

Course Information

<i>Course Number/Section</i>	OPRE 3333-502
<i>Course Title</i>	Quantitative Business Analysis
<i>Term</i>	Spring 2025
<i>Location</i>	Jindal School of Management Building
<i>Room</i>	JSOM 12.222
<i>Time</i>	Th 7:00PM - 9:45PM

Professor Contact Information

<i>Professor</i>	Reza Sajjadi
<i>Office Phone</i>	N/A
<i>Other Phone</i>	
<i>Email Address</i>	reza.sajjadi@utdallas.edu
<i>Office Location</i>	JSOM 2.104
<i>Office Hours</i>	by appointment
<i>TA Information</i>	N/A
<i>TA Email</i>	N/A

About the Instructor

Reza Sajjadi is a part time Lecturer in the Jindal School of Management. He teaches undergraduate and graduate courses in Operations and Supply Chain Management. He has 15+ years' experience working in industry and currently works for PepsiCo.

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.

Student Learning Objectives/Outcomes

Students are required to take the initiative to learn, understand and apply quantitative business analytics 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 analytics tools in Excel

Textbooks Guide: This course has two books:

1. Elementary Linear Algebra by R. Larson, 8th Edition – available online on WebAssign platform
ISBN-13: 9780357131831
2. Business Analytics by D. Camm, 4th Edition – available on MindTap platform

You can purchase online from Cengage.com.

Visit startstrong.cengage.com for step-by-step registration instructions and videos. I have included both videos below.

Registration Video and directions for registering WebAssign in
Blackboard: <https://startstrong.cengage.com/webassign-blackboard-ia-no/>
Registration Video and directions for registering MindTap in
Blackboard: <https://startstrong.cengage.com/mindtap-blackboard-ia-no/>

Students will need to purchase Cengage Unlimited from the Bookstore or directly from Cengage. With the subscription, students will have access to both books used in OPRE 3333.

Pricing Options for Cengage Unlimited are below:

Cengage Unlimited will work for this course and ANY other class using Cengage Material- MindTap, WebAssign, eBooks, Owl, CNOWV2.

Beware of sites that are selling discounted codes. These sources are likely unauthorized sellers who have acquired access codes illegally, and transactions with such sources may pose a risk to your personal information.

Software: Microsoft Office Excel

This course uses a laptop, eLearning, Internet access, Microsoft Excel 2007 or higher (no trial versions), with Data Analysis Activated (this comes with Excel). If you are using a Mac, it is recommended that you install a Windows Virtual machine, such as Parallel Desktop, or VMWare Fusion, which will then allow the use of Windows within the Mac Operating System (consult with JSOM technology helpdesk staff on second floor).

The Statistics and Math lab

The JSOM Statistics and Math Lab is located in room 2.414 and is open from Monday through Friday, per the schedule below. It will remain open until finals week and will be closed during breaks and on holidays. Students can reach out to us to get clarifications on their doubts. Our contact details are as below:

Name - Shalmali Gupte
Net ID - SXG240050
Email ID - shalmalishailendra.gupte@utdallas.edu

Name - Siddhartha Grover
Net ID - SXG230170
Email ID - siddhartha.grover@utdallas.edu

Name - Anuj Shah
Net ID - AXS240161
Email ID - anujminesh.shah@utdallas.edu

The following is the schedule for the semester:

Time	Monday	Tuesday	Wednesday	Thursday	Friday
9:00	Shalmali	Sid	Anuj & Shalmali	Shalmali & Anuj	Sid
10:00					
11:00					
12:00					
13:00		Anuj	Anuj		
14:00					
15:00				Shalmali	
16:00					
17:00					

The check-in link is as follows: <https://forms.gle/wHV6EL6KaV7rnxd8>

Students can also reach out to us through the Microsoft Teams app on our respective Net ID.

Academic Calendar

<https://www.utdallas.edu/academics/calendar/>

Course Policies

Makeup Exams

Students are expected to take exams on the scheduled dates. Make up exams will be available due to conflicts with approved university events or in the case of serious illness.

Extra Credit

1. Early exam registration has 3 bonus credit per exam (Test1 and 2) that will be added into the corresponding exam grade.
2. There is a 2 bonus points per class attendance.
3. There is 3 bonus points per assignment if it is submitted by deadline.

Quiz

N/A

Late Work

No credit for the late work.

Assignments

There would be 6-8 homework during the semester. The planned homework dates are provided in this syllabus (see Academic Calendar table below); however, dates may change. If so, I would post an update on e-learning.

There would not be any makeup for a missing homework.

Here is the detail for assignments:

Assignment	Coverage	Points	Deadline (including bonus point)	Deadline (excluding bonus point)
Assignment1 (MindTap)	Ch12 – Camm	25	Feb 15@11:59 PM	May 8 @11:59pm
Assignment2 (MindTap)	Ch13&14 – Camm	25	Feb 22@11:59 PM	
Assignment3 (MindTap)	Ch15 – Camm	25	Mar 3@11:59 PM	
Assignment4 (MindTap)	Ch3 – Camm	25	Mar 15@11:59 PM	
Assignment5 (MindTap)	Ch8 – Camm	25	Apr5@11:59 PM	
Assignment6 (WebAssign)	Ch1 – Larson	25	Apr 24 @11:59pm	
Assignment7 (WebAssign)	Ch2 – Larson	25	May 1@11:59pm	
Assignment8 (WebAssign)	Ch3 – Larson	25	May 8 @11:59pm	

Exam

There would be 3 tests. Test 1 and Test 2 will be held in Test Center located at:

Address: 3020 Waterview Parkway
SP2 First Floor, Suite 11.175
Richardson, TX 75080

You need to reserve a seat for the exam. Here are useful links:

<https://ets.utdallas.edu/testing-center/students/>

<https://ets.utdallas.edu/testing-center>

Per Testing Center policy, any student requires to reserve a seat at least 48 hours before exam date otherwise he/she is not allowed taking the exam.

Calculator

Any scientific calculator is allowed in this class. The recommended calculator is TI-84 PLUS.

Class Participation

At UT Dallas, each faculty member is free to develop his or her own methods of evaluating students' academic performance, which includes establishing course-specific policies on attendance. I will be taking attendance randomly during the semester. Please note that if you are absent, you run the risk of missing extra credit opportunities, quizzes, and in-class assignments, which will be randomly given during the semester - no make-ups are permitted for these things if a student is absent. I communicate with students in e-learning as needed. You should check for new e-learning messages, announcements and discussion posts every day.

Students are required to login regularly to the online class site.

Technical Requirements

In addition to a confident level of computer and Internet literacy, certain minimum technical requirements must be met

to enable a successful learning experience. Please review the important technical requirements on the Getting Started with eLearning webpage:

<https://ets.utdallas.edu/elearning/students/current/getting-started#:~:text=Students%20must%20have%20a%20UT,the%20start%20of%20the%20semester.>

Course Access and Navigation

The course can be accessed using the UT Dallas NetID account at: <https://elearning.utdallas.edu>.

Please see the course access and navigation section of the site for more information:

[Getting Started with eLearning](#)

Communication

This course utilizes online tools for interaction and communication. Some external communication tools such as regular email and a web conferencing tool may also be used during the semester. Student emails and discussion board messages will be answered within 3 working days under normal circumstances. I will not check WebAssign and MindTap communication platforms.

Distance Learning Student Resources

N/A

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 <https://ets.utdallas.edu/elearning/helpdesk>. The instructor and the eLearning Help Desk will work with the student to resolve any issues at the earliest possible time.

OPRE 3333-502 Calendar

Date	Event	Topic - Plan	HW Post	HW Due	Comment
23-Jan	Linear Optimization Models	Chapter 12 - Camm			
23-Jan					
30-Jan	Linear Optimization Models	Chapter 12 - Camm			
30-Jan					
6-Feb	Linear Optimization Models	Chapter 12 - Camm	Assignment1 (MindTap-Chapter12) - Feb 6 @9:45pm		Due date for early Test 1 reservation at Testing Center: Feb 8@11:59pm
6-Feb					
13-Feb	Integer & Non-Linear Optimization Models	Chapter 13&14 - Camm	Assignment2 (MindTap-Chapter13&14) - Feb 13 @9:45pm	Assignment1 (MindTap-Chapter12) - Feb 15@11:59pm	
13-Feb					
20-Feb	Decision Analysis	Chapter 15 - Camm	Assignment3 (MindTap-Chapter15) - Feb 20 @9:45pm	Assignment1 (MindTap-Chapter13&14) - Feb 22@11:59pm	
20-Feb					
27-Feb	No Class - Exam1 in Testing Center: Chapter 12,13,14,15 (2/24-2/25)			Assignment3 (MindTap-Chapter15) - Mar 3@11:59pm	
27-Feb					
6-Mar	Introduction to Business Analytics + Data Visualization	Chapter 1&3 - Camm	Assignment4 (MindTap-Chapter3) - Mar 6@9:45pm		
6-Mar					
13-Mar	Time Series Analysis and Forecasting	Chapter 8 - Camm		Assignment4 (MindTap-Chapter3) - Mar 15@11:59pm	Due date for early Test 2 reservation at Testing Center: Mar15@11:59pm
13-Mar					
20-Mar	No Class - Spring Break				
20-Mar					
27-Mar	Time Series Analysis and Forecasting	Chapter 8 - Camm	Assignment5 (MindTap-Chapter8) - Mar 27@9:45pm		
27-Mar					
3-Apr	No Class - Exam2 in Testing Center: Chapter 1&3&8 Camm (4/7-4/8)			Assignment5 (MindTap-Chapter8) - Apr5@11:59pm	
3-Apr					
10-Apr	System of Linear Equations	Chapter 1 - Larson			
10-Apr					
17-Apr	System of Linear Equations & Matrices	Chapter 1&2 - Larson	Assignment6 (WebAssign-Chapter1) - Apr 17@9:45pm		
17-Apr					
24-Apr	Matrices	Chapter 2 - Larson	Assignment7 (WebAssign-Chapter2) - Apr 24@9:45pm	Assignment6 (WebAssign-Chapter1) - Apr 24 @11:59pm	
24-Apr					
1-May	Determinant	Chapter 3 - Larson	Assignment8 (WebAssign-Chapter3) - May 1@9:45pm	Assignment7 (WebAssign-Chapter2) - May 1 @11:59pm	
1-May					
8-May	Exam3 in the same class we meet - WebAssign Chapter 1&2&3			Assignment8 (WebAssign-Chapter3) - May 8 @11:59pm	
8-May					

*Upon time availability up to two chapters will be added to the syllabus.

“Please note that the above schedule is simply a guide for the course and changes may occur. As the instructor for this course, I reserve the right to adjust this schedule in any way that serves the educational needs of the students enrolled in this course. Should any changes become necessary, you will be notified in the class or via eLearning. It is your responsibility to keep track of announcements regarding changes to this schedule.” - Reza Sajjadi

Grading Policy

Your instructor will only change a final letter grade if a calculation error occurs. Therefore, your instructor asks students to NOT request a final letter grade change (unless a calculation error has occurred) or any special consideration or additional extra credit assignments.

Exam 1	25%	200 Point
--------	-----	-----------

Exam 2	25%	200 Point
Exam 3	25%	200 Point
Assignment	25%	200 Point
Total	100*	800 Point

*It is required to attend/submit each part (Exam and Assignment) to pass the course. For example, a person who has not attended Exam 1 but scored full grades in other parts will not pass this course.

Grading Scale

Scale			
97 - 100 = A+	87 - 89.9 = B+	77 - 79.9 = C+	67 - 69.9 = D+
94 - 96.9 = A	84 - 86.9 = B	74 - 76.9 = C	64 - 66.9 = D
90 - 93.9 = A-	80 - 83.9 = B-	70 - 73.9 = C-	60 - 63.9 = D-

Group Projects

None

Assignment submission instructions

You need to submit your work on e-learning. The assignment will be post on e-learning. I will communicate through e-learning.

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.”

Accessibility Resource Center (ARC)

If you need special accommodation, see <https://accessability.utdallas.edu/>

UT Dallas Syllabus Policies and Procedures

The information contained in the following link constitutes the University’s policies and procedures segment of the course syllabus.

Please go to <http://go.utdallas.edu/syllabus-policies> for these policies.

The descriptions and timelines contained in this syllabus are subject to change at the discretion of the Professor.