

OPRE 3360.501: Managerial Methods in Decision

Making Under Uncertainty



Professor Prof. Anyan Qi

Term Fall 2017

Meetings Wednesday 7:00pm-9:45pm, JSOM 2.722

PROFESSOR'S CONTACT INFORMATION

Office Phone (972)883-5952

Office Location 3.214

Email Address Use the email tool on eLearning to contact me.

Office Hours Tuesday 2pm-4pm, or by appointment

TA Tanya Israni

TA Email tri170030@utdallas.edu

TA Office Tuesday 4:00pm-6:30pm and assignment due date 4:00pm-6:30pm at JSOM

Hours 2.604

GENERAL COURSE INFORMATION

Pre-Requisites MATH 1326 or equivalent.

Other Restrictions

OPRE 3360 and STAT 3360 cannot both be used to fulfill degree requirements.

Course Description

Introduces the concepts of probability and statistics to managerial decision making. Concepts will be developed in lecture and exercises using software packages. Topics include: summarizing and presenting data, probability theory, sampling, estimation, confidence intervals, hypothesis testing, regression, and ANOVA. Emphasis will be given to modeling and solving business problems in finance, marketing, accounting, and operations Management.

Learning Outcomes

On successful completion of this course a student will be able to use the tools of probability and statistical modeling to support business decisions. Specifically, she/he (i) can quantify uncertainty found in business situations and form probabilistic knowledge, (ii) estimate the key metrics based on data and test hypotheses about business realities using data, and (iii) build a statistical model of uncertain business realities for insight gathering and prediction.

Required Texts & Materials

No textbooks required.

Other Texts, Readings & Materials Other materials and lecture notes will be posted on eLearning.

If students would like to read a textbook, the followings are recommended:

- (optional) Anderson, D., Sweeney, D. and Williams, T. "Modern Business Statistics with Microsoft Office Excel," 5th ed.
- (optional) Groebner, D., Shannon, P. and Fry, P. "Business Statistics: A Decision-Making Approach," 9th ed.

The lecture notes and other materials posted on eLearning should be sufficient

for the students to learn the material. The optional textbooks are not required.

COURSE POLICIES

(credit) Criteria

Grading The total score (100 points) will be made up of five parts.

- Assignments (30%).
 - Individual assignments (15%).

Most individual assignments are due the night before each lecture and should be completed on eLearning.

Group assignments (15%).

The students are expected to form groups of 4-5 students and complete three group assignments during the semester. At the end of the semester a peer-review form will be used to evaluate team members' performance; each member's grade may be adjusted up or down based on feedback from other team members.

Ouiz and Tests (60%).

■ Test I (20%).

This test covers the first course module. The Test is open-book and open-note. Students are permitted to use Excel in the test. The test location is the Testing Center in the McDermott Library (MC 1.401). Any communications among students during tests are not allowed.

■ Test II (40%).

This test covers the second and third course module. The Test is openbook and open-note. Students are permitted to use Excel in the test. The test location is the Testing Center in the McDermott Library (MC 1.401). Any communications among students during tests are not allowed.

Class participation (10%).

Class attendance is highly encouraged. If you must miss a class because of an emergency you will have to contact the professor in advance for permission and provide proof, and you may need to meet with the professor individually to make up the class. You are also expected to actively participate in class.

Letter grade

You will be evaluated relative to your classmates.

Make-Up NO make-up exam will be offered except in case of medical emergency (proof Exams required).

Extra Credit Extra credit will **NOT** be offered.

Late Work NO late assignments will be accepted.

Class Attendance

- You are expected to actively participate in the class. See "Strategies for Success" below on "Participation" for more details.
- You are expected to read the required materials prior to the corresponding

class lecture (see the Course Outline for detail).

You are responsible for all material discussed and all course schedule changes announced during class.

Classroom Citizenship

- Class begins on time. Please maintain class decorum and be respectful toward fellow students in the class. If you have a doubt or misunderstanding regarding course work feel free to discuss it with me.
- Using your phone during class is not permitted and is rude. Keep your phone on silent at all times and away from your desk. This includes no texting. Offenders will be asked to turn off their phones. If this is a recurring problem students will be asked to give their phones to the instructor and will be returned at the end of the class session.
- Laptop computer policy: students are encouraged to bring a laptop to class, particularly in Module III since we will practice using Excel's statistical and regression features. Using a laptop (for the purpose of obtaining the numbers) is permitted. All other features and their usage (such as e-mail, internet, games, and instant messenger) are strictly prohibited and regarded as class disruptions.
- These rules will be enforced.

Accessibility Accommodations

It is the policy and practice of the University of Texas at Dallas to make reasonable accommodations for students with properly documented disabilities. However, written notification from the Office of Student AccessAbility (OSA) is required. If you are eligible to receive an accommodation and would like to request it for this course, please discuss it with me and allow one week advance notice. Students who have questions about receiving accommodations, as well as those who have or think they may have, a disability (mobility, sensory, health, psychological, learning, etc.) are invited to contact the Office of Student Access Ability for a confidential discussion. OSA is located in the Student Services Building, suite 3.200. They can be reached by phone at (972) 883-2098, or by email at studentaccess@utdallas.edu.

The course will involve extensive use of Microsoft Excel, and in particular the data-analysis tool pack (a native Excel add-in). The use of each tool will be discussed in class but basic familiarity (such as copy and paste, entering formulae) with Microsoft Excel is assumed.

I expect that students will use Excel 2010 or 2013 (preferred). In case some students may have laptops with Office 2007, the lecture notes, classroom demonstrations, and screen shots will utilize features common for all versions of Excel.

Mac Support Microsoft Office 2016 for Mac is the only version that features regression tools (which we will be using in Module III). I recommend that students with Mac install this version or use Microsoft Office for Windows. As a UTD student, you are eligible to buy a student version at a deeply discounted price: check with the university technology store.

Religious Holy

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.

This creed was voted on by the UT Dallas student body in 2014. It is a standard that Comets choose to live by and encourage others to do the same:

Comet Creed

"As a Comet, I pledge honesty, integrity, and service in all that I do."

UT Dallas Syllabus Policies and Procedures The information contained in the following link constitutes the University's policies and procedures segment of the course syllabus.

Please go to http://go.utdallas.edu/syllabus-policies for these policies.

The descriptions and timelines contained in this syllabus are subject to change at the discretion of the Professor.

STRATEGIES FOR SUCCESS

1. Class preparation:

The main topics, reading assignments, and suggested problems appear below. In each class you will be expected to:

- a) Complete required readings and skim lecture notes (prior to class) if you have time.
- b) Take notes on the printed lecture notes.
- Do all required Excel pre-work assignments prior to class and bring a laptop for Module III.
- d) Solve the suggested self-assessment problems in the Practice Problem Set **assigned for each class** listed in the syllabus (before and after class).
- e) Read the appropriate portions of the textbook (before and after class).
- f) Bring a **nameplate** to every class.

I understand that you have limited time. However, I strongly urge you to devote adequate time to the course since this is not material you can cram over a day or two. If you are pressed for time for specific classes, prioritize your class preparation in the order given above.

2. Class participation:

Please bring your **nameplate** to every class. The nature of the contributions students can make in class depends on whether we are covering basic tools, or asking for managerial conclusions. Excellent participation in this course means helping the entire class with salient questions, contributions, or clarifications. Less than excellent participation would include disruptive entrances/departures, causing distraction to yourselves, colleagues, and instructors by inappropriate use of your laptop or cellphone, and/or taking class time to ask for information that would be redundant for students properly prepared for class.

3. Practice problem sets

There are sets of self-assessment practice problems for each lecture starting from Class 2. To maximize your learning, attempt the self-assessment exercises for each lecture soon after the lecture, and review your lecture notes or seek help if you find yourself unable to complete the exercises.

4. Workload expectation:

The key to competence is **PRACTICE**. You will be given the opportunity to work on many practice problems in this course.

Note that university guidelines recommend that you study 2-3 hours per week for every credit hour in which you are enrolled. University expectations suggest you spend **6-9 hours** outside of class every week on homework and studying for this course.

A rule of thumb for time requirements is that I expect students will spend approximately 3 hours preparing for and reviewing each class, with additional time spent solving the practice problems and preparing for exams. Trimming this time input will diminish the value of the educational experience for everyone. Please recognize the importance of advance preparation, and begin now to level-load your course time input.

5. How to get help:

In addition to my office hours, a TA will be available for additional office hours for those students who need help. This course is cumulative and moves rapidly. **DO NOT FALL BEHIND!** It is recommended that you see your instructor **immediately for any difficulties.**

6. Tests:

TEST I

A test will be given at the completion of the first course module. The TEST Is open-book and open-note with Excel allowed, subject to the academic integrity policy. A practice test with solutions will be available on eLearning. The combination of reading, self-study exercises, classwork, practice, and graded individual and group assignments will fully prepare students to take the test.

TEST II

TEST II will be preceded by one in-class review session. Absences from the test will be entertained only in cases of extreme emergency; academics are your number one priority right now. Sample tests will be posted on the eLearning site at least one week before the test date. The TEST Is open-book and open-note. You will also be allowed to use Excel on the final exam, so students will want to become used to Excel's various statistical functions and add-ins during class and on the homework.

ASSIGNMENTS AND EXAMS CALENDAR

ORPE 3360.501 Fall 2017 Course Outline

No.	Date	Class	Individual Assignments	Other Assignments
1	Aug 23	Class 1		Sign up for your group on eLearning.
2	Aug 30	Class 2	HW 1 due at 11:45pm on Sep 5.	
3	Sep 6	Class 3	HW 2 due at 11:45pm on Sep 12.	
4	Sep 13	Class 4	HW 3 due at 11:45pm on Sep 19.	
5	Sep 20	Class 5	HW 4 due at 11:45pm on Sep 26.	Group HW 1 due at 11:45pm on Sep 26.
6	Sep 23	Review Session		
	(Sat)	Location: JSOM 1.212. Time: 9:00 AM-12:00 PM, Saturday, September 23.		
7	Sep 27-	TEST I 2 hours		
The test location is Testing Center			ocation is Testing Center at the McDe	ermott Library (MC 1.401).
8	Oct 4	Class 6	HW 5 due at 11:45pm on Oct 10.	
9	Oct 11	Class 7	HW 6 due at 11:45pm on Oct 17.	
10	Oct 18	Class 8	HW 7 due at 11:45pm on Oct 31.	Group HW 2 due at 11:45pm on Oct 31.
	Oct 25	NO CLASSES (Make up for review session on Sep 23)		
11	Nov 1	Class 9	HW 8 due at 11:45pm on Nov 7.	
12	Nov 8	Class 10	HW 9 due at 11:45pm on Nov 14.	
13	Nov 15	Class 11	HW 10 due at 11:45pm on Nov 28.	Group HW 3 due at 11:45pm on Nov 28.
	Nov 22	NO CLASSES (Fall break/Thanksgiving)		
14	Nov 29	Class 12		
15	Dec 1-2	TEST II 2 hours The test location is Testing Center at the McDermott Library (MC 1.401).		

TENTATIVE COURSE OUTLINE

The following pages list a lecture-by-lecture outline of the entire course. The learning objective, readings, and required and suggested assignments for each lecture are listed. To help you maximize your learning from the lectures and prepare for the two tests, I have assigned a number of individual assignments and practice problems for each class.

I will attempt to stick to this schedule as much as possible, although I reserve the right to modify the lecture contents depending on the evolution of the course. Sufficient notice will be given for any changes.

To help you manage your time efficiently I have categorized the activities on the to-do list into mandatory ($\sqrt{}$) and optional (\bullet). I strongly encourage that you complete mandatory activities before or immediately after each class. The optional text reading is based on Anderson, D., Sweeney, D. and Williams, T. "Modern Business Statistics with Microsoft Office Excel," 5^{th} ed. The text reading based on Groebner, D., Shannon, P. and Fry, P. "Business Statistics: A Decision-Making Approach," 9^{th} ed. is available upon request.

ORPE 3360.501 Daily Course Schedules

Module I: Describing and Measuring Data and Uncertainty

Class 1 (August 23): Course overview and introduction to data description

Learning objectives for this unit:

- Understand the definition and classification of data
- Understand the scale of measurement
- Learn how to summarize data for a categorical variable using graphical methods
- Learn how to summarize data for a quantitative variable using graphical methods

Preparation:

- ✓ Required reading: **super important!** Carefully review the course syllabus and plan!
- ✓ Required reading: read class synopsis, cases, and lecture notes.
- Text reading: Chap 1: 1.1, 1.2, 1.4–1.7, p. 1–10, 14–22; Chap 2: 2.1, 2.2 (skip dot plot and stem-and-leaf display), p. 38–45, 49–58.
- Optional reading or skim: For Today's Graduate, Just One Word: Statistics, The New York Times
- Optional reading or skim: Are you ready for the era of big data?, McKinsey Global Institute

After-class:

- ✓ Must-do: read the *Review of Quantitative and Excel Skills* (posted on eLearning).
- ✓ Must-do: sign up for your group on eLearning.

Class 2 (August 30): Introduction to probability

Learning objectives for this unit:

Understand random events, probability spaces, and the basic laws of probability.

Preparation:

- ✓ Required reading: read class synopsis, cases, and lecture notes.
- Text reading: Chap 2: 2.3, p. 66–73; Chap 4: 4.1–4.4, p. 181–190 (skip the combination and permutation on p.186–187), 192–194, 196–200, 203–207.

After-class:

✓ Individual Assignment 1: Practice Problem Set 1: 1, 2, 3, 4, 5, 6 on eLearning before 11:45pm on Sep 5.

Class 3 (September 6): Working with random variables

Learning objectives for this unit:

• Understand the concept of a random variable and its probability distribution.

Preparation:

- ✓ Required reading: read class synopsis, cases, and lecture notes.
- Text reading: Chapter 5: 5.1, 5.2 (skip discrete uniform distribution), 5.3, 5.4 (skip Covariance and Correlation for now and focus on cases where the random variables are independent. When random variables X and Y are independent, covariance $\sigma_{xy} = 0$ and correlation $\rho_{xy} = 0$. We will come back to discuss covariance and correlation in Module III), p. 227–229, 236–239, 246–247.

After-class:

- ✓ Individual Assignment 2: Practice Problem Set 1: 9, 10, 11, 19–27 on eLearning before 11:45pm on Sep 12.
- ✓ Register your seat for Test 1: https://www.registerblast.com/utdallas/Exam/List
- ✓ Note that the course number is "OPRE 3360" (NOT "OPRE 3310")

Class 4 (September 13): Discrete random variables and binomial distribution

Learning objectives for this unit:

- Learn how binomial distribution applies in business decision problems.
- Learn the difference between discrete and continuous random variables.

Preparation:

- ✓ Required reading: read class synopsis, cases, and lecture notes.
- Text reading: Chapter 5: 5.5, p. 252–260.

After-class:

- ✓ Individual Assignment 3: Practice Problem Set 1: 7, 8, 12–18 on eLearning before 11:45pm on Sep 19.
- \checkmark Must-do: start to work on the 1st group assignment which is due in two weeks.

Class 5 (September 20): Continuous random variables and normal distribution.

Learning objectives for this unit:

- Learn how normal distribution applies in business decision problems.
- Preview the Central Limit Theorem.
- Learn types of data available and how to collect data.

Preparation:

- ✓ Required reading: read class synopsis, cases, and lecture notes.
- Text reading: Chapter 6: 6.2, p. 286–298.

After-class:

- ✓ Required assignment: work with your group to complete the 1^{st} group assignment, and submit your group assignment on eLearning before 11:45pm Tuesday on Sep 26.
- ✓ Individual Assignment 4: Practice Problem Set 1: 28-34 on eLearning before 11:45pm on Sep 25.

Class 6 (September 23) Review Session for TEST I: A review session will be provided at JSOM 1.212 from 9:00am-12:00pm on Saturday, September 23. Online videos will be uploaded on eLearning.

1st Group Assignment: submit one copy (per group) <u>before 11:45pm Tuesday on September 26.</u>

TEST I: The test will be held at <u>Testing Center at the McDermott Library (MC 1.401)</u> on <u>September 27-28</u>. You have 2 hours to complete the exam. Note that the exam location is NOT the regular classroom.

TEST I covers the first course module. The test is open-book and open-note. Students are permitted to use Excel in the exam, but any communications among students are strictly forbidden. For preparation, review all your individual assignments, review your group assignment, and solve Practice Test I.

Module II: Statistical Inference and Hypothesis Testing

Class 7 (October 4): Sampling distributions and introduction to inference

Learning objectives for this unit:

- Explore why sampling leads to errors.
- Learn the concept of sampling error and its distribution.

Preparation:

- ✓ Required reading: read class synopsis, cases, and lecture notes.
- Text reading: Chap 3: 3.1 (skip weighted mean and geometric mean), 3.2, p. 108–112, 117-120, 125–132. Chap 7: 7.1–7.6, p. 313–321, 322–324, 326–337, 339–342.
- Optional reading or skim: article from The New York Times: *Risk Mismanagement:* What led to the financial meltdown.

After-class:

✓ Individual Assignment 5: Practice Problem Set 2: 1, 2, 3, 4, 5, 6, 7 on eLearning before 11:45pm on Oct 10.

Class 8 (October 11): Confidence interval and hypothesis test

Learning objectives for this unit:

- Learn to construct a confidence interval for a population parameter (mean or proportion).
- Learn how to formulate null and alternative hypotheses.
- Understand the p-value for a hypothesis test and how to compute it.

Preparation:

- ✓ Required reading: read class synopsis, cases, and lecture notes.
- Text reading: Chap 8: 8.1–8.4, p. 354–361, 362–370, 373–374, 376–380.

After-class:

- ✓ Individual Assignment 6: Practice Problem Set 2: 8, 9, 11, 12, 14 on eLearning before 11:45pm on Oct 17.
- \checkmark Must-do: start to work on the 2^{nd} group assignment which is due in two weeks.

Class 9 (October 18): Hypothesis test and introduction to statistical models

Learning objectives for this unit:

- Apply hypothesis test in business decision making.
- Understand the need and use of statistical models.
- Learn how to perform preliminary analysis.

Preparation:

- ✓ Required reading: read class synopsis, cases, and lecture notes.
- Text reading: Chap 9: 9.1–9.4, p. 394–398, 399–400, 401–414, 417–423.

After-class:

- ✓ Required assignment: complete the 2^{nd} group assignment with your group members, and submit your group assignments on eLearning before 11:45pm on October 31.
- ✓ Individual Assignment 7: Practice Problem Set 2: 15, 16, 17, 18, 20, 25, 26, 27, 28, 29, 30 on eLearning before 11:45pm on Oct 31.
- ✓ Register your seat for Test 2: https://www.registerblast.com/utdallas/Exam/List
- ✓ Note that the course number is "OPRE 3360" (NOT "OPRE 3310")

2nd Group Assignment: Submit one copy (per group) <u>before 11:45pm on October 31</u>.

No class on October 25 (make up for the review session on Sep 23).

Module III: From Data to Insights: Statistical Modeling and Regression Analysis

Class 10 (November 1): Covariance, correlation, and simple linear regression

Learning objectives for this unit:

- Be able to establish the relationship between two variables.
- Learn the simple linear regression model.

Preparation:

- ✓ Required reading: read class synopsis and mini-cases.
- ✓ Must-do: download the data files to your laptop.
- Text reading: Chap 2: 2.4 (scatter diagram and trendline), p. 78–81; Chap 3: 3.5, p. 148–156; Chap 5: 5.4, p. 242–249; Chap 14: 14.1–14.2, 14.7 (use Excel for regression), p. 606–616, 649–650.

After-class:

✓ Individual Assignment 8: Practice Problem Set 3: 1, 4, 5, 6, 7, 8, 16, 19, 20 on eLearning before 11:45pm on Nov 7.

Class 11 (November 8): Simple linear regression II

Learning objectives for this unit:

- Understand how regression can be used to estimate population parameters.
- Determine whether a regression model is significant using sample data.
- Learn how the regression can be applied to estimate the beta coefficient of a stock.

Preparation:

- ✓ Required reading: read class synopsis and mini-cases.
- ✓ Must-do: download the data files to your laptop.
- Text reading: Chap 14: 14.3–14.8 (skip Using Excel to Compute the Coefficient of Determination, Standard Residuals, Using Excel to Construct a Residual Plot, and Normal Probability Plot), p. 622–626, 630–639, 641–646, 650–653, 656–660.

After-class:

✓ Individual Assignment 9: Practice Problem Set 3: 2, 3, 9, 10, 11, 12, 13, 14 on eLearning before 11:45pm on Nov 14.

Class 12 (November 15): Multiple regression and multicollinearity

Learning objectives for this unit:

- Apply multiple regression analysis to business applications.
- Understand the causes, symptoms, and remedies for multicollinearity.

Preparation:

- ✓ Required reading: read class synopsis and mini-cases.
- ✓ Must-do: download the data files to your laptop.
- Text reading: Chap 15: 15.1–15.6, 15.8, p. 693–701, 706–707, 709–715, 717–718, 728–731.

After-class:

- ✓ Must-do: start to work on the 3^{rd} group assignment which is due at 11:45pm on Nov 28.
- ✓ Individual Assignment 10: submit your peer-review form about your group members on eLearning before 11:45pm on Nov 28.

No class on November 22 (Fall break/Thanksgiving).

Class 13 (November 29): An application of multiple regression and course review

Learning objectives for this unit:

- This class will allow students to practice using the tools they have learned in an application of statistical modeling to business.
- We will review the course in the second half of the course.

Preparation:

✓ Must do: submit your peer-review form about your group members

TEST II: The test will be held at <u>Testing Center at the McDermott Library (MC 1.401)</u> on <u>December 1-2</u>. You have 2 hours to complete the exam. Note that the exam location is NOT the regular classroom.

TEST II covers the second and third course modules. The test is open-book and open-note. Students are permitted to use Excel in the exam, but any communications among students are strictly forbidden. For preparation, review all your individual assignments from Class 7-Class 12, review your 2nd and 3rd group assignments, and solve Practice Test II Questions.

ACADEMIC INTEGRITY

The faculty and administration of the School of Management expect from our 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. We want to establish a reputation for the honorable behavior of our graduates, which extends throughout their careers. Both your individual reputation and the school's reputation matter to your success.

The Judicial Affairs website lists examples of academic dishonesty. Dishonesty includes, but is not limited to cheating, plagiarism, collusion, facilitating academic dishonesty, fabrication, failure to contribute to a collaborative project and sabotage. Some of the ways students may engage in academic dishonesty are:

- Coughing and/or using visual or auditory signals in a test;
- Concealing notes on hands, caps, shoes, in pockets or the back of beverage bottle labels;
- Writing in blue books prior to an examination;
- Writing information on blackboards, desks, or keeping notes on the floor;
- Obtaining copies of an exam in advance;
- Passing information from an earlier class to a later class;
- Leaving information in the bathroom;
- Exchanging exams so that neighbors have identical test forms;
- Having a substitute take a test and providing falsified identification for the substitute;
- Fabricating data for lab assignments;
- Changing a graded paper and requesting that it be regraded;
- Failing to turn in a test or assignment and later suggesting the faculty member lost the item;
- Stealing another student's graded test and affixing one's own name on it;
- Recording two answers, one on the test form, one on the answer sheet;
- Marking an answer sheet to enable another to see the answer;
- Encircling two adjacent answers and claiming to have had the correct answer;
- Stealing an exam for someone in another section or for placement in a test file;
- Using an electronic device to store test information, or to send or receive answers for a test;
- Destroying or removing library materials to gain an academic advantage;
- Consulting assignment solutions posted on websites of previous course offerings;
- Transferring a computer file from one person's account to another;
- Transmitting posted answers for an exam to a student in a testing area via electronic device;
- Downloading text from the Internet or other sources without proper attribution;
- Citing to false references or findings in research or other academic exercises;
- Unauthorized collaborating with another person in preparing academic exercises.

 Submitting a substantial portion of the same academic work more than once without written authorization from the instructor.

http://www.utdallas.edu/judicialaffairs/UTDJudicialAffairs-Basicexamples.html

PLAGIARISM

Plagiarism on written assignments, especially from the web, from portions of papers for other classes, and from any other source is unacceptable. On written assignments, this course will use the resources of turnitin.com, which searches the web for plagiarized content and is over 90% effective.

CONDUCT DURING COURSE EXAMS

During tests and quizzes, students in this section are not allowed to have with them any food and drinks. When possible, students should sit in alternating seats, face forward at all times, and remove any clothing which might conceal eye movements, or reflect images of another's work. Exam proctors will monitor any communication or signaling between students by talking, whispering, or making sounds, or by using your hands, feet, other body movements, the test paper itself, your writing implement.

ACADEMIC DISHONESTY

Students in this course suspected of academic dishonesty are subject to disciplinary proceedings, and if found responsible, the following minimum sanctions will be applied:

- Homework Zero for the Assignment
- Quizzes Zero for the Quiz
- Presentations Zero for the Assignment
- Group Assignments Zero for the Assignment for all group members
- Exams Zero for the Exam and a one letter grade reduction of the final course grade

These sanctions will be administered only after a student has been found officially responsible for academic dishonesty, either through waiving their right for a disciplinary hearing, or being declared responsible after a hearing administered by Judicial Affairs and the Dean of Student's Office.

In the event that the student receives a failing grade for the course for academic dishonesty, the student is not allowed to withdraw as a way of preventing the grade from being entered on their record. Where a student receives an F in a course and chooses to take the course over to improve their grade, the original grade of F remains on their transcript, but does not count towards calculation of their GPA.

The School of Management also reserves the right to review a student's disciplinary record, on file with the Dean of Students, as one of the criteria for determining a student's eligibility for a scholarship.

JUDICIAL AFFAIRS PROCEDURES

Under authority delegated by the Dean of Students, a faculty member who has reason to suspect that a student has engaged in academic dishonesty may conduct a conference with the student in compliance with the following procedures:

1. the student will be informed that he/she is believed to have committed an act or acts of academic dishonesty in violation of University rules;

- 2. the student will be presented with any information in the knowledge or possession of the instructor which tends to support the allegation(s) of academic dishonesty;
- 3. the student will be given an opportunity to present information on his/her behalf;
- 4. after meeting with the student, the faculty member may choose not to refer the allegation if he/she determines that the allegations are not supported by the evidence; or
- 5. after meeting with the student, the faculty member may refer the allegations to the dean of students along with a referral form and all supporting documentation of the alleged violation. Under separate cover, the faculty member should forward the appropriate grade to be assessed if a student is found to be responsible for academic dishonesty;
- 6. the faculty member may consult with the dean of students in determining the recommended grade;
- 7. the faculty member must not impose any independent sanctions upon the student in lieu of a referral to Judicial Affairs;
- 8. the faculty member may not impose a sanction of suspension or expulsion, but may make this recommendation in the referral documentation

If the faculty member chooses not to meet with the student and instead forwards the appropriate documentation directly to the dean of students, they should attempt to inform the student of the allegation and notify the student that the information has been forwarded to the Office of Dean of Students for investigation.

The student, pending a hearing, remains responsible for all academic exercises and syllabus requirements. The student may remain in class if the student's presence in the class does not interfere with the professor's ability to teach the class or the ability of other class members to learn. (See Section 49.07, page V-49-4 for information regarding the removal of a student from class).

Upon receipt of the referral form, class syllabus, and the supporting material/documentation from the faculty member, the dean shall proceed under the guidelines in the Handbook of Operating Procedures, Chapter 49, Subchapter C. If the respondent disputes the facts upon which the allegations are based, a fair and impartial disciplinary committee comprised of UTD faculty and students, shall hold a hearing and determine the responsibility of the student. If they find the student in violation of the code of conduct, the dean will then affirm the minimum sanction as provided in the syllabus, and share this information with the student. The dean will review the student's prior disciplinary record and assess additional sanctions where appropriate to the circumstances. The dean will inform the student and the faculty member of their decision.

UT DALLAS SYLLABUS POLICIES AND PROCEDURES

The information contained in the following link constitutes the University's policies and procedures segment of the course syllabus. Please go to http://go.utdallas.edu/syllabus-policies for these policies.

The descriptions and timelines contained in this syllabus are subject to change at the discretion of the Professor.