	Course	OPRE 3360.003/007: Managerial Methods in Decision Making Under Uncertainty	
UTD	Professor	Prof. Anyan Qi	
	Term	Spring 2025	
	Meetings	Section 003: Monday 1:00pm-3:45pm, JSOM 1.211	
		Section 007: Tuesday 4:00pm-6:45pm, JSOM 2.115	

PROFESSOR'S CONTACT INFORMATION

Office Phone	(972)883-5952			
Office Location	JSOM 3.214			
Email Address	Use the email tool on eLearning to contact me (note the email below is the TA's email.)			
Office Hours	Monday 4pm-5pm ¹ , or by appointment			
ТА	Like Bu			
TA Email	Like.Bu@UTDallas.edu			
TA Office	Friday 4:00pm-6:00pm and group assignment due date 4:00pm-6:00pm in JSOM 3.226.			
Hours	The Statistics and Math lab also offers assistance to undergraduate students for OPRE 3333 and OPRE 3360. The schedule is to be announced on eLearning and it is located in room 2.414.			

GENERAL COURSE INFORMATION

Pre-Requisites	None	
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 softwa packages. Topics include: summarizing and presenting data, probability theor sampling, estimation, confidence intervals, hypothesis testing, regression, an ANOVA. Emphasis will be given to modeling and solving business problems finance, marketing, accounting, and operations Management.	
Learning Outcomes	On successful completion of this course a student will be able to use the tools probability and statistical modeling to support business decisions. Specifical she/he (i) can quantify uncertainty found in business situations and for probabilistic knowledge, (ii) estimate the key metrics based on data and t 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.	

¹ All the time in the syllabus refers to the time in the North America Central Time Zone (CT).

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

Readings & Materials

 (optional) Anderson, D., Sweeney, D., Williams, T., Camm, J., Cohran, J., Fry, M., and Ohlmann, J. Modern Business Statistics with Microsoft Office Excel, 7th 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

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 <u>Student Code of Conduct.</u>

The University's attendance policy requirement is that individual faculty set their course attendance requirements. Regular and punctual class attendance is expected. Students who fail to attend class regularly are inviting scholastic difficulty. In some courses, instructors may have special attendance requirements; these should be made known to students during the first week of classes.

Class Participation

Attendance

Class

Regular class participation is expected. Students who fail to participate in class regularly are inviting scholastic difficulty. A portion of the grade for this course is directly tied to your participation in this class. It also includes engaging in group or other activities during class that solicit your feedback on homework assignments, readings, or materials covered in the lectures (and/or labs). Class participation is documented by faculty. Successful participation is defined as consistently adhering to University requirements, as presented in this syllabus. Failure to comply with these University requirements is a violation of the <u>Student Code of Conduct</u>.

Specifically,

- 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.
- **Class** Students are expected to follow appropriate University policies and maintain the security of passwords used to access recorded lectures. Unless the Office of Student AccessAbility has approved the student to record the instruction, students are expressly prohibited from recording any part of this course. Recordings may not be published, reproduced, or shared with those not in the 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 <u>Student Code of</u> <u>Conduct.</u>

The instructor may record meetings of this course. These recordings will be made available to all students registered for this class if the intent is to supplement the classroom experience. If the instructor or a UTD school/department/office plans any other uses for the recordings, consent of the students identifiable in the recordings is required prior to such use unless an exception is allowed by law.

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

(credit) Criteria

• Assignments (25%).

Individual assignments (10%).

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 <u>three</u> 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.

- Quiz and Tests (65%).
 - Test I (25%).

This test covers the first course module. The Test is open-eLearning and two double-sided letter-size cheating sheets allowed. Students are permitted to use Excel in the test. The test location is the <u>Testing Center</u> at the First floor of the Synergy Park North 2 building (SP2).² Any communications among students during tests are not allowed.

• Test II (40%).

This test covers the second and third course module. The Test is openeLearning and two double-sided letter-size cheating sheets allowed. Students are permitted to use Excel in the test. The test location is the <u>Testing Center at the First floor of the Synergy Park North 2 building</u> (SP2). Any communications among students during tests are not allowed.

• Class participation (10%).

<u>Class attendance is highly encouraged</u>. 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.

² Testing Center Address:

³⁰²⁰ Synergy Park North, SP2, Suite 11.175 Richardson, TX 75080

Letter grade

You will be evaluated relative to the class.

- Make-UpNO make-up exam will be offered except in case of medical emergency (proof
ExamsExamsrequired).
- Extra Credit Extra credit will NOT be offered.
- Late Work NO late assignments will be accepted.
- 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 and taking notes) 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.
 - **Software** 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 2013 or newer version.

Please use the link to download and install the newest Excel for <u>free</u> as a UTD student: <u>https://www.utdallas.edu/oit/o365/</u>.

Mac Support Microsoft Office 2016 for Mac (or newer version) features regression tools (which we will be using in Module III). I recommend that students with Mac install the newset version or use Microsoft Office for Windows.

Please use the link to download and install the newest Excel for <u>free</u> as a UTD student: <u>https://www.utdallas.edu/oit/o365/</u>.

The information contained in the following link lists the University'sAcademicacademic support resources for all students.

Support Resources Please go to <u>http://go.utdallas.edu/academic-support-resources</u>.

UT Dallas
SyllabusThe information contained in the following link constitutes the University's
policies and procedures segment of the course syllabus. Please review the
sections regarding the credit/no credit grading option and withdrawal from
class.

Please go to http://go.utdallas.edu/syllabus-policies for these policies.The information contained in the following link lists the University'sAcademicSupportResourcesPlease go to http://go.utdallas.edu/academic-support-resources.

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 or the electronic files on your tablet/laptop.
- c) Do all required Excel pre-work assignments prior to class and bring a laptop for Module III.
- d) Solve the individual assignment problems in the Practice Problem Set **assigned for each class** listed in the syllabus (before and after class).
- e) (Optional) 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. 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.

4. 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. Please contact the TA or me if you need to meet. This course is cumulative and moves rapidly. **DO NOT FALL BEHIND**! It is recommended that you see your instructor **immediately for any difficulties**.

5. Tests:

TEST I

A test will be given at the completion of the first course module. The test is openeLearning, subject to the academic integrity policy. You will also be allowed to use Excel on the test. 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 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-eLearning, subject to the academic integrity policy. You will also be allowed to use Excel on the test, 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

No.	Week	Class	Individual Assignments	Other Assignments	
0	Week 1	Class 0	HW 0 due at 11:45pm on Feb 2.		
1	Week 2	Class 1			
2	Week 3	Class 2	HW 1 due at 11:45pm on Feb 9.		
3	Week 4	Class 3	HW 2 due at 11:45pm on Feb 16.		
4	Week 5	Class 4	HW 3 due at 11:45pm on Feb 23.		
5	Week 6	Class 5	HW 4 due at 11:45pm on Mar 2.	Group HW 1 due at 11:45pm on Mar 2.	
6	Mar 1 (Sat)	Review Session for Test 1 2 PM – 5 PM, on MS Teams			
7	Week 7 Mar 3-4	TEST I: 2 hours The test location is Testing Center at Synergy Park North 2 building (SP2) . ³			
8	Week 8	Class 6	HW 5 due at 11:45pm on Mar 23.		
	Week 9	NO CLASSES (Spring Break)			
9	Week 10	Class 7	HW 6 due at 11:45pm on Mar 30.		
10	Week 11	Class 8	HW 7 due at 11:45pm on Apr 6.	Group HW 2 due at 11:45pm on Apr 6.	
11	Week 12	Class 9	HW 8 due at 11:45pm on Apr 13.		
12	Week 13	Class 10	HW 9 due at 11:45pm on Apr 20.		
13	Week 14	Class 11	HW 10 due at 11:45pm on Apr 27.	Group HW 3 due at 11:45pm on Apr 27.	
14	Week 15	Review Session for Test 2			
15	Week 16 May 5-6	TEST II: 2 hours The test location is Testing Center at Synergy Park North 2 building (SP2) .			

ORPE 3360.003/007 Spring 2025 Course Outline

³ Testing Center Address:
3020 Synergy Park North, SP2, Suite 11.175 Richardson, TX 75080