

Course Syllabus

Course Information

Course Number/Section **OPRE 6301: Sections 521 and 522**

Course Title **Quantitative Introduction to Risk
and Uncertainty in Business**

Term **Summer 2006**

Days & Times **Section 521: Mondays 6 to 9:50 pm – Room SOM 2.103
Section 522: Wednesdays 6 to 9:50 pm – Room SOM 1.117**

Professor Contact Information

Professor **Carol A. Flannery**

Office Phone **972-883-5939 (please note: I am only on campus Mon and
Wed 5 to 5:45 pm and in class times)**

Email Address **flannery@utdallas.edu VIA YOUR WEBCT ONLY
*****THIS IS FOR CONFIDENTIALITY*******

Office Location **SOM 3.202**

Office Hours **MW 5 to 5:45 PM (BEGINNING MAY 22)
SEE ME IN CLASSROOM AT 6 PM,
FIRST WEEK OF CLASSES)**

Other Information **Sometimes office hours may be in classroom**

Class Website: **<http://www.mathomatics.com> and also WebCT**

Course Pre-requisites, Co-requisites, and/or Other Restrictions

MATH 5304 or equivalent

Course Description

Introduction to statistical and probabilistic methods and theory applicable to situations faced by managers. Topics include: data presentation and summarization, regression analysis, fundamental probability theory and random variables, introductory decision analysis, estimation, confidence intervals, hypothesis testing, and One Way ANOVA (This section of this class requires use of Excel on assignments.)

Student Learning Objectives/Outcomes

- 1) Be able to organize and summarize raw data**
- 2) Be able to build and evaluate a regression model from raw data**
- 3) Be able to apply the basic rules of Probability Theory**
- 4) Be able to apply the concept of a random variable to solve business problems**
- 5) Be able to apply the Normal, Poisson, and Binomial Distributions to solve business Problems**
- 6) Be able to simulate data from the Normal, Poisson, and Binomial Distributions**
- 7) Be able to identify significant changes in averages and proportions**
- 8) Be able to determine if two populations have the same mean or the same proportion**
- 9) Be able to determine if several populations have the same mean**

Required Textbooks and Materials

Required Texts

STATISTICS FOR MANAGEMENT AND ECONOMICS, 7th EDITION, by G. KELLER, DUXBURY PRESS, 2005.

It is extremely important that students have the stated required current edition textbook and its accompanying CD. Not having these particular items may result in your not being able to complete a test and/or not participating in classroom exercises.

Online Text Companion: <http://www.duxbury.com/Titles.htm>

Required Materials

This section requires utilization of Excel software, but a laptop in class is not required.

Microsoft EXCEL (Available at a substantial discount to UTD Students at the UT Dallas Bookstore)

Students must be pro-active in learning Excel procedures and hand-calculator functions.

No other software will be utilized in this course.

Calculators for In-Class Tests

Since this section does not require a laptop for in-class lectures and in-class tests, you will need a handy statistical calculator to assist on in-class tests.

I am requiring the TI 30XII or TI 36X.

No other calculators will be permitted.

I repeat, no other calculators will be permitted. These student friendly calculators are found for about \$20 at area discount stores. You cannot share calculators on tests.

Assignments & Academic Calendar

For Topics, Reading Assignments, Due Dates, Exam Dates

SEE CLASS WEBSITE AND CLICK ON ICONS BEGINNING MAY 16, 2006

Study Groups:

It is a requirement in my classes for students to have study buddies.

Students should exchange email and/or phones/faxes to touch base with one another regarding assignments and/or lectures. Although group work is not permitted on any graded test and/or assignment, **study groups** are **strongly** encouraged.

Lectures:

If for some reason a student must miss a lecture, please contact your study buddy for notes.

My lecture notes and power point presentations are not online; this is not an online course.

Monday students are welcome to attend Wednesday lectures and vice versa. However, due to fairness, Monday students may not take tests with the Wednesday class, or vice versa.

Breaks:

Timed Breaks will be given during the class time. However, remember, your professor will be on break, too. Please be courteous and recognize this fact, and return back to the classroom after the break time.

Graded Tests and Assignments:

There will be **TWO in-class written tests** and **FIVE Excel software assignments** (to be sent to the Teaching Assistant, Mr. Jun Ru, via WEBCT email, by the specified due date/time).

Do your own work.

Collaboration on any test or graded assignment is not permitted and considered a breach in academic honesty and integrity.

Course Chapter Topics and TESTS:

(These topics are subject to change, revision, and reordering with notice to class)

Textbook Chapters: Chapter 1; Appendix 1B
Chapter 2
Chapter 3
Chapter 4
Chapter 5
Chapter 17; 17.1 – 17.7
Chapter 18; 18.1 – 18.3
Chapter 6 [Add Bayes Theorem; Basic Portfolio Analysis]

TEST 1 (40 POINTS OF TOTAL COURSE 100 POINTS):

June 12 (Mon class); June 14 (Wed class)

Written, multiple-choice and/or multiple-choice, problem solving combination.

Closed book, closed notes. In Class. Timed: Two Hours.

Lecture after test, unless otherwise noted.

Textbook Chapters: Chapter 7
Chapter 8: 8.2 – 8.3
Chapter 9
Chapter 11: 11.1 – 11.3
Chapter 10
Chapter 12: 12.1, 12.3 – 12.5
Chapter 13: 13.1 – 13.3
Chapter 15: 15.1, 15.6
Chapter 16: 16.1 – 16.3
Chapter 19
Chapter 23 [Add Risk Criteria; Decision Simulation]

TEST 2 (35 POINTS OF TOTAL COURSE 100 POINTS):

July 19 (Wed class); July 24 (Mon class)

Written, multiple-choice and/or multiple-choice, problem solving combination.

Closed book, closed notes. In Class. Timed: Two Hours.

Lecture after test, unless otherwise noted.

Computer Lab (First floor of SOM, near Java City)

I have downloaded Data Analysis and Data Analysis Plus on the computers in the lab.

If necessary, please utilize the lab for practice or your Software Assignments. There may be blocks of time reserved for testing by other classes, so please call the lab to make certain it is available.

Absence of Professor

If your professor is absent on a test day, the test may be administered by the Teaching Assistant. If this is not possible, the test will take place at the next class meeting.

Although instructor absences are rare, it can happen. If a substitute is not available, every attempt will be made to notify students by a note on the classroom door before class. If not, students are encouraged to stay in class for at least thirty minutes or until a note is posted on the class website and/or by email WEBCT.

Grading Policy

A TOTAL OF 100 POINTS AVAILABLE IN THIS COURSE.

TWO in-class written tests and FIVE software assignments .

TEST 1: 40 AVAILABLE POINTS

TEST 2: 35 AVAILABLE POINTS

SOFTWARE ASSIGNMENTS

#1 – 5 POINTS

#2 – 5 POINTS

#3 – 5 POINTS

#4 – 5 POINTS

#5 – 5 POINTS

There is no final exam.

Your grade is determined by the following scale and accumulated points:

A 94 – 100 points

B 87 – 93 points

C 75 – 86 points

F < 75 points

Course Policies

Make-up exams

There are no makeup exams. For extraordinary circumstances, a makeup exam will be considered, but there will be a “two point deduction” in exam grade.

Extra Credit

There is no extra credit work in this course.

Late Work

Software assignments will not be accepted if submitted after the email due date/time.

For extraordinary circumstances, a late software assignment may be considered, but there will be a one-point deduction for each day the assignment is late.

Questions Regarding Returned Written Tests

Students should direct inquiries about their test, in person, to the professor as soon as possible. If an inquiry about a written test is not presented to the professor by the next class meeting after posting of test grades, there will be no further reviewing of your test.

If there are questions regarding the last written test of the semester, submit your inquiry to me via email WEBCT, as soon as possible, and I will review your test before submitting final grades and respond to you via WEBCT email.

Remember, I have a university deadline to submit grades. Time is of the essence.

Questions Regarding Software Assignment Grades

Questions about software assignment grades should be submitted via email to your professor as soon as possible, for instance, the day grades are posted on WEBCT.

If an email inquiry about a software assignment is not presented to your professor by the next class meeting after the posting of the assignment grades, there will be no further review of the assignment.

Special Assignments

None

Class Attendance

Required. Textbook, calculator, paper, pencils are required each class meeting, even on Written Test Days.

Student Conduct & Discipline

The University of Texas System and The University of Texas at Dallas have rules and regulations for the orderly and efficient conduct of their business. It is the responsibility of each student and each student organization to be knowledgeable about the rules and regulations which govern student conduct and activities. General information on student conduct and discipline is contained in the UTD publication, *A to Z Guide*, which is provided to all registered students each academic year.

The University of Texas at Dallas administers student discipline within the procedures of recognized and established due process. Procedures are defined and described in the *Rules and Regulations, Board of Regents, The University of Texas System, Part 1, Chapter VI, Section 3*, and in Title V, Rules on Student Services and Activities of the university's *Handbook of Operating Procedures*. Copies of these rules and regulations are available to students in the Office of the Dean of Students, where staff members are available to assist students in interpreting the rules and regulations (SU 1.602, 972/883-6391).

A student at the university neither loses the rights nor escapes the responsibilities of citizenship. He or she is expected to obey federal, state, and local laws as well as the Regents' Rules, university regulations, and administrative rules. Students are subject to discipline for violating the standards of conduct whether such conduct takes place on or off campus, or whether civil or criminal penalties are also imposed for such conduct.

Academic Integrity

The faculty expects from its students a high level of responsibility and academic honesty. Because the value of an academic degree depends upon the absolute integrity of the work done by the student for that degree, it is imperative that a student demonstrate a high standard of individual honor in his or her scholastic work.

Scholastic dishonesty includes, but is not limited to, statements, acts or omissions related to applications for enrollment or the award of a degree, and/or the submission as one's own work or material that is not one's own. As a general rule, scholastic dishonesty involves one of the following acts: cheating, plagiarism, collusion and/or falsifying academic records. Students suspected of academic dishonesty are subject to disciplinary proceedings.

Plagiarism, especially from the web, from portions of papers for other classes, and from any other source is unacceptable and will be dealt with under the university's policy on plagiarism (see general catalog for details). This course will use the resources of turnitin.com, which searches the web for possible plagiarism and is over 90% effective.

Email Use

The University of Texas at Dallas recognizes the value and efficiency of communication between faculty/staff and students through electronic mail. At the same time, email raises some issues concerning security and the identity of each individual in an email exchange. **The university encourages all official student email correspondence be sent only to a student's U.T. Dallas email address and that faculty and staff consider email from students official only if it originates from a UTD student account. This allows the university to maintain a high degree of confidence in the identity of all individual corresponding and the security of the transmitted information.** UTD furnishes each student with a free email account that is to be used in all communication with university personnel. The Department of Information Resources at U.T. Dallas provides a method for students to have their U.T. Dallas mail forwarded to other accounts.

Submit email to flannery@utdallas.edu ONLY via YOUR WEBCT.

Email sent to me from email address domains, other than your official UTDallas address, may not be answered.

Withdrawal from Class

The administration of this institution has set deadlines for withdrawal of any college-level courses. These dates and times are published in that semester's course catalog. Administration procedures must be followed. It is the student's responsibility to handle withdrawal requirements from any class. **In other words, I cannot drop or withdraw any student. You must do the proper paperwork to ensure that you will not receive a final grade of "F" in a course if you choose not to attend the class once you are enrolled.**

Student Grievance Procedures

Procedures for student grievances are found in Title V, Rules on Student Services and Activities, of the university's *Handbook of Operating Procedures*.

In attempting to resolve any student grievance regarding grades, evaluations, or other fulfillments of academic responsibility, it is the obligation of the student first to make a serious effort to resolve the matter with the instructor, supervisor, administrator, or committee with whom the grievance originates (hereafter called "the respondent"). Individual faculty members retain primary responsibility for assigning grades and evaluations. If the matter cannot be resolved at that level, the grievance must be submitted in writing to the respondent with a copy of the respondent's School Dean. If the matter is not resolved by the written response provided by the respondent, the student may submit a written appeal to the School Dean. If the grievance is not resolved by the School Dean's decision, the student may make a written appeal to the Dean of Graduate or Undergraduate Education, and the dean will appoint and convene an Academic

Appeals Panel. The decision of the Academic Appeals Panel is final. The results of the academic appeals process will be distributed to all involved parties.

Copies of these rules and regulations are available to students in the Office of the Dean of Students, where staff members are available to assist students in interpreting the rules and regulations.

Incomplete Grade Policy

As per university policy, incomplete grades will be granted **only for work unavoidably missed at the semester's end and only if 70% of the course work has been completed.** An incomplete grade must be resolved within eight (8) weeks from the first day of the subsequent long semester. If the required work to complete the course and to remove the incomplete grade is not submitted by the specified deadline, the incomplete grade is changed automatically to a grade of **F**.

Disability Services

The goal of Disability Services is to provide students with disabilities educational opportunities equal to those of their non-disabled peers. Disability Services is located in room 1.610 in the Student Union. Office hours are Monday and Thursday, 8:30 a.m. to 6:30 p.m.; Tuesday and Wednesday, 8:30 a.m. to 7:30 p.m.; and Friday, 8:30 a.m. to 5:30 p.m.

The contact information for the Office of Disability Services is:

The University of Texas at Dallas, SU 22

PO Box 830688

Richardson, Texas 75083-0688

(972) 883-2098 (voice or TTY)

Essentially, the law requires that colleges and universities make those reasonable adjustments necessary to eliminate discrimination on the basis of disability. For example, it may be necessary to remove classroom prohibitions against tape recorders or animals (in the case of dog guides) for students who are blind. Occasionally an assignment requirement may be substituted (for example, a research paper versus an oral presentation for a student who is hearing impaired). Classes enrolled students with mobility impairments may have to be rescheduled in accessible facilities. The college or university may need to provide special services such as registration, note-taking, or mobility assistance.

It is the student's responsibility to notify his or her professors of the need for such an accommodation. Disability Services provides students with letters to present to faculty members to verify that the student has a disability and needs accommodations. Students must submit these forms to the professor as soon as possible; meaning, the next class meeting after you receive your paperwork/forms.

Individuals requiring special accommodation should contact the professor after class or during office hours.

Religious Holy Days

The University of Texas at Dallas will excuse a student from class or other required activities for the travel to and observance of a religious holy day for a religion whose places of worship are exempt from property tax under Section 11.20, Tax Code, Texas Code Annotated.

The student is encouraged to notify the instructor or activity sponsor as soon as possible regarding the absence, preferably in advance of the assignment. The student, so excused, will be allowed to take the exam or complete the assignment within a reasonable time after the absence: a period

equal to the length of the absence, up to a maximum of one week. A student who notifies the instructor and completes any missed exam or assignment may not be penalized for the absence. A student who fails to complete the exam or assignment within the prescribed period may receive a failing grade for that exam or assignment.

If a student or an instructor disagrees about the nature of the absence [i.e., for the purpose of observing a religious holy day] or if there is similar disagreement about whether the student has been given a reasonable time to complete any missed assignments or examinations, either the student or the instructor may request a ruling from the chief executive officer of the institution, or his or her designee. The chief executive officer or designee must take into account the legislative intent of TEC 51.911(b), and the student and instructor will abide by the decision of the chief executive officer or designee.

NOTICE: It is the student's responsibility to read and understand this syllabus.

Any errors or omissions in this syllabus will be corrected with notice to the student in class and/or by website announcement.

Any errors or omissions on the class website and/or WEBCT email will be corrected with notice to the student in class and/or by website announcement.

Please check the class website often for any announcements.