STATISTICS SYLLABUS
Spring 2014

COURSE Math 115
Statistics (4 units)

PREREQUISITE
Completion of MATH 102.
Advisory: Eligibility for College Level Reading or completion of ENGL 101.

INSTRUCTOR
Jim Disbrow   email: *jdisbrow@avc.edu* (quickest way to get ahold of me)
661-276-5329 (daytime - leave message)
homepage: http://avconline.avc.edu/jdisbrow/

TEXTBOOK

Introductory Statistics, 9th edition, Neil A. Weiss
(may also use 8th edition)

DESCRIPTION
This is an introductory course in statistical procedure. It includes a study of
graphs, central tendency, dispersion, normal curve, probability, binomial
distribution, estimation, hypothesis testing, regression, correlation and chi-
square.
This is not a basic skills course.
[CAN STAT 2] (CSU, UC, AVC)

GROUND RULES
Because this class meets only once a week for four hours, it will be an intense
course. If you miss more than two class meetings, you may be dropped. To pass
this course, students are required to attend all lectures. It is the responsibility of
the student to Add or Drop this course. If you stop attending class, and do not
drop the course officially, you may be given an "F" at the end of the semester.
Remember, dropping is the student's responsibility, not the instructors. **But I
can! If you miss class more than twice, without any reasonable excuse, you
may be dropped from the class.**
If you miss a class, you are still responsible for the material covered.

HOMEWORK
We will go over the homework each class period. However, homework will not
be collected every week. Instead there will usually be a weekly quiz. The
quizzes are based on the homework and will have problems just like the
homework or just like a problem we did in class. If you do the homework and
come to class, you should have no problem with the quizzes. If you don't
attempt the homework and don't come to class, you won't have much chance in
this class.
I reserve the right to change this policy. If I feel you are not doing your
homework, I will start collecting and grading it. Homework will not be accepted
if more than a week late.

QUIZZES

A quiz will be given nearly each week. Quizzes are based on fairly recent homework material, and material presented in class; for example, Quiz 3 is based on material seen after Quiz 2. There are no make-ups for quizzes; instead one quiz score will be dropped to allow for that unforeseen circumstance when you just couldn't get to class, or just didn't have time, or your boss sent you out of town, etc.

TESTS

There will probably be 3 tests (100 points each) + comprehensive final (100 points) = 400 points.

If you are unable to take an hourly test at the time it is scheduled, you are then graded using only the remaining tests and the final, counting the final now as 200 points instead of 100 points. That is, if you miss one test, you will receive the grade of your final exam on that test. This will be allowed only once. If you miss another test, you will receive a zero (0) on that test.

NO MAKE-UP TEST will be given after the class takes a test. A test taken early (before the rest of the class) will be allowed under special circumstances. However, arrangements must be made **well** in advance. **The final exam is mandatory.** You cannot pass the course without taking the final exam.

GRADING

Quizzes are worth 10 points each and tests are worth 100 points each.
Your percentage is 100% times the fraction

$$\frac{T1 + T2 + T3 + F + Q}{400 + 10(n - 1)}$$

where T1, T2, and T3 are your scores on the 100 point tests. F is your score on the 100 point final. Q is the sum of your best n–1 quiz (or homework) scores; n is the number of quizzes given.

The cutoff percentages for A, B, C, and D are 90, 80, 70, and 60. After the final exam I may revise the percentages for C and D downward.

Suppose your numerator totaled 421 points and we had 11 quizzes, then:

Your percentage = 421/500 x 100% = 84.2%.

The cutoff percentages for A, B, C, D are typically 90, 80, 70, 60. Class participation can help decide borderline (e.g., 89%, 79%, etc.) cases. If you have perfect attendance, I will add 1% to your final class percentage.

EXTRA HELP

Tutoring may be obtained through the Math Lab. The hours the Math Lab and Learning Center are open are posted outside the Learning Center door.

STUDY TIME

On the average, in a typical semester, you should spend a minimum of 2 hours outside of class for every hour spent in class. This class meets 4 hours a week. This means approximately 8 hours a week for Math 115 outside of class. Some of you may require more time, some of you may require less time. Everyone is different. Only you can decide how much time you need to spend. The most important thing is do not get behind. You are responsible for the material you miss. I would suggest finding someone in class to study with – someone you can get notes from if you must miss a class.

CLASSROOM COURTESY

We are all adults. This is a college classroom. It will be taught like a college course. Again, this is not a basic skills course. In order to create a classroom environment to encourage learning, please observe the following courtesies:

1. Arrive on time and stay through the entire class. I believe it is rude and disruptive to be late for class. More grace is given the first two weeks of class.
2. Turn off cell phones and pagers or use the battery vibration option. If you are expecting an emergency call please step outside of the classroom to answer your phone. Under no circumstances should you talk on the phone or answer the phone during class.
3. Remove headphones.
4. Do not eat during class. Drinks are OK, e.g., coffee, bottled water, etc.
5. Do not leave the classroom to make a phone call or for any other non-emergency.
6. Do not bring little children to class unless they are enrolled in the class.
7. Please observe the rules of courtesy that you learned in kindergarten.

IMPORTANT DATES

Last day to ADD class:	**17 Feb. 2014**
Last day to drop with a REFUND:	**17 Feb. 2014**
Last day to drop WITHOUT "W":	**17 Feb. 2014**
Last day to drop WITH "W":	**02 May 2014**

YOUR CALCULATOR

To see if you and your calculator are ready for statistics, produce these results (rounded to 3 significant digits):

$$12.3 + (2.53)(0.65) = 13.9$$

$$\sqrt{(1.23)^2 + (3.45)^2 + (5.67)^2} = 6.75$$

$$(1234)(3456)(5678)(7891) = 1.91 \times 10^{14}$$

$$1 - 1/(2.7)^2 = 0.863$$

$$(15.4 - 14.67)/2.4 = 0.304$$

$5! = 120$ (your calculator should have a key with $x!$ on it). eg. $\boxed{x\,!}$

STUDENT CONDUCT:

The Student Code of Conduct, disciplinary procedure, and student due process can be found in the college catalog, student handbook, and the Office of the Dean of Student Affairs. Charges of misconduct and disciplinary sanctions may be imposed upon those who violate these standards of conduct, or provisions of college regulations.

ACCOMMODATION OF DISABILITY:

Reasonable Accommodation. If you have a legally protected disability under the Americans with Disabilities Act (ADA) or California discrimination law, and you believe you need reasonable accommodation to participate fully in this class, please make an appointment to see me outside of class to discuss your needs.

Students with disabilities who need academic accommodations should discuss options with me during the first two weeks of class.

CHEATING AND PLAGIARISM:

Cheating and plagiarism, in any form, will not be allowed or tolerated. If I am convinced beyond all reasonable doubts that cheating has taken place, students will be penalized, or disqualified, by receiving an "F" grade.

TRACK YOUR GRADES:

Test	Grade						
Test #1	---------						
Test # 2	---------						
Test # 3	---------						
Final Exam	----------						
Quizzes/Homework	---	---	---	---	---	---	---
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STUDY RECOMMENDATION

1. **Open your Mind**: One major obstacle to learning new information is that new information often differs from what we already know. To learn, you need to have an open mind. This does not mean that you have to believe everything that you are told. You have to think critically about what you are told. However be cautious and guard against letting old beliefs or opinions stop you from learning anything new.

2. **Reduce Interference**: One major reason for forgetting new information is that new information interferes with other information. When you are studying more than one subject at a time, you are increasing the likelihood of interference occurring. If possible, try to study one thing at a time. Give yourself time to absorb new information.

3. **Don't Cram**: Staying up all night cramming for an exam the following morning is not a good way to study. Spacing out your study into smaller and more frequent study periods will improve retention. Instead of studying for five hours in one evening, you will learn more and retain more if you study one hour per night for five nights.

4. **Reduce Stress**: Stress and anxiety interfere with learning. You will learn more, and enjoy it more, if you are relaxed when you study. One of the most effective ways of relaxing that does not interfere with learning is exercise. Sleep is also a good way of relaxing. Exercise, take a nap, and study.

5. **Make the Most of Your Assignments**: You will master the material more efficiently if you make a commitment to completing all your assignment. The lessons will make more sense to you, and you will learn more, if you follow these instructions: Set aside a specific time to view, read, and study each chapter, read the assigned textbook pages for the problems you are assigned, review key terms and concepts, check your understanding for all unfamiliar terms in the text, review questions at the end of each session and chapter.

6. **Think about What You Have learned**: Learning is not a passive activity, it is active. As soon as you learn something, try to repeat it to someone or discuss it with a friend. If you will think about what you just learned, you will be much more likely to retain that information. The reason we remember certain information has to do mostly with (1) how important that information is to us, (2) whether or not we actively use the information.

7. **Get Feedback on What You are Studying**: Study alone, learn with others. You need feedback to help reinforce learning. Feedback also helps make sure you correctly understand the information. The questions at the end of each chapter are specifically designed to give you feedback and reinforce what you are learning. The more time and practice you devote to learning, the better you will be at remembering that information.

8. **Be a Smart Student**: Develop excellent study habits. There is no magic formula for successful studying. However, there are a few universal guidelines.

- Do make a commitment to yourself to learn.
- Don't let other people interrupt you while you are studying.
- Do make a schedule and stick to it.
- Don't study while you are doing something else.
- Do create a specific place to study.
- Don't study if you are tired, upset, or overly stressed.
- Do exercise and relax before you study.
- Don't study for extended periods of time without a break.
- Do give yourself ample time to study.
- Don't complain that you have to go to study.
- Do take a positive approach to learning.

9. **<u>Contact Your Instructor</u>**: If you are having an especially difficult time with learning some information, contact your instructor. Your instructor is there to help you. Often a personal explanation will do wonder in helping you clear up a misunderstanding.

Source: