Sensation and Perception Online Lab

Spring 2016 - 01:830:302:91 Busch Psychology Building, Room 105 Wednesdays 10:20-11:00 AM

Instructor: Yelda Semizer

E-mail: <u>yelda.semizer@rutgers.edu</u> (Please contact me by email from your Rutgers University e-mail address.) **Office Hours:** Fridays 12:00(noon)-1:00 PM (or by appointment), Bush Psychology Building, Room 123. **Chat Room Hours (Required):** Wednesdays 10:20-11:00 AM in the Chat Room on Sakai. There will be two inclass meetings in weeks 2 and 9 of the semester during these hours in Room 105.

Course Description:

We will be doing various lab exercises that will give you hands on experience with the research methods and important findings in Cognition and in Sensation and Perception. These exercises will give you opportunity to experience some phenomena first hand, as well as the opportunity to generate and test some hypotheses of your own. You'll also be able to improve some basic skills in using software, analyzing data and communicating scientific findings. The schedule of each lab exercises and assignments will be announced as the semester progresses.

Learning Goals:

1. Develop scientific thinking skills, including how to form and test hypotheses and how to draw sound conclusions from results.

- 2. Demonstrate some well-known cognitive and perceptual phenomena by running lab exercises.
- 3. Learn-by-doing the main research methods of the field.
- 4. Learn how to analyze data and evaluate hypotheses.
- 5. Learn research communication skills.
- 6. Improve computer literacy.



This course has been certified as satisfying four of the Writing 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.

This laboratory class is meant to serve as a companion to the lecture class PSYCH-301. The conceptual and theoretical basis for the exercises and demonstrations are developed in lecture. For this reason, concurrent or past registration in PSYCH-301 is required.

Resources:

We will be using two main software packages: PsychoPy will be used to run the lab exercises. Excel or Google Sheets will be used to analyze the data. We'll spend the first in-class meeting to install these resources to your computers. If you want to complete exercises through the university resources, most of the computer labs on campus have these software packages installed. <u>https://oit-nb.rutgers.edu/labs</u>

The class has a Sakai website (<u>http://sakai.rutgers.edu</u>), where the latest course information is posted. Weekly lecture slides, videos, lab exercises, and other supplementary documents will be posted under the Resources tab. Weekly assignments will be posted under the Assignments2 tab. Revisions will also be accepted through the same tab. Grades will be posted on the Gradebook2 tab.

Class Requirements:

Weekly Activity and Assignments: We will be working on weekly lab exercises. The individual weekly assignments are designed so that you can learn the central concepts and skills of the course, including research methods, hypothesis formation and testing, analysis and presentation of results, and writing the elements of a lab report using the formats that are customary in research journals. Each week, you will be given slides covering the conceptual background for that week's exercise as well as the exercise file. You are expected to develop an understanding of the material in the slides and complete the exercise following the instructions. After each lab is completed (data collection and analysis), you will be given an assignment. Assignments will often consist of brief (1-2 page) reports on methods, raw data, data analysis (graphs, charts, statistical tests, etc.), results and conclusions. Assignments will be graded such that there will be opportunity for revisions and improvements.

Timetable and Deadlines: Completion of work and uploading to Sakai according to the specified timetable is required. You are responsible for all material, as well as completion of all assignments.

Getting Help: Options for getting help include the office hours or the chat room for the week's lab. I will monitor the chat room and reply according to a schedule to be announced. The chat room is also a good forum for you to answer each other's questions. Doing so will help your own understanding of the material.

Final Project: There will be a final capstone project, which will be based on an original lab exercise. The project, including the experimental design, collection and analyses of data and the written report (written in the style of journal articles in the field) gives you the opportunity to use the skills you have learned during the semester. Details of the project assignment will be described later in the semester. Project proposals must be approved by the instructor before beginning data collection.

Grades: Your final grade will be based on three things:

- 1. Attendance and active participation in the chat hours and forums (see Attendance and Active Participation Policy below) (10%)
- 2. Weekly activity and assignments (see Weekly Activity and Assignments Policy below)
- 3. Final project: An original project report completed during the last several days of class (90%)

Every assignment will count towards your grade.

Grades for this course will not be curved or scaled.

The criteria for grading your work will be:

- Effort and class participation in online chat room hours and forums
- Demonstration of progress in understanding and using software tools
- Clarity and format of graphs, tables and writing
- Demonstration of understanding basic perceptual concepts introduced in the labs

Class Policies:

Weekly Activity and Assignments Policy: Students who hand in the assignment on time and receive a failing grade will be given the option of handing in one revised version within one week of receipt of the graded assignment. The revised report will then be graded. *Revising an assignment does not guarantee a higher grade*. No revisions of a failed assignment will be accepted after this one-week delay, and no subsequent revisions will be accepted after the first revision, although I will be available to meet with you at any time to discuss the material and your performance. Students who did not hand in the original assignment on time will not be to given the option to revise their work.

The weekly assignments will be graded on pass/fail scale:

P+: Excellent workP: Good, passP-: Minor problems, needs improvementF: Fail, requires redo

Scores on these weekly assignments will be used to adjust the grade given on the final project. A half letter grade will be added for 3 P+'s accumulated during the semester. A half letter grade will be subtracted for 3 P-'s accumulated during the semester. If an F is not redone, it will also cause a half letter grade deduction.

3 P+'s: Add one-half letter gradeP: No points added or deducted3 P-'s: Deduct one-half letter gradeF: Deduct one-half letter grade if left uncorrected

<u>All laboratory assignments and reports must be completed by the individual student.</u> Collaborative reports will be given an F grade. Please see *Academic Dishonesty Policy* below. In addition, your assignments will be checked using **Turnitin**, a software that checks originality of your assignments by comparing it to content on the Web, articles, books, and assignments of previous students of this class.

Final Project Policy: The final project is the writing of a full laboratory report based on an original experiment carried out in class during the final weeks of the semester. These reports will be given a letter grade (A, B+, B, C+, C, D, F).

Final project reports will be evaluated and graded based on all essential elements, including the soundness of the hypothesis, the methods and procedures used (including how many trials were run), the analysis and presentation of the results, the quality of the introduction and discussion, the quality of the paper, including adherence to conventions of journal-style articles and the clarity of the writing. Ample time will be provided to complete the projects. Unlike the small assignments, there won't be opportunity for revision. A detailed grading rubric and a summary of the stylistic conventions of journal-style articles will be posted on the course Sakai site.

Attendance and Active Participation Policy: Attendance is crucial for this course. Each week you will be required to attend class, either in person during weeks 2 and 9 of the semester or online. Attendance will be taken based on chat room logs. So you need to check in by stating that you are online to get credit. Absences will result in a penalty on your final grade. Read the slides and assignment instructions for the week before the weekly meeting. You are also expected to participate during the online meetings beyond simply getting credit for being there. This includes, but is not limited to, asking questions about the slides and/or the assignment for the week, as well as any technical questions you may have. Don't hold back on asking questions in the chat room! If you have a question, chances are someone else has that same question.

Computers:

Lab exercises require computers that run either Windows or Macintosh operating systems. Lab software is not compatible with operating systems used on devices that use iOS, Android, or other mobile operating systems (notebooks, tablets, or iPads). If you choose to run the exercises in a university computer lab, please see https://oit-nb.rutgers.edu/service/computer-labs-0 for a list of university computer lab locations. Be sure to bring a thumbdrive so that you can keep copies of your work. In addition, some of the exercises may require use of headphones.

Some Important Rules:

No electronic recording (audio, video, photos) of class materials is allowed. No online posting of class material is allowed other than as approved by the instructor.

Data Collection:

In this course we are doing lab exercises, not original research. All data for weekly exercises as well as the final project will be collected with either you or your classmates serving as the participants. **Collecting data from anyone else (roommates, friends, family members) is never permitted.**

Academic Integrity Policy:

In science, there is absolutely no room for fraud or untruth. Our job as scientists is to search out facts, not just for us but also for society as a whole. Consequently, you should be very clear that, just as I expect you to learn about the topic matter, I also expect you to learn about scientific honesty. In the work that you present to me, falsifying, plagiarism, or copying without attribution will not be tolerated. Intentional ethical violations will result in failure for the material in question.

Rutgers University's Academic Integrity policy states, among other things, that "every Rutgers University student...make sure that all work submitted as his or her own in a course or other academic activity is produced without the aid of unsanctioned materials or unsanctioned collaboration." This includes having someone else run your experiment, having someone else read the material for you, and having someone else run the analysis for you. If there is reason to believe that someone else is doing the work for you, this will be investigated in accordance with the university's procedures and policies. Also, the university policy does not allow re-using your own material form classes taken previously or concurrently.

Please check the school guidelines for further clarification of violations. http://academicintegrity.rutgers.edu/

Take a 20 minute interactive-tutorial on Plagiarism and Academic Integrity, <u>http://www.scc.rutgers.edu/douglass/sal/plagiarism/intro.html</u>

All course materials can be found on http://sakai.rutgers.edu.

If you decide to stay enrolled in this class after receiving this syllabus, I will assume that you have read the entire syllabus and have agreed to all the policies outlined.