## Course Syllabus

Math 119 - Elementary Statistics
Professor Tim Busken
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Section 75857, 3 units
T-Th, 2:20-3:45pm
Room M207
Office Hours: 2-2:20pm T-Th

Textbook: (Required) DeVeaux, Velleman, \& Bock. Intro Stats. Third Edition, Boston: Prentice Hall/Allyn \& Bacon, 2009. ISBN: 978-1-256-77468-6 Used: \$10-85. You do NOT need the MyMathLab Student Access Kit.

Final Exam Date: Thursday, December 12th

## Grading:

|  | Homework |
| :--- | :--- |
| Project | $7.5 \%$ |
| Labs | $5 \%$ |
| Exams | $60 \%$ (15\% each) |
| Final Exam | $20 \%$ |



Blackboard: Blackboard is a website that allows you see your grades as they appear in my gradebook. I use blackboard to email the class, so please sure that your correct email address is registered with Student Web Services/Blackboard. Here is the url: sdccd.blackboard.com/webapps/login/ Your login and password information (first-time users) is your CSID and birthday using the 2 digit month, 2 digit day, and 4 digit year (i.e. 01012013)

Course Description: This course covers descriptive and inferential statistics. The descriptive portion analyzes data through graphs, measures of central tendency and spread. Other statistical practices utilize basic probability, binomial and normal distributions, estimation of population parameters, hypothesis testing, linear regression and correlation. Analytical reading and problem solving are required for success in this course. This course meets district G.E. requirements. This course is intended for students interested in statistical analysis or need a transfer math course. (FT). Associate Degree Credit \& transfer to CSU. UC Transfer Course List. MATH 119, BIOL 200 or PSYC 258 combined: maximum credit, one course.

Prerequisite: MATH 096 or MATH 092 with a grade of "C" or better, or equivalent, or Assessment Skill Levels M50/M45.

## Student Learning Outcomes:

1. Organize, describe and interpret data sets in meaningful tables and graphs, and evaluate measures of central tendency and variation.
2. Evaluate probabilities using the laws of probability, the standard normal distribution, tdistribution, and $\chi^{2}$-distribution.
3. Use hypothesis testing to investigate claims involving one or two samples, utilizing the standard normal distribution, $t$-distribution, $r$-distribution, and $\chi^{2}$-distribution.

## Student Learning Objectives:

1. Organize qualitative and quantitative data into meaningful charts and graphs.
2. Analyze data by comparing and contrasting graphs.
3. Evaluate measures of location, central tendency and variation.
4. Evaluate probabilities using a variety of computational methods.
5. Evaluate probabilities using a variety of distributions.
6. Apply the Central Limit Theorem to sampling distributions.
7. Use estimation techniques to determine confidence interval and sample size.
8. Perform and analyze hypothesis tests of means and proportions using both one-and twosample data sets.
9. Evaluate correlation to determine the appropriateness of regression models.
10. Compute suitable regression models.

Graphing Calculator: The TI- 84 calculator is REQUIRED for this course. The TI-83 or TI- 83 plus may also be used as they operate using the same instructions as the TI-84 (with a few exceptions). You will learn how to use this calculator by using the tutorials or following the instruction set located in each "Using Technology" section of the text. It is your responsibility to bring your calculator to all on-campus exams and classes. Students may not share calculators during exams.


## Seven Tips for Success in Your Stats Class

1. Come to class every day, on time
2. Take notes in class
3. Ask questions! This will slow me down!
4. Attempt ALL the homework ASAP after class.
5. Check all your answers in back of the book
6. Get help in office hours, from a tutor, or from a friend.

## 7. Be POSITIVE!

Attendance Policy: You may be dropped for any absence without notifying me by email during the first week. Attendance is expected at each class meeting. Bring your text and calculator to every class. You can be dropped from the class for having $>6$ hours of absences. Late arrival and early departure from class can be counted as an absence. If you know that you will be absent or very late, please notify me by email me. In the event of an absence, you are responsible for all material covered in class, turning all assignments in on time and any schedule changes or class
announcements. It is the students responsibility to drop all classes in which he/she is no longer attending. It is the instructors discretion to withdraw a student after the add/drop deadline due to excessive absences. Students, who remain enrolled in a class beyond the published withdrawal deadline, as stated in the class schedule, will receive an evaluative letter grade in this class.

Cheating/Plagiarism: Students are expected to be honest and ethical at all times in the pursuit of academic goals. Students, who are found to be in violation of Administrative Procedure 3100.3 Honest Academic Conduct, will receive a grade of zero on the assignment, quiz, or exam in question and may be referred for disciplinary action in accordance with Administrative Procedure 3100.2, Student Disciplinary Procedures.

Homework: Homework will be assigned from out of your math textbook and will make up 7.5\% of your total grade. Homework is always due on the first class meeting which occurs after each exam. Most homework assignments will consist of 5 problems, and credit will be given for correctness and showing necessary work. Feel free to work with your colleagues, but copying is not permitted. I do NOT accept late homework or corrections to homework.

The list of homework problems can be found on the last page of this document and on the online version of this syllabus at your course website. You should spend at least 3-6 hours outside of class for every hour of lecture. I strongly encourage you to work together on homework and to seek extra help from the tutors.

Exams: There will be 4 exams (worth $15 \%$ each) and a comprehensive final (Chs. 2-24) worth $20 \%$. Make up exams will not be given unless there are extraordinary circumstances, which you must contact me about by email prior to the exam. Cell phones and any other electronic devices must not be on your person or on your desk during the exam and must be turned off. Cell phones and any other electronic devices must be in your book bag, backpack, purse, etc. and your bag must be zipped up. (Do remember this if you plan to be late to the exam!) Most exams have two parts: on one part you are allowed/encouraged to use a calculator and on the other part calculators are forbidden. Under no circumstances are students allowed to share calculators during the exam.

How to study for exams: (1) Review all the class notes including the class exercises. (2) Redo all the homework problems. (3) Read the textbook sections.

Project: There will be one project worth $7.5 \%$ of your final grade. Students can work in pairs. Corrections will not be accepted. Please see the Class Calendar.

Computer Labs: Computer Labs will be worth 5\% of your final grade. Computer Labs will be completed in class. We will use the free GeoGebra software that runs on any platform.

Accomodation of Disability: Students with disabilities who may need academic accommodations should notify me within the first two weeks of instruction. All information will be kept confidential.

Disruptions: Your demeanor should support and respect the environment of learning inside the classroom. Movement and chitchat in the classroom disrupts your classmates and the instructor. This includes leaving class, coming in late, passing notes, texting and chatting with the person next to you about non-math related topics. It is very important that all students be respectful of those trying to learn. This is as important in the back row, as it is in the front row. Again, I encourage you to ask questions in class. Just know that if you have a question related to the class, someone else is certain to be wondering the same thing. So please ask! Talk/text on your phone and attend to your personal needs before or after - but not during class. When you enter the classroom, turn off cell phones, pagers, and all other communication devices. In times of family crisis, you may set your cell phone on vibrate. If you must arrive late or leave early, take the first seat near the door.

## Grading:

| $90 \%-100 \%$ | A |
| :--- | :--- |
| $80 \%-89 \%$ | B |
| $70 \%-79 \%$ | C |
| $60 \%-69 \%$ | D |
| below $60 \%$ | F |

## Important Dates:

1. August 19 Fall semester classes begin.
2. August 30 Add/Drop deadline; Honors Contract deadline.
3. August 30 Refund deadline enrollment fees and/or non-resident tuition.
4. September 2 Holiday Labor Day.
5. September 20 Last day to file a petition for Pass/No Pass grade option.
6. October 25 Withdrawal deadline NO drops accepted after this date
7. November 11 Holiday Veterans Day
8. November 2529 Colleges Closed; Holiday Thanksgiving
9. December 12 Math 119 Final Exam
10. December 16 End of Fall 2103 Semester
11. January 6 Fall 2013 grades available on e-Grades


$\underset{\text { Math } 119}{\text { October }} 2013$

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Test 2 |  | Lab 2 work on Project | ${ }_{4}^{4}$ |  |
| ${ }^{6}$ | 7 | Ch. $14{ }^{8}$ |  | Ch. $14{ }^{10}$ Ch. 15 | ${ }^{11}$ | 12 |
| ${ }^{13}$ |  | Ch. $15{ }^{15}$ Ch. 16 |  | Ch. $16{ }^{17}$ Ch. 17 | ${ }^{18}$ | 19 |
| ${ }^{20}$ | ${ }^{21}$ | Review ${ }^{22}$ | ${ }^{23}$ | Test $3{ }^{24}$ | Last day to drop 25 <br> with a W | ${ }^{26}$ |
| ${ }^{27}$ |  | Ch. $18{ }^{29}$ |  | Ch. $19{ }^{31}$ |  |  |

November 2013

|  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|  |  |  |  |  | 1 | ${ }^{2}$ |
| ${ }^{3}$ | 4 | Ch. $20{ }^{5}$ | ${ }^{6}$ | Ch. $21{ }^{7}$ | Last Day to tor Drop Semester length classes ${ }^{8}$ | 9 |
|  | Holiday Veteran's Day No class! | Ch. 22 ${ }^{12}$ |  | Review | ${ }^{15}$ | ${ }^{16}$ |
| ${ }^{17}$ |  | Test $4{ }^{19}$ |  | Ch. 23 Lube ${ }^{21}$ | 22 | ${ }^{23}$ |
| 24 | Holiday Thanssiving No class $\quad 25$ | Holiday Thanksiging No class | Holiday 27 <br> Thanksgiving  <br> No class  | Holiday <br> Thanssigiving <br> No class | Holiday <br> Thankgsiving 29 | ${ }^{30}$ |

December 2013
Math 119

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | Ch 24 | 4 | Final Exam <br> Review <br> Project <br> Due | 6 | 7 |
| 8 | 9 | Final Exam Review | 11 | $\underset{\text { Exam }}{\text { Final }}$ | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| 29 | 30 | 31 |  |  |  |  |

## Homework Guidelines \& List

- Worth $7.5 \%$ of your overall grade.
- HW is always due on the first class meeting which occurs after each exam.
- 5-7 means do problems 5, 6 and 7.
- Put the section number in the top right corner of each page.
- Write your name on the first page of your packet.
- You can write on the front and back of the sheet, but start a new section on a new sheet.
- Please staple your homework before you come to class. A stapler will not be provided.

Ch. 2 \#2-4, 11-12, 15
Ch. 3 \#5-7, 9, 14ab, 32abc, 47abc
Ch. 7 \#3-5, 11,14, 33abd
Ch. 4 \#13-14, 23-24, 26, 30-31, 40a
Ch. 8 \#1, 5, 15, 27abc, 49bcef
Ch. 5 \#31bc, 33c, 40
Ch. 12 \#2-3, 22, 23ab
Ch. 6 \#9-10, 14, 27a-d, 40abc,41,51bce,53abc
Ch. 13 \#2-3, only part a for 10-13, Test 1

16, 19, 21 Test 2
Ch. 18 \#12-13, 18, 20 , 33, 38
Ch. 14 \#32, 36-37, 40-41
Ch. 19 \#2, 12bc, 13abcde, 15,18, 25,40
Ch. 15 \#1-3, 5, 8-9, 16
Ch. 20 \#2, 13, 16(skip e), 20
Ch. 16 \#2-3, 6, 10, 14
Ch. 21 \#1, 4, 10ab, 12ab
Ch. 17 \#9, 28, 32
Ch. 22 \# 16, 24, 26a

## Test 3

## Test 4

Ch. 23 \#2, 18, 32
Ch. 24 \#14, 16, 32, 43

