San Jose State University Dr. Tom Means

Department of Economics Spring 2015

***Economics 3***

***Introductory Statistics and Probability***

**Office:** 142 DMH

**Phone:** 924-5414(office) 924-5400(dept.)

**Email:** [tom.means@sjsu.edu](mailto:tom.means@sjsu.edu).

**Office**

**Hours:** MW 2 – 2:45 pm, and by appointment

# Add/

**Drops:** You are responsible for all University and Department guidelines regarding the adding and dropping of a class. Please consult the SCHEDULE OF CLASSES.

**Text:** ***Statistics for Business and Economics*,** James T. McClave, P. George Benson, Terry Sincich, Pearson, 12th edition, 2014

***Excel Modeling in Corporate Finance*,** Craig W. Holden, Pearson, 5th edition, 2015

***Primer on Bayesian Statistics*,** T. S. Means, Spartan Publications, 2010 (online)

**Student**

**Learning**

**Objectives:**

* Define statistical terms as they relate to descriptive and inferential statistics.
* Learn basic probability rules and essential probability distributions.
* Learn sampling and basic sampling theory distributions.
* Learn how to make inferences about population parameters.
* Learn about basic regression analysis.
* Apply computer software (excel) to analyze data.

**Course**

**Info:** This is an introductory course in statistics and probability theory. You must have a good working knowledge of basic algebra. Attendance in class is highly recommended since lecture material will go into more depth than the text. Lecture material will also be emphasized on the exams and some lecture material is not in the text. If you are having problems with the course material, please see me early on in the course. I might be able to help you achieve better results if I know of your problem soon enough.

This is a four-unit course.  There are three hours of lecture along with 2 hours of lab work each week. Unlike a 3-unit course, I will not do homework problems during lecture so that I will be able to cover more material than a 3-unit semester course. You will learn the computer software, work on computer projects, and go over homework problems during the lab period.

This syllabus has learning objectives, rigor, class meeting times, and assignments commensurate with the expectation of 12 hours of work per week across 15 weeks in a semester.  For reference, under a traditional three-unit course, you were expected to complete 9 hours of work per week inclusive.

**Disability:** Any student with a disability requiring an accommodation should make this need known to the instructor during the first class period. Every effort will be made to accommodate your needs.

**Exams, Lab and**

**Homework:** There will be **three exams** of equal weight, equally spaced throughout the course. The exams will be **closed book.** You may write formulas on a piece of paper to use during an exam. Incomplete grades will only be considered if you have a grade of C or better. Grading will be done on a curve.

Exam 1 20%

Exam 2 20%

Exam 3 20%

Quizzes/Tests 20%

Lab Projects 20%

100%

## Classroom Protocol:

## *Turn off cell phones. You are late to class when I close the front door to the classroom. If you are late, enter thru the rear door. If you need to leave class early, sit in the rear of the classroom. Cell phones are allowed during exams but must be in airplane mode. Bring a calculator if you have trouble with basic math.*

**Course**

**Outline:**

01/26(M) Introduction - McClave (1, 3.1)

01/28(W) Probability Definitions - Primer (1), McClave (3.1)

02/02(M) Descriptive Statistics (2)

02/04(W) Probability Rules - McClave (3.2-6)

02/09M) Bayes Rule – McClave (3.7)

02/11(W) Discrete Probability Distributions - McClave (4.1-4)

02/16(M) Continuous Probability Distributions - McClave (4.5-8)

02/18(W)

**02/23(M) Review**

**02/25(W) Exam #1**

03/02(M) Sampling Distributions - McClave (5), Primer (2)

03/04(M)

03/09(M) Confidence Intervals - McClave (6)

03/11(W)

03/16(M) Hypothesis Testing - McClave (7), Primer (3)

03/18(W)

**3/23 – 3/27 SPRING BREAK – no classes**

03/30(M) Inferences About Two Populations - McClave (8)

04/01(W)

**04/06(M) Review**

**04/08(W) Exam #2**

04/13(M) Inference about Variances - McClave (6.7, 7.7, 8.6)

04/20(M) Analysis of Categorical Data - McClave (10)

04/22(W)

04/27(M) Analysis of Categorical Data - McClave (10)

04/29(W)

05/04(M) Simple Linear Regression - McClave (11)

05/06(W)

05/11(M) Review

**05/15(F) Final Exam 12:15 - 2:30 pm**