

OPRE 3333: Quantitative Business Analysis
University of Texas at Dallas
Fall 2018

Course Syllabus

Disclaimer

The material contained in this syllabus is subject to change upon announcement by the instructor in class.

Course Information

Course Number:	OPRE 3333.006
Course Title:	Quantitative Business Analysis
Term:	Fall 2018
Days and Time:	Monday, 1:00pm - 2:15pm, JSOM 2.722 Wednesday, 1:00pm - 2:15pm, JSOM 2.722
Instructor:	Negin Enayaty Ahangar
Office:	JSOM 3.420
Office Hours:	Monday and Wednesday, 10:00am - 12:00pm Tuesday and Thursday, 2:30pm - 4:30pm
Email:	negin@utdallas.edu
Phone:	972-883-5115
Teaching Assistant:	Arunima Jain
Office:	JSOM 2.604
Office Hours:	Tuesday, 10:00am - 12:00pm Wednesday, 2:00pm - 4:00pm
Email:	arunima.jain@utdallas.edu

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

MATH 1325 or MATH 2413 or MATH 2417

Course Description

Provides students with the analytical tools necessary for making better management decisions. Students are introduced to mathematical techniques used to make different types of business decisions.

Learning Outcomes

Students are required to take the initiative to learn, understand and apply quantitative business analytic to real world business data. At the end of this course, you should:

- Be able to apply mathematical techniques of optimization and linear algebra
- Be able to effectively understand and interpret analytic models and use them in the decision making process
- Be able to utilize basic business analytic tools in Excel

Required Textbooks and Materials

Textbooks:

1. Elementary Linear Algebra (8th edition) - Larson
2. Essentials of Business Analytics (2nd edition) Camm/Fry/Anderson/Sweeney/Williams

You have two options to purchase the textbook:

1. Through UTD Bookstore
2. Through Cengage.

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

Course Notes/Handouts

A portion of course material will be presented through course notes and handouts. It is each student's responsibility to take appropriate notes during lecture. If a student misses a lecture for any reason, it is his/her responsibility to obtain notes from a classmate.

Communication

UTD eLearning is used to disseminate the materials for this course. Students can visit <https://elearning.utdallas.edu> and login using their net ID and password. Upon successful login, the Quantitative Business Analysis webpage should be available. Presentation slides, handouts, data files, homework assignments, and review questions will be available on this webpage. The instructor expects students to keep up with these materials. It is each student's responsibility to check the website before each class and bring that day's lecture, examples, and homework materials to lecture. The instructor will also post helpful links to supplementary content that may be helpful in learning the required material. Students who have questions should make every attempt to consult the instructor and TA during office hours. When this is not possible, the student should email the instructor and TA with a description of the question.

Quizzes

1. There will be a quiz at the end of every chapter.
2. The quiz will cover the chapters finished in the previous session. This means you are expected to attend every class, carefully follow the lectures, and actively participate in discussions.
3. As stated in the grading policy above, the two 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 two 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 any class, I will not violate the course policy.
5. I strongly advise you do not skip classes/quizzes and keep the two chances for unexpected circumstances.

Course Policy

1. The quizzes will be taken in class.
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 prior permission only. In such circumstances, student will be required to provide justifying documents.
5. There will be NO extra credit in this course under any circumstances.
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 <https://go.utdallas.edu/syllabus-policies> for these policies.

Grading

Grades are assigned based upon the following scale and weighting.

Quiz	25%
Exam 1	25%
Exam 2	25%
Exam 3	25%

97-100	A ⁺	87-89.99	B ⁺	77-79.99	C ⁺	67-69.99	D ⁺
93-96.99	A	83-86.99	B	73-76.99	C	63-66.99	D
90-92.99	A ⁻	80-82.99	B ⁻	70-72.99	C ⁻	60-62.99	D ⁻

Once a graded item has been returned, a student has 48 hours to challenge the grade. To challenge a grade, a student must submit a typed description of the grading error to the grader (tests: instructor). This description must include the students name and e-mail address. The grader responds to a challenge within 48 hours of its receipt.

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 eLearning. It is your responsibility to keep track of announcements regarding changes to this schedule.

Course Calendar

Week	Date	Topic	Book	Quiz
1	Monday, August 20	System of Linear Equations	Chapter 1 - Larson	Quiz 1
1	Wednesday, August 22	System of Linear Equations	Chapter 1 - Larson	
2	Monday, August 27	System of Linear Equations	Chapter 1 - Larson	
2	Wednesday, August 29	Matrices	Chapter 2 - Larson	
3	Monday, September 3	Labor Day		Quiz 2
3	Wednesday, September 5	Matrices	Chapter 2 - Larson	
4	Monday, September 10	Matrices	Chapter 2 - Larson	
4	Wednesday, September 12	Determinants	Chapter 3 - Larson	
5	Monday, September 17	Determinants	Chapter 3 - Larson	Quiz 3
5	Wednesday, September 19	Determinants	Chapter 3 - Larson	
6	Monday, September 24	Review Session		
6	Wednesday, September 26	Exam 1	Chapter 1,2, and 3 (Larson)	
7	Monday, October 1	Introduction to Business Analytics	Chapter 1 - Camm	Quiz 4
7	Wednesday, October 3	Introduction to Business Analytics	Chapter 1 - Camm	
8	Monday, October 8	Data Visualization	Chapter 3 - Camm	
8	Wednesday, October 10	Data Visualization	Chapter 3 - Camm	
9	Monday, October 15	Time Series Analysis and Forecasting	Chapter 8 - Camm	Quiz 5
9	Wednesday, October 17	Time Series Analysis and Forecasting	Chapter 8 - Camm	
10	Monday, October 22	Review Session		
10	Wednesday, October 24	Exam 2	Chapter 1,3, and 8 (Camm)	
11	Monday, October 29	Linear Optimization Models	Chapter 11 - Camm	Quiz 6
11	Wednesday, October 31	Linear Optimization Models	Chapter 11 - Camm	
12	Monday, November 5	Linear Optimization Models	Chapter 12 - Camm	
12	Wednesday, November 7	Linear Optimization Models	Chapter 12 - Camm	
13	Monday, November 12	Integer Linear Optimization	Chapter 12 - Camm	Quiz 7
13	Wednesday, November 14	Nonlinear Optimization Models	Chapter 13 - Camm	
14	November 19,21	Fall break		
15	Monday, November 26	Decision Analysis	Chapter 15 - Camm	
15	Wednesday, November 28	Decision Analysis	Chapter 15 - Camm	Quiz 8
16	Monday, December 3	Review Session		
16	Wednesday, December 5	Exam 3	Chapter 11, 12, 13, and 15 (Camm)	