Professor: Dr. Thomas Fisher

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Office Hours: Tuesday and Thursday, 2:30-3:30pm and <u>by appointment</u>

Personal Web Site: *http://f.web.umkc.edu/fishertho/*

Class Materials: Notes; occasionally a Calculator will be helpful.

Text: There is **<u>no required</u>** text for the course, but the following may be helpful:
<u>Applied Statistics and the SAS Programming Language (5th ed)</u> by Cody & Smith for help with SAS programming
<u>Mathematical Statistics with Applications (7th ed)</u> by Wackerly, Mendenhall and Schaeffer for theoretical aspects

Course Objectives: The students will master methods for analyzing data from experiments and observational studies; design-based and model-based inferences; model assessment; ANOVA; power analysis; SAS procedures.

Topic Outline: Concepts of applied statistics, probability review, sampling distributions, estimation, parametric & nonparametric inference on one & two populations, inferences on categorical data, power analysis and sample size determination, One-way ANOVA, multiple comparisons, Two-way ANOVA, Regression, General Linear Model, selected topics. SAS programming with associated methods will be covered.

Exams: One midterm and a final exam will be given.

The midterm is <u>tentatively</u> scheduled for Wednesday, October 10.

The final exam is scheduled for Thursday, December 13, 3:30-5:30.

Exams will be closed book and each will be worth 30% of your final grade.

Homework: A few homework assignments will be given during the semester. Homework should be detailed enough to adequately demonstrate your solution. You may discuss homework problems with other students; however, the final work must be your own!! Homeworks turned in late will be penalized 10% per class period not to exceed 20%. Homeworks more than a week late will not be accepted.

Projects: Two larger homework assignments/small projects will be assigned during the semester. Details will be determined and provided at a later date. You are to work on these assignments alone without help of your peers.

Attendance Policy: This is a graduate course and the pace is such that it will not be advisable to miss any sessions. If you know you will be absent, please inform me in advance. When you are absent, it will be your responsibility to contact another student for the notes and announcements. While attendance does not factor into your grade, I will often take attendance for my own records.
You are expected to be an active participant for the entire 75-minute class. Indications that this is not happening include sleeping, surfing the web or instant messaging on your laptop, text-messaging on your cell-phone, studying for another class, etc. Please turn your cell phone to silent before class.

Students are expected to wait quietly for 15 minutes after class is scheduled to begin. If I have not yet appeared the students are free to leave.

Letters of Accommodation: If you have a letter stating specific testing accommodations to which you are entitled, please come by my office to discuss the accommodations that you will need and to give me a copy of the letter. Even if you do not anticipate using any accommodations, it is a good idea to turn in the letter as soon as possible. *Please note that unless I have at least one week's notice I will be unable to provide any accommodation on an exam*

Prerequisites: The prerequisite for the class is Stat 441, Mathematical Statistics II.

Student Code of Conduct: Any violation of the *Student Code of Conduct* will not be tolerated. This includes cheating, plagiarism, storing information in a calculator, sabotage of another's work, disrupting class. See the below website for a complete listing of the student code of conduct. All violations will be handled in accordance with established procedures and policies concerning student academic responsibility.

http://www.umsystem.edu/ums/departments/gc/rules/programs/200/010.shtml

Final Grades: At the end of the semester, the final grades will be compiled using the most favorable of the two methods shown below:

Instrument	Value
Homework	20%
Projects	20%
Midterm	30%
Final Exam	30%
Total	100%

Grades will be assigned based on the follow:

Percentage	Grade
[90, 100)	A
[87, 90)	A-
[84, 87)	B+
[80, 84)	B
[77, 80)	B-
[74, 77)	C+
[70, 74)	C
[67, 70)	C-
[64, 67)	D+
[60, 64)	D
[57, 60)	D-
[0, 57)	F