OPRE3333.501– FALL 2016

Course **:** OPRE3333.501
Title **:** Quantitative Business Analysis
Term **:** FALL 2016

Adjunct Professor: Levent Kaan, Ph.D.   -   Levent.Kaan@utdallas.edu

Office	: NA	**Class Meetings**	: TUE & THU
Office Hrs	: As Required	**Class Hrs**	: 5:30 PM- 6:45 PM
Call or Text	: 214-755-1439	**Location**	: UTD Dallas Main Campus- JSOM 1.110
Teaching Assistant	: NA		

Required Textbook:

Custom Essentials of Business Analytics | Camm/Cochran/Fry/Ohlmann/Anderson/Sweeney/Williams | 1st Edition | ISBN-13: 978-1-305-02910-1 | ISBN-10: 1-305-02910-0

Prerequisites
One of the following should be completed: MATH 1325 Applied Calculus I / MATH 2413 Differential Calculus / MATH 2417 Calculus I

Course Description
This course introduces the concept of business processes problem solving utilizing quantitative techniques including matrices, data analysis, and time series. Linear, nonlinear, and integer type problems will be evaluated. As a result of this course students are expected to solve various business type problems utilizing quantitative techniques and make decisions based on the validated results.

Student Learning Objectives / Outcomes
A student successfully completing this course is expected to know how to utilize quantitative methods to approach a problem, solve, and validate to make sound business decisions. Student is expected to learn and use Microsoft EXCEL with add-ins like solver, data analysis toolpak, and similar software (lindo, lingo, ampl etc.) as needed. Bringing a Microsoft based laptop will help learning process for student. Mac based computers office toolpaks are not 100% compatible with the Excel toolpak that this course will utilize.

Days	**Topics**
Aug 23	Course Introduction & Syllabus Review
Aug 25	Elementary Linear Algebra - Chapter 1: System of Linear Equations
Aug 30	Elementary Linear Algebra - Chapter 1: System of Linear Equations
Sep 1	Elementary Linear Algebra - Chapter 2: Matrices
Sep 6	Elementary Linear Algebra - Chapter 2: Matrices
Sep 8	Elementary Linear Algebra - Chapter 2: Matrices
Sep 13	Elementary Linear Algebra - Chapter 3: Determinants
Sep 15	Test 1 Review Session & *HW 1 due by 5:30PM*
Sep 20	**Test 1 - Closed Book - 8 ½ x 11 Cheat Sheet allowed (one side only**
Sep 22	Essentials of Business Analytics - Chapter 1: Introduction
Sep 27	Essentials of Business Analytics - Chapter 3: Data Visualization
Sep 29	Essentials of Business Analytics - Chapter 5: Time Series Analysis and Forecasting 1 of 3
Oct 4	Essentials of Business Analytics - Chapter 5: Time Series Analysis and Forecasting 2 of 3
Oct 6	Essentials of Business Analytics - Chapter 5: Time Series Analysis and Forecasting 3 of 3
Oct 11	Essentials of Business Analytics - Chapter 8: Linear Optimization Models – 1 of 3 & *HW 2 due by 5:30PM*

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Oct 13	Essentials of Business Analytics - Chapter 8: Linear Optimization Models – 2 of 3
Oct 18	Essentials of Business Analytics - Chapter 8: Linear Optimization Models – 3 of 3
Oct 20	Test 2 Review
Oct 25	**TEST 2 – Closed Book - 8 ½ x 11 Cheat Sheet allowed (one side only)**
Oct 27	Essentials of Business Analytics - Chapter 9: Integer Linear Optimization - 1 of 2
Nov 1	Essentials of Business Analytics - Chapter 9: Integer Linear Optimization - 2 of 2
Nov 3	Essentials of Business Analytics - Chapter 10: Nonlinear Optimization *& HW 3 due by 5:30PM*
Nov 8	Essentials of Business Analytics - Chapter 10: Nonlinear Optimization
Nov 10	Essentials of Business Analytics - Chapter 10: Nonlinear Optimization
Nov 15	Essentials of Business Analytics - Chapter 12: Decision Analysis 1 of 2
Nov 17	Essentials of Business Analytics - Chapter 12: Decision Analysis 2 of 2
Nov 21-25	Winter Break & Thanksgiving
Nov 29	Final Review *& HW 4 due by 5:30 PM*
Dec 1	**Final – Take Home Due 12/7/2016 by 5:30 PM**

Grading Policy

Homework 4:	30%	(75 points each-300 total)
Tests (2):	40%	(200 points each-400 total)
Final	30%	(300 points)
Set Bonus	5%	(50 points shared among various tests)

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97-100  = A+;    93-96  = A;   90-92  = A-
87-89   = B+;    83-86  = B;   80-82  = B-
77-79   = C+;    73-76  = C;   70-72  = C-
67-69   = D+;    63-66  = D;   60-62  = D-;   less than 60 = F
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Course Policies

Make Up Test:	No make-up tests
Late Work:	25% deduction on late work (accepted until solutions posted online or in class)
Class Attendance:	Being on time & 100 % class attendance expected for full understanding of this course. UT Dallas requires professors to provide attendance information to registrar so you may see attendance may be taken at times
Course Submissions:	All course related submissions are expected to be done using e-learning system. Use UT Dallas assigned email for your official communication with the professor.

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 content in this syllabus is subject to change at the discretion of the Professor.

Revised on Wednesday, August 03, 2016