# Course Syllabus

#### **Course Information**

Course Number: OPRE 3360.001/007 (Updated 08/15/17)

Course Title: Managerial Methods in Decision Making Under Uncertainty

Term: Fall 2017

Days & Time: Friday/Tuesday, 4:00 PM – 7:45 PM, Room 2.722

Instructor: Mo Naseri

Office: SOM 4.614 (Dean's Suite)
Office Hours: by appointment only
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## Course Pre-requisites, Co-requisites and/or Other Restrictions

MATH 1326 or MATH 2414 or MATH 2419

#### **Course Description**

Introduces the concept 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**

Students are expected to develop skills on problem formulation, identification of appropriate statistical techniques, computer implementations in Excel and manual calculations and written explanations, and interpretation of empirical results. At the end of this course you should be able to:

- Be acquainted with the concept of sample and population.
- Calculate and interpret statistics in context.
- Use statistics to describe samples and test hypothesis to make inferences about populations.
- Present data using Excel as an analytic tool.

### **Required Textbooks and Materials**

Textbook: Modern Business Statistics with Microsoft® Excel® (5th Edition)

Authors: Anderson, Sweeney, Williams - ISBN-10: 1-305-25511-9 / ISBN-13: 978-1-305-25511-1

New textbooks come with a card having an access code. This code will enable you to log into the publisher's website and obtain Web Data Files.

This is the required edition of the text. Any other editions, such as the abbreviated or international edition, may have different problems, different data files, and/or chapter topics. Since your assignment, tests, problems will contain textbook problems, you are inviting a low exam grade by not having the correct edition.

You have two options to purchase the textbook:

- 1. Through UTD Bookstore.
- 2. Through Cengage link: <a href="http://services.cengagebrain.com/course/site.html?id=2627487">http://services.cengagebrain.com/course/site.html?id=2627487</a>

## **Software:** Microsoft® Office Excel®

This course uses a laptop, eLearning, Internet access, Microsoft Excel 2007 or higher (no trial versions), Data Analysis Activated (this comes with Excel), and Web Data Files (available for download from the textbook Publisher's website for your textbook at CengageBrain.com). If you are using a Mac, it is recommended to install a Windows Virtual machine, such as Parallel Desktop, or VMWare Fusion 4 which will then allow the use of Windows within the Mac Operating System.

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**The Statistics and Math lab**, offers assistance to undergraduate students for OPRE 3333 and OPRE 3360. The schedule is 10 am-6 pm Monday to Friday and it is located in room 2.414.

The following is a **tentative schedule**, which will be followed as closely as possible. However, should any changes become necessary, it will be announced in the class or via Blackboard. <u>It is your responsibility to keep track of</u> announcements regarding changes to this schedule.

## **Tentative Schedule**

Week - Day	Chapter / Lecture	Chapter
Week 01 Aug 21-Aug25	Introduction to OPRE 3360 Chapter 1 - Introduction to Data and Statistics	• Syllabus • 1.1 - 1.6
Week 02 Aug 28-Sep 01	Chapter 2 - Descriptive Statistics: Tabular & Graphical Display	• 2.1 - 2.4
Week 03 Sep 04-Sep 08	Chapter 3 - Descriptive Statistics: Numerical Measures	• 3.1 - 3.5
Week 04 Sep 11-Sep 15	Chapter 4 - Introduction to Probability  Quiz 1 - In Class: Chapters 1, 2, & 3	• 4.1 - 4.4
Week 05 Sep18-Sep 22	Chapter 4 - Introduction to Probability Exam 1 - In Class: Chapters 1, 2, & 3	• 4.1 - 4.4
Week 06 Sep 25-Sep 29	Chapter 5 - Discrete Probability Distributions	• 5.1 - 5.5
Week 07 Oct 02-Oct 06	Chapter 6 - Continuous Probability Distributions	• 6.1 - 6.2
Week 08 Oct 09-Oct 13	Review & Practice Quiz 2 - In Class: Chapters 4, 5, & 6	4, 5, & 6
Week 09 Oct 16-Oct 20	Exam 2 - In Class: Chapters 4, 5, & 6	
Week 10 Oct 23-Oct 27	Chapter 7 - Sampling & Sampling Distributions	• 7.1 - 7.5
Week 11 Oct 30-Nov 03	Chapter 8 - Interval Estimation	• 8.1 - 8.4
Week 12 Nov 06-Nov 10	Chapter 9 - Hypothesis Tests	• 9.1 - 9.5
Week 13 Nov 13-Nov 17	Chapter 9 - Hypothesis Tests	• 9.1 - 9.5
Week 14 Nov 20-Nov 24	Fall Break - no class	
Week 15 Nov 27-Dec 01	Review & Practice Quiz 3 - In Class: Chapters 7, 8, & 9	7, 8, & 9
Week 16 Dec 04-Dec 08	Exam 3 - In Class: Chapters 7, 8, & 9	

## **Grading Policy**

Percentage		Scale			
Exam 1		97 - 100 = A +			
Exam 2		93 - 96.9 = A			
Exam 3	30%	90 - 92.9 = A-	80 - 82.9 = B-	70 - 72.9 = C	60 - 62.9 = D-
Quizzes (3 quizzes, 5% each)	15%				
Active Participation	5%				Below $60 = F$

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### **Course Policy: Be Advised**

- 1. You are expected to read the assigned chapter in advance, attend every class and actively participate in discussions.
- 2. The quizzes will be taken in class. You will need to have laptop.
- 3. Announcements/changes will be through the eLearning. It is your responsibility to check it at least once a day.
- 4. If you missed a class, then please ask your classmates about what was covered in class.
- 5. There will be NO make-up quiz/exam except for extenuating circumstances with <u>prior permission</u> only. In such circumstances, student will be required to provide justifying documents.
- 6. There will be NO extra credit in this course under any circumstances.
- 7. 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
  - Case Write-ups Zero for the Assignment
  - Quizzes Zero for the Quiz
  - Presentations Zero for the Assignment
  - Group Work Zero for the Assignment for all group members
  - Tests F for the course

#### **Comet Creed**

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:

"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 course syllabus.

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

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

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