



## Statistics for the Behavioral & Social Sciences Fall 2011

*All respect faith, but doubt is what gives you an education.@ - Wilson Mizner, American Dramatist*

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Professor:	Lora Larkin
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Office Hrs:	Mon-Thur 10:45 - 11:15am or by appt

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Course/CRN:	PSYC B5 #75667 & 75671
Class Day/Time:	M/W & T/Th 8:30-10:30am in SE Bldg Rm7
Website:	<a href="http://www2.bakersfieldcollege.edu/llarkin">www2.bakersfieldcollege.edu/llarkin</a>
In case of absence:	refer to my website for course updates
In emergency:	Call BC security at 395-4554 (also for an escort to your vehicle)

### **WELCOME TO STATISTICS!**

This course is intended to provide you with the skills necessary to **critically evaluate information** that you are exposed to on a daily basis. Regardless of your career goal, **you should be educated consumers** of information. To do well in this course, you must understand the basics in the beginning; so be sure to ask questions if you do not understand. **The only dumb question is the one you do not ask!** Statistics does not have to be your worst class, and you do not need to be a math genius to do well in this course. In fact, mathematics is only a small portion of your course content. You might also be assured to know that I hate Math! But I have found that statistics is one of my favorite courses to teach. And, yes, it is possible to enjoy yourself in this class!

If you have difficulty with time management (remember: this is a 5-unit class!), reading independently, listening attentively, working with others in a group setting, or cannot/ will not buy the book, then this course is not for you. The skills you are expected to practice in this class are **the same skills that will be expected of you within your careers**. As you read further, you will learn that I do not take too kindly to issues of attendance and tardiness either. However, I will do everything I can to not only help you through this course, but for you to take away some valuable learning tools as well.

### **Course Description:**

Statistics as applied to the behavioral and social sciences: Introduces basic terminology and measurement scales associated with basic statistics used in behavioral and social research: Emphasizes appropriate application and interpretation of measures of central tendency, variation, and correlation in the use of parametric and nonparametric statistical hypothesis testing. Prerequisites include Math BD & Intro to Psych, Soc, Anthr, Econ, or Poli Sci. The units earned are also transferable to UC, CSU, and private colleges. Recommended English Level 5 and Reading Level 5.

### **Student Learning Outcomes:**

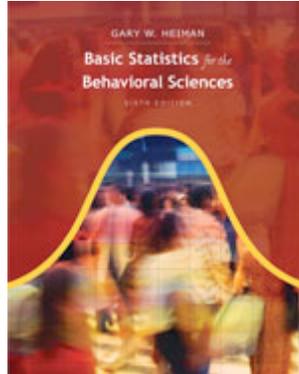
By the end of this class you will be able to do each of the following...

1. Identify and explain the levels of measurement and terminology used in statistical analysis
2. Explain and effectively apply descriptive and inferential statistics for each level of data
3. Interpret statistical analyses based on behavioral and social research problems

### **Text/Materials:**

- Required Text: Heiman, G.W. (2011). Basic statistics for the behavioral sciences (6<sup>th</sup>

- edition). Belmont, CA: Cengage. (ISBN: 978-0-8400-3143-3)
- Optional Study Guide: Hendricks, D.J & Walls, R.T. (2011). Student workbook and study guide. Belmont, CA: Wadsworth: Cengage Learning. (ISBN: 978-0-495-90959-0)
- Scientific Calculator: ...must have square root and squaring function keys.
- #2 Pencils - no pens!!! (Work written in pen will NOT be accepted)
- Scantron #AS 100 (x7 for exams) & # AS 15 (x7 for quizzes)
- Texts and Supplemental resources are also on reserve in the BC library.



### **Students with Disabilities:**

If you have a disability and believe you may need additional accommodations in this class, you are encouraged to contact Disabled Student Programs & Services located at Student Services Building, 1<sup>st</sup> Floor, Counseling Center (395-4334) **AS SOON AS POSSIBLE** to better ensure such accommodations are implemented in a timely fashion.

### **Academic Integrity:**

Plagiarism occurs when you use the exact written or spoken words, a summary of written or spoken words, and/or the ideas that someone else has produced without giving the original author credit. When you use another author's material you must give that person credit by indicating the source of the material in your text. Buying a paper or having someone write your paper is also considered plagiarism. A plagiarized paper will receive no (0%) credit.

### **EVALUATION:**

**Exams** will consist of M/C and short answer questions. Each exam may be comprised of content from the text as well as lecture discussion, including concept/application questions as well as calculations. You may use a 5x7 index card for each exam to use for quick reference notes, however, no more than 1 ½ hours is allowed for each exam. **WARNING: If you are more than 15 minutes late for an exam, you will not be allowed to take the exam.** No make-up exams will be given. **NO EXCEPTIONS! The lowest exam score will be dropped** at the end of the semester. Most exams will have approximately 50 MC questions (worth 1 point each) and at least 2 short answer questions (worth 5-10 points each).

**Quizzes** will be administered on each review day at the beginning of class, and will also include M/C questions from each of the required chapters taken from the online quizzes on your textbook publisher's website. There is also a link to these quizzes provided on my website. **If you are late for a quiz, you will not be allowed to take the quiz.** No make-up quizzes will be given. **NO EXCEPTIONS! The lowest quiz score will also be dropped** at the end of the semester. Each quiz will have approximately 10 questions, worth 1 point per question.

**Assignments** will include in-class/out-of-class handouts, group activities, and SPSS (Statistical Program for the Social Sciences) data entry and analysis. Most assignments are due either the same class period they were assigned or the following class period at the start of class. **To avoid point deduction, late (after class has begun) or illegible assignments or assignments without work shown will be accepted if accompanied by additional coursework attached to the required**

assignment within one week of the original due date (additional coursework to be discussed with me). Take-home work must also be neat (i.e., no perforated edges) and pre-stapled (no, I do not bring a stapler with me to class). Most assignments are graded on a 10 point scale based on work shown rather than correct responses. It is your responsibility to verify correct responses.

A **Survey** will be completed throughout the semester as an opportunity for you to synthesize the information you learn in this class into one activity. There are five parts to the survey, and each part will be due as the material for that section is covered in the class (see outline for corresponding due dates). For example, Part I relates to chapter 1 & 2; Part II relates to chapters 3 & 4 and so on. This 150 points assignment is worth 15% of your grade, with the final section due in the last weeks of the class.

A **Journal Critique** includes a 65-point typed summary of an empirical journal source written in APA (not MLA) style, including a description of the researcher=s hypotheses and variables, method of data collection, multivariate statistical analysis, and results. You will also include your comments and reactions to either the way the research was conducted or to the findings from the research. Instructions for finding articles and examples of empirical journal sources are available on my website. You will also present your study to your peers for an additional 10 points, discussing the purpose of the study and why the particular statistical analysis was chosen. This 75 point assignment is worth 15% of your grade (i.e. you cannot pass this course without completing a journal critique). **Late critiques will be accepted, but will be deducted 10% each late day.**

**Participation** will be noted daily. Many assignments involve working in GROUPS of at least four (4) individuals, though you are responsible for your own assignments. Which group you will participate in will be decided by you early in the semester, and you will remain in this group (unless there are extenuating circumstances, such as students dropping or not working well together) throughout the course.

**\*\*You should be advised that the combined writing assignments (including weekly assignments, journal critique, and short-answer portion of your exams) for this class will total no less than 10 pages.**

### **IMPORTANT TO READ**

**(BEFORE you discuss your absence with me)!**

**Attendance** will be taken daily. **Do not enroll in the course if you are unwilling or unable to attend ON-TIME for the ENTIRE class period.** You are allowed no more than four (4) excused or unexcused absences to **avoid being dropped from the course.** *NOTE: In fairness to the waitlisted students, if you are absent for any of the classes within the first week of the semester without communicating with me, you will be automatically dropped from the course and will not be reinstated.* **Absences and late coursework are strongly discouraged.**

**Absence Make-up Policy:** You are expected to inform me in advance of any anticipated absences. If an absence is excused (e.g. documented illness, death, participation in an academic event), you may make-up take-home course work for full

credit. Make-up course work must be completed the class period prior to or immediately upon returning to class. If I was not notified *prior* to the excused absence, course work CANNOT be made-up for full credit (unless the absence was due to an emergency situation).

**Late Coursework** (excluding your journal critique): You must have been in attendance when the assignment was distributed or made arrangements with a classmate to receive a copy of the assignment. To avoid point deduction for your late work (after class has begun), you will be given one week to return additional work (in proportion to the late work and to be discussed at the time of your tardy) along with

your required assignment before any points for the assignment will be given. Keep in mind, no more than (3) assignments will be accepted late.

**PLEASE TAKE NOTE: Computer/Printer/Childcare/Car problems DO NOT constitute a change in my policies. I prefer not to be placed in a position of evaluating personal lives, though I will be more than willing to discuss your difficulties should they arise.**

**Grade Scale:**

89.5-100	A	40% Exams
79.5-89.4	B	10% Quizzes
69.5-79.4	C	20% Assignments (In/Out-of-Class)
59.5-69.4	D	15% Journal Critique
0-59.4	F	15% Survey

**Grade Calculation:** \_\_\_%(40%) + \_\_\_%(10%) + \_\_\_%(20%) + \_\_\_%(20%) + \_\_\_%(10%) = \_\_\_% out of 100% possible...

HINT: use decimals rather than % to calculate your final grade.

Grades may be curved at my discretion. You are responsible for keeping all returned, graded work and must keep all graded assignments until after final grades have been reported to Admissions and Records in the event that a grade is missing from the gradebook or has been miscalculated. Otherwise the final grade will remain in effect. Grade summaries will be handed out at Midterm and towards the end of the semester for clarification. It is also your responsibility to collect all assignments by the end of the semester.

**Borderline Final Grades:**

If your grade percentage is near a higher letter grade (e.g., 78.9% is a C, but near a B) you will earn the higher grade if throughout the semester you have missed no more than two classes, completed all assignments, and have demonstrated good classroom participation.

**REMEMBER: I will be evaluating you on more than exams, quizzes, and assignments. I will also be taking mental notes on your ATTITUDE and HOW YOU APPROACH THIS CLASS!!!**

**THE MORE CHATTER IN THIS CLASS THE BETTER!**

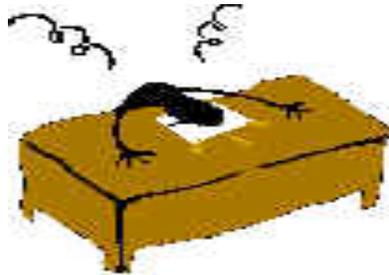
**Show me that you are not afraid to HAVE FUN LEARNING!!!**

**Extra Credit:**

**NOTE: You are allowed no more than 2% of your total semester grade from extra credit assignments.** Extra credit opportunities (each worth 1%) will be announced throughout the semester and may include an additional typed or presented empirical journal critique (see above), a scheduled meeting with me for (approx 10 min) outside of class time to discuss course related material (i.e., paper assignments, career objectives related to psychology, etc.); providing recent newspaper/magazine articles, comic strips, etc. with a brief typed explanation of how it relates to course content or to discuss within class; taking the learning styles quiz on my intro psych webpage and typing a discussion of the results and application to this class; and/or completing a time management activity from my intro psych webpage to better prepare you to be more successful in this course(see me if you need more details).

In addition, you may also attend the library workshops and critical academic skills workshops offered periodically throughout the regular semester (see BC library homepage and BC academic development for schedule of workshops). Be sure to let the workshop personnel know that you wish to receive credit for “Lora Larkin’s Statistics Course” so that I may receive notification of attendance from the personnel.

You can also get involved in campus activities (see [www2.bakersfieldcollege.edu/culture](http://www2.bakersfieldcollege.edu/culture) & BC event calendar for more details), including plays, concerts, sporting events, student government activities, and guest lectures. Keep your ticket stubs, brochures, or handouts and type a half-page discussing your experience—what you liked/didn’t like, etc.



**Student Contact Information** (Who you can call when you are absent or need help; Please complete by the end of the 2<sup>nd</sup> week of the semester):

Name	Phone	Email	Availability

**NOTE:** This personal information is NOT to be used for any other purpose besides clarifying course content for your statistics course (i.e. this is not my attempt at matchmaking for your dating pleasure). 😊

**ATENTATIVE@ COURSE SCHEDULE**  
**Fall 2011 - [Mon/Wed]**

Day of Class	Discussion	*Assignments Due Next Class
Aug - 22 24 29 31	Ch 1: Introduction to Statistics Ch 2: Research Quiz/ Journal Discussion <b>EXAM #1 - Ch 1-2</b>	Read/Outline Ch 1&2 Workbook/Online Quiz Ch 1&2 Study for Exam #1 Read/Outline Ch 3 <b>Survey Part I Due 9/7</b>
Sept - 7 12 14 19	Ch 3: Frequency Distributions Ch 4: Meas. of Central Tendency Quiz/Review <b>EXAM #2 - Ch 3-4</b>	Read/Outline Ch 4 Workbook/Online Quiz Ch4-5 Study for Exam #2 Read/Outline Ch 5 <b>Survey Part IIa &amp; b Due 9/21</b>
21 26 28 Oct - 3 5	Ch 5: Meas. of Variability Ch 6: z-scores & the Normal Curve Quiz/Review <b>EXAM #3 - Ch 5-6</b>  SPSS Data Entry/Analysis	Read/Outline Ch 6 Workbook/Online Quiz Ch 5-6 Study for Exam #3 Read Appendix B p392-401 <b>Survey Part IIIa &amp; b Due 10/5</b> Read/ Outline Ch 7
10 12 17 19	Ch 7: Correlation Ch 8: Regression Quiz/Review <b>EXAM #4 - Ch 7-8</b>	Read/Outline Ch 8 Workbook/Online Quiz Ch 7-8 Study for Exam #4 Read/Outline Ch 9
24 26 31 Nov - 2	Ch 9: Infer Stats/Journal Discussion Ch 10: Hypothesis Testing Quiz/Review <b>EXAM #5 - Ch 9-10</b>	Read/Outline Ch 10 Workbook/Online Quiz Ch 9-10 Study for Exam #5 Read/Outline Ch 11
7 9 14 16  21	Ch 11: t-tests/Correlations Ch 12: Independent Samples t-tests Ch 12: Related Samples t-tests  Quiz/SPSS  <b>EXAM #6 - Ch 11-12</b>	Read/Outline Ch 12 <b>Survey Part IV Due 11/14</b> Workbook/Online Quiz Ch 11-12 <b>Survey Part V Due 11/16 (end of class)</b> <b>Journal Critique Due 11/21</b> Study for Exam Read/Outline Ch 13 <b>Survey Part VI Due 11/23</b>
23 28 30 Dec - 7	Ch 13: ANOVA/SPSS Ch 15: Nonparametric tests/ SPSS Quiz/Journal Presentations <b>EXAM #7 - Ch 13-15</b>	Read/ Outline Ch 15 Prepare for Journal Presentation Study for Exam #7

**\*NOTE: Readings, Outlines, and Study Workbook are NOT REQUIRED, but are RECOMMENDED to increase your chance for success in this course. You may also use these assignments for up to 1% of EXTRA CREDIT each. Only 2% of extra credit will be added to your overall semester grade total (see EX CR in syllabus).**

**ATENTATIVE@ COURSE SCHEDULE**  
**Fall 2011 - [Tue/Thur]**

Day of Class	Discussion	*Assignments Due Next Class
Aug - 23 25 30 1	Ch 1: Introduction to Statistics Ch 2: Research Quiz/ Journal Discussion <b>EXAM #1 - Ch 1-2</b>	Read/Outline Ch 1&2 Workbook/Online Quiz Ch 1&2 Study for Exam #1 Read/Outline Ch 3 <b>Survey Part I Due 9/6</b>
Sept - 6 8 13 15	Ch 3: Frequency Distributions Ch 4: Meas. of Central Tendency Quiz/Review <b>EXAM #2 - Ch 3-4</b>	Read/Outline Ch 4 Workbook/Online Quiz Ch4-5 Study for Exam #2 Read/Outline Ch 5 <b>Survey Part IIa &amp; b Due 9/20</b>
20 22 27 29	Ch 5: Meas. of Variability Ch 6: z-scores & the Normal Curve Quiz/Review <b>EXAM #3 - Ch 5-6</b>	Read/Outline Ch 6 Workbook/Online Quiz Ch 5-6 Study for Exam #3 Read Appendix B p392-401 <b>Survey Part IIIa &amp; b Due 10/4</b>
Oct - 4	SPSS Data Entry/Analysis	Read/ Outline Ch 7
6 11 13 18	Ch 7: Correlation Ch 8: Regression Quiz/Review <b>EXAM #4 - Ch 7-8</b>	Read/Outline Ch 8 Workbook/Online Quiz Ch 7-8 Study for Exam #4 Read/Outline Ch 9
20 25 27 Nov - 1	Ch 9: Infer Stats/Journal Discussion Ch 10: Hypothesis Testing Quiz/Review <b>EXAM #5 - Ch 9-10</b>	Read/Outline Ch 10 Workbook/Online Quiz Ch 9-10 Study for Exam #5 Read/Outline Ch 11
3 8 10 15  17	Ch 11: t-tests/Correlations Ch 12: Independent Samples t-tests Ch 12: Related Samples t-tests  Quiz/SPSS  <b>EXAM #6 - Ch 11-12</b>	Read/Outline Ch 12 <b>Survey Part IV Due 11/10</b> Workbook/Online Quiz Ch 11-12 <b>Survey Part V Due 11/15 (end of class)</b> <b>Journal Critique Due 11/17</b> Study for Exam Read/Outline Ch 13 <b>Survey Part VI Due 11/22</b>
22 29 Dec - 1 6	Ch 13: ANOVA/SPSS Ch 15: Nonparametric tests/ SPSS Quiz/Journal Presentations <b>EXAM #7 - Ch 13-15</b>	Read/ Outline Ch 15 Prepare for Journal Presentation Study for Exam #7

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