Syllabus

Psych 2RR3: Research Design and Statistics for Psychologists

Winter Session: January 6 - April 6, 2004
Lectures: Tuesday, Thursday, Friday at 11:30 AM to 12:20
Location: JHE/376
Course email address: stats@brain.mcmaster.ca
Course web site (Important): http://www.science.mcmaster.ca/Psychology/psych2rr3/

Course description: We will study advanced statistical principles in the design and analysis of experiments in psychology. Topics include parametric and non-parametric techniques for single samples, two sample and multi sample designs. Students will gain an understanding of frequency distributions, samples, and sampling distribution of the means, and will learn to make inductive inferences based on significance testing. We will learn about statistical power and effect size. We will learn that a test of significance does not provide a complete story without an estimate of effect size.

Instructor (see Course web site for office hours):
Dr. Judith M. Shedden
Email: shedden@brain.mcmaster.ca

Teaching assistants (see Course web site for office hours):
The TAs and the instructor are not able to return long distance phone calls. Email is highly recommended and will be answered promptly. All the TAs can be reached at the course email address (stats@brain.mcmaster.ca).
Lisa Betts
Matt Crump
Carl Gaspar
Michelle Jetha

Textbook:

The textbook comes with a CD containing review software and supplementary materials. The supplementary materials (Dr. Hurlburt calls them Resources) are .pdf files which you can read on the screen or print (you need Acrobat reader for this, it can be downloaded for free from the web pages or installed from the CD itself). For students who have limited access to a computer and printer, I have made these Resources available on reserve at Mills Library. They will also be available from the course web pages.

There are also interactive programs on the CD, including Algebra review, and QuizMaster, and a series of "Lectlets" for each chapter in which the author of the textbook provides a mini-lecture with audio and visual aids. These are highly recommended, they are fun and useful for brushing up your skills.

Grade evaluations:
Your grade in the course will be based on three evaluations: Midterm 1, Midterm 2, and the Final Examination. You may bring one set of notes to the exams. There are no make-up tests. The possible weights for the three evaluations are presented below. The option that generates the highest value will determine your final grade. You may bring any calculator to the exam but you must show your work for all answers.

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<th>Option 1</th>
<th>Option 2</th>
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<tr>
<td>Midterm 1</td>
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<td>Midterm 2</td>
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<td>Final Exam</td>
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<td>100%</td>
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A percentage marking system will be used for the individual components. The final percent will be converted to a letter grade using the Senate-approved transformation. In converting the final percent to a letter grade, any values < 0.5 will be rounded down, and any values > 0.5 will be rounded up. For example, 49.49 = F and 49.50 = D-.

The instructor reserves the right to adjust final marks up or down, on an individual basis, in the light of special
circumstances and/or the individual's total performance in the course. Details of the course requirements may be subject to change. If requirements are altered, a revised course outline will be posted on the webpage and the details will be announced in class.

The instructor is not able to reschedule the final exam. If there is a problem with the final exam schedule, students must contact the registrar's office.

Policies
McMaster University Policy for Medicals and Deferred Exams
Please refer to the Office of the Associate Dean of Science (Studies) for important information regarding missed course work, medical exemptions (including the McMaster medical certificate), exam conflicts, and deferred exams.

Academic Dishonesty
Academic dishonesty consists of misrepresentation by deception or by other fraudulent means and can result in serious consequences, e.g. the grade of zero on an assignment, loss of credit with a notation on the transcript notation that reads: “Grade of F assigned for academic dishonesty”, and/or suspension or expulsion from the university.

It is your responsibility to understand what constitutes academic dishonesty. For information on the various kinds of a academic dishonesty please refer to the Academic Integrity Policy, specifically Appendix 3, located at http://www.mcmaster.ca/senate/academic/ac_integrity.htm.

The following illustrates only three forms of academic dishonesty:
1. Copying or using unauthorized aids on tests and examinations.
2. Plagiarism, e.g. the submission of work that is not one's own or for which other credit has been obtained.
3. Improper collaboration in group work.