INTRODUCTION TO STATISTICS

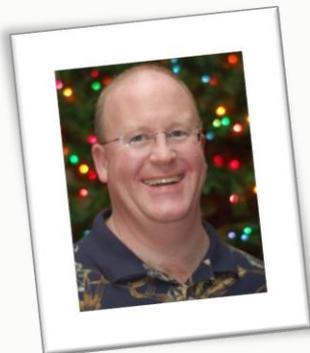MATH 120, SPRING 2012 - SECTION #39146 (4 UNITS)

MON & WED, 8:00 AM – 9:50 AM, BLDG. 21, ROOM 157

INSTRUCTOR

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Office Hours	MTWTh 7:15 AM – 7:40 AM Wed & Thurs 10:00 AM – 11:15 AM

COURSE

DESCRIPTION

This course covers basic statistical techniques, including design and analysis for both parametric and non-parametric data. Descriptive statistics included are measures of central tendency and measures of dispersion. Graphical techniques of illustrating data are covered. Probability and its application to inferential statistical procedures is covered. Inferential statistics included are estimation and hypothesis testing, chi-square, analysis of variance and regression. Applications are drawn from a variety of fields.

PREREQUISITES

Math 90, with a grade of "C" or better, or by eligibility by placement on the VVC assessment exam. You may be asked to provide proof that you have met this prerequisite. Acceptable forms of proof include (but not limited to) VVC Assessment Test results, WebAdvisor or MicroGrade printout, or prerequisite challenge approval.

CALCULATORS

A calculator will be required for all exams. The TI-83, TI-83+, TI-84 or TI-89 are the most appropriate for this course. You will be taught how to use the various features, demonstrated primarily on the TI-83+.

Some calculators will be available to check out for the semester, on a first-come, first-served basis. You will need to sign a form for financial responsibility of the calculator for the semester and a financial hold will be placed on your student account if it is not returned at the end of the semester.

TEXTBOOK / MATERIALS

Technically, no text is required. However, if you are "math-phobic" or wish extra resources, you can access the text that accompanies my lecture notes in three ways:

ELEMENTARY STATISTICS, 8TH EDITION, BY BLUMAN (RECOMMENDED)

Choice #1: Purchase ConnectMath online for $80, tax included. Electronic access to your text is included.

Choice #2: Purchase ConnectMath from VVC bookstore for $109.60 plus tax (same as choice #1, but you can use your financial aid for the purchase). Electronic access to your text is included.

Go to "www.connectmath.com" and enter the Course Code: **DPUVJ-TPTHR**. If you have an access code which you purchased at the bookstore (choice #2), enter it. Otherwise, click on "purchase an access code online" link (choice #1). Choose the 18-week option.

The 2-week Financial Aid Access Code for this course is **52924-469B2-AAC2C-28BC0**. If you are short on funds, but want to get started right away, please use this code. Note that it **does not** give add an additional two weeks to your course. You will need to extend your account **BEFORE** the end of the two weeks to ensure that you don't lose any of your work.

GRADING

Grades will be based on all homework (collectively worth one exam), unit tests, a project, and a comprehensive final exam. Any exam not taken will be regarded as a zero. The lowest exam score (including the project, homework, and, yes, possibly even the final exam!) will be deleted prior to computing the term grade. Students are expected to complete all exams during class on the dates and times scheduled. **No make-up, pre-take, or re-take exams will be given, without exception.**

Grade Scale:

A: [88,100)
B: [78,88)
C: [70,78)
D: [65,70)
F: [0, 65)

CHAPTER TESTS

A *one-page, front-side-only, hand-written, (not photocopied) "cheat sheet"* may be used for each exam. As this is my first semester using ConnectMath for exams, exams may be "split" in such a way that part is done on the computer, and part on paper.

HOMEWORK

Homework will be assigned in ConnectMath. It will collectively count as one exam. Homework for any given chapter will be due at 8:00 am on the day of that chapter's test.

EXTRA CREDIT

No extra credit will be granted beyond the established grading scale.

ATTENDANCE

You are required to attend class every day. After 4 hours of absence, you may be dropped from this class. It is your responsibility to keep your enrollment status current. You risk an "F" if you stop attending without officially withdrawing. Do not bring friends or children to class. Please turn any cell phones or pagers to silent mode during class time. No cell phones will be allowed on your desk during exams. We are here to learn; please refrain from texting during class.

Class attendance is not a measure of performance or proficiency. Whether a student is just physically present in the class is not a valid basis for grading. Reference Title 5 Section 55002 of the California Code of Regulations: (A) Grading Policy. The course provides for measurement of student performance in terms of stated course objectives and culminates in a formal, permanently recorded grade based upon uniform standards in accordance with section 55758 of this Division. The grade is based on demonstrated proficiency in the subject matter and the ability to demonstrate that proficiency, at least in part, by means of written expression that may include essays, or, in courses where the curriculum committee deems them to be appropriate, by problem solving exercises or skills demonstrations by students.
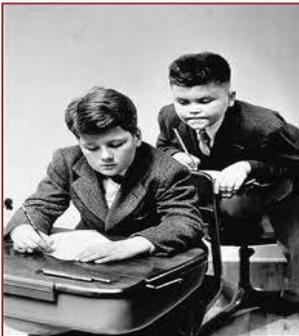
STUDENT ACCESS

Students with special needs are encouraged to meet with instructors to discuss the opportunity for academic accommodation and be referred to disabled student program and services per Administrative Procedure (AP 3440).

If you have a learning disability or physical need that requires special accommodation, please advise me prior to 02-20-12 (the start of the second week of class).

POLICIES

SCHOLASTIC DISHONESTY

While students may work together on the researching of any assignment, it is expected that each of their writing assignments reflect substantial individual effort. Any student who commits plagiarism or is found to have cheated on a scheduled exam is subject to a zero score for that specific exam which may result in a term grade of "F" for this course. Students should be aware that cases of cheating and/or plagiarism will be forwarded to the appropriate college administrator promptly. The college administration has a range of sanctions that may be imposed including, but not limited to, academic suspension or expulsion from the college.
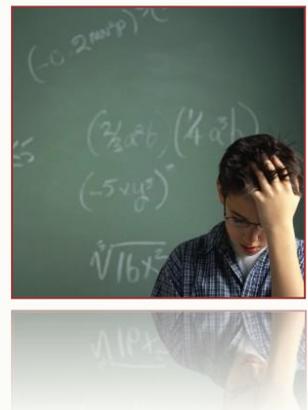
MISCELLANY

ACADEMIC SUPPORT

You are strongly encouraged to get tutoring or go to the Math Lab, study in groups, and see me for help outside of class. All of these are free! Students that get help outside of class are typically much more successful than those that do not.

Regular Math Lab hours are:
Monday-Thursday   12:45 PM – 9:00 PM

The Math Lab is located in room 21-157 (in the Advanced Technology Center). Outside of those hours, please go to the information booth at the east end of the Tech building to sign in for tutoring help. My office hours are listed at the start of this syllabus. Appointments are also available if you are unable to meet me at those times.

STUDENT LEARNING OUTCOMES

Upon completion of this course, the student can:
1. find the sample mean and sample standard deviation of a given data set.
2. find the area under the normal curve between two x-values.
3. find and interpret a 95% confidence interval for a mean.
4. perform a hypothesis test for the mean of a population.

VVC SPRING CALENDAR

SPRING Term Begins	Feb 13
Lincoln Day Holiday (college closed)	Feb 17
College Closed (no classes)	Feb 18
Washington Day Holiday (college closed)	Feb 20
Last Day to Drop and still receive a "W"	March 30
Spring Break Holiday (college closed)	April 6
College Closed (no classes)	April 7
Spring Break (no classes - offices open)	April 9-13
College Closed (no classes)	April 14
Memorial Day Holiday (college closed)	May 28
Commencement	June 8
Spring Semester Ends	June 9

CLASS SCHEDULE

An effort will be made to adhere as closely as possible to this schedule. If we can ever "get ahead" of the pace, we will take the opportunity to do so, just in case we need extra time on other material, later in the course. Test dates are fixed, however. They will not change, regardless of our progress through the course.

		Sections to be Covered In Class				Sections to be Covered In Class
M	02.13	Introduction, Chapter 1A, Chapter 14A		M	04.16	Chapter 8A
W	02.15	Chapter 1B, 2A		W	04.18	Test Chapters 6 & 7
M	02.20	President's Holiday – Campus Closed		M	04.23	Chapter 8B
W	02.22	Sample Bias, Chapter 2B		W	04.25	Chapter 9A
M	02.27	Test Chapters 1 & 2		M	04.30	Chapter 9B
W	02.29	Chapter 3A, Calculator Introduction		W	05.01	Test Chapters 8 & 9
M	03.05	Chapter 3B, More Calculator Practice		M	05.07	Chapter 10A
W	03.07	Review, Chapter 4A		W	05.09	Chapter 10B; assign projects
M	03.12	Chapter 4B		M	05.14	Chapter 11
W	03.14	Test Chapter 3		W	05.16	Review, Chapter 12
M	03.19	Chapter 5		M	05.21	Test Chapters 10 & 11
W	03.21	Review		W	05.23	Review, Chapter 13A
M	03.26	Test Chapters 4 & 5		M	05.28	Memorial Day – Campus Closed
W	03.28	Chapter 6		W	05.30	Chapter 13B
M	04.02	Chapter 7A		M	06.04	Test Chapters 12 & 13; projects due
W	04.04	Chapter 7B		W	06.06	Final Exam