Course Syllabus

Course Information

Course Number: OPRE 3360.006/501 (Updated 01/11/18)

Course Title: Managerial Methods in Decision Making Under Uncertainty

Term: Spring 2018

Days & Time: Friday, 4:00 PM – 6:45 PM, JSOM 11.206

Thursday, 7:00pm - 9:45pm, JSOM 1.102

Instructor: Mo Naseri

Office: SOM 4.614 (Dean's Suite)
Office Hours: by appointment only
Email: naseri@utdallas.edu
Phone: 972-883-5892

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 online materials and web data files. You have three options to purchase the textbook:

- 1. Through UTD Bookstore.
- 2. Through Cengage link: http://services.cengagebrain.com/course/site.html?id=2652884
- 3. Alternatively, you may purchase the access for Aplia (publisher's website) which has an ebook or bundle Aplia access with printed version of the book through the link below. This is the best price! http://services.cengagebrain.com/course/site.html?id=2652506

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.

Course Syllabus Page 1

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 announcements regarding changes to this schedule</u>.

Tentative Schedule

Week - Day	Chapter / Lecture	Chapter
Week 01	Introduction to OPRE 3360	• Syllabus
Jan 11/ Jan 12	Chapter 1 - Introduction to Data and Statistics	• 1.1 - 1.6
Week 02 Jan 18/ Jan 19	Chapter 2 - Descriptive Statistics: Tabular & Graphical Display	• 2.1 - 2.4
Week 03 Jan 25/ Jan 26	Chapter 3 - Descriptive Statistics: Numerical Measures	• 3.1 - 3.5
Week 04 Feb 01/ Feb 02	Chapter 4 - Introduction to Probability Quiz 1 - In Class: Chapters 1, 2, & 3	• 4.1 - 4.4
Week 05 Feb 08/ Feb 09	Chapter 4 - Introduction to Probability Exam 1 - In Class: Chapters 1, 2, & 3	• 4.1 - 4.4
Week 06 Feb 15/ Feb 16	Chapter 5 - Discrete Probability Distributions	• 5.1 - 5.5
Week 07 Feb 22/ Feb 23	Chapter 6 - Continuous Probability Distributions	• 6.1 - 6.2
Week 08 Mar 01/ Mar 02	Review & Practice Quiz 2 - In Class: Chapters 4, 5, & 6	4, 5, & 6
Week 09 Mar 08/ Mar 09	Exam 2 - In Class: Chapters 4, 5, & 6	
Week 10 Mar 15/ Mar 16	Spring Break ©	
Week 11 Mar 22/ Mar 23	Chapter 7 - Sampling & Sampling Distributions	• 7.1 - 7.5
Week 12 Mar 29/ Mar 30	Chapter 8 - Interval Estimation	• 8.1 - 8.4
Week 13 Apr 05/ Apr 06	Chapter 9 - Hypothesis Tests	• 9.1 - 9.5
Week 14 Apr 12/ Apr 13	Chapter 9 - Hypothesis Tests	• 9.1 - 9.5
Week 15 Apr 19/ Apr 20	Review & Practice Quiz 3 - In Class: Chapters 7, 8, & 9	7, 8, & 9
Week 16 Apr 26/ Apr 27	Exam 3 - In Class: Chapters 7, 8, & 9	

Grading Policy

Percentage		Scale				
Exam 1	20%	97 - 100 = A +	87 - 89.9 = B +	77 - 79.9 = C+	67 - 69.9 = D+	
Exam 2	30%	93 - 96.9 = A	83 - 86.9 = B	73 - 76.9 = C	63 - 66.9 = D	
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 $60 = F$	

Course Syllabus Page 2

Course Policy:

- 1. You are expected to 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.

Course Syllabus Page 3