Sensation and Perception Lab

Course Number: 01:830:302:03
Semester: Spring 2012
Course Meeting Days/Times: Wednesday 8:40 AM – 11:40 AM
Course Meeting Location: Busch Psychology Building, Room 105

Instructor: Steven A. Cholewiak
E-Mail: scholewi@rci.rutgers.edu
Office Hours: By appointment, Busch Psychology Building, Room 162

Learning goals:

Students will learn about leading terms, concepts, theoretical perspectives, empirical findings, and historical trends in Sensation & Perception. Students will apply basic research methods in psychology, including research design, data analysis, and interpretation, to standard lab problems. The core learning goals are:

1. To provide an opportunity to experience perceptual phenomena first hand.
2. To learn how to design, conduct, analyze, and write-up experiments.
3. To learn how to use software tools to analyze and plot data.

Students will use critical thinking, skeptical inquiry, and, when possible, the scientific approach to ask, answer and understand questions related to behavior and mental processes. Students will apply psychological concepts and content to become engaged citizens.

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

Course Goals:

This lab will address a number of goals over the course of the semester. Specifically, the instructor will evaluate how well students:

- Respond effectively to editorial feedback from the instructor through successive drafts and revisions. Specifically, how well students incorporate feedback on submitted homeworks' grammar and style on subsequent homeworks and the final project.
- Communicate effectively on homeworks and the final project.
- Evaluate and critically assess peer reviewed journal sources and use the conventions of attribution and citation correctly.
- Analyze and synthesize information and ideas from multiple peer reviewed sources to generate new insights about psychological phenomena.

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

1. Attendance and participation in the weekly lab
2. Weekly lab assignments
3. An original project report and presentation completed during the last several class meetings

Please note that every homework assignment will count towards your final grade (see 'Weekly Assignments' below). Attendance and homeworks are mandatory, so unexcused absences and late/unsubmitted homeworks will affect your grade in the class. There are no tests or quizzes planned for this class. The final grades for this course will not be curved or scaled.

The main criteria for grading your work through the course of the semester will be:

- Demonstration of understanding basic perceptual concepts introduced in the labs
- Clarity and format of writing & graphs
- Demonstration of progress in understanding and using the provide software tools
- Responding effectively to editorial feedback on previous homeworks
- Effort and class participation

Weekly Assignments:
We will be working on labs at each class meeting. After each lab is completed (data collection and analysis), you will be assigned a write-up of the lab that is due the following Sunday evening at 11:55 PM. If the lab runs less than the allotted time, then you are encouraged to use the full class period to complete the assignment for that week. The weekly write-ups will often consist of brief (1-3 page) reports on methods, results (graphs, charts, statistical tests, etc.), and/or conclusions.

The weekly assignments will be graded on the pass/fail scale:
    P+: Excellent work, very minor issues, if any
    P: Good work, some content and/or formatting issues
    P-: A number of problems with content; needs improvement
    F: Major problems, fail; requires redo

Scores on the 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.
    $3 \times$ P+'s: Add one-half letter grade
    P: No points added or deducted
    $3 \times$ P-'s: Deduct one-half letter grade
    F: Deduct one-half letter grade if left uncorrected

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.   No revisions of failed assignments will be accepted after this one-week timeframe, and no subsequent revisions will be accepted after the first revision, although I will be available to meet with you to discuss the material and your performance.

All laboratory assignments and reports must be completed by the individual student unless otherwise noted.   Collaborative reports will be given an F grade (see Academic Dishonesty Policy below).

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) and will be evaluated using the SAS Course Goals.

Attendance Policy:
If you miss a lab for a legitimate reason (e.g., illness) you must bring an official excuse note (e.g., a doctor's note).   This will excuse you from performing that part of the assignment. If you need to miss a class for a planned absence in the future (e.g., a religious holiday), please contact me (scholewi@rci.rutgers.edu) as soon as possible so that we can schedule a make-up.   Missed assignments that are not excused will be given a failing grade and will therefore deduct one-half letter grade from your final grade.

You must arrive on time to class. Excessive lateness prevents you from learning about the goals and content of the labs. Keep in mind that I record attendance and note tardy individuals. If you are more than 20 minutes late, you will not be allowed to participate and your tardiness will be counted as 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, it 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 and reporting to the administration.   Please check the school guidelines for further clarification of violations:

http://academicintegrity.rutgers.edu/
http://academicintegrity.rutgers.edu/files/documents/AI_Policy_9_01_2011.pdf

Schedule of Labs:

The following is a rough schedule of the course. I will email lab manuals approximately 1 week before the class. **Make sure to print them out!** Changes and amendments may be made as the course progresses.

January 18	**NO LAB** – 1st day of Wednesday classes (see http://scheduling.rutgers.edu/calendar.shtml)
January 25	Introduction to the course, Lab 1: Perception of line length (Graphs & Tables)
February 1	Lab 2: Pitch discrimination (Method, Results)
February 8	Lab 3: Center of gravity (Introduction)
February 15	Lab 4: Prism adaptation (Method)
February 22	Lab 5: Extrapolation of motion (Results)
February 29	Lab 6: Attention shift (Discussion)
March 7	Lab 7: Crowding (Results)
March 14	**NO LAB** – Spring Recess (see http://scheduling.rutgers.edu/calendar.shtml)
March 21	Lab 8: P-illusion (Title Page, Abstract, and Discussion)
March 28	Lab 9: Design final project, abstract, title
April 4	Data collection for final projects
April 11	Data analysis for final projects
April 18	Turn in final projects, final presentation
April 25	Reserved for course adjustments and changes to syllabus
Final Exam	**NO LAB**

All course materials can be found on http://sakai.rutgers.edu after you log in. It is expected that you print out ALL materials before class. The printer in the classroom is for printing out SPSS output and data-related materials ONLY.

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.