## Psychology 107: Psychological Statistics SYLLABUS

Susan Croll
Fall, 2008
M, W 10:15-12:05
Rm NSB A101

Office: Razran Hall Rm 215
Lab: Razran Hall Rm 269
Phone: 718-997-3551
E-mail: profcroll@yahoo.com
Office hours: W 1:45-3:00p and by appointment

Course Objective: To provide students with objective tools for presenting data and testing hypotheses about the way the world works, with a special emphasis on psychological phenomena. Students will gain an appreciation of the need for rigorous evaluation and presentation of qualitative and quantitative data.

Text: $\quad$ Statistics for the Behavioral Sciences, $7^{\text {th }}$ Edition, Gravetter and Wallnau (2006): Wadsworth.

## Tentative Schedule:

| Date | Topic | Reading | Problems |
| :---: | :---: | :---: | :---: |
| W, 8/27 | Syllabus Review | None | None |
| M, 9/1 | NO CLASS - LABOR DAY |  |  |
| W, 9/3 | Intro to Statistics | Ch 1 (not 1.3) | 3,14,16 |
| M, 9/8 | Frequency Distributions, Graphs | Ch 2 (not 2.6) | 1,7,13,17,19,21a |
| W, 9/10 | Central Tendency | Ch 3 (no weighted means) | 3,5,7,9 |
| M, 9/15 | Variability | Ch 4 | 15,21,23 |
| W, 9/17 | Normal distributions \& Z scores | Ch 5 \& $6 \quad$ Ch5: | 1,21,23;Ch6:5,9,11,23a-c |
| M, 9/22 | Sampling distributions | Ch 7 | 11,19,21 |
| W, 9/24 | Review for Exam \#1 | Ch 1-7 | as needed |
| M, 9/29 | NO CLASSES SCHEDULED |  |  |
| W, 10/1 | NO CLASSES SCHEDULED |  |  |
| M, 10/6 | Exam \#1, Problem Set | Ch 1-7 | None |
| W, 10/8 | NO CLASSES SCHEDULED |  |  |
| M, 10/13 | COLLEGE CLOSED |  |  |
| T, 10/14 (Mon) | Exam \#1, Multiple Choice | Ch 1-7 | None |
| W, 10/15 | Hypothesis Testing | Ch 8 | 3,5 |
| M, 10/20 | One Sample z and t tests | Ch 8\&9 Ch8: | 7,21;Ch9:7,9,15,21,23a |
| W, 10/22 | Independent groups $t$ test | Ch 10 | 11,17a,23a |
| M, 10/27 | Dependent groups $t$ test | Ch 11 | 15,23,25 |
| W, 10/29 | Introduction to ANOVA | Ch 13.1-13.2 | None |
| M, 11/3 | Independent Groups ANOVA | Ch 13.3-13.6 | 23,25,27 |
| W, 11/5 | Review for Exam | Ch 8-11,13 | as needed |
| M, 11/10 | Exam \#2 - Problem Set | Ch 8-11,13 | None |
| W, 11/12 | Exam \#2 - Multiple Choice | Ch 8-11,13 | None |
| *M, 11/17 | Repeated Measures ANOVA | Ch 14 | 1,3,17 |
| *W, 11/19 | Factorial ANOVA | Ch 15.1-15.2 | 1,4,5 |
| M, 11/24 | Factorial ANOVA | Ch15.3-15.5 | 15a\&c, 23a |
| W, 11/26 | Chi Square | Ch 18 (no 18.4 or 18.6) | 15a,25 |
| M, 12/1 | Correlation | Ch 16 (no 16.5, 16.6) | 5,11 |
| W, 12/3 | Regression | Ch 17 (no 17.3 or 17.4) | 3,11a\&b,13 |
| M, 12/8 | Review for Exams | Ch 14-18 GRO | P PROJECT DUE |
| W, 12/10 | Exam \#3 - Problem Set | Ch 15-18 | None |
| M, 12/15 | Exam \#3 - Multiple Choice | Ch 14-18 | None |
| TBA | FINAL EXAM | See study guide - com | hensive |

[^0]
## Course Expectations and General Information

Materials - All students are expected to bring the textbook, a notebook, and a calculator to class every day. Students may also find it useful to bring a pencil, a straight edge (such as a small ruler), and graph paper for making graphs. Calculators need only have basic operations and a square root key.

Problems and Readings - Each lecture will be given without the expectation that the chapter has been read in advance. Many students who are frightened of math find it less confusing to first hear the lecture and then read the chapter. The syllabus lists homework problems to accompany each lecture. It is strongly recommended that you complete these assignments shortly after each lecture. Homework will not be checked or collected. It is your responsibility to ensure that you get sufficient practice with the problems. Students may ask me to go over specific homework problems the following class period or during review sessions only. Students who feel they require additional practice may complete additional odd-numbered problems in the textbook (answers in back of book). However, in the interest of time, these cannot be reviewed in class. I would be happy to check additional problems during my office hours or by appointment.

Partners - Within the first week or two of classes, students will be assigned about 2 partners to work with during class and on their group project. These students will serve as your "lab partners" when we practice computations and when you conduct your own research project. You should strive to sit with your lab partners each day, if possible, and also exchange contact information early in the semester.

Projects - Each set of partners must hand in one completed data set based on a small research project which you will conduct on your own. Topics for the research projects will be handed out later in the semester. Partners should work together on the project, and hand in two identical copies of the project. One will be returned, graded, while the other will be kept on file.

Exams - There will be 3 exams during the semester, each covering a third of the course. Each exam will run across 2 days. The first day will be a problem set exam in which you will complete any 3 of 4 (or 2 of 3 ) problems. You may not collaborate with other students on this problem set exam, but may use your notes, textbook, or any other materials. The second day will consist of a 25 question multiple choice exam followed by a review of both exams. This second exam will be taken with no assistance from other students, materials, or calculators. During finals week, there will be a comprehensive final exam. The final exam will be more conceptual, and will require no computations. As the exam date approaches, details about the final exam will be covered in class.

## Grading Policy

Grades are neither curved nor subjectively adjusted at the end of the semester. Your grade will be exactly what you earn (and expect) based on the following formula:

Assignment

| 100 points per problem exam (x3) | 300 points |
| :--- | ---: |
| 50 points per multiple choice exam (x3) | 150 points |
| 100 points for final exam | 100 points |
| 100 points for project (due Monday, December 8) | 100 points |
| 25 points for peer evaluation | 25 points |
| 25 points for submitting materials | 25 points |
| 5 points for completing math pre-test |  |
| 5 points for completing data questionnaire I |  |
| 5 points for completing data questionnaire II |  |
| 5 points for completing project choice sheet |  |
| 5 points for submitting peer evaluations |  |
| 100 points per lab problem set (2 counted) | 200 points |
|  |  |
| TOTAL | $\mathbf{9 0 0}$ points |

At the end of the semester, simply divide your total number of earned points by 9 to get your percent for the class. Final letter grades are assigned as follows:

| A+ | 97 or higher | C+ | $77-79$ |
| :--- | :--- | :--- | :--- |
| A | $93-96$ | C | $73-76$ |
| A- | $90-92$ | C- | $70-72$ |
| B+ | $87-89$ | D+ | $67-69$ |
| B | $83-86$ | D | $60-66$ |
| B- | $80-82$ | F | below 60 |

## Classroom Policies

Cell phones and Pagers - When possible, cell phones and pagers should be turned off during class. If you might need to be urgently reached (for example, you have young children), please turn your pager or cell phone to its vibrate mode. If you find yourself in a situation in which you receive a call and must take it, answer the phone in a whisper and ask your caller to hold on. Then, quietly exit the room and continue your conversation in the hall. Repeated calls received by the same person over the course of the semester will result in dismissal from class. Receiving loud phone calls during class is unfair to your classmates. CELL PHONES MAY NOT BE USED DURING EXAMS.

Cheating - DO NOT CHEAT. You are adults and, as such, must accept your own limitations and be responsible for your own actions. I am generally aware of who is cheating in my classes, and will not provide you with favorable references, etc., regardless of your grades, if you have received your grade unethically. It is not your grade, but your effort, that impresses me. Penalities WILL BE IMPOSED for academic dishonesty in this class.

Plagiarism - Plagiarism is a form of cheating (see above). Paraphrase the ideas of others - do not use their exact words. When you find it necessary to directly quote another writer (please avoid this practice as much as possible), be certain to enclose the statement in quotations and cite your source clearly. See me if you are unsure about how to cite sources, though outside sources will not be necessary in this class.

Food \& Drinks - You are welcome to eat or drink in class. Please do not bring foods with strong odors or noisy wrappers - these types of foods can be distracting for your classmates. In addition, if you bring food or drink to class, you are responsible for appropriately disposing of all trash in the garbage.

Breaks - There will be a break about halfway through most classes for about 10 minutes. If you need to leave the room before or after the break, feel free to do so, but do it quietly. During exams, only one student at a time should leave the room if possible. During multiple choice exams and the final exam (given in two halves), students may not leave the room. During the problem set, students may leave the room one at a time, but are discouraged from doing so.

Make-Up Exams - Make-up exams will be available for students who must miss an exam. However, make-up exams are generally harder than the original exam. In addition, I reserve the right to change the format of the make-up exam and to delay grading or return of the make-up exam until others have taken it.

Grade grievances - I will consider any grievances that you may have about the manner in which I have graded your exam or paper. If you feel that you answered a question correctly or that your paper/essay achieved a higher level than the grade you received, you may prepare an essay in which you defend your position. This essay must be received within 1 week of the date when I return the assignment to the class. I will read your essay thoroughly and, if I agree with your assertions, I will adjust your score appropriately.

Attendance/Punctuality - There are no penalties for tardiness or lack of attendance. However, I always cover the material that I find most important during class, so it is to your advantage to attend. In addition, regardless of your attendance in class, you are fully responsible for knowing everything that was covered in class (including any changes in assignment due dates, etc.). If you need to arrive late or leave early, please sit near the entrance of the room and do so quietly so as not to disturb your classmates.

MY NAME: $\qquad$
STATS PARTNERS: $\qquad$ Contact Information $\qquad$
$\qquad$
$\qquad$

## Score

## Worth

Exams:

| Problem Set \#1 | $\square$ |
| :--- | :--- |
| Multiple Choice \#1 | $\square$ |
| Problem Set \#2 | $\square$ |
| Multiple Choice \#2 | $\square$ |
| Problem Set \#3 | $\square$ |
| Multiple Choice \#3 | $\square$ |
| Final Exam |  |

100

50

Group Project:

| Project Write-Up | $\square$ |
| :--- | :--- |
| Peer Evaluation | $\square$ |

Lab Problem Sets (drop the lowest):
Problem Set \#1 $\square$
Problem Set \#2 $\square$

Total $\square$
My final percentage is (divide total by 9): $\square$


[^0]:    *substitute lecturer

