

EDPSY 490A: Basic Educational Statistics
Summer 2012 Tuesdays & Thursdays 4:40-6:10p, Miller 104**

Note: we will be in Miller 212 on Aug 7 & Aug 9

Instructor: Liz Sanders

Email: lizz@uw.edu (email is the best way to communicate)

Office Hours: **3:30-4:30p Tuesdays & Thursdays in Miller 411**

email me directly if you have questions/need an individual appointment

Grader/TA: Fraser Bocell

Email: fbocell@uw.edu (email is the best way to communicate)

Laptops/Cell Phones/Recording Devices

All cell phones and laptops must be **turned off** (or silent) and **put away** during every class period. Videorecording is not permitted. However, you may use audiorecording *during lectures (not during quizzes or exams)*.

Course Overview

This is an introductory course in statistical methods designed primarily for graduate students and senior-level undergraduates in the behavioral and social sciences. The class presents basic statistical concepts with an emphasis on the logic of inferential statistics. While we assume you have no previous statistical background, we expect you to be proficient in arithmetic and basic algebra. Your colleagues come from a number of different fields, typically including education, nursing, psychology, speech and hearing sciences, human design and engineering, and ethnic studies, among others. The primary goal of this course is for you to build a solid foundation in statistics used in research in order to prepare you for more advanced coursework. A secondary goal is that you become a better consumer (critical thinker) of research you may hear about through the media.

Note #1: class lectures are part of the course content and attendance is required. If you miss class, you are responsible for obtaining a copy of a classmate's lecture notes as well as emailing me to make-up a quiz (see make-up/late policy). If you are not here when a homework is due, to avoid a late penalty, you may scan and email your work electronically to me in an email attachment.

Note #2: We will not be learning statistical software in this course; these skills are usually taught in more advanced coursework. This said, Eric Hamilton, our consultant at CSSCR (<http://julius.csscr.washington.edu>), will offer an SPSS seminar during finals week of fall quarter, just for recent Edpsy 490 students (I will send out an email with this information in the fall quarter).

EDPSY 490 Summer 2012 Schedule		
<i>Text</i>	<i>Tuesdays</i>	<i>Thursdays</i>
Ch. 1-3	6/19 – Introduction, Vocabulary, Scales HW1 handed out	6/21 – Scales, Normal Curve HW1 due , HW2 handed out
Ch. 2-4	6/26 – QUIZ 1 Normal Curve, Central Tendency	6/28 – Central Tendency, Variability HW2 due , HW3 handed out
Ch. 4-5	7/03 – QUIZ 2 Variability	7/05 – Confidence Intervals HW3 due , HW4 handed out
Ch. 5	7/10 – QUIZ 3 Confidence Intervals	7/12 – Review, 1-Group Null Hypothesis Testing HW4 due , HW5 handed out
Ch. 6-7	7/17 – MIDTERM (Ch 1-5)	7/19 – 1-Group Null Hypothesis Testing HW5 due , HW6 handed out
Ch. 7-8	7/24 – QUIZ 4 1-Group Null Hypothesis Testing	7/26 – 1- and 2-Group Null Hypothesis Testing HW6 due , HW7 handed out
Ch. 8-9	7/31 – QUIZ 5 Chi-Square, 1-Way ANOVA	8/02 – 1-Way ANOVA, Simple Regression HW7 due , HW8 handed out
Ch. 10	8/07 – QUIZ 6 Simple Regression & Correlation **MILLER 212**	8/09 – Simple Regression & Correlation **MILLER 212**
Ch. 10	8/14 – QUIZ 7 Wrap-Up, Review HW8 due	8/16 – 4:40 – 6:40 FINAL EXAM*

* You can email Liz for your exam score on Mon 8/21; your exam can be reviewed in person during Fall quarter (by appt).

Office Hours 3:30-4:30 T & Th, Miller 411

Many students who have completed this course report that they find spending time at office hours to be a valuable part of their learning experience. As such, please do not feel shy about coming; in fact, I encourage it. Regular office hours are group-oriented (i.e., many come together to review their homework or go over study material), but I am also able to meet with you individually by appointment. During general office hours, we will be in **Miller 411**.

Materials: Text & Calculator

- Text:** The **required** course text, *Basic Educational Statistics* (Klockars & Sanders, 2011), is available at the UW bookstore for about \$20. All exams, quizzes, and homeworks are based on material covered in lectures and the course text. There are two optional sections in Chapters 4 (sampling distribution of variances) and 5 (confidence intervals for variance) that will not be covered in class or on homeworks/quizzes/exams. For those who wish to have one, the pre-approved **optional** text is available at the UW bookstore (R. Pagano's *Understanding Statistics in the Behavioral Sciences*; any edition of this text will be alright).
- Calculator:** You need a calculator that (a) you find easy to use and (b) that can compute a number raised to a power (button: y^x or x) as well as take the root of a number (button: $\sqrt{\quad}$). **Phone calculators are not acceptable.** (Example: TI-30XA, which is about \$15)

Please **bring your text and calculator to every class**. I also recommend **pencils/highlighters** for note-taking.

Performance Evaluation

Homeworks: There will be 8 **homework assignments due at the start of class (usually Thurs; see schedule)**. Each is worth about 10 points (ranging from 5 to 15 points, depending on amount of work involved). I am happy to answer homework questions via email and during office hours. Homeworks will be returned to you within one week (HW8 will be returned on the day of the final exam; you will not need it to study from for the final exam).

Quizzes: There will be 7 timed **quizzes at the start of class (usually Tues; see schedule)** to review material from the previous lectures. Texts, notes, and cell phones are not permitted. **Only calculators are permitted.**

Exams: There is one midterm (Chapters 1-5) and one final exam (cumulative but focuses primarily on Chapters 6-10). Exams are similar to quizzes in format and content. Again, **only calculators are allowed.**

Make-up/Late Policy: If you need to miss a quiz it can be made up by appointment with me, as long as you email me as soon as possible, **and make it up by the next class period**. Late homework is accepted with a 10% penalty each class period it is late (all work must be turned in by final exam for any credit consideration).

Grades: There are no extra credit options for this course. Grades are assigned based on percentage of accumulated points from quizzes, homeworks, and exams approximately as follows.

8 homeworks worth 5-15 points each (about 40% of grade)	80 points
7 quizzes worth 5-7 points each (about 20% of grade)	40 points
1 midterm exam worth 30 points (about 15% of grade)	30 points
1 final exam worth 50 points (about 25% of grade)	50 points
Total number of points (approximately)	200 points

96% and above	4.0	72% to 73%	3.2
93% to 95%	3.9	70% to 71%	3.1
90% to 92%	3.8	68% to 69%	3.0
86% to 89%	3.7	66% to 67%	2.9
83% to 85%	3.6	64% to 65%	2.8
80% to 82%	3.5	62% to 63%	2.7 (Pass)
77% to 79%	3.4	60% to 61%	2.6
74% to 76%	3.3	58% to 59%	2.5

Below 58% receives rapidly decreasing grades.

Students with Disabilities

To request a letter for accommodations due to a disability, please contact Disabled Student Services at (206) 543-8924 (V/TTY); bring the letter to me to discuss the accommodation you might need for the class.