Fall 2020

Sensation & Perception Online Lab Syllabus

Course Number: 830:302:02
Two Zoom Meetings: Week 3 & Week 9
Weekly Online Chats: Wednesdays 12:00 – 1:20 pm, Sakai chat room

Instructor: Jie Wang
E-mail: jie.zy.wang@rutgers.edu
Zoom Office Hours: By appointment via email

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. 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. By completing various assignments and interacting with your fellow students and me, you'll be able to improve some basic skills in using PsychoPy, analyzing data in Excel and communicating scientific findings. We will generally discuss **one lab topic per week.** The final project will involve developing a scientific experiment of your own and testing an original hypothesis. **The schedule of each lab exercise and assignment 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 laboratory class is meant to serve as a companion to the lecture class PSYCH-305. The conceptual and theoretical basis for the exercises and demonstrations are developed in lecture. For this reason, concurrent or past registration in PSYCH-305 is required.

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.

Class website:

- All relevant course information will be posted on the Sakai website, including:
  - Experiment files
  - PowerPoint Slides
  - Instructional videos and more
- All uploaded assignments must be .doc, .docx or .pdf format. All uploaded data must be in .xls/.xlsx or google sheet format.
- Grades will be posted in the gradebook tab on the Sakai.

Time Management:

Note that Rutgers University expects the **median** student to spend 3 hours per week on lab classes. (If you don't remember what "median" is, please ask!) Therefore, you should plan to spend 3 hours per week on this class. You should also be aware that any given week may take you more time if you find the material difficult, or less if you've covered it in previous classes. The great thing about online classes is that these three hours do not have to be all at the same time, or even the same time every week! (There is one exception to the "same time every week": see the section below called "Weekly Sakai Chats")

Please also note that the Lab Coordinator has very carefully chosen assignments such that they will take the median student approximately 3 hours. If the list of assignments one week seems like a lot of individual assignments, that is because most of them will take a short time. If the list of assignments one week seems like short, that is because you are expected to spend more time on each assignment.

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

Important Rules:
No electronic recording (audio, video, photos, etc.) 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, etc.) is **never** permitted.

Grading:
In order to pass this class, you must do the weekly assignments on time. In addition, you must do the final project. **If you do not complete both of these aspects of the course, you will automatically fail the course**.

Your final grade will be based on three things:

1. Attendance 10%
2. Weekly lab assignments 30%
3. Final Project: an original project report completed during the last several weeks 60%

Every assignment will count towards your grade. There are no **exams** for this course. Grades for this course will not be curved or scaled.

The criteria for grading your work will be:

- Effort and class participation
- Demonstration of progress in understanding and using software tools
- Clarity of graphs
- Clarity of writing
- Demonstration of understanding basic perceptual concepts introduced in the labs

Final Project:
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).

Weekly Assignments:
Each week, we will work on lab assignments on various topics. After data collection and analysis, you will be assigned a brief write-up which will be due about **a week** later, consisting of one or more sections of a full lab report (methods, results, data analysis, etc).

These assignments will be graded in general on demonstrated effort, clarity, and understanding of the introduced concepts.

Based on the above, you will receive one of the following grades:

- **3:** You did well on the assignment
- **2:** You did okay.
- **1:** You did poorly.
- **0:** You didn't submit the assignment.

If you hand in the assignment on time and receive anything lower than a 3, you will get the option to **revise** your assignment based on my feedback. These revised assignments must be handed in **within a week** of the feedback. **The revised grade will then replace the original grade *IF* the revised grade shows improvement (it does not always guarantee a better grade).** Only one revision attempt is allowed. If you take the feedback into account in your revisions every week, you can really turn your grade around! 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 6 assignments with a score of 3 accumulated during the semester. A half letter grade will be subtracted for 3 assignments with a score of 1 accumulated during the semester. If a 0 is not redone, it will also cause a half letter grade deduction.

6 3's:	Add a half letter grade
2:	No points added or deducted
3 1's:	Deduct a half letter grade
0:	Deduct a half letter grade if left uncorrected

Example: Student A has 6 3's, while student B has 3 1's and 1 0. If student A receives a B+ for the final paper and a half letter grade increase for having 6 3's, the final paper grade will be improved to an A. If student B receives a B+ for the final paper and receives one letter grade deduction for having 3 1's and a 0, the final paper grade will be reduced to a C+.

All laboratory assignments and reports must be completed by the individual student. Collaborative reports will be given a 0 grade. Please see Academic Dishonesty Policy below. **All lab assignments need to be completed or I will not grade your final project.**

Late Assignments:

If you do not turn in an assignment on time, you will lose the option to revise it. However, you can still receive partial credit if you submit it by the end of the revision period. When the revision assignment has been posted in the Assignments tab on Sakai, late assignments must be submitted there, and the maximum grade you can receive will be a 2. If your late assignment is not submitted by the revision due date it will become an unchangeable 0. **If you miss two assignments (2 0s), you will automatically fail the course.** In general, please do your best to submit assignments on time as to not incur any penalties.

Weekly Sakai Chats:

Each week, we will have a weekly chat meeting in the chatroom on the class Sakai site. This meeting gives you an opportunity to ask any questions you may have about the experiment/assignment for the week. This is MANDATORY, and will determine your participation grade in the course. To receive credit, you must be in the chat room on time, for the entire time, and you must contribute meaningfully to the discussion. A "meaningful contribution" includes comments such as a question about the material that is not answered in the power-point or the movies assigned, or answering someone else's question with a reasonable answer. Contributions that will not be counted include comments such as "I understood everything," or "What did everyone do this weekend?" Each student is required to remain and participate in the chatroom for the full scheduled time. Note: this chat time is included as part of your time-management allotment.

Attendance Policy:

If you miss a chat meeting for a legitimate reason (e.g. illness, religious holiday) you must send an official excuse note (e.g. doctor's note). Missed chats that are not excused will negatively impact your participation grade. ***You must attend the weekly chat meetings on Sakai.*** Not attending prevents you from learning about the goals and content of the lab projects. If you are more than 20 minutes late you will be marked down as having an unexcused absence.

Academic Dishonesty Policy:

In science, there is absolutely no room for fraud or untruth. Our job as scientists is to search out facts, not just for ourselves but 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. Additionally, re-use of assignments from other classes will not be permitted Intentional ethical violations will be handled in accordance with the university's academic

integrity policy. All assignments will be submitted to the Turn-it-in system, where its originality will be verified. Please check the school guidelines for further clarification of violations.

All course materials can be found on http://sakai.rutgers.edu after you log in. It is expected that you have reviewed all relevant materials to the week's assignment prior to our schedule online chat.

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

Thanks for reading, and I hope for this to be a great semester!