## Syllabus

*Course Description* : An initial course in probability and statistics for students strong in mathematics. Probability topics include sample spaces, random variables, independence, and the binomial, Poisson, normal, and exponential distributions and their applications. Calculus-based methods will be used for analyzing continuous distributions. Statistics topics include descriptive statistics, sampling distributions, confidence intervals, hypothesis testing, regression, and ANOVA. Prerequisite: MTH 208 or concurrent enrollment.

Textbook : "Probability & Statistics for Engineering and the Sciences," 8<sup>th</sup> ed., by Jay L. Devore.

Grading:

4 Long Exams	400  pts
1 Comprehensive Final Exam	200  pts
28 Quizzes @ 5 points each (drop lowest 3)	125  pts
3 SPSS Assignments	100  pts
Attendance and Class Participation	25  pts
Total points	$\overline{850 \text{ pts}}$

## To get a grade of

А	- one has to get at least 736 (92%) points out of 800.
A/B	- one has to get at least $696~(87\%)$ points out of $800.$
В	- one has to get at least 656 $(82\%)$ points out of 800.
B/C	- one has to get at least $608~(76\%)$ points out of $800.$
С	- one has to get at least 560 $(70\%)$ points out of 800.
D	- one has to get at least 480 $(60\%)$ points out of 800.

## $Tentative \ Exam \ Dates:$

Exams	Dates	Time	Coverage
Exam #1	Sept. 23	Class Time	$1.1  ext{-} 1.4, 2.1  ext{-} 2.5, 3.1  ext{-} 3.3$
Exam $#2$	Oct. 21	Class Time	$3.4  ext{-} 3.6, 4.1  ext{-} 4.5, 5.1  ext{-} 5.5$
Exam #3	Nov. 12	Class Time	6.1, 7.1- $7.4, 8.1$ - $8.4, 9.1$ - $9.4$
Exam #4	Dec. 9	Class Time	10.1-10.2,11.1,12.1-12.5,14.1-14.3
Final Exam	Dec. 16	4:45 - 6:45 PM	Comprehensive

*Note* : Students can bring a formula sheet in exams #3, #4, and in the final exam.

Long Exams : In order to finish these long exams in the allotted time, you should be <u>well prepared</u> for them. That is, you should be familiar with all the material we covered in class and have practiced enough to know how to answer most of the problems in the exam at first glance.

*Make-up Exam Policy* : In order to be excused from a long exam, you must have a valid reason and you must discuss the matter with me before the exam. In the event that you miss a long exam due to circumstances beyond your control, I may count your final exam for a larger part of your grade.

*Homework* : Homework will be assigned daily. This is to help you practice and master the concepts we discuss in class. It is expected that you will complete all exercises and will verify that your answers are correct using the back of the book. It is **your** responsibility to ask me when you do not understand a question. To really master the material, you need to do all recommended homework problems.

*Quizzes* : Quizzes are meant to motivate you to do the assigned homework problems and to review the material we covered the previous meeting. There will be a total 28 5-point quizzes, but only your best 25 scores will be counted in your grade. Because you can drop your lowest 3 quizzes, there will be **no make up quizzes** until after you used up all 3 drop quizzes.

*SPSS Assignment* : Students can work in pairs for these SPSS assignments. All your work should be **type written** on a computer paper.

*Attendance* : Attendance will be taken every day. An excused absence (approved by me) does not count as an absence. At the end of the semester, points will be awarded as follows:

Absences	0-2	3-4	5-6	7-8	9 or more
Points	15	12	9	6	0

*Calculator* : It is recommended that students bring with them a calculator to class. TI-83 is preferred but any other calculator that has statistical mode is fine. Two students may <u>not</u> share a calculator during an exam.

*Classroom Courtesy* : Please turn off your cellphones and ipods when you get into the classroom. If you have to leave early, please let me know at the beginning of class and make a quiet exit.

Academic Honesty Policy : Academic dishonesty will NOT be tolerated in this classroom. If you are caught cheating in an exam, it will result in an automatic F in that exam and a written reprimand to be included in the student's disciplinary file. Do not even let yourself come under suspicion of dishonesty.

Accommodations: Any student with a documented disability (e.g., physical, learning, psychiatric, vision, or hearing, etc.) who needs to arrange reasonable accommodations must contact the instructor and the Disability Resource Services Office (165 Murphy Library, 785-6900) at the beginning of the semester.

**NOTE**: Mathematics/Statistics is not a spectator sport. It requires daily participation, both in the classroom and in the homework. This might be a difficult course for some of you, so find a study partner(s). Two heads are usually better than one and it makes the work a lot more fun.....

Good luck and I hope you will do well in this course!!