Psychological Statistics
PSYCH 308 | Section 005 | Fall Semester 2014 | 4:00 - 5:50 | MW | W006 BNSN

Instructor
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Teacher’s Assistant
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Office Hours
My office hours are Mondays 2:00-3:30 or by appointment. My office location, phone, and email are listed above. Feel free to contact me with questions regarding the course material either in person, by phone, or via email. I will do my best to make myself available at times other than my office hours. Please feel free to set up an appointment to talk with me or just come by my office. If I am available, I’ll talk with you. If not, we can find a time that will work.

Course Objectives
This course is an introduction to statistics in the social sciences. We will cover topics such as probability theory, descriptive statistics, sampling distributions, parameter estimation, tests of hypotheses, non-parametric tests, correlation, and regression.
Course Goals

_Hocus Pocus, Let’s Hope It’s Not Bogus_ – Statistician Robert Gallop on Statistics

Sometimes statistics seems magical – mathematical hand-waving, if you will. We read a statistic on the web or in a textbook and we simply hope that what is written isn’t bogus. My overarching goal for this class is to help you become comfortable enough with the logic and procedures of statistics that you can make an informed decision about whether the statistics you read about are bogus. I also hope in the process that you come to appreciate statistics and maybe come to like it, even a little.

Learning Outcomes

1. **Recognize and understand notation, formulae, and concepts.** Students will be able to recognize and understand basic statistical notation, formulae, and concepts. *Measurement: Multiple choice and short answer exams*
2. **Speak and write about notation, formulae, etc.** Students will be able to accurately speak and write about statistical formulae, concepts, analyses, and results. *Measurement: Short essays.*
3. **Select and use formulae appropriately.** Students will be able to correctly select and use basic statistical formulae and appropriately interpret the results. *Measurement: Multiple choice tests, short essays.*

Textbook

There is a single required textbook for this course (available in the BYU bookstore):


Any version of the 10th edition is fine – hardback, loose-leaf, ebook, etc.

You will also need to purchase access to Aplia, which is an online tool for the textbook and course. You will complete quizzes and supplemental assignments via Aplia. Note you can use Aplia as a free trial until 11:59 PM on 09/21/2014. The Aplia course key is: 3M4D-BMZM-3SVS.
Course Requirements

**Homework**
Statistics is a skill. Therefore, you will need to practice. Consequently, homework will consist of practice questions. You will not turn homework assignments in and thus they will not be graded. (However, see the self-evaluation section below to see how homework is involved in your grade.) The homework is there to help you practice and learn statistics. I strongly recommend that you work as many problems and answer as many questions from the textbook, Aplia, and from class as you can because that is how you will develop your statistical skills. To emphasize: *I strongly recommend that you work as many problems as you can as that will help you develop the most skills.* I will make time during class throughout the semester to work problems that you struggle to solve on your own.

**Quizzes/Problem Sets**
Learning occurs best when assignments are frequent and regular. Thus, this course has brief quizzes for each of the chapters and sections of lecture. You will use Aplia to complete the quiz (they are called Problem Sets on Aplia). The quizzes will tend to focus on the fundamental ideas, concepts, and calculations. The quizzes are a combination of multiple choice, fill in the blank, etc. They will be open-note and open-book and will not have a time limit, although you can only take each quiz once. **You must complete each quiz on your own.** The due dates for the quizzes are:

<table>
<thead>
<tr>
<th>Quiz</th>
<th>Date</th>
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<tbody>
<tr>
<td>1-5</td>
<td>Sep 30</td>
</tr>
<tr>
<td>6-11</td>
<td>Nov 4</td>
</tr>
<tr>
<td>12-15, 17</td>
<td>Dec 12</td>
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</tbody>
</table>

I will drop the lowest 3 quiz scores based on percent correct. If you forget to complete a quiz or have computer problems, then you will need to use one of the 3 dropped scores. All quizzes combined are worth 100 points (about 30% of the final grade). Your final quiz grade will be based on the average percent correct across the 12 best quizzes. Thus, if you average 90% correct, you will receive 90 points for your quiz grade.
Exams
There will be three exams, two occurring during the semester and one during finals week. Exams 1 and 2 will be given in the testing center and Exam 3 will be given in the classroom during finals week. Specifically, Exam 3 will be Wednesday, December 17, 5:45 p.m. to 8:45 p.m, in our classroom. The second and third exams are not comprehensive – I will not directly test you on all the material covered up to that point. Nevertheless, statistics is by definition comprehensive in that topics build upon one another. Thus, it is important that you master material throughout the course.

Whereas the quizzes tend to focus on fundamental ideas, concepts, and formulae, I create my exams to determine the degree to which students have mastered both fundamental and advanced topics (e.g., the ability to apply concepts to new situations). Consequently, students often find exams to be a bit more challenging than quizzes.

A Note on the Final Exam. This material is the University’s policy on Final Exams and is drawn from http://registrar.byu.edu/registrar/acadsched/finalExam.php:

Final examinations will be given at the times shown in the schedule below [see the web address for the specific times]. Examinations are not given early. The examination period is preceded by exam preparation days, which give time for conscientious review, study, and synthesis of the semester's work. The preparation and the examination periods are firmly scheduled parts of the semester; you must not make plans that interfere with these important academic activities. If illness or other uncontrollable circumstances prevent you from taking an examination at the scheduled time, you are responsible to inform the class instructor as soon as possible. Your instructor may give the grade Incomplete, depending on the circumstances. The incomplete cannot be given unless you and your instructor together prepare a contractual agreement.

Additionally, the University has changed its policy regarding which classes can use the testing center during Finals week. Specifically, the University has stated that: “Finals administered through the Testing Center for Fall and Winter will be for classes having a total (including multiple sections) of 60 or more students taking the same exam.” Given that our class will not have 60 students, I am required to
provide an in-class final.

**Self-Evaluation**
You will have the opportunity to complete a self-evaluation at the end of class. The purpose of these self-evaluation is to encourage you to think about the relationship between your effort in the course and what you learn. Thus, you will briefly evaluate and assign yourself a “grade” regarding your effort in the areas of attendance, homework completion, participation, etc. The evaluation will be completed on Learning Suite at the appropriate time during the semester. The self-evaluation will be worth 30 points.

**Grading**

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<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
<th>Grade</th>
<th>Percentage</th>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>94-100</td>
<td>B-</td>
<td>80-83</td>
<td>D+</td>
<td>67-69</td>
</tr>
<tr>
<td>A-</td>
<td>90-93</td>
<td>C+</td>
<td>77-79</td>
<td>D</td>
<td>64-66</td>
</tr>
<tr>
<td>B</td>
<td>87-89</td>
<td>C</td>
<td>74-76</td>
<td>D-</td>
<td>60-63</td>
</tr>
<tr>
<td>B+</td>
<td>84-86</td>
<td>C-</td>
<td>70-73</td>
<td>E</td>
<td>&lt;60</td>
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**Course Policies**

**Honor Code Standards**
In keeping with the principles of the BYU Honor Code, students are expected to be honest in all of their academic work. Academic honesty means, most fundamentally, that any work you present as your own must in fact be your own work and not that of another. Violations of this principle may result in a failing grade in the course and additional disciplinary action by the university. 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.

**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 Employment Office at 422-5895 or 367-5689 (24-hours); or contact the Honor Code Office at 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 which may impair your ability to complete this course successfully, please contact the Services for Students with Disabilities Office (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 may seek resolution through established grievance policy and procedures by contacting the Equal Employment Office at 422-5895, D-285 ASB.

**Electronic Devices**

Please switch all cell phones to silent mode prior to class. Please refrain from emailing, texting, instant messaging, and surfing the web during class. Such activities are often distracting to other students and to me. Furthermore, statistics typically takes considerable effort and concentration to learn. If your concentration is elsewhere, you will likely have difficulty in the course.

**Course Schedule**

The schedule in this course and syllabus is subject to change. Such changes will be announced in class if made. If you miss a class, check with your classmates or me to see if a change was announced in the class you missed. Please see learningsuite.byu.edu for the detailed schedule.