

FINA 7397

Summer 2022

Instructor: Dom Berta

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Course Objectives:

The key objective of this course is to introduce the "Decision Analysis" (DA in short) process, and apply it to a series of Case Studies, be they Financial, Medical, Economics or Litigation/Legal.

The Decision Analysis approach is a very powerful tool to help out make better decisions. It is a combination of both qualitative and quantitative approaches, such as the Tornado Diagram, the Decision Tree or the Monte-Carlo solutions.

Several guest lecturers, either renown DA experts in the Consulting or Medical field will show the students how DA is used in real life.

It is expected that, at the end of this course, students will be able to use DA to help them make better decisions, either in business or in their personal life.

The class syllabus is shown on pages 6&7.

Instructor:

Dom Berta is currently Adjunct Professor at the Bauer School of Business, teaching "Upstream Project Economics", "Planning & Budgeting", "Decision Analysis" classes, "Managerial Finance", as well as a Continuing Education on "Introduction to Managerial Finance". He has been working in the oil and gas industry for 39 years in executive, managerial and professional positions, whether in finance, business development and engineering.

Recommended Books:

"Project Economics and Decision Analysis, Volume 1, 2nd ed," M. A. Mian (PennWell Publishing, 2011)

"Introduction to Decision Analysis", David Skinner - ISBN-13: 978-0964793866 / ISBN-10: 0964793865

<u>Course Materials</u> The course material will consist of: (1) lecture notes and other reading material relating to the analytical frameworks used in the course and case studies of "real-life" decision-making situations that invite students to bring together their knowledge and apply it to situations that challenge top-management.

The lecture notes will be posted on Blackboard.

Basic knowledge of Excel is a must.

Basic knowledge of PowerPoint will be helpful.

Students must be using a laptop for this class, as experience has shown that the screens of smartphones are too small.

Class Content

Class time will be divided between lectures on the analytic material and discussion of cases that highlight the practical management issues raised by the theoretical frameworks. The cases are carefully chosen to do much more than simply illustrating the concepts covered in the lectures. The cases will often point to ambiguities in the concepts or invite attention to subtle issues that do not usually come through in the study of the text-book. The assignment of cases and the focus questions to help in the preparation or analysis of these cases are clearly spelt out in the syllabus below, and the case discussions are an integral part of the course. Class attendance is very important and strongly encouraged.

Course Requirements:

Students will be required to present both written work and oral analysis of the cases. The written work will involve homework exercises and case reports. The case report assignments and their due dates are clearly spelt out below. Oral analysis will be presented in case discussions. I expect students to have read the cases and prepared the assignment questions prior to the class session. Inadequate preparation not only means losing grading points but also lowers the entire class standard.

Grading:

The grading weights of the course-work are as under:

- 1. Quizzes 10%
- 2. Homework assignments 10%
- 3. Final 50%
- 4. Class contribution/participation 30%

Please note that I reserve the right to modify these percentages as a function of the class.

Class participation reflects the standard of contribution to class discussions, especially in the cases. In terms of grading criteria for case discussions, I will look for whether the student (1) has thoroughly prepared the case, (2) is a good listener, i.e., can link his or her arguments to the comments of others, and (3) is willing to be "creative" in offering new ideas. Please see Appendix B.

Please note that I may have to vary the grading coefficients in order to accommodate for the current CoVid situation.

Class Participation:

I will use participation during our weekly sessions as a potential curve. Please note that I will frequently call on you for your input or opinions, so be prepared. Please review Appendix A for details.

Excused Absence Policy:

Regular class attendance, participation, and engagement in coursework are important contributors to student success. Absences may be excused as provided in the University of Houston Undergraduate Excused Absence Policy and Graduate Excused Absence Policy for reasons including: medical illness of student or close relative, death of a close family member, legal or government proceeding that a student is obligated to attend, recognized professional and educational activities where the student is presenting, and University-sponsored activity or athletic competition. Additional policies address absences related to military service, religious holy days, pregnancy and related conditions, and disability.

Recording of Class:

Students may not record all or part of class, livestream all or part of class, or make/distribute screen captures, without advanced written consent of the instructor. If you have or think you may have a disability such that you need to record class-related activities, please contact the Center for Students with Disabilities. If you have an accommodation to record class-related activities, those recordings may not be shared with any other student, whether in this course or not, or with any other person or on any other platform. Classes may be recorded by the instructor. Students may use instructor's recordings for their own studying and notetaking. Instructor's recordings are not authorized to be shared with anyone without the prior written approval of the instructor. Failure to comply with requirements regarding recordings will result in a disciplinary referral to the Dean of Students Office and may result in disciplinary action.

Syllabus Changes:

Due to the changing nature of the COVID-19 pandemic, please note that the instructor may need to make modifications to the course syllabus and may do so at any time. Notice of such changes will be announced as quickly as possible.

Resources for Online Learning:

The University of Houston is committed to student success and provides information to optimize the online learning experience through our Power-On website. Please visit this website for a comprehensive set of resources, tools, and tips including: obtaining access to the internet, AccessUH, and Blackboard; requesting a laptop through the Laptop Loaner Program; using your smartphone as a webcam; and downloading Microsoft Office 365 at no cost. For questions or assistance contact UHonline@uh.edu.

UH Email:

Email communications related to this course will be sent to your UoH Exchange email account that each University of Houston student receives. The Exchange mail server can be accessed via Outlook, which provides a single location for organizing and managing day-to-day information, from email and calendars to contacts and task lists. Exchange email accounts can be accessed by logging into Office 365 with your Cougarnet credentials or through Access UH. They can also be configured on IOS and Android mobile devices. Additional assistance can be found at the Get Help page.

Webcams:

Access to a webcam is required for students participating remotely in this course. Webcams must be turned on during all live course meetings to enable discussion.

Honor Code Statement:

Students may be asked to sign an honor code statement as part of their submission of any graded work including but not limited to projects, quizzes, and exams: "I understand and agree to abide by the provisions in the Houston Graduate Academic Honesty Policy. I understand that academic honesty is taken very seriously, and, in the cases of violations, penalties may include suspension or expulsion from the University of Houston."

Hyflex Online Courses:

This course is being offered as an Hyflex format. Class meetings will take place according to the class schedule. Some students will be physically in-class, whereas others will be online. The instructor may have to alter some of the class format, schedule, contents and grading percentages due to the application of this novel format.

Helpful Information:

COVID-19 Updates: https://uh.edu/covid-19/

Coogs Care: https://www.uh.edu/dsaes/coogscare/

Laptop Checkout Requests: https://www.uh.edu/infotech/about/planning/off-

campus/index.php#do-you-need-a-laptop

Health FAQs: https://uh.edu/covid-19/faq/health-wellness-prevention-faqs/

Student Health Center: https://uh.edu/class/english/lcc/current-students/student-

health-center/index.php

Professor Evaluation:

The C.T. Bauer College of Business has a policy for its instructors to be evaluated by students to provide feedback on how their teaching performance can be improved. I encourage you to participate in the evaluation process. I am available throughout the semester to receive any informal input. I rely on your input to improve the class each time I teach it.

Disability-Based Accommodations:

The C.T. Bauer College of Business would like to help students who have disabilities achieve their highest potential. To this end, students must register with the Center for Students with Disabilities (CSD) (Telephone 713-743-5400) It is the mission of the Disability Resource Center (DRC) to be committed to providing access to the educational environment for students. Students who may need accommodations should contact the DRC to discuss their needs and begin the registration process.

Appendix A:

Class Schedule, Topics and Assignments

4/26/2022				
	FINA 7397	- Bauer School of Business, University		
	of Houston			
37 . 7		022 - Professor Dom Berta		
Note: Due adapt this		ct of the CoVid on any Hyflex class environmer	it, I reserve the right to	
Session	Date	Class Contents	Assignment for next class	
#1	Tuesday June 7	Course introduction		
		Decision Analysis (DA in short): what, why, how?		
		A brief review of Economics fundamentals	Homework #1 for	
		In-class exercise	next class: Economics	
#2	Tuesday Jun14	Work Homework #1		
		Short quiz over previous session material		
		Issue Sorting: in-class Case Study#1 and #2		
		Work Case Studies in break-out rooms		
#3	Tuesday June 21	Review concepts from previous sessions	Homework #2 for next class:	
	june 21	Influence Diagram	Develop the Influence Diagram	
		In-class Case Study #3 and #4 in break- out rooms	for Case Study #2 (Manufacturing)	
#4	Tuesday June 28	Review HW#2	Homework #3 by	
	june 20	Risk Timeline	Risk Timeline for Case Study #4	
		In-class exercise	(Litigation)	
#5	Tuesday July 5	Guest lecturer (consulting)		
		Review concepts from previous		
		sessions Rework Case Studies if necessary		
		Probability Assessment		
		Risk Tolerance / Aversion	Homework #4 by next class: Assess	
		Portfolio Management	P10/P50/P90 for a project of interest	

		In-class exercise		
#6	Tuesday July 12	Review previous concepts. Discuss homework #4		
		Tornado Diagram	Homework #5 for	
		In-class exercise + discussion	next class: build a tornado diagram.	
#7	Tuesday July 19	Review previous concepts. Discuss homework #5		
		Decision Tree	Homework #6 for	
		In-class exercise	next class: Build a Decision Tree	
#8	Tuesday July 20	Review previous concepts. + review homework #6		
		Monte-Carlo analysis	Homework #7 for next class: carry-out a Monte-Carlo	
		In-class exercise	analysis	
#9	Tuesday July 27	Review previous concepts. Discuss homework #7		
		Value of Information		
		Industry Presenter - (medical)		
#10	Tuesday Aug 3	Review any concept covered so far		
		Strategy Table		
		Industry presenter - (consulting)		
Finals	Aug 10 to Aug 13	Finals		