Course Syllabus

Course Information

Course Number: OPRE 3360.007/012

Course Title: Managerial Methods in Decision Making Under Uncertainty

Term: Fall 2021

Instructional Mode: Traditional Classroom

Meeting Day & Time: Section 012: Tuesday, 1:00 PM – 3:45 PM

Section 007: Tuesday, 4:00 PM – 6:45 PM

Meeting Location: SOM 2.717
Instructor: Mo Naseri

Instructor Email: naseri@utdallas.edu

Office Hours: Virtual Appointment via Teams, with prior Booking

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.

Required Textbooks & Materials

Textbook: Modern Business Statistics with Microsoft® Excel® (7th Edition) Authors: Anderson, Sweeney, Williams Can be purchased through UT Dallas Bookstore or Cengage: https://faculty.cengage.com/titles/9780357131381

Software: Microsoft® Office Excel®

This course uses a laptop, eLearning, Internet access, Microsoft Excel 2007 or higher (no trial versions), Data Analysis (this comes with Excel), and Web Data Files, available for download from at CengageBrain.com.

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.

Office Hours (Monday, 10am to 12pm & 2pm to 4pm): Students can make an appointment to meet via Teams. Appointments may be booked 48 hours prior to the office hours through the link below. Students may cancel a booking till 2 hours prior to the appointment. Students who fail to meet without cancelling their appointment, more than ONCE, will not be able to book/attend any other office hours throughout the semester.

Book: https://outlook.office365.com/owa/calendar/ProfNaseriOfficeHoursBookingsCopy@utdallas.edu/bookings/

Class Attendance Week 1 (8/24) to Week 3 (9/7): Students are expected to study the pre-recorded lectures on eLearning and attend specific de-densified face-to-face practice session that is assigned to each group of students. There will be no live streaming during these weeks.

Class Attendance Starting Week 4 (9/14): Students are expected to attend regular face-to-face lectures. There will be no pre-recorded lectures or live streaming starting this week.

Tentative Schedule

Week	In Class Contents Asynchronous Contents via eLearning						
Day		·					
Week 1	Syllabus	Chapter 1 - Introduction to Data and Statistics					
Aug 24	• Introduction to OPRE 3360	Chapter 2 - Descriptive Statistics: Tabular & Graphical Display					
Week 2	Practice Problems Chapters 1 & 2	Chaptan 2 Descriptive Statistics: Numerical Manager					
Aug 31	• Excel	Chapter 3 - Descriptive Statistics: Numerical Measures					
Week 3	Practice Problems Chapter 3						
Sep 7	• Excel						
Week 4	Chapter 4 - Introduction to Probability	• Quiz 1 - Chapters 1 to 3					
Sep 14	• Practice Problems Chapter 4	from 7pm on Tuesday to 7pm on Wednesday					
Week 5	Chapter 5 - Discrete Probability Distributions	• Quiz 2 - Chapters 1 to 4					
Sep 21	• Practice Problems Chapter 5	from 7pm on Tuesday to 7pm on Wednesday					
Week 6	Chapter 6 - Continuous Probability Distributions	• Quiz 3 - Chapters 1 to 5					
Sep 28	• Practice Problems Chapter 6	from 7pm on Tuesday to 7pm on Wednesday					
Week 7	• Chapter 6 - Continuous Probability Distributions	• Quiz 4 - Chapters 1 to 6					
Oct 5	• Practice Problems Chapter 6	from 7pm on Tuesday to 7pm on Wednesday					
Week 8	Exam 1 - in Testing Center: Chapters 1 to 6						
Oct 12	(Tuesday from 8:30am to 7pm)						
Week 9	Chapter 7 - Sampling & Sampling Distributions						
Oct 19	Practice Problems Chapter 7						
Week 10	Chapter 8 - Interval Estimation	• Quiz 5 - Chapter 7					
Oct 26	Practice Problems Chapter 8	from 7pm on Tuesday to 7pm on Wednesday					
Week 11	• Chapter 9 - Hypothesis Tests	• Quiz 6 - Chapter 7 & 8					
Nov 2	Practice Problems Chapter 9	from 7pm on Tuesday to 7pm on Wednesday					
Week 12	• Chapter 9 - Hypothesis Tests	• Quiz 7 - Chapters 7 to 9					
Nov 9	Practice Problems Chapter 9	from 7pm on Tuesday to 7pm on Wednesday					
Week 13	Chapter 14 - Simple Linear Regression	Quiz 8 - Chapters 7 to 9 from 7 mm on Typedou to 7 mm on Wednesday.					
Nov 16	Practice Problems Chapter 14	from 7pm on Tuesday to 7pm on Wednesday					
Week 14	Fall Break - No Class ☺						
Nov 23		0 - 0 Cl + 7 + 0 0 14					
Week 15 Nov 30	• Q&A	• Quiz 9 - Chapters 7 to 9 & 14 from 7pm on Tuesday to 7pm on Wednesday					
Week 16							
Dec 7	Exam 2 - in Testing Center: Chapters 7 to 9, & 14 (Tuesday from 8:30am to 7pm)						
Dec /	(Tuesday from 6.50am to 7pm)						

Grading Policy

Percentage	Scale					
Exam 1	30 Points	97 - 100 = A+	87 - 89 = B+	77 - 79 = C+	67 - 69 = D+	Below $60 = F$
Exam 2	40 Points	93 - 96 = A	83 - 86 = B	73 - 76 = C	63 - 66 = D	
Quizzes (top 6, 5 points each)	30 Points	90 - 92 = A-	80 - 82 = B-	70 - 72 = C	60 - 62 = D-	

Exams

- Exams will be administered by the Testing Center (UTD Synergy Park). Students should visit
 https://ets.utdallas.edu/testing-center
 for more info. Be advised that student ID (Comet card) is required for
 taking exams. The details will be announced through eLearning prior to each exam. Students are strongly
 encouraged to register a seat early in advance preferably during the first 2 weeks of semester. Students MUST
 reserve a seat for taking the test at least 4 days prior to exam.
 - ** It is student's responsibility to ensure he/she has a reserved seat for the exam. As Testing Center no longer accepts walk-ins, student without reservation CANNOT take the exam during the allotted time and this will lead to a grade of "zero" for the exam. The instructor CANNOT reserve seat and will NOT reschedule exam for anybody, NO EXCEPTIONS! So PLEASE do not ask!
- 2. There will be NO make-up/rescheduling exam except for medical emergencies (written statement justifying the situation from a physician required). Written statement should include the physician's (not a physician assistant) address and phone number for the verification purpose. Scheduling a surgery/operation on an exam date is not considered a medical emergency!
- 3. Exams will NOT be returned to students. However, students have <u>one week</u> (only one week) after grades are posted on eLearning, to check their tests during the office hours and have the instructor's feedback.

Quizzes

- 1. There are 9 quizzes in total.
- 2. The quizzes are multiple-choice, closed-book and will be taken via eLearning.
- 3. Students can take the quiz only during the allotted time announced by instructor. No exceptions!
- 4. The lowest three quizzes will be dropped and the top six will be considered only.
- 5. Be advised, there is no need to provide any documents (like doctor note) or justifications in case of absence. Students may miss three quizzes and still no points will be deducted from their overall grades. This means there will be no make-up (no justifications) for a missed quiz 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 quiz, I will not violate the course policy. I strongly advice you do not skip classes/quizzes and keep the three chances for unexpected circumstances, such as covid, wedding, job interview, and etc.
- 6. Students are not allowed to take picture or copy exam/quiz questions and are not allowed to use any other resources other than their formula sheet and Excel during any tests.
- 7. Graphing calculators are NOT allowed for any quizzes/exams. Using cell phone, laptop or any other electronic devices are NOT allowed either.
- 8. The instructor each week will post a feedback so students can review questions and answers.

Class Materials

The instructor may provide class materials that will be made available to all students registered for this class as they are intended to supplement the classroom experience. These materials may be downloaded during the course; however, these materials are for registered students' use only. Classroom materials may not be reproduced or shared with those not in class, or uploaded to other online environments except to implement an approved Office of Student AccessAbility accommodation. Failure to comply with these University requirements is a violation of the Student Code of Conduct.

COVID-19 Guidelines and Resources

The information contained in the following link lists the University's COVID-19 resources for students and instructors of record. Please see http://go.utdallas.edu/syllabus-policies.

Distance Learning Student Resources

Online students have access to resources including the McDermott Library, Academic Advising, The Office of Student AccessAbility, and many others. Please see the <u>eLearning Current Students</u> webpage for more information.

Server Unavailability or Other Technical Difficulties

The University is committed to providing a reliable learning management system to all users. However, in the event of any unexpected server outage or any unusual technical difficulty which prevents students from completing a time sensitive assessment activity, the instructor will provide an appropriate accommodation based on the situation. Students should immediately report any problems to the instructor and also contact the online elearning Help Desk. The instructor and the elearning Help Desk will work with the student to resolve any issues at the earliest possible time.

General Rules, Communication and Academic Dishonesty

- 1. Taking picture/Recording video will NOT be allowed during any classes.
- 2. According to FERPA and without exception, students MUST communicate with the instructor via their UTD email only (emails from personal email accounts such as Gmail, Yahoo, etc. will not be answered).
- 3. Announcements/changes will be through the eLearning and/or UT Dallas email and it is student' responsibility to log into eLearning and UTD email periodically (daily) and review the provided materials.
- 4. If student missed a class, then he/she should ask classmates about what was covered in class.
- 5. Students in this course suspected of academic dishonesty are subject to disciplinary proceedings, and if found responsible, the following minimum sanctions will be applied:
 - Quizzes Zero for the Quiz
 - 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."

Academic Support Resources

The information contained in the following link lists the University's academic support resources for all students. Please go to <u>Academic Support Resources</u> webpage for these policies.

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.