MIHAYLO COLLEGE OF BUSINESS & ECONOMICS
Department of Information Systems & Decision Sciences

ISDS 415: Decision Support and Business Intelligence Systems
Fall 2016

Instructor: Rahul Bhaskar, PH.D.
Class Time: Saturday 9:00AM-11:45AM

Office: SGMH – 4170, *Cell Phone: 9495721911*, *Office Hours*: Saturday 12:00pm –
1:00pm. Immediately after class. Please make sure you have read the required material in the
text and have complete lecture notes prior to your office visit.

E-mail: rbhaskar@fullerton.edu
All your communications to the instructor must identify your name and class.

Course Description

This course will provide business students with the skills and knowledge to understand and
implement processes and technology related to business intelligence. Upon successful
completion of the course you will possess skills that are most sought after by today's
employers in any field. If you are majoring in another field like marketing, finance, or
accounting, this course will help you utilize information systems and decision sciences to
achieve goals at your future or present employer. Business Intelligence is the basis of all
decision making in any company in any area. Some companies do it informally and others
do it with multi-million dollar systems. This course will help you identify those areas where
business intelligence can make the most difference.

Objective

The aim of this course is to teach the students on how to design and develop expert systems
and decision support systems. The major objectives of this course are:

1. Helping students develop intellectual capabilities related to the design and
   development of BI systems.
2. The course will also explore how BI systems can support organizational goals and
   how BI systems can impact organizations and managers.
3. Understand that BI systems are intended to support rather than replace decision
   makers.
4. Know more about the internet, the World Wide Web, its potential uses to support
   decision making, and its impact on decision behavior.
5. Design and develop BI systems

Required Books

Business Intelligence and Analytics: A Managerial Perspective on Analytics, Publisher:
Pearson Education; Third edition (January 9, 2014) • **Language:** English • **ISBN-10:** 0-13-305105-6 • **ISBN-13:** 978-0-13-305105-6

Predictive Analytics: The Power to Predict Who Will Click, Buy, Lie, or Die
Eric Siegel (Author), Thomas H. Davenport (Foreword), Publisher: Wiley; 2016
ISBN 9781119145677

Grading

Final Exam	**30%**
Midterm	**20%**
Quizzes	**15% (equally weighted)**
Case Study / Dimensional Database/SAS workbook	**20% (equally weighted)**
Project	**10%**
Class Participation	**5%**

Grades will be based on the percentage earned of the total possible points. 10% will be deducted each week for late assignments. Late assignments CANNOT receive a grade of "A." Plus/minus grades will be issued:

A 92-100%	B+ 88-89%	C+ 78-79%	D+ 68-69%	F $\leq$ 59%
A- 90-91%	B 82-87%	C 72-77%	D 62-67%	
	B- 80-81%	C- 70-71%	D- 60-61%	

Exams:

There will be a mid-term exam and a final. The final examination is cumulative.

All examinations are closed book / closed notes. You may use the tables in your book if necessary. You may bring one sheet of notes (use both sides if you want). Electronic calculators are allowed during mid-term and final exams. No Makeup exam or incomplete grades will be given.

Groups:

For group project and presentation, you should form a group of 5 students. Please email me with your group name and group member.

Academic Dishonesty:

Academic dishonesty, when detected, will result in a lower letter grade for the work at hand, and may result in 'F' for the course plus additional university level disciplinary actions set forth in the University catalog. Click here for details of the university policy.

Disabled Student Services

For information about student's right to accommodations for documented special needs, contact: Disabled Student Service Office, University Hall 101, and Phone: (657) 278-3117, Website: www.fullerton.edu/disabledservices

Assessment Statement

The main purpose of the degree program at the College of Business & Economics (College) at Cal State Fullerton is to provide you with the knowledge and skills that prepare you for a successful career in business. In order to assist us in achieving this goal, we will use a number of assessment tools to track your progress throughout the College curriculum. Please expect to participate in College assessment activities in several of your courses while at CSUF. As you do so, you will assist us in identifying our program's strengths and weaknesses as well as areas for potential improvement. In other words, you will be making an important investment in the value of your degree.

Course Website Usage and Communication

You are responsible for checking the Blackboard System frequently in order to keep all deadlines. Announcements, data projects, grades and other relevant information regarding this course will be posted there. By policy, every student should have a Blackboard account when the student is enrolled in a class. The student should immediately confirm that you have a Blackboard account and that you are enrolled in the Blackboard course for this class. Check the Blackboard course frequently for announcements and before each class session.

Emergency Procedures Notice to Students

The safety of students attending California State University Fullerton is of paramount importance. During an emergency it is necessary for students to have a basic understanding of their personnel responsibilities and the University's emergency response procedures. You must make sure that you have understood the emergency procedures and your responsibilities during an emergency. Click here for details

Classmate' Names/ Phones/ e-mail addresses:

1. _____

2. _____

Please note that this schedule is subject to change with notice, per UPS 300.004.

Week	Class Date	Topics covered in class	Homework/ Activities online	Will be tested on	Reading DUE
Week 1	August 20th	Introduction - Overview of Business Analytics - Case with Thomas Davenport **Introduction to - Analytics with Excel**			**Syllabus**
Week 2	August 27th	- Book Application Case 1.2 - Section 1.8 - Big Data Discussion **Analytics with Excel**	Self- Assessment Quiz – Chapter 1. Due on September 2nd 11:55pm	Q1, mid-term	**Chapter 1**
Week 3	September 3rd	Data warehouse - Definition and Concepts - Process overview - Architectures - Database Design **Analytics with Excel** **Book case study – in class : Continental Airlines**	Predictive Analytics Introduction – Discussion forum. Due on September 16th 11:55pm Self- Assessment Quiz – Chapter 2. Due on September 16th 11:55pm Case: Performance Lawn Equipment (Regression Analysis): Due on September 16th 11:55pm	Q1, mid-term	**Chapter 2** Predictive Analytics - Introduction
Week 4	September 17th	- Database design **Data Selection: Designing a Dimensional Database**	Quiz 1 on Chapter 1, 2 and Analytics with Excel Due on September 23rd 11:55pm	Mid-term	**Chapter 2**
Week 5	September 24th	- Business Reporting, - Visual analytics - Management - **Exercise 4** – Page142 - Business Performance **Gallery walk- Application cases for Chapter 3**	SAS- Visual Analytics Workbook Self -Assessment Quiz Chapter 3. Due on September 30th 11:55pm	Q2, Mid-term	**Chapter 3**
Week 6	October 1st	- Data Mining Concepts - Data Mining Applications - Data Mining Process - IBM Watson Introduction	Self -Assessment Quiz Chapter 4. Due on October 7th 11:55pm	Q2, Mid-term	**Chapter 4**
Week 7	October 8th	- Data Mining Methods	Quiz 2 Chapters 3 and 4	Mid-	**Chapter 4**

		- Data Mining Software Tools - Privacy Issues and Myths **IBM Watson**	Due on October 14th 11:55pm	term	Predictive Analytics Chapter 6 - Watson
Week 8	October 15th	- **MIDTERM**	In Class		Chapters 1-4 and Analytics with Excel
Week 9	October 22nd	- Text Analytics - Text Mining Applications - Text Mining Process - Sentiment Analysis **Project**			Chapter 5
Week 10	October 29th	- Web Mining - Web mining - Web Analytics **Project**	Self- Assessment Quiz Chapter 5 Due on November 4th 11:55pm	Q3, Final	**Chapter 5**
Week 11	November 5th	-Fundamentals of Big Data Analytics - Big Data Analytics Technologies **Project**		Q3, Final	**Chapter 6** Predictive Analytics Chapter 3 – The Data Effect
Week 12	November 12th	Big Data and Data warehousing Big Data Vendors Big Data and Stream Analytics **Project**	Self- Assessment Quiz 6. Due on November 11th 11:55pm	Q3, Final	Chapter 6
Week 13	November 19th	Business Analytics: Emerging Trends and Future Impacts Cloud Computing and BI Impact of Analytics on organizations **Project**	Quiz 3 Chapters 5 and 6 Due on November 13th 11:55pm	Final	Chapter 7 Predictive Analytics Chapter 7 Persuasion by numbers
Week 14	Nov 20- 27th	**Thanksgiving Holiday**			
Week 15	December 3rd	**Project Presentations**	PROJECT Due on December 2nd 11:55pm		
Week 16	December 10th	**FINAL EXAM**			Chapters 5-7

Key to the "Work Due" Column

- Q# - Online quiz due