

**Professional MBA (PMBA) Program**  
**Spring 2022**  
**OPIM857 – Practical Business Analytics for Managers**

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**Web:** SUCourse  
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**Course Objective:**

The main objective of this course is for the student to develop an understanding of the role of computer-based information systems in the direct support of data-driven intelligent managerial decision making—nowadays commonly referred to as Business Analytics.

**Learning Outcomes:**

Upon successful completion of the course, the student should be able to:

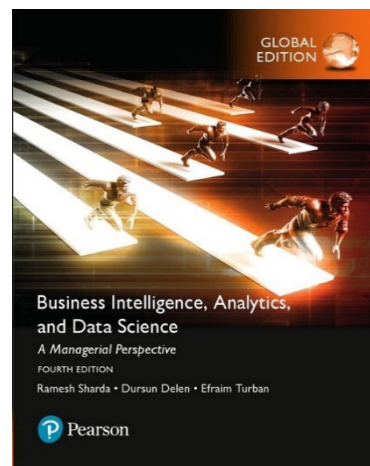
1. Have a well-grounded understanding of Business Analytics
2. Understand the enabling tools and techniques for Business Analytics
3. Learn and relate to a variety of Business Analytics technologies and use cases
4. Know the definition of data, text and Web mining and understand their processes
5. Develop hands-on experience with one or more Business Analytics software tools
6. Understand Big Data and Social Analytics as they relate to Business Analytics.

**Course Materials:**

The course will use the following book:  
**Business Intelligence, Analytics, and Data Science: A Managerial Perspective, 4th Edition**

**Publisher:** Pearson, ©2018  
**Authors:** Ramesh Sharda, Dursun Delen and Efraim Turban

International Edition  
**ISBN-10:** 1292220546  
**ISBN-13:** 9781292220543



There will be some additional reading materials recommended by the instructor. These additional materials will be posted on the class Website (i.e., SUCourse).

### **SUCourse:**

SUCourse (the course management system adopted by Sabanci University) will be used to disseminate all written material for this class, which will include PowerPoint slides, white papers, and case studies. We will also use SUCourse for online discussions and short online quizzes.

### **Instructional Design:**

The course is designed to include a mix of lecture, case studies, discussions, and hands-on skill development opportunities/exercises. Students are expected and encouraged to productively participate in class discussions and activities. The success of this course depends on each participant (instructor and students) to create and actively contribute to the learning process/experience.

### **Case Studies:**

The book contains plenty of example case studies for the students to read. These case studies designed to foster the learning of the chapter materials with relevant real-world application examples. Some of these case studies will be used as examples and further discussed in class.

### **Grading:**

Participation & professionalism	: 10%
Group term project	: 30%
Online mini-quizzes	: 30%
Small/hands-on assignments	: 30%
<b>Total</b>	<b>: 100%</b>

### **Requirements:**

**Attending and actively participating** in each and every class period is crucial for a successful learning experience. In order to positively participate in class discussions, students are required to read the chapter prior to the start of the class.

Instead of a final exam, there will be a **group term project** for this class. The project will involve conceptualizing and developing a business analytics solution using a large and feature-rich data set along with the business analytics tools and techniques you will be learning in this class. You, as a team, with the help and guidance of your professor, will design and execute a solution to a real-world predictive analytics problem. Each team will submit a final project report (documenting the steps/phases they followed in their solution development process) and will present their project (collectively, as a team) in class at the end of the semester. Generally, unless a compelling argument is given to suggest otherwise, the term project will be involved in analyzing, conceptualizing, and solving a data mining type prediction problem.

A few **practical, hands-on assignments** will be given during the semester. Some of these assignments will be executed and submitted in-class, and some after class. For these assignments you are to upload your well-organized homework report (in PDF format) to SUCourse by the stated due date and time. These assignments are meant to help students' understanding of the subject matter through simple hands-on analytics exercises.

There will be several short **quizzes** which will be taken online via SUCourse. These quizzes will include a mix of multiple-choice, fill-in-the-blank, short answer type essay questions and some simple problems. You will be allowed to take these quizzes twice and the best of the two attempts will count for the gradebook.

### **Academic Honesty:**

Learning is enhanced through cooperation and as such you are encouraged to work in groups, ask for and give help freely in all appropriate settings. At the same time, as a matter of personal integrity, you should only represent your own work as yours. Any work that is submitted to be evaluated in this class should be an original piece of writing, presenting your ideas in your own words. Everything you borrow from books, articles, or web sites (including those in the syllabus) should be properly cited. Although you are encouraged to discuss your ideas with others (including your friends in the class), it is important that you do not share your writing (slides, MS Excel files, reports, etc.) with anyone. Using ideas, text and other intellectual property developed by someone else while claiming it is your original work is *plagiarism*. Copying from others or providing answers or information, written or oral, to others is *cheating*. Unauthorized help from another person or having someone else write one's paper or assignment is *collusion*. Cheating, plagiarism and collusion are serious offenses that could result in an F grade and disciplinary action. Please pay utmost attention to avoid such accusations.

## Course Schedule:

<b>Week 1</b>	<b>Date:</b> Friday, May 27 & Saturday, May 28
	<b>Topics:</b> Introduction to Business Intelligence & Descriptive Analytics
	<b>Requirements:</b> Read Chapters 1, 2
<b>Week 2</b>	<b>Date:</b> Friday, June 3 & Saturday, June 4
	<b>Topic:</b> Descriptive & Predictive Analytics
	<b>Requirements:</b> Read Chapters 3 & 4
<b>Week 3</b>	<b>Date:</b> Friday, June 10 & Saturday, June 11
	<b>Topic:</b> Predictive Analytics I (Continued)
	<b>Requirements:</b> Read Chapter 4
<b>Week 4</b>	<b>Date:</b> Friday, June 17 & Saturday, June 18
	<b>Topic:</b> Predictive Analytics II (Continued)
	<b>Requirements:</b> Read Chapters 4 & 5
<b>Week 5</b>	<b>Date:</b> Friday, June 24 & Saturday, June 25
	<b>Topic:</b> Big Data Concepts & Tools
	<b>Requirements:</b> Read Chapter 7
<b>Week 6</b>	<b>Date:</b> Friday, July 1 & Saturday, July 2
	<b>Topic:</b> Future Directions and Project Presentations
	<b>Requirements:</b> Read Chapter 8

*Some alterations to the course schedule are likely. If/when the changes are needed and decided upon, the details of those changes will be announced and explained in class and will be included in an updated version of the syllabus.*