Quantitative Analysis for Business

BZAN 6310

Instructor Information

Instructor Ming Zhao, Ph.D. Email mzhao@bauer.uh.edu Office Location & Hours MH-290F @ Wed 4:00-5:00 PM

General Information

Description

Data have become a torrent flowing into every area of the global economy. Many companies are seeking to enhance their ability to transform data into valuable insights and actions. The course will provide students with skills to analyze data.

Prerequisite

Students are expected to be proficient in Excel prior to taking this course. This included being able to use common Excel tools such as range names, pivot tables, data tables, lookups, goal seek, conditional/logical IFs, conditional SUM/COUNT/AVERAGE, SUMPRODUCT, and statistical and financial functions. A good tutorial on all these tools (and more) can be found here: http://www.kelley.iu.edu/albrightbooks/Free_downloads.htm

Required Course Materials

Textbook: Business Analytics: Data Analysis and Decision Making 6th edition by S. Christian Albright and Wayne L. Winston

Computer and Software: Laptop computer with Windows 7/8/10 OS. Because of issues with the Excel add-ins, Mac users must be able to run Windows. The software that used in the class is Microsoft Excel 2013 or later with an Add-in called StatTools in Palisade Decision Tools Suite.

Course Guidelines

The course involves lots of Excel Spreadsheets modeling. To be successful in this course you should be prepared to spend a fair amount of time outside of class practicing your modeling skills. This course is taught using and inverted pedagogy where you are responsible for reviewing the course lectures online BEFORE coming to class so that we can work more challenging problems during class and have more time for discussion.

While we will be using Excel as our primary modeling "language", this is not a course in Excel; rather, it is a course that will help you to integrate much of what you are learning in your MBA curriculum in a way that will allow you to add value to your organization.

Classroom Conduct: All students are expected to behave in a professional and ethical manner at all times. This includes, but is not limited to, the following:

- Coming to class on time and staying until the end of the period. "Attending" class means not only being physically present but also engaged and actively participating in a positive way.
- Using legally licensed copies of the course software and textbook materials.
- Using your computer for class business ONLY; i.e., not for email, web surfing, messaging, etc.
- Taking notes and paying attention during class so that you can ask meaningful questions.

- Working diligently outside of class time to solve the homework problems on your own.
- Strictly observing the university academic honesty policy at all times.

Academic Integrity Policy: The University of Houston Academic Honesty Policy is strictly enforced by the C. T. Bauer College of Business. No violations of this policy will be tolerated in this course. A discussion of the policy is included in the University of Houston Student Handbook, <u>http://catalog.uh.edu/content.php?catoid=6&navoid=1025</u>. Students are expected to be familiar with this policy.

Any material submitted for course credit must be your own work if it is an individual-based assignment or the work of your team if it is a group-based assignment. Students are not permitted to discuss, read, etc. the work, thoughts, and ideas regarding the cases or exams with other students (or another team for group case work). If outside references are used, they must be properly referenced. Plagiarizing or copying the work done by others is a violation of the Academic Honesty Policy.

Academic misconduct is a serious threat to the integrity and value of your degree. The instructor will strictly follow the Academic Honesty Policy in areas of plagiarism, fabrication, cheating, and other forms of academic misconduct.

- Suspected cases of academic misconduct will be reported.
- Penalties for academic dishonesty may include a failing grade in the course, academic probation, and/or dismissal from the University.

Disability Accommodation: The C. T. Bauer College of Business would like to help students who have disabilities achieve their highest potential. To this end, in order to receive academic accommodations, students must register with the Center for Students with Disabilities (CSD) (telephone 713-743-5400), and present approved accommodation documentation to their instructors in a timely manner.

CAPS Counseling and Psychological Services: Counseling and Psychological Services (CAPS) can help students who are having difficulties managing stress, adjusting to college, or feeling sad and hopeless. You can reach CAPS (www.uh.edu/caps) by calling 713-743-5454 during and after business hours for routine appointments or if you or someone you know is in crisis. Also, there is no appointment necessary for the "Let's Talk" program, which is a drop-in consultation service at convenient locations and hours around campus. http://www.uh.edu/caps/outreach/lets_talk.html.

Religious Holy Days: The University of Houston respects the religious observances of students even though they may conflict with university class meetings, assignments, or examinations as outlined in the University of Houston Student Handbook. Potential conflicts with assignment due dates and examinations must be discussed with the instructor within the first week of class to be eligible for scheduling changes.

Makeup Policy: According to University Policy, a makeup examination will be administered only if the instructor is furnished with written evidence that a student is:

- 1. Participating in an activity appearing on the University Authorized Activity List and <u>must</u> be preceded by authorized, written, notice.
- 2. Confined to home or bed by physician on account of illness.
- 3. Bereaved by a death in his/her immediate family.
- 4. Participating in legal proceedings that require his/her presence.

If you miss an exam/quiz due to a valid excuse as listed above, you have to notify the instructor as soon as possible but no later than 48 hours after the scheduled exam, and provide a <u>written evidence</u> as soon as possible. Otherwise, you will not be allowed to take a makeup exam/quiz and you will receive a grade of ZERO (0) for that exam/quiz.

Course Schedule

Week	Date	Торіс	Sections
1	01/17	Introduction, Excel Basic, Filter, Pivot Table	2.7, 3.5
2	01/24	Describing Single Variable	2.1-2.6
3	01/31	Finding Relationships among Variables	3.1-3.4
	01/31	Last day to drop	
4	02/07	Probability and Probability Distributions	4.1-4.5
5	02/14	Exam 1	
6	02/21	Norm Distributions	5.1-5.3
7	02/28	Binomial Distribution	5.4-5.7
8	03/07	Sampling and Intro to Estimation	7.1-7.5
	03/14	Spring Break	
9	03/21	Confidence Interval Estimation	8.1-8.6
10	03/28	Confidence Interval Estimation	8.7-8.10
	03/30-04/01	Exam 2	
	04/03	Last day to drop with W	
11	04/04	Hypothesis Testing	9.1-9.3
12	04/11	Hypothesis Testing	9.4-9.7
13	04/18	Regression Analysis	10.1-10.5
14	04/25	Regression Analysis	10.6-10.7
	04/27-04/30	Exam 3	

Grading

The exams and in-class participation will be weighted as follows to determine each student's final grade:

Item	Value
Exam 1	30%
Exam 2	30%
Exam 3	40%
Bonus Points	2%
Total	102%

The following scale will determine you final course grade:

<u>> 92</u>	А	72.00 - 77.99	С
90.00 - 91.99	A-	70.00 - 71.99	C-
88.00 - 89.99	B+	68.00 - 69.99	D+
82.00 - 87.99	В	62.00 - 67.99	D
80.00 - 81.99	B-	60.00 - 61.99	D-
78.00 - 79.99	C+	<60	F

Grades are earned on the basis of performance in this course, not given on the basis of need or effort. This grading scale already includes a curve, so there will be no rounding up. NOTE: Grades are not negotiable. I do not reply to email requesting a grade change or extra credit.