**HUD 4120 001**  
**Methods of Empirical Research**

Spring 2001  
Monday 5:10-6:50, Grace Dodge Hall 449  
Instructor: Lawrence T. DeCarlo  
Office: Grace Dodge 453e  
Office hours: Mon. 3-5, Tues., 1-3, and by appointment  
Phone: 212-678-4037  
Email: decarlo@exchange.tc.columbia.edu  
Website: [http://www.columbia.edu/~ld208/](http://www.columbia.edu/~ld208/)

Text:  
William Wiersma  
Boston, MA: Allyn and Bacon

Also see:  
*Foundations of behavioral research*, 3rd ed. (1986)  
Fred N. Kerlinger  
New York: Holt, Rinehart, and Winston

**Objectives**  
An introduction to research methods in psychology and education. Issues and applications will be discussed, with examples from psychology, education, and medicine.

**Schedule of Topics**  
Science and research  
Constructs, variables, scales  
Problems and hypotheses  
Basics of research design  
sampling and randomization  
Descriptive and inferential statistics  
regression and analysis of variance  
Measurement  
reliability and validity  
Factor analysis, structural equations  
model diagrams  
Experimental research  
Quasi-experimental research  
Research designs  
random, stratified, clustered  
Survey research  
questionnaires, rating scales  
Qualitative research
Readings

Chapters in Wiersma corresponding to the topics shown above are given below.

Course Outline

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<th>Chapters</th>
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<tr>
<td>1/29</td>
<td>Constructs, variables, scales</td>
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<td>2/5</td>
<td>Formulation of research problem, hypotheses</td>
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<td>Research design</td>
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<td>2/19</td>
<td>Descriptive &amp; inferential statistics</td>
<td>13,14</td>
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<td>Models, diagrams, and research</td>
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<td><strong>Midterm exam</strong></td>
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<td><strong>Final exam</strong></td>
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Grading

Grades will be based on a midterm and final. Students are responsible for attending lectures and taking tests on the scheduled dates. There are no make up exams, you are responsible for taking the test on the scheduled date. I will be reasonable with respect to legitimate difficulties that might cause you to miss an exam, but you must make arrangements with me before the date of the exam.