

## **PSYCHOLOGY 316: APPLIED RESEARCH METHODS (Fall 2007)**

**Instructor:** Dr. Robert Patterson

**Office Hours:** (JT 314) 12:00-1:00 Tue & Thurs or by appt.

**Texts:** (1) Solso & Johnson (required); (2) Frazier (optional)

This course provides information about the design and analysis of applied research in psychology. The goal of this course is to assist individuals in becoming informed consumers of behavioral research and in being able to critically analyze claims made about human behavior. In meeting this goal, students will learn about scientific methods and inference while analyzing studies from various fields in psychology, including pseudoscience (e.g., astrology).

There are four parts to this course. The first part covers experimental design, while the second part discusses inferential statistics. The third part covers a case study as an example, and the fourth part involves student presentations of group projects.

Group projects will involve both a class presentation and a written paper. For group projects, groups select a controversial topic currently in media or of keen interest (e.g., does violence in the media make children more violent?). Topics derived from pseudo-science areas or paranormal occurrences (e.g., ESP) are encouraged. Students should read books and research reports on the topic and attempt to interview local experts (e.g., university professor). In the paper and presentation, discuss main topic, goals, and your methods of inquiry. Analyze the evidence or data supporting one or the other side of the controversy. Cite at least seven sources and read at least one report from each source. Use your new knowledge about research design and statistics to discuss the strengths and weaknesses of the studies reviewed, and comment on the credibility of the original claim. Presentations will be graded on clarity of analysis, logic of analysis, and speaking effectiveness. Papers will be graded on clarity of analysis, logic of analysis, and writing quality.

For sources of topics:

Print journals: Skeptical Inquirer, Journal of Parapsychology, Research in Parapsychology, Journal of the American Society for Psychical Research.

Internet: Rhine Research Center ([www.rhine.org](http://www.rhine.org));  
Consciousness Research Laboratory ([www.psiresearch.org](http://www.psiresearch.org));  
Cognitive Sciences Laboratory ([www.lfr.org/csl/index.html](http://www.lfr.org/csl/index.html));  
Society for Scientific Exploration ([www.jse.com](http://www.jse.com));  
Princeton Engineering Anomalies Research ([www.princeton.edu/~rdnelson/pear.html](http://www.princeton.edu/~rdnelson/pear.html));  
International Consciousness Research Laboratories ([www.icrl.org](http://www.icrl.org));  
Center for Biogenetic Structuralism ([www.carleton.ca/~claughli/biogen.htm](http://www.carleton.ca/~claughli/biogen.htm));  
Enigma Project ([www.research.umbc.edu/~frizzell/tep.html](http://www.research.umbc.edu/~frizzell/tep.html));  
Erickson Paranormal Research Foundation ([www.paranormal.simplenet.com](http://www.paranormal.simplenet.com));  
Sussex Paranormal Research Group ([www.netcomuk.co.uk/~uther/sprg/contents.htm](http://www.netcomuk.co.uk/~uther/sprg/contents.htm));

Course content comes from text, lectures, outside reading and demonstrations. Grades will be determined by performance on two tests (25 points each), a class presentation (25 points), and a major paper (25 points). Grading: 91-100 points = A, 81-90 points = B, 71-80 points = C, 61-70 points = D, 60 points and below = F. Reasonable accommodations are available for persons with a documented disability; see instructor for details. Make up exams given for excused absences only (e.g., sickness).

| <b><u>TOPIC</u></b>      | <b><u>READINGS</u></b> | <b><u>DATES</u></b> |
|--------------------------|------------------------|---------------------|
| Intro to class           | S&J: Skim Chs 1, 3     | Aug 21              |
| Intro to Research Design | S&J: Ch 2              | Aug 23              |
| Research Design          | S&J: Chs 4, 5, & 7     | Aug 28-Sept 6       |
| <b>TEST 1</b>            |                        | <b>Sept 11</b>      |
| Inferential statistics   | Lectures               | Sept 13-25          |
| Case Study               | Lectures               | Sept 27-Oct 9       |
| <b>TEST 2</b>            |                        | <b>Oct 11</b>       |
| Outline of Paper         | Lectures               | Oct 16-18           |
| Class Presentations      | Fraz: Chs 1-29         | Oct 23-Nov 29       |
| Extra Credit Video       |                        | Dec 4               |
| <b>Paper Due</b>         |                        | <b>Dec 6</b>        |