SYLLABUS for STATISTICAL METHODS

DATE: Fall 2015
COURSE NUMBER AND TITLE: PSYC/SS/ECON 300.01/.02 Statistical Methods
CREDIT HOURS: 3
TIME AND PLACE: Section 02 9:00 a.m. – 10:15 a.m. Mon/Wed, SAC 148
                  Section 01 12:00 p.m. - 1:15 p.m. Tues/Thurs, ADM 203
INSTRUCTOR: Teri Rust, Ph.D.
OFFICE: Spalding Hall 273, phone: 792-2276, e-mail: trust@lcsc.edu
OFFICE HOURS: M-TH 1:30-2:45, and by appointment

Course Description: This course is designed to provide students with a basic understanding of the
fundamentals of statistics. The emphasis will be on understanding, application, and problem solving, not on
extensive computations and the memorization of formulas. The concepts considered in this course are those
related to the representation of information (descriptive statistics and graphs) and those concepts related to
drawing conclusions based on sample data (inferential statistics, including probability, the normal
distribution, and hypothesis testing—Independent t, dependent t, correlation, chi square, ANOVA).

"Worksheets" booklet available at bookstore.

Required Equipment: A calculator with a square root key, and one YOU know how to operate. You may
NOT use a calculator on a phone or other communication/internet device.

A note to persons with disabilities. If you need course adaptations or accommodations because of a
disability, if you have emergency medical information to share with me, or if you need special arrangements
in case the building must be evacuated, please make an appointment with me as soon as possible. My office
location and office hours are printed above.

Prerequisite: Completion of the general education math requirement prior to enrollment.

General Course Objectives
Upon completion of the course, the student:
1. will be familiar with the various scales of measurement;
2. will be able to create and evaluate frequency distributions and various graphing techniques;
3. will be familiar with the calculations, uses, and interpretations of the three measures of
central tendency;
4. will be familiar with the calculations, uses, and interpretations of measures of variability;
5. will be familiar with the calculations, uses, and interpretations of percentile ranks;
6. will be familiar with the normal curve model, using the normal curve table, and the basics of
probability;
7. will be familiar with the basic theory behind hypothesis testing, including the concept of
statistical significance;
8. will be able to follow the steps to carry out different types of t-tests and interpret the results;
9. will be familiar with the concepts of Type I and Type II errors;
10. will demonstrate an understanding of correlation, including the limitations of conclusions
that can be drawn;
11. will be able to follow the steps to carry out one-way and two-way chi square analyses and
interpret the results;
12. will be able to follow the steps to carry out a one-way ANOVA and interpret the results;
13. will be able to select the appropriate inferential analysis;
**Attendance:** Attendance is extremely important. Everything is cumulative, so if you miss class you will have a difficult time. Attendance is taken every day. It is YOUR responsibility to sign in. If you know you will be gone, please let me know. If you miss class, please do not delay a future class asking me to cover what you missed. Those questions are more appropriate in my office. Attendance is expected, and 8 absences will result in an F regardless of points earned. If there are circumstances that will interfere with your attendance, please register for the online version of the course. No texting, cell phones ringing, or internet activity during class. Using a computer to take notes is not allowed, given the nature of formulas and computations.

**Assignments:** Most class periods end with an outside assignment. It is strongly recommended you complete these in order to facilitate your understanding of the concepts. In fact, it is highly unlikely you can pass the course without doing the homework. Anticipate spending approximately 3 hours outside of class for every class period. Some homework assignments will be submitted for points. They are due IN CLASS. Late assignments are accepted for up to 1 week, but they lose 10% for every day they are late. I DO NOT accept ANY assignments after 5:00 p.m. on the Friday before finals’ week.

I will try to explain concepts thoroughly in class. I am happy to address questions during class and outside of class. Do not expect to be able to satisfactorily complete this course just by coming to class--READING THE BOOK AND extra work are CONSISTENTLY required. You must be able to complete the homework worksheets without using your notes, text, or previously worked problems. You must be able to understand the vocabulary of statistics.

**Tests:** The four exams include a combination of multiple choice and worked problems. The only acceptable reasons to miss an exam are extreme illness, absence while representing the college, or death in the family. In any case, I MUST be notified prior to the beginning of class for a make-up to be possible. ALL EXAMS ARE CUMULATIVE!!!!! If English is not your first language, you may use a translation dictionary on tests.

- Test 1, Chpts 1-3 (80 pts)
- Test 2, Chpts 4-5, + (90 pts)
- Test 3, Chpts 6 & 9 (100 pts)
- FINAL, Wed Dec 16 OR Thurs Dec 17, Chpts 7, part of 13, 11 (130 pts)
  Do NOT to leave for home or vacation before the final and expect to take it early. I do not allow tests to be taken early. I also do not allow students to do anything “more” once final exam week begins.

**Quizzes:** There are 3 e-mail quizzes worth 5 points each. They will follow within a week of tests 1, 2, and 3. There will also be multiple in-class quizzes, and I will count your 5 highest scores. Research shows that testing/quizzing improves retention of information (McDaniel, Anderson, Derbish, & Morrisette, 2007).

**Withdrawing:** The deadline for withdrawing from the class with a W on your transcript is Thursday, November 5. After that, a petition is required, it costs money, and it is not necessarily approved. Withdrawing can now negatively impact your financial aid, so please be aware of all consequences.

**Grading:** Your final grade will be assigned largely (approx 99%) based on your performance on exams and quizzes. You may figure 90%, 80%, 70% cut-offs. I reserve the option of using +/- grading for those scores that fall close to the cutoffs. Other grading criteria include outside assignments and your mature approach to the subject as evidenced by attendance, classroom behavior, and attitude. You can monitor your grades through Blackboard. Do not assume that you will automatically get bumped up by 1%.

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<tr>
<th>Component</th>
<th>Points</th>
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<tbody>
<tr>
<td>3 e-mail quizzes @ 5 pts each</td>
<td>15</td>
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<tr>
<td>5 in-class quizzes @ 5 pts each</td>
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<tr>
<td>Tests</td>
<td>400</td>
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<td>Total</td>
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**Grades and what they mean:**

- (500-555) A Distinguished (Exceptional)
<table>
<thead>
<tr>
<th>Score Range</th>
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<tbody>
<tr>
<td>(444-499)</td>
<td>B Superior</td>
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<tr>
<td>(389-443)</td>
<td>C Average (Minimal Expectation)</td>
</tr>
<tr>
<td>(333-388)</td>
<td>D Below Average</td>
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<tr>
<td>(…-323)</td>
<td>F Failing</td>
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Please feel free to stop by my office, call, or e-mail, if you need any assistance.
LEWIS-CLARK STATE COLLEGE Syllabus Addendum

**Consumer Information**
In 2008, the federal government required all post-secondary institutions offering federal financial aid programs to provide key data to both prospective and current students. To comply with this requirement, Lewis-Clark State College has developed a consumer information page, which may be accessed at [http://www.lcsc.edu/consumer-information/](http://www.lcsc.edu/consumer-information/).

**Disability Accommodations**
Students requiring special accommodations or course adaptations due to a disability and/or a health-related issue should consult their course instructors and the LCSC Student Counseling Center immediately (RCH 111, 792-2211). Official documentation may be required in order to provide an accommodation and/or adaptation.

**Student Rights and Responsibilities**
Students have the responsibility for knowing their program requirements, course requirements, and other information associated with their enrollment at LCSC. Students should review the LCSC General Catalog ([http://webdev.lcsc.edu/catalog](http://webdev.lcsc.edu/catalog)) and the LCSC Student Handbook ([http://www.lcsc.edu/media/2157659/Student-Handbook.pdf](http://www.lcsc.edu/media/2157659/Student-Handbook.pdf)) for more information.

**Accidents/Student Insurance**
Students participating in LCSC classes normally must look to their personal health insurance policy (Student Health Insurance Plan or comparable private coverage) should an accident occur. In the event of an accident, please seek medical help, if necessary, and report the incident to LCSC Security (792-2226). Fieldtrips or other special student activities may also require students to submit a signed participation waiver (forms can be obtained from the supporting Division Office).

**Enrollment Verification/Attendance**
Students who are not actively pursuing their classes may have to repay part or all of their financial aid awards depending upon the circumstances.

**Academic Dishonesty**
Academic dishonesty, which includes cheating and plagiarism, is not tolerated at LCSC. Individual faculty members may impose their own policies and sanctions regarding academic dishonesty after offering the student an opportunity to explain his or her actions. Sanctions imposed by the faculty member are limited to grades on the assignment(s) in question and/or on the course grade. On matters of academic dishonesty, faculty members do not have the authority to dismiss a student from class indefinitely nor to disenroll a student from a program without corroboration from a Division Chair (or program ethics committee where applicable), the appropriate instructional dean, and the Vice President for Student Affairs. Students who are accused of being academically dishonest may be referred to the VP for Student Affairs for official disciplinary action.

**Illegal File Sharing**
Students using LCSC’s computers and/or computer network must comply with the college’s appropriate use policies and are prohibited from illegally downloading or sharing data files of any kind. Specific information about the college’s technology policies and its protocols for combating illegal file sharing may be found on the VP for Student Affairs’ web page ([http://www.lcsc.edu/student-affairs/student-code-of-conduct/](http://www.lcsc.edu/student-affairs/student-code-of-conduct/)).

**Diversity Vision Statement**
Regardless of race, color, age, sex, religion, national origin, disability, veteran status, or sexual orientation, you will be treated and respected as a human being.

**Disclosures**
During this course, if you elect to discuss information with me which you consider to be sensitive or personal in nature and not to be shared with others, please state this clearly. Your confidentiality in these circumstances will be respected unless upholding that confidentiality could reasonably put you, other students, other members of the campus community, or me in danger. In those cases or when I am bound by law to report what you have told me, such as incidents involving sexual assault or other violent acts, I will submit a report to appropriate campus authorities.

**Student Feedback**
Students shall be provided the opportunity to formally evaluate each course in which they are enrolled. Notification of student feedback opportunity and timelines will be made through the official LCSC student email (currently LCMail) or online course learning management (currently Blackboard Learn) systems.

**Student Work**
Student work for this course (assignments, quizzes, exams, projects, etc.) may be copied and retained for program assessment or accreditation purposes. For more information, speak with the instructor or division chair.

Approved by VP for Student Affairs & Provost 7/07/2015