

Psychology 2030 Section A - Methods and Statistics

Summer 2013

Meeting Time: 1:00pm - 3:50pm Tuesday/Thursday

Room: L1060

Instructor: Heather Bell

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Office Hours: Tuesday and Thursday 11:30am - 12:30pm

Office: EP1283A (Neuroscience Building, inside the Pellis lab)

Calendar Description

Basic research methods and descriptive and inferential statistics used in psychology.

Textbooks

Thinking with Data - 6th Ed. (Vokey and Allen) - available at the bookstore, and also online at:
<http://people.uleth.ca/%7Evokey/pdf/thinking.pdf>

Is that a Fact?: A Field Guide to Statistical and Scientific Information (Battersby)

General Description

Psychology 2030 is a basic introduction to the research methods and statistical techniques used in psychological research. The aim of this course, rather than to teach only the applied mathematics of data analysis, is to build students' understanding of the theory behind research design, data collection, statistical application, and interpretation of results, such that they are able to more effectively assess statistical claims that are encountered in both real-world situations, and in a scientific setting. Examples from various sources, ranging from popular media to medicine, will be used to illustrate specific points. The ultimate goal is for students to acquire the tools necessary for critical thinking abilities that can be applied to many types of statistical information.

Instructional Methodology

The course will consist of 2 lectures per week, and will focus on understanding the theoretical foundations of inferential statistics, using real-world examples, in addition to introducing the applied aspects of those (i.e., learning how to use statistical tests). The assignments will deal mainly with practicing the mathematics involved in inferential statistics, and the exams will be a combination of both applied and theoretical questions.

Policy for Take-Home Assignments / Exams

You are free, indeed encouraged, to consult your notes, the textbook, the course web-site, and any other supplementary materials you feel may be of some assistance. **However, the work you subsequently submit must be your own** (please see the Academic Offences section of the Student Discipline Policy of the University of Lethbridge Academic Calendar).

Distribution of marks

Score	Grade	Score	Grade	Score	Grade	Score	Grade
90-100	A+	77-80	B+	67-70	C+	57-60	D+
85-90	A	73-77	B	63-67	C+	50-57	D
80-85	A-	70-73	B-	60-63	C-	<50	F

Assessments

Item	Approximate Due Date	Weight
Math Review	May 14	2% bonus
Assignments	As Assigned (3 total)	30%
In Class Exam 1	June 4	30%
Take-home Final	June 25	40%

Extra Help

You are encouraged to form study-groups on your own, and, providing that the time works with my schedule, to invite the instructor to meetings, if you desire.

Experimental Research Participation

This course is designed to provide students with an opportunity to participate in active research programs of faculty members. This participation allows you to get direct experience in how many of the experiments and studies you will read and hear about are actually done, and provides an opportunity for you to see what goes on in the labs, and meet senior undergraduate and graduate students conducting their own laboratory research projects. Calls for volunteers to assist in these projects will be made during the semester, via e-mail. If you are asked to volunteer, and you accept, each project usually requires typically less than one hour of your time, but the exact time commitment will depend on the individual research project. In recognition for your time, and in recognition that you are learning something about the discipline of psychology, beyond what you would in the normal classroom environment, an extra credit of 1% for each study in which you participate will be added to your total grade to a maximum of 3% (so, it is theoretically possible to score 105%, with the math review bonus). Note that there is no guarantee that all students will be able to achieve the maximum extra credit. As these are extra credits, students who choose not to participate are not disadvantaged. There will be no transferring of credits to different classes. Each course will have a specific sign up and password. The studies will run from ... You will receive an email with the login information.