CASPER COLLEGE COURSE SYLLABUS

STAT2150-01

Statistical Methods of Data Analysis

Semester/Year: Fall 2015

Instructor's Name: Ashley Widman-Johnson

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Office Hours: Monday 9:00 – 9:50 and 12:30 – 12:50

Tuesday and Wednesday 12:30 – 12:50 and 2:00 – 2:50

Thursday 9:00 – 9:50 and 12:30 – 12:50

Friday 12:30 – 12:50 **Other times by appointment

Course Description: Statistical Methods of Data Analysis is a continuation of statistics inference methods begun in STAT2050 or STAT2070. It includes multisample and multi-variate methods including step-wise regression, ANOVA, ANCOVA, MANOVA, and non-parametric testing. There is an emphasis on interpretation of analyses provided by the statistical computer package SPSS.

Statement of Prerequisite: A grade of "C" or better in STAT2050 or STAT2070

Goal: The goal of this course is to gain a working knowledge of the statistical methods used for the analysis of data and the interpretation of the results. This will be accomplished using the SPSS statistical computer package.

Casper College General Education Outcomes:

- Demonstrate effective written communication
- Use quantitative analytical skills to evaluate and process numerical data

Casper College may collect samples of student work demonstrating achievement of the above outcomes. Any personally identifying information will be removed from student work.

Course Objectives: The students will be able to, given data, identify the appropriate method(s) necessary to answer a posed statistical question. Results will be communicated in a report format.

Methodology: You are responsible for everything taught in class whether you are present or not. You should study with the intent to understand and not to "just get by" on the tests. You will be encouraged to participate in class. If you have any questions about what has just been presented PLEASE ask right then and there as it is likely that others may have a similar question.

Required Course Materials:

Calculator: While most calculations will be found using computer software, a scientific or graphing calculator will be used occasionally. The Math Learning Center offers a renting option. Contact them for more details.

Recommended Materials

Text: Any edition of *Discovering Statistics Using SPSS* by Andy Field

Flash drive: Many days of class will involve working on problems and/or assignments that will be continued at a later time. It is recommended that you bring a flash drive to save files so they can easily be reopened.

Grading:

Assignments: (25 points each) After most topics, there will be an assignment that will require the use of the material from that week. All assignments will require the use of SPSS and will be submitted in a one to two page formal report write-up. Each report must be your own individual work. The expected format of the reports and the rubric that will be used for to grade each assignment will be posted on Moodle. We will be spending approximately two days in class for most assignments. If you need additional time on assignments, you may need to use the Stat Lab for software access so budget your time accordingly. Assignments will be due via hard copy by the end of the day (11:59 p.m.) on the specified due date. The lowest assignment will be dropped.

Final Project: (100 points total) At the end of the semester, there will be a two-part major analysis with multiple hypotheses requiring the use of several techniques used throughout the semester. The final week of class time will be set aside for work time on this project.

Late Assignments: No assignment will be accepted late unless you are personally given permission from me BEFORE the assignment is due. Missing class is never a legitimate reason for attempting to turn in an assignment late. No assignment will be accepted after its solutions have been discussed for any reason.

Attendance: While attendance is not part of the grade calculation, it is absolutely necessary for success in this course. Since most of the learning and practice will happen in the class, it is essential to miss as few classes as possible.

Cell Phone Policy: Cell phones are never to be seen or heard in class. They may not be used as a calculator. It is both rude and distracting to have your phone out in class and will not be tolerated. A phone set on vibrate can be just as disruptive as it is on ring so please turn your phone off before the start of class.

Grading Scale: The traditional percentage grading scale of 90% A - 80% B - 70% C - 60% D will be used. However, I reserve the right to lower the grade cutoffs.

Class Policies: Last Date to Change to Audit Status or to withdraw with a W Grade is November 12th.

Student Rights and Responsibilities: Please refer to the Casper College Student Conduct and Judicial Code for information concerning your rights and responsibilities as a Casper College Student.

Chain of Command: If you have any problems with this class, you should first contact the instructor to attempt to solve the problem. If you are not satisfied with the solution offered by the instructor, you should then take the matter through the appropriate chain of command starting with the Department Head/Program Director, the Dean, and lastly the Vice President for Academic Affairs.

Academic Dishonesty: (Cheating & Plagiarism) Casper College demands intellectual honesty. Proven plagiarism or any form of dishonesty associated with the academic process can result in the offender failing the course in which the offense was committed or expulsion from school. See the Casper College Student Code of Conduct for more information on this topic.

Official Means of Communication: Casper College faculty and staff will employ the student's assigned Casper College email account as a primary method of

communication. Students are responsible to check their account regularly. This is also, where you will find course evaluation links during course evaluation periods.

ADA Accommodations Policy: If you need academic accommodations because of a disability, please inform me as soon as possible. See me privately after class, or during my office hours. To request academic accommodations, students must first consult with the college's Disability Services Counselor located in the Gateway Building, Room 344, (307) 268-2557, bheuer@caspercollege.edu. The Disability Services Counselor is responsible for reviewing documentation provided by students requesting accommodations, determining eligibility for accommodations, and helping students request and use appropriate accommodations.