Psychology 321 Quantitative and Statistical Methods

Spring 2005
MW 2:30 - 3:48, Mendenhall Lab 115 (Lecture)
R 9:30 - 10:48, Lazenby 15 (Lab A)
R 11:00-12:18, Lazenby 15 (Lab B)

Instructor: Trisha Van Zandt
Lazenby 230, 688-4081
Office hours: MT 11:00 - 12:00, or by appointment
E-mail: van-zandt.2@osu.edu

T.A.: Nancy Briggs
Lazenby 240D, 292-5510
Office hours: W 10:00-12:00
E-mail: briggs.96@osu.edu

Web site: http://tinyurl.com/3p4l6
Mailing list: psy321@maigret.psy.ohio-state.edu

Texts:

1. Howell, D. C. (2004). *Fundamental Statistics for the Behavioral Sciences* (5^{th} Edition). Belmont, CA: Brooks/Cole.
2. Williams, P. (2003). *Interactive Statistics*. Sinauer Associates, Inc. URL: http://www.introstats.net; course number 5224435. *Note: you only need to purchase web access to this text. Used textbooks will not come with web access!*

Students with disabilities: This syllabus is available in alternative formats upon request. In addition, if you may need an accommodation based on the impact of a disability, you should contact the instructor immediately. Students with special needs should contact the Office of Disability Services (ODS) at 292-3307 for certification if they have not already done so. Upon such certification, the ODS and the instructor will make every effort to accommodate special needs. However, to ensure that evaluation of student performance in the course is conducted in a manner that is fair to all students, special accommodations will not be granted in the absence of ODS certification.

Academic Misconduct: All students at the Ohio State University are bound by the Code of Student Conduct (see http://studentaffairs.osu.edu/resource_csc.asp). Suspected violations of the code in this class will be dealt with according to the procedures detailed in that code. Specifically, any alleged cases of misconduct will be referred to the Committee on Academic Misconduct.

Grading policies

I will use the following fixed grading scale:

A	A-	B+	B	B-	C+	C	C-	D+	D
93%	90%	87%	83%	80%	77%	73%	70%	67%	60%

To prevent against unfair exams, I will call the grade of the second highest scorer on any exam 100%, and the cutoffs will be computed from that grade. So, for example, if I write a really hard test and the second highest score is 72%, and you earn 60%, your score on that exam will be $60/72 = 83\%$. (Note that I have never had to do this!)

There will be three exams, each worth 20% of your grade. Homeworks, which will be assigned on an approximately weekly basis, will be worth 40% of your grade. Because solution sets will be posted, no late homeworks will be accepted. You will have opportunities to make up missing homeworks in the form of optional work that will be assigned throughout the quarter.

Exams will be closed-book, but you may bring one 8.5"x11" page of notes to the exam. In the event of a last-minute emergency, you MUST call the TA, the instructor, or Angie Bassett (292-4131) BEFORE THE EXAM BEGINS. ALL MAKE-UP EXAMS WILL BE ORAL AND NO LATER THAN THREE DAYS AFTER THE MISSED EXAM. Acceptable excuses for missing an exam are a death in your family, personal illness or the illness of your child or spouse, and unforseen accidents like your car breaking down or getting stuck in a elevator on the way to the exam. I will need documented proof of these events should they occur, so get a funeral card, a note from your physician, and/or an invoice from the towing company with the date on it.

Under certain circumstances, you may arrange to take an exam early. Discuss rescheduling an exam with the instructor well in advance of the exam.

Words of Advice

Come to class. It makes a difference. I give out test questions in class. I work through examples that won't be available on the online notes. I answer questions. You're paying me to provide you with instruction. Don't waste your (or your parents') money by skipping class and trying to learn it all on your own.

Tentative class schedule

Exam locations are noted on the website and will be announced in class.

Week	Dates		Reading Assignment Chapter(Sections) Howell	Williams	Topics
1	Mar	28	8,12(1,2)	4(2,3); 5	Sampling distributions, Hypothesis testing, z-tests (review)
		30	5(4),12(3-5)	6	Z-tests, Estimating standard error, t-tests
2	Apr	4	8(7)	5(6),7(1-3)	T-tests continued, Errors in Inference, p-values
		6	14(1-4)	8(1,3,4)	Testing hypothesis about two independent means
3		11			Two independent means cont.
		13	13	8(2)	Testing hypotheses about two dependent means
4		18	12(7)	9	Interval estimation
		20			Interval estimation cont.
			Exam 1 (during Lab, Apr 21)		
5		25	8(7),15	7(4)	Power and effect size
		27			Power cont.
6	May	2		10(3.1)	The F-test
		4	16(1,2)	10(1,2)	Introduction to ANOVA
7		9	16(3)	10(2)	Partioning the sums of squares
		11	16(9)	10(3,6)	Computational Examples
			Exam 2 (during Lab, May 12)		
8		16	16(5)	10(5.2)	Post hoc procedures
		18	18	10(4)	Repeated measures ANOVA
9		23	19	12(1,2,4)	The χ^2-test
		25			The χ^2-test cont.
10		30			Memorial Day
	June	1		12(3)	Tests of proportions
			Exam 3 (during Lab, June 2)		