Course Information

Course Number/Section OPRE 3333-501

Course Title Quantitative Business Analysis

Term Spring 2023

Location Jindal School of Management Building

Room JSOM 1.110

Time Th 7:00PM - 9:45PM

Professor Contact Information

Professor Reza Sajjadi

Office Phone N/A

Other Phone

Email Address reza.sajjadi@utdallas.edu

Office Location JSOM 2.104
Office Hours by appointment

TA Information N/A
TA Email 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 +10 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: To be updated

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

- > 1-semester access (4 months) / 9780357700037 / \$124.99
- 1-year access (12 months) / 9780357700044 / \$189.99
- 2-year access (24 months) / 9780357700051 / \$239.99

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, from 9 am to 5 pm. It will remain open until the finals week and will be closed during breaks and on holidays. Students can reach out to get clarifications on their doubts. Students can also reach out through the Microsoft Teams app on our respective Net IDs. Here is the contact and schedule of associates who can help you in the lab.

Name – TBD Net ID – TBD Email ID – TBD

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Academic Calendar

First day of classes: Tuesday, January 17 Last day of classes: Friday, May 5 No classes (Spring break):

✓ Monday, March 13 – Thursday, March 16

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

N/A

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	
Assignment1 (WebAssign)	Ch1 Sec1&2&3	
Assignment2 (WebAssign)	Ch2 Sec1&2	
Assignment3 (WebAssign)	Ch2 Sec3&4	
Assignment4 (WebAssign)	Ch3 Sec1&2&3&4	
Assignment5 (MindTap)	Ch3	
Assignment6 (MindTap)	Ch8	
Assignment7 (MindTap)	Ch12	

Exam

There would be 3 tests all 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 is the link:

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

Calculator is not a requirement for this course. However, you can use the below calculator:

TI-84 PLUS (and it's variants)

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.

Academic Calendar

Date	Event	Topic - Plan	HW Post	HW Due
19-Jan	System of Linear Equations	Chapter 1 - Larson		
19-Jan	System of Linear Equations	Chapter 1 - Larson		
26-Jan	System of Linear Equations	Chapter 1 - Larson	Assignment1	
26-Jan	System of Linear Equations & Matrices	Chapter 1 - Larson	(WebAssign)	
2-Feb	Matrices	Chapter 2.1 - Larson		Assignment1
2-Feb	Matrices	Chapter 2.1 - Larson		(WebAssign)
9-Feb	Matrices	Chapter 2.2 - Larson	Assignment2	Assignment2
9-Feb	Matrices	Chapter 2.3 - Larson	(WebAssign)	(WebAssign)
16-Feb	Determinants	Chapter 2.4 - Larson	Assignment3	Assignment2
16-Feb	Determinants	Chapter 3.1 - Larson	(WebAssign)	(WebAssign)
23-Feb	Determinants	Chapter 3.2 - Larson		Assignment3 (WebAssign)
23-Feb	Determinants	Chapter 3.3 - Larson		
2-Mar	Determinants	Chapter 3.4 - Larson	Assignment4 (WebAssign)	
2-Mar	Test Review (upon time availability)	Chapter 1&2&3		
9-Mar	No Class - Exam1 in Testing Center: Chapter 1&2&3			Assignment4
9-Mar				(WebAssign)
16-Mar	No Class: Spring break			
16-Mar				
23-Mar	Introduction to Business Analytics	Chapter 1 - Camm	Assignment5	
23-Mar	Data Visualization	Chapter 3 - Camm	(MindTap)	
30-Mar	Data Visualization	Chapter 3 - Camm		
30-Mar	Time Series Analysis and Forecasting	Chapter 8 - Camm		
6-Apr	Time Series Analysis and Forecasting	Chapter 8 - Camm	Assignment6	Assignment5 (MindTap)
6-Apr	Time Series Analysis and Forecasting	Chapter 8 - Camm	(MindTap)	
13-Apr	No Class - Exam2 in Testing Center: Chapter 1&3&8 Camm			Assignment6
13-Apr				(MindTap)
20-Apr	Linear Optimization Models	Chapter 12 - Camm	Assignment7	
20-Apr	Linear Optimization Models	Chapter 12 - Camm	(MindTap)	
27-Apr	Linear Optimization Models	Chapter 12 - Camm		
27-Apr	Linear Optimization Models	Chapter 12 - Camm		
4-May	Exam3 in Testing Center: Chapter 12			Assignment7
4-May				(MindTap)

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

[&]quot;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.

Weights

Exam 1	25	%
Exam 2	25	%
Exam 3	25	%
Assignment	25	%
Total	100*	100%

^{*}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 got full grades in other parts will not pass this course.

Grading Scale

+1									
	Scale								
	97 - 100 = A +	87 - 89.9 = B+	77 - 79.9 = C +	67 - 69.9 = D +					
	93 - 96.9 = A	83 - 86.9 = B	73 - 76.9 = C	63 - 66.9 = D					
	90 - 92.9 = A-	80 - 82.9 = B-	70 - 72.9 = C-	60 - 62.9 = D-					
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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:

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.

[&]quot;As a Comet, I pledge honesty, integrity, and service in all that I do."