

CourseOPRE 3333.001/002
Quantitative Business AnalysisProfessorDr. Monica BrussoloTermSpring 2017MeetingsM/W/F 9 - 9:50 am at JSOM 2.717 (001)
10 - 10:50 am at JSOM 2.106 (002)

PROFESSOR'S CONTACT INFORMATION

Phone	972-883-4411
Office location	JSOM 3.231
Email address	monica.brussolo@utdallas.edu
Office hours	Tuesday 10-12 pm: walk-ins
	Thursday 10:30 am to 1 pm by appointment using this link <u>utdscm.genbook.com.</u>
	Select Class Office Hours to access my calendar.
	For appointments at other times or days, use the link for availability.
Other information	E-mail is recommended for ALL communications during the semester. eLearning will
	be used to post announcements, assignments and grades.
Teaching Assistant	Wengang (Carlos) Gao - Office Location 2.414
T.A. email	wxg150630@utdallas.edu
TA office hours	To be posted on eLearning Announcements

GENERAL COURSE INFORMATION

	OPRE 3333 and MATH 2333 cannot both be used to fulfill degree requirements.
Pre-requisites, Co-	Prerequisite: MATH 1325 Applied Calculus I or MATH 2413 Differential Calculus
requisites, & other	or MATH 2417 Calculus I).
restrictions	The topics discussed in this course are inherently mathematical. Students are
	encouraged to explore supplementary resources early on the semester as needed.
	Provides students with the analytical tools necessary for making better management
Course Description	decisions. Students are introduced to mathematical techniques used to make
	different types of business decisions.
	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:
Looming Outcomer	• Be able to apply mathematical techniques of optimization and linear algebra
Learning Outcomes	• 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
	i. Elementary Linear Algebra (8 th edition) –Larson
	ii. Essentials of Business Analytics (2 nd edition)
Required Texts &	Camm/Fry/Anderson/Sweeney/Williams
	Online Book Bundle (both books included) - ISBN 9781337605816
	This book is a customized UTD bundle so you have 2 options to buy it:
wrater lais	Option 1: UTD bookstore
	Option 2: link is not available yet. It will be posted on eLearning.
	Additional material such as handouts and slides will be posted distributed in class
	and as needed, posted in eLearning.
Suggested Texts,	If you attend class regularly, the textbook handouts and lecture notes should suffice
Readings, & Materials	in you attend class regularly, the textbook, handouts and recture notes should suffice.

TENTATIVE CALENDAR & ASSIGNMENTS¹

01/09/2017 - 05/05/2017

Mon/Wed/Friday - Sections 001/002

Week/date	Material to be Covered
	Introduction to the course.
Week of Jan 9	System of Linear Equations – Chapter 1 (Larson)
Jan 16	Martin Luther King day – No class
Jan 18 and 20	System of Linear Equations - continuation
Week of Jan 23 and	Matrices – Chanter 2 (Larson)
Jan 30	Wartees – Chapter 2 (Larson)
Feb 1, 3, 6, 8	Determinants – Chapter 3 (Larson)
Feb. 10, 13, 15	Selected Linear Algebra Applications
February 17	Exam review if time allows
February 20	Exam 1: Chapters 1, 2, 3 Larson and handouts available from 9 am to 9 pm^2
February 22	Introduction to Business Analytics – Chapter 1 (Camm)
February 24	Data Visualization – Chapter 3 (Camm)
Week of Feb 27	Time Series Analysis and Forecasting - Chapter 8 (Camm)
Week of March 6	Linear Optimization Models and graphical solution - Chapter 11 (Camm)
Week of March 13	Spring Break – no class this week
Week of March 20	Special cases of Linear Optimization Models
March 27	Exam review if time allows
March 29	Exam 2: Chapters 1, 3, 8, 11 of Camm and handouts. Available from 9 am to 9 pm.
March 31	Excel Solver and Sensitivity Analysis
Week of April 3	Integer Linear Optimization - Chapter 12 (Camm)
Week of April 10	Nonlinear Optimization Models (Lagrange Multipliers)- Chapter 13 (Camm)
Week of April 17	Decision Analysis Chapter 15 (Comm)
and April 24	Decision Analysis - Chapter 15 (Canini)
April 26	Exam review if time allows
April 28	No class today. Use this day to prepare for the exam.
	Exam 3: Chapters 12, 13, 15 Camm and handouts. Available from 9 am to 9 pm
May 3 and 4	(either day).

COURSE POLICIES

	3 exams at the testing center: 25% each (75%). The exams are not cumulative.
	Assignments (one per chapter) available in the Cengage website, posted a week in
	advance. The lowest grade will be dropped (25%).
Grading (credit)	97-100 points = A+; 93-96.9 points = A; 90-92.9 points = A-
Criteria	87-89.9 points = B+; 83-86.9 points = B; 80-82.9 points = B-
	77-79.9 points = C+; 73-76.9 points = C; 70-72.9 points = C-
	67-69.9 points = D+; 63-66.9 points = D; 60-62.9 points = D- (Passing grades)
	Below $60 = F$

¹ Any changes to this schedule will be announced in class or through eLearning and it is the student's responsibility to keep track of them.

² Exam will be given on the testing center and it is computer based. Time allowed: 2 Hours. Appointments for the exam are required at <u>http://www.utdallas.edu/studentsuccess/testingcenter/</u>

Make-up Exams	When exam dates are missed, make-up exams will be given only for justified circumstances, documentation is required. Contact the instructor.
Assignments	Assignments will be posted a week in advance of their due date. You can work together on assignments but develop your own solution. LATE SUBMISSIONS WILL NOT BE ACCEPTED. All assignments should be submitted on the due day on Cengage. No make-up assignments will be given, so plan ahead.
Class Attendance	EXPECTED . Looking at previous experiences with this and other classes, tardiness and absence are the main contributing factors to poor and failing grades.
Classroom Citizenship	 i. <u>Class begins on time.</u> Please maintain class decorum and be respectful towards fellow students in the class. If you have a doubt or misunderstanding regarding course work feel free to discuss it with me. ii. <u>Using your phone during class is not permitted and it is rude</u>. Keep it on silent at all time and away from your desk. 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 which will be returned at the end of the class session. No pictures or video during class time, it distracts me and it is a violation of privacy. iii. <u>Use of your computer is allowed as long as it is not interrupting the class or distracting other students in the classroom.</u> If such situation occurs, the first time you will be asked to turn off your computer. Recurrent offenders will be asked to leave the classroom. Given that this is a numeric class, the material discussed will need for you to take notes in a conventional way most of the time. Therefore, I encourage you to use your computer wisely. In my experience, abusing the use of computers during class time results in unsatisfactory final grades. iv. <u>Use of tablets is allowed</u>, as long as they are used to read the textbook, or the class notes. v. <u>These rules will be enforced.</u>
Special Assistance	For help you succeed in the class, the following resources are available: Your instructor, the teaching assistant assigned to this class, JSOM Statistics and Math Lab (JSOM 2.414), the Student Success Center (MC1.302), the Student Counseling Center (SSB 4.600) and the New Student Programs Office (SSB 3.600) among other resources.
Expectation	University guidelines recommend that you study 2-3 hours per week for every credit hour in which you are enrolled. That is, University expectations suggest you spend 6-9 hours outside of class every week on homework and studying for this course.
Student Conduct and Discipline	The University of Texas System and The University of Texas at Dallas have rules and regulations for the orderly and efficient conduct of their business. It is the responsibility of each student and each student organization to be knowledgeable about the rules and regulations which govern student conduct and activities. General information on student conduct and discipline is contained in the UTD publication, <i>A to Z Guide</i> , which is provided to all registered students each academic year. The University of Texas at Dallas administers student discipline within the procedures of recognized and established due process. Procedures are defined and described in the <i>Rules and Regulations, Board of Regents, The University of Texas</i> <i>System, Part 1, Chapter VI, Section 3</i> , and in Title V, Rules on Student Services and Activities of the university's <i>Handbook of Operating Procedures</i> . Copies of these rules and regulations are available to students in the Office of the Dean of Students, where staff members are available to assist students in interpreting the rules and regulations (SU 1.602, 972/883-6391).

	A student at the university neither loses the rights nor escapes the responsibilities of
	citizenship. He or she is expected to obey federal, state, and local laws as well as the
	Regents' Rules, university regulations, and administrative rules. Students are subject
	to discipline for violating the standards of conduct whether such conduct takes place
	on or off campus, or whether civil or criminal penalties are also imposed for such
	conduct.
	The faculty expects from its students a high level of responsibility and academic
	honesty. Because the value of an academic degree depends upon the absolute
	integrity of the work done by the student for that degree, it is imperative that a student
	demonstrate a high standard of individual honor in his or her scholastic work.
	Scholastic dishonesty includes, but is not limited to, statements, acts or omissions
	related to applications for enrollment or the award of a degree, and/or the submission
	as one's own work or material that is not one's own. As a general rule, scholastic
	dishonesty involves one of the following acts: cheating, plagiarism, collusion and/or
	falsifying academic records. Students suspected of academic dishonesty are subject
	to disciplinary proceedings.
Academic Integrity	
8.	<u>Cheating</u> , includes but is not limited to the use or attempted use of unauthorized
	materials, information, or study aids in any academic exercise; the use of sources
	beyond those authorized by the instructor in completing any academic exercise or,
	syllabus or class discussion. A cademic exercise includes all forms of work submitted
	for credit or hours
	Plagiarism, especially from the web, from portions of papers for other classes, and
	from any other source is unacceptable and will be dealt with under the university's
	policy on plagiarism (see general catalog for details). This course will use the
	resources of turnitin.com, which searches the web for possible plagiarism and is over
	90% effective.
	The University of Texas at Dallas recognizes the value and efficiency of
	communication between faculty/staff and students through electronic mail. At the
	same time, email raises some issues concerning security and the identity of each
	individual in an email exchange. The university encourages all official student email
	correspondence be sent only to a student's U.T. Dallas email address and that faculty
Email Use	and staff consider email from students official only if it originates from a UID
	in the identity of all individual corresponding and the security of the transmitted
	information. LITD furnishes each student with a free email account that is to be used
	in all communication with university personnel. The Department of Information
	Resources at UT Dallas provides a method for students to have their UT Dallas
	mail forwarded to other accounts.
	The administration of this institution has set deadlines for withdrawal of any college-
	level courses. These dates and times are published in that semester's course catalog.
Withdrawal	Administration procedures must be followed. It is the student's responsibility to
from Class	handle withdrawal requirements from any class. In other words, I cannot drop or
II OIII Class	withdraw any student. You must do the proper paperwork to ensure that you will not
	receive a final grade of "F" in a course if you choose not to attend the class once you
	are enrolled.
	Procedures for student grievances are found in Title V, Rules on Student Services
Student Grievance	and Activities, of the university's <i>Hundbook of Operating Procedures</i> .
Procedures	In attempting to resolve any student grievance regarding grades, evaluations, or other
	fulfillments of academic responsibility, it is the obligation of the student first to make

	a serious effort to resolve the matter with the instructor, supervisor, administrator, or committee with whom the grievance originates (hereafter called "the respondent"). Individual faculty members retain primary responsibility for assigning grades and evaluations. If the matter cannot be resolved at that level, the grievance must be submitted in writing to the respondent with a copy of the respondent's School Dean. If the matter is not resolved by the written response provided by the respondent, the student may submit a written appeal to the School Dean. If the grievance is not resolved by the School Dean's decision, the student may make a written appeal to the Dean of Graduate or Undergraduate Education, and the deal will appoint and convene an Academic Appeals Panel. The decision of the Academic Appeals Panel is final. The results of the academic appeals process will be distributed to all involved parties. Copies of these rules and regulations are available to assist students in interpreting the rules and regulations.
Incomplete Grades	As per university policy, incomplete grades will be granted only for work unavoidably missed at the semester's end and only if 70% of the course work has been completed. An incomplete grade must be resolved within eight (8) weeks from the first day of the subsequent long semester. If the required work to complete the course and to remove the incomplete grade is not submitted by the specified deadline, the incomplete grade is changed automatically to a grade of <u>F</u> .
	The goal of Student AccessAbility is to provide students with disabilities educational opportunities equal to those of their non-disabled peers. Student AccessAbility services is located in room SSB 3.200 Office hours are Monday through Thursday, 8 am to 6 pm and Friday, 8 am to 5 pm The contact information for the Office of Student AccessAbility: The University of Texas at Dallas, SSB 3.200 studentaccess@utdallas.edu (972) 883-2098 (voice or TTY)
Disability Services	Essentially, the law requires that colleges and universities make those reasonable adjustments necessary to eliminate discrimination on the basis of disability. For example, it may be necessary to remove classroom prohibitions against tape recorders or animals (in the case of dog guides) for students who are blind. Occasionally an assignment requirement may be substituted (for example, a research paper versus an oral presentation for a student who is hearing impaired). Classes enrolled students with mobility impairments may have to be rescheduled in accessible facilities. The college or university may need to provide special services such as registration, note-taking, or mobility assistance. It is the student's responsibility to notify his or her professors of the need for such an accommodation. AccessAbility Services provides students with letters to present to faculty members to verify that the student has a disability and needs accommodations. Individuals requiring special accommodation should contact the professor after class or during office hours.
Religious Holy Days	The University of Texas at Dallas will excuse a student from class or other required activities for the travel to and observance of a religious holy day for a religion whose places of worship are exempt from property tax under Section 11.20, Tax Code, Texas Code Annotated. The student is encouraged to notify the instructor or activity sponsor as soon as possible regarding the absence, preferably in advance of the assignment. The student, so excused, will be allowed to take the exam or complete the assignment

	within a reasonable time after the absence: a period equal to the length of the absence, up to a maximum of one week. A student who notifies the instructor and completes any missed exam or assignment may not be penalized for the absence. A student who fails to complete the exam or assignment within the prescribed period may receive a failing grade for that exam or assignment.
	If a student or an instructor disagrees about the nature of the absence [i.e., for the purpose of observing a religious holy day] or if there is similar disagreement about whether the student has been given a reasonable time to complete any missed assignments or examinations, either the student or the instructor may request a ruling from the chief executive officer of the institution, or his or her designee. The chief executive officer or designee must take into account the legislative intent of TEC 51.911(b), and the student and instructor will abide by the decision of the chief executive officer or designee.
	Off-campus, out-of-state, and foreign instruction and activities are subject to state
Off-Campus	law and University policies and procedures regarding travel and risk-related
Instruction and	activities. Information regarding these rules and regulations may be found at
Course Activities	http://www.utdallas.edu/BusinessAffairs/Travel Risk Activities.htm. Additional
	information is available from the office of the school dean.