01:830:306:06 Spring 2014

Busch Psychology Building, Room 105

Thursday 12:00-3:00 PM

Contact information.

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Office hours: by appointment, Psychology 121

General Plan. The aim of this course is to provide hands-on experience and training in some of the methodologies, experimental designs, and analytical methods that are common in research in cognitive psychology. Most of the course will be devoted to running some simple in-class experiments, analyzing the data, and interpreting the results.

Upon successful completion of this course students will

- have a basic understanding of the methods and techniques related to research design
- be able to use basic statistics and statistical software to analyze data
- be able to interpret the results of the statistical analyses
- produce an APA-style empirical paper.

Goals. This course has been certified as satisfying four of the Writings and Communication Learning Outcome Goals (including WCR and WCD) of the SAS Core Curriculum. Specifically, students will be able to

a) Respond effectively to editorial feedback from peers, instructors, and/or supervisors through successive drafts and revision (WCR);

b) Communicate effectively in modes appropriate to a discipline or area of inquiry (WCD);

c) Evaluate and critically assess sources and use the conventions of attribution and citation correctly;

d) Analyze and synthesize information and ideas from multiple sources to generate new insights.

Handouts. There will be weekly handouts distributed in class. In addition, links to the handouts are available on this web site under resources

Schedule. The labs generally follow a two-week cycle. During the first week of each unit, students will act as subjects in an experiment. The TA will give some of the theoretical background and motivation of the week's experiment, and explain the experimental design. During the second week, the class will analyze and interpret the results. The TA will discuss the relevant statistical methods, both in general and as they apply to the results at hand.

The schedule of units is as follows (subject to modification):

Jan 30	Introduction to the course Lab 1: Why study cognition? Numerical estimation
Feb 6	Lab 2: Why study cognition? Numerical estimation
Feb 13	Lab 3: Categorization and typicality
Feb 20	Lab 4: Categorization and typicality
Feb 27	Lab 5: Mental rotation
March 6	Lab 6: Mental rotation
March 13	Lab 7: Category leaning
March 20	No class. Spring Break
March 27	Lab 8: Category leaning
April 3	Lab 9: Working memory
April 10	Lab 9: Working memory
April 17	Design final project, abstract, title Data collection for final projects
April 24	Data analysis for final projects
May 1	No Class. Turn in final projects by 5 pm May 4 (Sunday)

Attendance. Attendance is mandatory because so much of the class depends on the hands-on experience of running the experiments.

Assignments. *You will be given written assignments every 2 weeks. They should be handed in on time.*

Final project. *You will be asked to write a 10-14 page lab report devoted to the analysis of one of experiments done in class (instructor will choose the experiment).*

Grading. Each unit will include a writing assignment, usually a lab report (or part of a lab report) on the experiment conducted in class. The assignment will be explained in the handouts and discussed in class. You can get 10 points for each assignment. For the final project you can get 50 points.

90% -100% --- A

87% - 89% --- B+

80% - 86% --- B

77% - 79% --- C+

70% - 76% --- C

60% - 69% --- D

59% - 0% --- F

Plagiarism. All work that students turn in must be their own work. Student should not work collaboratively on lab report assignments without prior approval from the TA. Any outside sources (including help from other people) must be appropriately referenced in all written work. Turning in someone else's work as your own is completely unacceptable. Any student who plagiarizes will, at the very least, receive a failing grade for the course. More severe consequences (e.g., exclusion) are also possible.

Religious observances

Rutgers University's policy on accommodations for religious observances or holidays is available at the following site:

http://registrar.rutgers.edu/NB/ENROL-NB.HTM#religious