

Psychology 301
Psychological Statistics
Section 004 - Fall 2009
TTH 9:00 – 10:50 AM
343 Marb

Professor: Julie Nelson, Ph.D. (julie_nelson@byu.edu)
Office: 1030 SWKT
Phone: 422-5958
Office Hours: M, T, 11-12 pm (or by appointment)

TA: Stephen Francis (steve.byu@gmail.com)
Office: 1151 SWKT
Phone: 422- 4287 (Psych Office)
Office Hours: M-Th 10-11 am (or by appointment)

Required Textbook: Gravetter & Wallnau (2007). *Statistics for the Behavioral Sciences* (8th ed.). Thomson Wadsworth.
ISBN-13: 9-780-495-60220-0
ISBN-10: 0-495-60220-5

Course Objectives:

This course is not designed solely for mathematicians, computer geeks, or nerds. It does not require that you sleep with an HP calculator under your pillow or actually enjoy figuring square roots by hand. You will not be required to show me your Math 110 grade (so long as you don't ask about mine). In fact, you will not be expected to remember much from that course at all (thank goodness). This is a statistics course, not a math course—so relax. By the end of this course, you will have mastered a number of basic statistical concepts and tests, as well as gained an appreciation of the importance of an understanding of statistics to the study of psychology. It is also hoped that you will have overcome any apprehension you may have had about this course at the outset. Above all else, it is hoped that you will actually end up enjoying this class—if not statistics itself!

Course Description

An outline of the tentative schedule for the course is included in this syllabus. I may change this schedule if it becomes necessary, so please attend class regularly and stay current with your reading and homework assignments.

Exams: The bulk of your grade will be based on your performance on three midterm exams and one final exam administered at the testing center. Exams include multiple-choice, short answer, and computational questions. You will be allowed to take the exam over a number of days. Please be aware of the testing center hours so as to allow yourself enough time to complete the exam. You are required to take a Blue Book to each examination.

Homework: You will be required to complete assigned homework exercises. These exercises will be graded on an effort basis. Please do not panic if you do not understand a problem, simply give your best effort, show your work, and then attend the labs for assistance. Some of these exercises may be somewhat repetitive. Feel free to work out only what is necessary for you to master a concept and then note that you do not feel it necessary to complete the remainder of the exercise. Homework is due on the first class period following the chapter discussion.

Extra credit/research participation: You may also receive one percentage point on your final exam for each hour or hour equivalent you spend in research participation (1.2 points), for a bonus of up to three percentage points (3.6 points). Please write a short paragraph describing the nature of the research and provide a document stating the date of participation and the researcher's name and signature for verification.

Attendance/ Participation: As Woody Allen said "Eighty percent of success is showing up." You are expected to attend classes. In case of emergency absences please notify me prior to class if possible. I will not take attendance during the semester, but your attendance and active participation are essential to the success of this course. Active participation includes asking relevant questions, contributing to class discussion, and generally demonstrating that you are keeping up on the readings and homework.

Total Course Points:

Exams (3; 160 points each; Final Exam; 120)	600 points
Homework: (16 chapters worth 5 pts. each)	80 points
Total points	680 points

Grades will be calculated on a percentage basis:

93%=A	83%=B	73%=C	63%=D
90%=A-	80%=B-	70%=C-	60%=D-
87%=B+	77%=C+	67%=D+	Below 60%=Fail

Late Work –No late work will be accepted. If you feel that you cannot complete an assignment on time you must a) make arrangements with me well in advance of the due date of the assignment, or b) your excuse had better be very, very good!

Lateness – Class begins at 9:00am and you are expected to be in class by this time. Please plan your schedules accordingly. Arriving late is disrespectful to the professor and other class members. Students who arrive late often disrupt class work and may face academic sanctions.

Cell phones must be turned off during class; no text messaging. Sending or receiving email, surfing the web, or playing games via phone or laptop computer during class is prohibited as it is distracting to members of the class. Persons violating this policy will be dismissed from the lecture. Repeated violations of this policy will result in a reduction in the course grade to be determined by the professor.

Resources:

Homework Lab: A portion of most Thursday class periods will be set aside as a homework lab to be conducted by my teaching assistant. This time is set aside for you to ask questions related to your homework assignments and to work through problems with your classmates. Take advantage of this time by coming prepared with specific questions or problems from the homework you want to review.

Personal Consultations: Please schedule time with the teaching assistant or with me or visit us during our office hours.

Calculator: *You will need one!* It doesn't have to be fancy, but must be able to calculate square roots, exponents, and have a memory function. Calculators with variance, standard deviation, mean, graphing, and other statistical functions are nice, but you will not be allowed to use these functions on the exams.

Your classmates. Please feel free to work in groups on your homework assignments. You will be required to hand in your own assignments, but you may work on them with others. Studying together may also help you to understand and to practice explaining concepts discussed in the course.

Additional Resources for Psychology students:

APA Format Tutorials:

I require all writing assignments (and references) to be written in APA style. I strongly encourage you to complete the online tutorial to learn APA format. This tutorial includes changes made in the new 6th Edition of the APA manual.

<http://flash1r.apa.org/apastyle/basics/index.htm>

<http://flash1r.apa.org/apastyle/whatsnew/index.htm>

FHSS Writing Lab:

To get help with your paper's organization, structure, focus, tone, and documentation style, you can go to the FHSS Writing Lab in **1051 JFSB** to meet one-on-one with a peer advisor. All advisors are students from our college and are trained in APA, Turabian, and some AMA and MLA.

To prepare for a tutorial, take

- o a copy of the assignment
- o a hard copy of your draft, whatever stage it may be in
- o a list of questions and concerns you have about your paper

Drop in or make an appointment: **Monday through Friday 9:00 am – 5:00 pm, closed Tuesday from 11:00 am-12:00 pm (for devotional) and Thursday from 3:00 pm- 5:00 pm (for staff meeting).**

For more information, go to <http://fhsswriting.byu.edu> or email: fhss-writinglab@byu.edu

Miscellaneous –

Illness (Flu):

Alert Dr. Nelson or Steve (graduate TA) through email or by telephone if you have the flu or are showing signs of the flu. You should not come to class ill, since your attendance will risk further spread of a serious virus. Communicate with your professors the seriousness of your illness and discuss ways you can submit work and make up any missed work without attending class.”

Syllabus:

While every effort will be made to adhere to the assigned schedule, all times, topics, and subjects covered in the course are at the discretion of the professor and could change. Advance notice will be given in the event of any change. You are encouraged to attend all classes and to turn in assignments and take exams when scheduled.

Honor Code and Other Issues

Plagiarism

It is an act of plagiarism to "borrow" ideas or quotes from former students' old papers and from the papers of students presently taking the course with you. Plagiarism also includes quoting or paraphrasing passages from any of your references without giving proper credit to the real authors (i.e., an APA-style citation), because doing so implies that this information came from you. Presenting the ideas of others as one's own is called plagiarism. Plagiarism, as defined by the BYU Honor Code, is a form of intellectual theft. It is an act of fraud; it is dishonest, deceitful, unethical, and can lead to serious and lasting negative consequences for your academic and professional career. In addition, please use only those sources that meet the course criteria for acceptable reference materials. [1]

Academic Honesty

While all students sign the honor code, there are still specific skills most students need to master over time in order to correctly cite sources, especially in this new age of the internet; as well as deal with the stress and strain of college life without resorting to cheating. Please know that as your professor I will notice instances of cheating on exams or plagiarizing on papers. See <http://www.byu.edu/honorcode> for specific examples of intentional, inadvertent plagiarism, and fabrication, falsification.

Preventing Sexual Discrimination or Harassment

Title IX of the Education Amendments of 1972 prohibits sex discrimination against any participant in an educational program or activity that receives federal funds. The act is intended to eliminate sex discrimination in education. Title IX covers discrimination in programs, admissions, activities, and student-to-student sexual harassment. BYU's policy against sexual harassment extends not only to employees of the university but to students as well. If you encounter unlawful sexual harassment or gender based discrimination, please talk to your professor; contact the Equal Opportunity Office at 801-422-5895 or 801-422-5689 (24-hours); or contact the Honor Code Office at 801-422-2847.

Students with Disabilities

Brigham Young University is committed to providing a working and learning atmosphere that reasonably accommodates qualified persons with disabilities. If you have any disability that may impair your ability to complete this course successfully, please contact the University Accessibility Center located in 2170 WSC (801-422-2767). Reasonable academic accommodations are reviewed for all students who have qualified documented disabilities. Services are coordinated with the student and instructor by the SSD office. If you need assistance or if you feel you have been unlawfully discriminated against on the basis of disability, you

[1] Always do right. This will gratify some people, and astonish the rest.—Mark Twain

may seek resolution through established grievance policy and procedures. You should contact the Equal Opportunity Office at 301-422-5895, D-282 ASB.

Student Learning Outcomes

Each program at BYU has developed a set of expected student learning outcomes. These will help you understand the objectives of the curriculum in the program, including this class. To learn the expected student outcomes for the programs in this department and college go to <<http://learningoutcomes.byu.edu>> and click on the College of Family, Home and Social Sciences and then this department. We welcome feedback on the expected student learning outcomes. Any comments or suggestions you have can be sent to <FHSS@byu.edu>.

Honor Code Standards

Students are also expected to adhere to the Dress and Grooming Standards. Adherence demonstrates respect for yourself and others and ensures an effective learning and working environment. It is the university's expectation, and my own expectation in class, that each student will abide by all Honor Code standards. Please call the Honor Code Office at 422-2847 if you have questions about those standards.

CLASS SCHEDULE

The following is a tentative schedule of class discussions and of the assigned readings and exercises for each assigned chapter from the Gravetter text. Please have the readings completed by the day we **begin** discussing each chapter. Please be prepared to hand in homework from the chapter exercises on the day **following** the last day of the discussion for each assigned chapter.

Date	Chapter	Topic
Sept. 1	Introduction to Course	
Sept. 3	1	Intro to statistics
Sept. 8	2	Frequency Distributions
Sept. 10	3	Central Tendency
Sept. 15	4	Variability
Sept. 17		Lab <i>Exam 1 Review</i>
Sept. 17-21	Exam 1 (1-4)	
Sept. 22, 24	5	z-Scores
Sept. 24	5	Lab
Sept. 29, Oct. 1	6	Probability
Oct. 1	6	Lab
Oct. 6, 8	7	Probability & Samples
Oct. 8	7	Lab
Oct. 13, 15	8	Hypothesis Testing
Oct. 15	8	Lab
Oct. 15-19	Exam 2 (5-8)	
Oct. 20	9	<i>t</i> -Statistic
Oct. 22	10	Independent Samples <i>t</i>
Oct. 22	10	Lab
Oct. 27, 29	11	Related Samples <i>t</i>
Oct. 29	11	Lab
Nov. 3, 5	13	Intro to ANOVA
Nov. 5	13	Lab
Nov. 5-9	Exam 3 (9-13)	
Nov. 10, 12	14	Repeated-measures ANOVA
Nov. 12	14	Lab
Nov. 17, 19	16	Correlation
Nov. 19	16	Lab
Nov. 24-27		Thanksgiving Holiday
Dec. 1, 3	17	Regression
Dec. 3	17	Lab
Dec. 8, 11	18	Chi Square
Dec. 11	18	Lab
Dec. 14-18	Final Exam (14-18)	