



北京大學  
汇丰商学院

Peking University HSBC Business School

# Econ 532

## Business Analytics and Decision Making

### Module 3, 2018-2019

#### Course Information

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**Instructor: Qian Chen**

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Office Hour: Wed 2-4pm

**Teaching Assistant: TBA**

Phone: TBA

Email: TBA

**Classes:**

Lectures: Tue & Fri 10:30-12:20

Venue: PHBS Building, Room 229

**Course Website:**

If any.

## 1. Course Description

### 1.1 Context

Course overview:

This course provides an introductory overview of the tools and techniques used for business analytics, business forecasting and business planning, thereby providing a better basis for informed decision-making. It bridges the business school students in Management, Economics and Finance area to the real business world by focusing on understanding and solving real business problems with data analysis and basic quantitative method. Topics includes: data management, decision analysis under uncertainty and risk, decision tree, quality control, design of business experiment and survey, nonstandard business information assessment, and business forecasting. These topics are discussed within a simple, easy-adapting quantitative framework, which requires very basic math knowledge.

Prerequisites:

**Math.**

### 1.2 Textbooks and Reading Materials

**Recommended Readings:**

**Recommended readings:**

1. Business Analytics - Methods, Models, and Decisions, James R. Evans (2e, 2015). ISBN: 0321997824

2. Business Analytics: Data Analysis & Decision Making 5th Edition, S. Christian Albright, Wayne L. Winston, ISBN-13: 978-1133629603 Various published business reports.
3. Various published business reports.

**Course Management System:** We will use CMS (<http://cms.pkusz.edu.cn/>) to manage the course. Course code and password will be provided in the first class.

### **Statistical Package:**

In this course, a wide range of business cases will be used to demonstrate the techniques and tools. Students will be required to write case summary report to demonstrate their understanding of the contents. In the meantime, the students will practice writing and presenting skills that transfer quantitative analytical results into presentable and comprehensible business words.

**Computing package:** Excel

## **2. Learning Outcomes**

### **2.1 Intended Learning Outcomes**

<b>Learning Goals</b>	<b>Objectives</b>	<b>Assessment (YES with details or NO)</b>
1. Our graduates will be effective communicators.	1.1. Our students will produce quality business and research-oriented documents.	Assignment, Mid-term exam, case discussion
	1.2. Students are able to professionally present their ideas and also logically explain and defend their argument.	Assignment, Mid-term exam, case discussion
2. Our graduates will be skilled in team work and leadership.	2.1. Students will be able to lead and participate in group for projects, discussion, and presentation.	case discussion
	2.2. Students will be able to apply leadership theories and related skills.	
3. Our graduates will be trained in ethics.	3.1. In a case setting, students will use appropriate techniques to analyze business problems and identify the ethical aspects, provide a solution and defend it.	Assignment, Mid-term exam, case discussion
	3.2. Our students will practice ethics in the duration of the program.	
4. Our graduates will have a global perspective.	4.1. Students will have an international exposure.	Assignment, Mid-term exam, case discussion
5. Our graduates will be skilled in problem-solving and critical thinking.	5.1. Our students will have a good understanding of fundamental theories in their fields.	Assignment, Mid-term exam, case discussion
	5.2. Our students will be prepared to face problems in various business settings and find solutions.	Assignment, Mid-term exam, case discussion
	5.3. Our students will demonstrate competency in critical thinking.	Assignment, Mid-term exam, case discussion

### **2.2 Course specific objectives**

### **2.3 Assessment/Grading Details**

<b>Assessment task</b>	<b>Weighting</b>
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1. Attendance	10%
2. Assignments	40%
3. Quizzes	30%
4. Case Discussion	20%
Total	100%

The assignments are individual written assignment. A hard copy is required, soft copy is optional.

Late submission of assignments will not be accepted and considered failure of the tasks.

## **2.4 Academic Honesty and Plagiarism**

It is important for a student's effort and credit to be recognized through class assessment. Credits earned for a student work due to efforts done by others are clearly unfair. Deliberate dishonesty is considered academic misconducts, which include plagiarism; cheating on assignments or examinations; engaging in unauthorized collaboration on academic work; taking, acquiring, or using test materials without faculty permission; submitting false or incomplete records of academic achievement; acting alone or in cooperation with another to falsify records or to obtain dishonestly grades, honors, awards, or professional endorsement; or altering, forging, or misusing a University academic record; or fabricating or falsifying of data, research procedures, or data analysis.

All assessments are subject to academic misconduct check. Misconduct check may include reproducing the assessment, providing a copy to another member of faculty, and/or communicate a copy of this assignment to the PHBS Discipline Committee. A suspected plagiarized document/assignment submitted to a plagiarism checking service may be kept in its database for future reference purpose.

Where violation is suspected, penalties will be implemented. The penalties for academic misconduct may include: deduction of honour points, a mark of zero on the assessment, a fail grade for the whole course, and reference of the matter to the Peking University Registrar.

For more information of plagiarism, please refer to *PHBS Student Handbook*.

## **3. Topics, Teaching and Assessment Schedule**

Week	Topic	Lectures	Text chapters	Assignment due date	Additional information
1	Introduction; How to effectively measure and manage business information?	Graphical display and statistical description of data			
2	Decision making in multiple scenarios.	Uncertainty and Decision trees			
3	Decision making in multiple scenarios.	Uncertainty and Decision trees			

4	Identify important business factors via business research: Design and assessments.	Business survey design, Analysis of Variance, Tests for two population distributions			
5	Identify important business factors via business research: Design and assessments.	Business survey design, Analysis of Variance, Tests for two population distributions			
6	How to Deal with nonnumeric and limited business information?	Non-parametric tests			Midterm Exam
7	How to Deal with nonnumeric and limited business information?	Non-parametric tests			
8	How to manage and control the quality of products and services?	Quality control, Pivot tables			
9	Forecasting with experts	Essential for business forecasting, Delphi methods, Product lift curve			

#### 4. Miscellaneous