

Course OPRE 6301: Sections 503, 504

**Professor** Dr. Carol Flannery

Teaching Assistant Mr. Jun Ru

Spring 2007

**Term** Section 503 begins on Wed, January 10, 2007

Section 504 begins on Thurs, January 11, 2007

Meetings Sec 503 : Wednesday, 7 to 9:45 pm, SOM 1.217

Sec 504 : Thursday, 7 to 9:45 pm, SOM 1.212

Dr. Flannery joined UT-Dallas in 1995.

The Fall 2006 semester began her 30th year of teaching math and statistics in colleges and universities. In addition to teaching, her expertise includes writing technical math training publications, developing tailor-made, on-site

courses for business and industry, and the production and curriculum development of tutorial videos and online

courses.

#### **Professor's Contact Information**

Office Phone Contact by email preferably, via WebCT.

**Office Location** SOM 2.409 (east side of the building)

About your Professor

flannery@utdallas.edu

**Email Address** Students should send email via WebCT for confidentiality.

Email is not checked daily and is never checked on weekends or holidays.

Office Hours Wednesdays 6 to 6:45 pm, Thursdays 6 to 6:45 pm

Email is not a good forum in which problem solving can be explained in

an appropriate manner.

Other Information Please visit your professor and/or teaching assistant during office hours

for any help regarding problem solving.

Study buddies are required in class. Study groups are encouraged.

#### **General Course Information**

Pre-requisites, Co-

requisites, & 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 class section requires use of Excel on assignments as indicated in textbook.)

#### **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

**Learning Outcomes** 

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

#### **Learning Outcomes (continued):**

- 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
- 10) Hypothesis Testing and Estimation by Confidence Intervals

# STATISTICS FOR MANAGEMENT AND ECONOMICS, 7<sup>th</sup> EDITION, by G. KELLER, DUXBURY PRESS, 2005.

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

## Required Texts & Materials

This section of OPRE 6301 requires utilization of Excel software, but a laptop in class is not required.

Microsoft EXCEL is available at a substantial discount to UTD Students at the UTDallas Bookstore.

Although there will be some class time allotted within the on-campus computer lab, students must be pro-active in learning Excel procedures and hand-calculator functions.

No other software will be utilized in this course.

#### Online Text Companion Site

### http://www.duxbury.com/Titles.htm

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

I am requiring the TI 30XII or TI 36X; your choice.

#### Calculators for In-Class Written Tests

Students must have calculators by the second class meeting.

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**

[Topics, Reading Assignments, Due Dates, Exam Dates]

WEEK AND DATE ASSIGNMENTS AND/OK ACTIVITISCHEDUL	WEEK AND DATE	ASSIGNMENTS	AND/OR	ACTIVITY SCHEDULE
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 Wk 1 – Jan 10/11
 Assignment 1

 Wk 2 – Jan 17/18
 Assignment 2

Wk 3 – Jan 24/25 Assignment 3 (Meet first hour in Computer Lab)

Wk 4 – Jan 31 /Feb 1 Assignment 4

Wk 5 – Feb 7/8 \*\*\*\*\*\*WRITTEN TEST #1 over Assignments #1 thru #3

 Wk 6 – Feb 14/15
 Assignment 5

 Wk 7 – Feb 21/22
 Assignment 6

Wk 8 – Feb 28/Mar 1 Assignment 7 (Meet first hour in Computer Lab)
Wk 9 – Mar 7/8 SPRING BREAK MARCH 5 – 10, 2007

**Wk 10 – Mar 14/15** Assignment 8

Wk 11 – Mar 21/22 \*\*\*\*\*\*\* WRITTEN TEST #2 over Assignments #4 thru #7

Wk 12 – Mar 28/29 Assignment 9 (Meet first hour in Computer Lab)

**Wk 13 – Apr 4/5** Assignment 10

Wk 14 – Apr 11/12 Assignment 11 (Meet first hour in Computer Lab)

Wk 15 – Apr 18/19

Wk 16 -----Wed Final Ex—Apr 25

\*\*\*\*\*\*WRITTEN TEST #3 over Assignments #8 thru #10

FINAL EXAM in Excel to be held in the Computer Lab.

Even is completive even Assignments #1 thru #11

Thur Final Ex —Apr 25
Thur Final Ex —Apr 26
Exam is cumulative over Assignments #1 thru #11.

#### **Course Policies**

Written tests are closed book, closed notes. Usually Multiple-Choice format with option of including short answer questions.

Tests are 90 minutes followed by lecture unless otherwise indicated.

Final Exam (to be taken in the computer lab) is open book, open notes Utilizing Excel. Students will also be asked to type responses to questions after obtaining Excel results.

This exam will be submitted online via WebCT.

Time permitted for Final Exam is 2 hours.

Final Exams submitted after the 2 hour deadline will not be accepted.

**Testing Information** 

Written Test #1 – 25%

Written Test #2 – 25%

Written Test #3 – 25%

Final Exam - 25%

Grades may be posted on WebCT. There is no guarantee about this. In the event that grades are posted on WebCT and errors in posting are discovered, the errors will be corrected, whether the grade will be corrected higher or lower.

Inclement Weather	If the university is <u>officially closed</u> due to bad weather, and this closure is on a scheduled test day, the test will be held at the next class meeting.
Grading Criteria	92 – 100 A 85 - 92 B 75 - 84 C 74 and below F Students taking this course as an undergraduate will be subject to all policies as graduate students taking this course. Meaning, there are no + or – final grades. Also, there is no D grade in graduate school.  Points may be deducted from your final course average due to excessive absences from class. See CLASS ATTENDANCE within this syllabus.
Make-up Exams	There are no makeup exams. In <u>rare</u> cases, a makeup <u>may</u> be administered. In such cases, a makeup exam will be a more detailed test. In reference to religious holidays, please see the section on RELIGIOUS HOLIDAYS within this syllabus.
Extra Credit	There is no extra credit.
Late Work	Late work is not accepted.
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.  Wednesday students are welcome to attend Thursday lectures and vice versa. However, due to fairness, Wednesday students may not take tests with the Thursday class, or vice versa.
Class Attendance	Class attendance is required. Roll may be taken at any time during the semester. Students missing four or more classes are subject to being docked on their final course grade average by 4 or more points (one point for each class missed).
Breaks during Class	Timed Breaks will be given during the class time. However, your professor will be on break, too. Please be courteous and recognize this fact, and return back to the classroom in a timely manner after the break time.
Cell Phones	Turned off, out of sight, and not to be used within the classroom area at any time; this includes during breaks.
Student Conduct and 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, <i>A to Z Guide</i> , 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 <i>Rules and Regulations, Board of Regents, The University of Texas System, Part 1, Chapter VI, Section 3</i> , and in Title V, Rules on Student Services and Activities of the university's <i>Handbook of Operating Procedures</i> . 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 egulations (SU 1.602, 972/883-6391).  A student at the university neither loses the rights nor escapes the responsibilities of itizenship. 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 of 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 onduct.  The faculty expects from its students a high level of responsibility and academic onesty. 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 emonstrate a high standard of individual honor in his or her scholastic work.  Scholastic dishonesty includes, but is not limited to, statements, acts or omissions elated to applications for enrollment or the award of a degree, and/or the submission				
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s 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 rom any other source is unacceptable and will be dealt with under the university's solicy on plagiarism (see general catalog for details). This course will use the esources of turnitin.com, which searches the web for possible plagiarism and is over 0% effective.				
The University of Texas at Dallas recognizes the value and efficiency of communication between faculty/staff and students through electronic mail. At the ame 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 tudent 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 desources at U.T. Dallas provides a method for students to have their U.T. Dallas mail forwarded to other accounts.				
The administration of this institution has set deadlines for withdrawal of any college- evel 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 andle 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 lass once you are enrolled.				
Procedures for student grievances are found in Title V, Rules on Student Services and Activities, of the university's <i>Handbook of Operating Procedures</i> .				
n attempting to resolve any student grievance regarding grades, evaluations, or other ulfillments of academic responsibility, it is the obligation of the student first to make serious effort to resolve the matter with the instructor, supervisor, administrator, or ommittee with whom the grievance originates (hereafter called "the respondent"). Individual faculty members retain primary responsibility for assigning grades and valuations. 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				
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	resolved by the School Dean's decision, the student may make a written appeal to the Dean of Graduate or Undergraduate Education, and the deal 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.  As per university policy, incomplete grades will be granted only for work
Incomplete Grades	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 <b>F</b> .
	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)
Disability Services	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. Individuals requiring special accommodation should contact the professor after class or during office hours.
	******Letters and Forms for students utilizing Disability Services for special assistance must be presented to your professor <u>as soon as possible</u> .
	The University of Texas at Dallas will excuse a student from class or other required
Religious Holy Days	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.

These descriptions and timelines are subject to change at the discretion of the Professor.

**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 students 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 students in class and/or by website announcement.

Check the class WEBCT often for any announcements.