BUSA 501: Introduction to Business Analytics

COURSE SYLLABUS: Fall 2015 01W

Instructor: Dr. Bo Han
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To protect your academic privacy, please always send me emails from your tamuc.edu email. Please use emails to ask me questions. This is the fastest way to reach me.
Office Hours: By appointment.
Office #: BA 325 (McDowell Administration Building on Commerce campus)

COURSE INFORMATION

Required Textbooks

Essentials of Business Analytics (1st Ed.)

by Camm/Cochran/Fry/Ohlmann/Anderson/Sweeney/Williams
ISBN: 978-1-285-18727-3
(We do not need the access code from this book. Used book without the access code works fine. Some book vendor use 15 as the edition number. No matter how they label the edition number, the book must have the same ISBN listed above.)
Important Note:
If you use an Apple computer, please make sure that you can access to Excel on a Windows PC. Some advanced data analysis functions are not supported by Apple.

COURSE DESCRIPTION

This course is designed to introduce the following business analytics knowledge to students:

(1) Business analytics practice
(2) Quantitative data analyses (Focus of this class)
(3) IT infrastructure in business analytics

This course teaches graduate students the process of analyzing big data and discovering new information to support management decision making. Topics include the analysis of production data, analysis and management, and marketing research analysis.

Student Learning Outcomes

Students should be able to implement analytical models in the software tools. In addition, students should be able to interpret the results of business analytics and their implications to business administrations. According to the data analysis results,

students should be able to make data driven decisions to optimize the business process and address issues in business administrations.

GRADING

Assignments (A Maximum of 60 Points)
6 assignments will be given during the semester. You can get a maximum of 10 points for each assignment. Please note:

- Assignments are very important to your final grade! Please be sure to complete and submit every assignment by the deadline.
- For some challenging assignments, I have created the developer guides. Please use the guides as the support to complete the assignments.

Exams (A Maximum of 40 Points)
Two exams will be given during the semester. You can get a maximum of 20 points for each exam. Each exam will be open for one week on eCollege. You can choose any time during the one-week period to take the online exam. Once you start the exam, you have two hours to complete the exam. You can't pause or retake the exam once it is started. The exam dates are:

- Exam 1 will be open from 10 AM on October 26 to 6PM on November 1, 2015.
- Exam 2 will be open from 10 AM on December 7 to 6PM on December 14, 2015.

Final Grade
At the end of this semester, if your total point is between 90 and 100, you will get an A; if it's between 80 and 89, you will get a B, and so on. **Please note that the actual points will be used to calculate your final grade.** No percentage or curving will be used in this class.

Points	Grade
90-100	A
80-89	B
70-79	C
60-69	D
below 60	F

Bonus points
You can participate in the instructor assigned activities to get a maximum of 3 points for bonus in this semester.

TECHNOLOGY REQUIREMENTS

The following information is provided to assist you in successfully using technology to complete the assignments and class activities:

For exercises and assignments, you need Microsoft Excel (2010 is recommended), Microsoft Access (2010 is recommended), and SAP Graphic User Interface (**GUI installer link will be given by the instructor**). If you don't have Microsoft Access software, you can use the computers in the library on Commerce campus or use the free trial version of Microsoft Access. I will email you the free trial when the Access training starts.

If you are an Apple Mac user, make sure that you can access to a Windows PC. Apple Macs can not run the advanced data analysis functions in Excel, and does not support Microsoft Access software at this moment.

It is the best practice to use Firefox or Chrome to access to the online class according to eCollege. This is applicable to both PC and Mac users. Please download either one if you don't have any of these Web browsers.

VIDEOS

Videos are very important to support your learning and academic success in this class. I introduce the main concepts and knowledge structures to you each week. **Be sure to watch the lecture videos before reading the textbook.** It will help you understand the data mining concepts in an easier way.

All lecture videos are located in the weekly links (Week 1, Week 2, …, Week 14, Week 15) on eCollege, as shown in the example below:

COMMUNICATION AND SUPPORT

If you ask me questions by emails, I will reply you in 48 hours. However, I usually answer them much faster than this.

If you have questions about software operations, please be sure to include the screenshots of the issues in the emails.

All assignment due dates, project deadlines, and exam time are central time in the United States.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

University Specific Procedures

ADA Statement

Students with Disabilities
The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services
Texas A&M University-Commerce
Gee Library- Room 132
Phone (903) 886-5150 or (903) 886-5835
Fax (903) 468-8148
StudentDisabilityServices@tamuc.edu

Student Conduct
All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. (See *Code of Student Conduct from Student Guide Handbook).*

COURSE OUTLINE / TENTATIVE CALENDAR

Schedule	Topic
Week 1	Chapter 1: Introduction to Business Analytics
Week 2	Chapter 4: Linear Regression
Week 3	Chapter 5: Time Series Analysis
Week 4	Chapter 6: Data Mining

Week 5	Chapter 7: Spreadsheet Models
Week 6	Chapter 8: Linear Optimization
Week 7	Chapter 9: Integer Linear Optimization
Week 8	Chapter 10: Nonlinear Optimization
Week 9	**Midterm Review & Exam 1**
Week 10	Chapter 11: Monte Carlo Simulation
Week 11	Chapter 12: Decision Analysis
Week 12	Database Management Review
Week 13	Introduction to SAP-ERP
Week 14	Data Management in SAP-ERP
Week 15 & 16	**Final Review & Exam 2**