate intellectual access to journals and books in the social sciences
3) To provide an introduction to the conducting and reporting of social science research

Course requirements:
1) Homework assignments and quizzes in the laboratory. Weekly homework assignments will be given. Quizzes will take place every two to three weeks. Grades on the assignments and quizzes will be combined to yield an overall laboratory grade.

2) Two hourly exams. The first one will be on Oct. 3; the second will be on Nov. 17.

3) Final exam during the exam period, covering the entire semester.

Derivation of final grade:

Laboratory grade: 20%
First hourly exam: 20%
Second hourly exam: 20%
Final exam: 40%

Required readings:
The basic text for the course is:


The workbook associated with this text will be used in the laboratories and in homework assignments:


For the first couple of weeks of the course, there will be required readings taken from:

<table>
<thead>
<tr>
<th>Date Range</th>
<th>Topic</th>
<th>Readings</th>
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<tbody>
<tr>
<td>Sept. 1</td>
<td>Introduction</td>
<td>Kidder &amp; Judd, Chapters 1-2</td>
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<tr>
<td>Sept. 6-13</td>
<td>What is a scientific approach to human behavior? Validity and reliability: How do we measure what we want to measure? Research design: What designs are good for what purposes?</td>
<td>Kidder &amp; Judd, Chapters 13  Welkowitz, Chapters 1-7</td>
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<tr>
<td>Sept. 15-27</td>
<td>Describing data: Measures of location, central tendency, spread, and transformations.</td>
<td>Welkowitz, Chapters 1-7</td>
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<td>Sept. 29-Oct. 11</td>
<td>The nature of statistical inference: Probability and the normal curve. Inferences about the mean of a population.</td>
<td>Welkowitz, Chapters 8-10</td>
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<td>Oct. 13</td>
<td>First hourly exam</td>
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<td>Oct. 18-20</td>
<td>Inferences about the means of two populations.</td>
<td>Welkowitz, Chapter 11</td>
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<td>Oct. 25-Nov. 3</td>
<td>Assessing relationships between variables.</td>
<td>Welkowitz, Chapters 12-13</td>
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<td>Nov. 8-Nov. 15</td>
<td>Assessing the power of our research.</td>
<td>Welkowitz, Chapter 14</td>
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<td>Nov. 17</td>
<td>Second hourly exam</td>
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<td>Nov. 22-Dec. 8</td>
<td>Assessing whether multiple groups differ: Analysis of variance.</td>
<td>Welkowitz, Chapters 15-16</td>
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