

STAT 6166, Spring 2008,
Statistical Methods in Research I
Room 280, Florida Gym
Tu 7:25-8:15am; Th 7:25 – 9:20am

Instructors: Mark Yang
202, GF Hall
Tel: 352-392-1941 x 224,
e-mail: yang@stat.ufl.edu

Office Hours: Instructor: 5:15-6:30pm MW; TA: Tue and Fri 2:00-3:30pm

TA: Yuan Liao: McCarty C 428 extension 232, yliao@stat.ufl.edu

Course Objective: To train graduate students in the sciences in statistical concepts and methodology for research planning and data analysis

Texts and Course materials:

Required: Ott and Longnecker, 2004. *A First Course in Statistical Methods*, Duxbury.
Additional handouts as needed. These will be posted to the class website.

Web Site: <http://www.stat.ufl.edu/~yang/STA6166>

Grading: Option 1: Homework 30%* ; Exams (3) 70%
Option 2: Exams (3) 100% (30, 30, 40)
You can shift from option 1 to 2 at any time.

Dates for Exams: First (Feb. 7, Thursday), Second (Mar. 20, Thursday)
Final (30A) Apr. 30 (wed) 7:30-9:30am.

Homework will be assigned every Thursday (except the two exam Thursdays) to be turned in on Tuesday. You can miss 1 assignment, or drop the lowest.)

>90%	A
80-89%	B+
70-79%	B
60-69%	C

Those who are interested in statistical software SAS and R may wish to take the one credit course STA5106 by Dr. Amy Candrell. This course is in the schedule of courses under Statistics-CALS.

* 90% is considered as perfect score.

Tentative Schedule

Chapter	TOPIC	Hours to cover
		2
1	Introduction	1
2	Data Collection	0.5
3	Data Summary	1.5
4	Probability distribution, sampling distribution and 3.the Central Limit Theorem	3.5
5	Estimation and Hypothesis Testing of a Mean	3
6	Estimation and Hypothesis Testing of Two Means	3
7	Comparing Population Variances	2
8	One way ANOVA and multiple comparisons	4
9	Two way ANOVA	3
10	Categorical Data Analysis	2
11	Bivariate Analyses: Regression and Correlation	5
12	Multiple regression	3

Final Exam (comprehensive) on Wednesday April 30, 7:30 – 9:30 pm (30A)

Policies and Additional Information:

1. **Office Hours.** Office hours are listed above. Help outside these times are by appointment only. Call or email to schedule an appointment. Please do not use e-mail to ask technical question.
2. Occasionally, **Lecture materials** or other notes (interesting websites, pointers to recent interesting articles, etc.) will be available on the instructor's website.
3. The **class website** will be used to distribute additional information, handouts, etc. to everyone in class. Be sure your campus email address is current because you are accountable for any information we posted in this manner.
4. We are not available for **questions on exam materials** starting the day before an exam.
5. **All Exams are closed book and closed mouth.** You may NOT share information or calculators with other students during the exam. I encourage you to ask the proctors any questions regarding

clarification or interpretation of exam questions but please do not ask us about your answer.

6. Answers to the exams and homework will be provided as quickly as possible after the homework due date or after the exam. The answers will be posted to the website. Check early and often! We will try to post the exam answers immediately after the exam. Note: once the answers to an assignment or exam are posted no make-ups are possible.

7. **Missed Exams.** If you must miss an exam (very few excuses are permitted) let me know as soon as possible before the scheduled exam. It is unlikely a make-up exam will be offered except if the student cannot change the timing of the conflicting event.

8. Late **homework** will not be accepted and will be recorded as a 0 grade. If you are going to miss a class or have a scheduling conflict, return the assignment before the due date. Some of the homework assignments will be collected and graded. Solutions should be written suitable for collecting and grading. Write the solution for each separate problem in pencil on sheets of 8½" x 11" paper. It is the responsibility of the student to work all of the assigned homework problems independently (which means by yourself, on your own). The experience gained from doing these problems is invaluable and necessary for the understanding of the material we shall be covering. **Late homework will not be accepted.**

9. Please do not ask us to alter your grade on an exam on homework unless we made a calculation mistake (added the total wrong, or took points off a correct answer, etc). If you think this is what happened then you should provide the exam and a *written* explanation of the reason you believe we made a mistake to me *within a day* of the return of the exam. No verbal explanations will be accepted.

University Policies:

Academic Dishonesty:

All members of the University Community share the responsibility to challenge and make known acts of apparent academic dishonesty. Acts of academic dishonesty will not be tolerated and will be referred to the Student Honor Council. Information regarding University policies about academic dishonesty and the University's honor code may be found at:

<http://www.dso.ufl.edu/judicial/procedures/academicguide.html>

Academic accommodations:

If you have a documented disability and wish to discuss academic accommodations with me, please contact me as soon as possible. Information on Disability Resources can be found at

<http://www.dso.ufl.edu/drp/services/>