PSYCH 301 – Psychological Statistics

Winter 2013

Section 003: 341 MARB on T Th from 1:00 pm – 2:50 pm
Name: Scott Baldwin
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Office Location: 268 TLRB (Taylor Building)
Email: scott_baldwin@byu.edu
Office Hours: Th 3:00 pm to 4:00 pm
Or By Appointment

Name: Jenna Jackson
Office Phone:
Office Location: Psych Central
Email: jennajackson93@gmail.com
Office Hours: M,W 1:30 pm to 3:00 pm

Course Information

Description
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.

"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

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.

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.

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

### Textbook

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<thead>
<tr>
<th>Item</th>
<th>Vendor</th>
<th>Price (new)</th>
<th>Price (used)</th>
</tr>
</thead>
</table>

### 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. The practice questions will nearly all come from the textbook. I strongly recommend that you work as many problems and answer as many questions from the textbook 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.* The answers to nearly all of the practice questions are in the back of the textbook. I will make time during class throughout the semester to work problems that you struggle to solve on your own.

### Self-Evaluation

You will have the opportunity to complete a self-evaluation at the end of the semester. The purpose of the self-evaluations 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. These evaluations will be completed on Learning Suite. The self-evaluations will be worth 45 points.

### Quizzes

There will be six quizzes throughout the semester, each worth approximately 20 points. The quizzes will tend to
focus on the fundamental ideas, concepts, and calculations. The quizzes will be multiple choice. The quizzes will be administered on Learning Suite. They will be open-note and open-book and will not have a time limit, although you can only take them one time. However, you will be expected to complete them on your own. The quizzes will be available on Learning Suite for about one week. However, each quiz must be completed by the due date. The due dates can be found on the Schedule and under Assignments.

Exams

There will be three exams, two occurring during the semester and one during finals week. All exams will be given in the testing center on the dates listed in the Course Schedule. 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.

Grading Scale

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percent</th>
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<tbody>
<tr>
<td>A</td>
<td>94% to 100%</td>
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<tr>
<td>A-</td>
<td>90% to 93%</td>
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<tr>
<td>B+</td>
<td>87% to 89%</td>
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<tr>
<td>B</td>
<td>84% to 86%</td>
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<tr>
<td>B-</td>
<td>80% to 83%</td>
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<tr>
<td>C</td>
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<tr>
<td>C-</td>
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<tr>
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<td>67% to 69%</td>
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<tr>
<td>D</td>
<td>64% to 66%</td>
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<tr>
<td>D-</td>
<td>60% to 63%</td>
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<td>E</td>
<td>0% to 59%</td>
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Assignment Descriptions

Quiz #1
Jan 16
Due: Wednesday, Jan 16 at 11:55 pm
Quiz #1. This quiz covers material from Lecture and Chapters and 2 from the textbook.
Quiz #2
Jan
25
Due: Friday, Jan 25 at 11:55 pm
This Quiz covers material from Lecture and Chapters 3 and 4 from the book.

Quiz #3
Feb
27
Due: Wednesday, Feb 27 at 11:55 pm
Quiz #3. This quiz covers material from Lecture and Chapters 6 and 7 from the textbook.

Quiz #4
Mar
06
Due: Wednesday, Mar 06 at 11:55 pm
Quiz #4 Covers the material from Lecture and from Chapters 8, 9, and 10 from the textbook.

Quiz #5
Mar
29
Due: Friday, Mar 29 at 11:55 pm
Quiz #5 covers the material from Lecture and from Chapters 12 and 13 from the textbook.

Quiz #6
Apr
17
Due: Wednesday, Apr 17 at 11:55 pm
Quiz #6 covers material from Lecture and Chapters 14 and 15 of the textbook.

Self-Evaluation
Apr
17
Due: Wednesday, Apr 17 at 11:00 pm
The purpose of this self-evaluation is to encourage you to think about the relationship between your effort in the course and what you learned. Evaluate your effort in each of these three areas. You may give yourself anywhere from zero to fifteen points in each category. Please be thoughtful and honest about your responses. Generally, what is most important here is not the amount of time you have put in, but whether you have made sufficient effort to really learn the material, and in the case of class participation, whether you have contributed to the class environment and discussion. In order to receive full credit for the final evaluation you need to have completed the mid-term evaluation.

Exam 1
Feb
04
Due: Monday, Feb 04 at 11:00 pm
Exam 1 - Covering Lecture and Chapters 1-5 of the textbook. The exam will be given in the Testing Center. The exam runs from Jan 29 to Feb 4, with Feb 4 as a late day.

Exam 2
Mar
18
Due: Monday, Mar 18 at 11:00 pm
Exam 2 - Covering Lecture and Chapters 6-11 of the textbook. The exam will be given in the Testing Center. The exam runs from Mar 12 to Mar 18, with Mar 18 as a late day.

Exam 3
Apr
24
Due: Wednesday, Apr 24 at 11:00 pm
Exam 3 - Covering Lecture and Chapters 12-15 and 17 of the textbook. The exam will be given in the Testing Center. The exam runs from April 19-24.

Point Breakdown

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<thead>
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<th>Percent of Grade</th>
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<tr>
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<td>Quiz #6</td>
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<td>Self-Evaluation</td>
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<td>Exam 1</td>
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<td>Exam 2</td>
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<td>Exam 3</td>
<td>18.3%</td>
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University Policies

Honor Code
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.

Sexual 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 and pertains to admissions, academic and athletic programs, and university-sponsored activities. Title IX also prohibits sexual harassment of students by university employees, other students, and visitors to campus. If you encounter sexual harassment or gender-based discrimination, please talk to your professor or contact one of the following: the Title IX Coordinator at 801-422-2130; the Honor Code Office at 801-422-2847; the Equal Employment Office at 801-422-5895; or Ethics Point at http://www.ethicspoint.com, or 1-888-238-1062 (24-hours).

Student Disability
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 University Accessibility Center (UAC), 2170 WSC or 422-2767. Reasonable academic accommodations are reviewed for all students who have qualified, documented disabilities. The UAC can also assess students for learning, attention, and emotional concerns. Services are coordinated with the student and instructor by the UAC. 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.

Academic Honesty
The first injunction of the Honor Code is the call to "be honest." Students come to the university not only to improve their minds, gain knowledge, and develop skills that will assist them in their life's work, but also to build character. "President David O. McKay taught that character is the highest aim of education" (The Aims of a BYU Education, p.6). It is the purpose of the BYU Academic Honesty Policy to assist in fulfilling that aim. BYU students should seek to be totally honest in their dealings with others. They should complete their own work and be evaluated based upon that work. They should avoid academic dishonesty and misconduct in all its forms, including but not limited to plagiarism, fabrication or falsification, cheating, and other academic misconduct.

Plagiarism
Intentional plagiarism is a form of intellectual theft that violates widely recognized principles of academic integrity as well as the Honor Code. Such plagiarism may subject the student to appropriate disciplinary action administered through the university Honor Code Office, in addition to academic sanctions that may be applied by an instructor. Inadvertent plagiarism, which may not be a violation of the Honor Code, is nevertheless a form of intellectual carelessness that is unacceptable in the academic community. Plagiarism of any kind is
completely contrary to the established practices of higher education where all members of the university are expected to acknowledge the original intellectual work of others that is included in their own work. In some cases, plagiarism may also involve violations of copyright law. Intentional Plagiarism—Intentional plagiarism is the deliberate act of representing the words, ideas, or data of another as one's own without providing proper attribution to the author through quotation, reference, or footnote. Inadvertent Plagiarism—Inadvertent plagiarism involves the inappropriate, but non-deliberate, use of another's words, ideas, or data without proper attribution. Inadvertent plagiarism usually results from an ignorant failure to follow established rules for documenting sources or from simply not being sufficiently careful in research and writing. Although not a violation of the Honor Code, inadvertent plagiarism is a form of academic misconduct for which an instructor can impose appropriate academic sanctions. Students who are in doubt as to whether they are providing proper attribution have the responsibility to consult with their instructor and obtain guidance. Examples of plagiarism include: Direct Plagiarism—The verbatim copying of an original source without acknowledging the source. Paraphrased Plagiarism—The paraphrasing, without acknowledgement, of ideas from another that the reader might mistake for the author's own. Plagiarism Mosaic—The borrowing of words, ideas, or data from an original source and blending this original material with one's own without acknowledging the source. Insufficient Acknowledgement—The partial or incomplete attribution of words, ideas, or data from an original source. Plagiarism may occur with respect to unpublished as well as published material. Copying another student's work and submitting it as one's own individual work without proper attribution is a serious form of plagiarism.