Math 311
Elementary Probability and Statistics
Fall 2005, Section 1
Kennedy 207
TTh 8:00-9:20

Instructor: Dr. Christopher Mouron
Office: 320 Ohlendorf Hall
Office Hours: MWF 10:00-11:00 AM, TTh 10:30-11:30 AM, or by appointment
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Text: *Probability and Statistical Inference*, by Hogg and Tanis, Edition 7e, Person Prentice Hall, Upper Saddle River, NJ. 2006.

Course Description: This course is the first part of a two part sequence covering probability and statistics. Statistics is the science of gaining information from numerical data. Our modern technological world generates data at an enormous rate. Newspapers, business meetings, and governmental committee meetings are often inundated with data. However, all too often the data is improperly obtained and improperly assessed. Important everyday decisions for individuals, corporations, societies, and governments hinge on a proper understanding and assessment of data. Every facet of industry, science, engineering, economics and business benefit from a solid knowledge of statistics. This is why there are more statisticians employed in the United States than mathematicians from all other branches of mathematics combined. Probability is the language of statistics; it is a measure of the likelihood of an event occurring.

Course Content: This course will focus primarily on probability with some statistical applications. The goal is to cover most of the topics in chapters 1-5. In this we will examine basic concepts and theories of probability, poker odds, Bayes' Theorem, measures of central tendency, discrete distributions, continuous distributions, moment generating functions, multivariate distributions and conclude with the Central Limit Theorem

Technology: We will use Mathematica, Excel and possible SPSS. All can be found installed on most computers on campus. Also, we will use the software provided by the book. You may also use a calculator; however, you must show your work on tests and homework.

Course Prerequisites: Calculus I, II, III(co-requisite).

Attendance Policy: I will follow the College's attendance policy, which can be found on page 66 of the Catalogue. In particular, a student will be giving a warning after 4 absences and a written recommendation to the Dean that the student be dropped from the

course will be made after 7 absences. In the case of a missed test, the student will be allowed to make-up the test only if both of the following conditions are satisfied:

1) I am contacted before the test is given (at least 1 week in the case of absence due to the attendance of an official school function.)
2) I am given proper documentation.

Finally, the student is responsible for all material and notes due to an absence. Get the notes from another student. Come to my office for any materials handed out in class.

Homework, Labs and Quizzes (23%): Mathematics is not a spectator sport. In order to learn the techniques and concepts, the student must work problems outside of class. The student is expected to spend at least 3 hours outside of class for every hour spent in class.

1) Practice exercises. These are problems that the student should do before the next class meeting. If a student has difficulty with an exercise, the student may ask me to do it in class (provided time allows) or in my office. Often, the student will be required to present practice problems on the board in class.

2) Graded exercises. These problems will be collected usually once a week. Due to the fact that I have 60 students, it is imperative that the work turned in is neat and organized. The student will be graded on correctness of the work. Also the student is required to show all work leading to an answer. The students may work together on these problems but the work turned in must be the students own, i.e. no copying. Copying homework will be considered an honor violation and students suspected of copying homework will be referred to the Honor Council. Also, if student do work together on homework, they must document who they worked with.
3) Pop quizzes. If it is evident to the instructor that the students are not keeping up with the homework, a pop quiz may be given.

Also, the student is expected to “pre-read” the text before the lecture. This is a excellence way for the student to familiarize him/herself will the material covered and will aid the student in following the lectures.

Written Projects (10%): There will be 2 projects that will consist of longer, more involve applications of this course. These projects must be typed and will be graded on correctness of the mathematics and written exposition. Rough drafts submission will be optional.

Late homework and projects will not be accepted. You will have plenty of time to complete assignments to turn in. If you are sick, have a roommate, classmate or friend turn in your homework for you. If they can get it to me before noon, it will be accepted. I f you plan to miss class for other reasons, turn in the homework early or have a classmate turn it in during class.

Tests (40%): There will be 2 tests throughout the semester. Unless otherwise notified, the test will be closed book and notes. The tentative test dates are:

1) October 6
2) November 18

Final Exam (27%): The final exam will be cumulative. Unless otherwise notified, the exam will be closed book and notes.

Grades: Grades will be earned for the following percentages:

A	Score >= 93%	*C*	73% <= Score < 77%
A-	90% <= Score < 93%	*C-*	70% <= Score < 73%
B+	87% <= Score < 90%	*D+*	67% <= Score < 70%
B	83% <= Score < 87%	*D*	63% <= Score < 67%
B-	80% <= Score < 83%	*D-*	60% <= Score < 63%
C+	77% <= Score < 80%	*F*	Score < 60%

Honor Code: The student is expected to conduct him or herself within the guidelines of the College's Honor Code. If you have any questions about what is or not allowed, please ask.

If you have a documented disability and wish to receive academic accommodations, please contact myself and the Office of Student Disability Services as soon as possible.