# Course Syllabus

#### **Course Information**

Course Number: OPRE 3360.006/501 (Updated 1/14/19)

Course Title: Managerial Methods in Decision Making Under Uncertainty

Term: Spring 2019

Days & Time: Section 006: Tuesday, 4:00 AM – 6:45 PM, JSOM 2.717

Section 501: Tuesday, 7:00 PM – 9:45 PM, JSOM 2.717

Instructor: Mo Naseri

Office Location: SOM 4.614 (Dean's Suite)

Office Hours: Monday & Tuesday, 2:00 PM – 4:00 PM

Office Phone: (972) 883-5892 Email: naseri@utdallas.edu

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

MATH 1325 or MATH 2413 or MATH 2417.

### **Course Description**

Introduces the concept of probability and statistics for managerial decision-making. Concepts will be developed in lecture and exercises using software packages and topics including: summarizing and presenting data, probability theory, sampling, estimation, confidence intervals, hypothesis testing, regression, and ANOVA.

### **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.

### (Strongly!) Recommended Textbooks and Materials

Textbook: Modern Business Statistics with Microsoft® Excel® (6th Edition) Authors: Anderson, Sweeney, Williams

- 1. Through UTD Bookstore
- 2. Through Cengage link:

https://www.cengage.com/dashboard/#/course-confirmation/MTPP0CJNQGJ6/initial-course-confirmation

### **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.

## **Tentative Schedule**

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 announcements regarding changes to this schedule</u>.

Week - Day	Chapter / Lecture				
Week 1 Jan 15	<ul> <li>Introduction to OPRE 3360</li> <li>Chapter 1 - Introduction to Data and Statistics</li> <li>Chapter 2 - Descriptive Statistics: Tabular &amp; Graphical Display</li> </ul>				
Week 2 Jan 22	<ul> <li>Chapter 3 - Descriptive Statistics: Numerical Measures</li> <li>Quiz 1 - In Class: Chapters 1, 2 &amp; 3</li> </ul>				
Week 3 Jan 29	<ul> <li>Chapter 3 - Descriptive Statistics: Numerical Measures</li> <li>Quiz 2 - In Class: Chapters 1, 2 &amp; 3</li> </ul>				
Week 4 Feb 5	<ul> <li>Exam 1 - In Class: Chapters 1, 2 &amp; 3</li> <li>Chapter 4 - Introduction to Probability</li> </ul>				
Week 5 Feb 12	<ul> <li>Chapter 4 - Introduction to Probability</li> <li>Chapter 5 - Discrete Probability Distributions</li> </ul>				
Week 6 Feb 19	<ul> <li>Chapter 5 - Discrete Probability Distributions</li> <li>Quiz 3 - In Class: Chapters 4 &amp; 5</li> </ul>				
Week 7 Feb 26	<ul> <li>Chapter 6 - Continuous Probability Distributions</li> <li>Quiz 4 - In Class: Chapters 4, 5 &amp; 6</li> </ul>				
Week 8 Mar 5	<ul> <li>Chapter 6 - Continuous Probability Distributions</li> <li>Quiz 5 - In Class: Chapters 4, 5 &amp; 6</li> </ul>				
Week 9 Mar 12	<ul> <li>Exam 2 - In Class: Chapters 4, 5 &amp; 6</li> <li>Chapter 7 - Sampling &amp; Sampling Distributions</li> </ul>				
Week 10 Mar 19	• Spring Break - No Class ©				
Week 11 Mar 26	Chapter 7 - Sampling & Sampling Distributions				
Week 12 Apr 2	<ul> <li>Chapter 8 - Interval Estimation</li> <li>Quiz 6 - In Class: Chapters 7 &amp; 8</li> </ul>				
Week 13 Apr 9	<ul> <li>Chapter 9 - Hypothesis Tests</li> <li>Quiz 7 - In Class: Chapters 7, 8 &amp; 9</li> </ul>				
Week 14 Apr 16	<ul> <li>Chapter 9 - Hypothesis Tests</li> <li>Quiz 8 - In Class: Chapters 7, 8 &amp; 9</li> </ul>				
Week 15 Apr 23	<ul> <li>Review &amp; Practice</li> <li>Quiz 9 - In Class: Chapters 7, 8 &amp; 9</li> </ul>				
Week 16 Apr 30	• Exam 3 - In Class: Chapters 7, 8 & 9				

# **Grading Policy**

Percentage	Scale				
Exam 1	40 Points	194 - 200 = A+	174 - 179 = B+	154 - 159 = C+	134 - 139 = D+
Exam 2	50 Points	187 - 193 = A	167 - 173 = B	147 - 153 = C	127 - 133 = D
Exam 3	50 Points	180 - 186 = A-	160 - 166 = B-	140 - 146 = C-	120 - 126 = D-
Quizzes (top 6, 10 points each)	60 Points				Below $120 = F$

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#### **Quizzes** (please review carefully):

- 1. There is a quiz at the end of almost every class (9 quizzes in total).
- 2. The quiz will cover previous chapters AND current class topics. This means you are expected to attend every class, carefully follow the lectures, and actively participate in discussions.
- 3. The three quizzes with the lowest grades will be dropped and the top six will be considered only.
- 4. Please be advised, there is no need to provide any documents (like doctor note) or justifications or emails to me in case of absence. You may miss three quizzes and still no points will be deducted from your overall grades. This means there will be no make-up (no justifications) for a missed class under any circumstances. This is a policy with no exception, so PLEASE do not ask to reschedule a quiz/for a make-up quiz when you miss a class, I will not violate the course policy.
- 5. You will NOT be allowed to take the quiz/exam in the other section of this class under any circumstances. If you attend a section other than yours, your quiz/exam will not be graded. PLEASE do not ask!
- 6. I strongly advice you do not skip classes/quizzes and keep the three chances for unexpected circumstances, such as sister's wedding, urgent meeting, job interview, car accident, flight booked two years ago! and etc.

### **Course Policy:**

- 1. The quizzes will be taken in class. You may need to have laptop for some of the quizzes.
- 2. Announcements/changes will be through the eLearning. It is your responsibility to check it at least once a day.
- 3. If you missed a class, then please ask your classmates about what was covered in class.
- 4. There will be NO make-up exam except for extenuating circumstances with <u>prior permission</u> only. In such circumstances, student will be required to provide justifying documents.
- 5. There will be NO extra credit in this course.
- 6. 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 <a href="https://go.utdallas.edu/syllabus-policies">https://go.utdallas.edu/syllabus-policies</a> for these policies.

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

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