Business Statistics and Data Analysis

Course Name	Course type (credit/hours)	Required course(3/3)	Course code	I001
	Target students Division/major/grade	Business Administration/Freshman	Opening semester	2021 2ND SEMESTER
	Class time and classroom	Tue B(DaB106)Thu A(DaB106)	English Grade	A(100%English)

Reference to this course	Prerequisite courses	None		
	Related basic courses	Quantitative Business Analysis		
	Recommended concurrent courses	None		
	Related advanced courses			

Instructor	Name (title/division)	Sung, Minje(Professor, Business Administration)				
	Office Room Number	Dasan 526	Office phone Number	2912	e-mail	
	Office hours	TBA		Homepage address		
Teaching Assistant	Name (title/division)					
	Office Room Number		Office phone Number		e-mail	

1. Introduction

2. Course Objectives

This course is an introduction to the basic statistical methods which are used both in the direct solution of managerial problems and as foundations for more advanced analytical methods. It satisfies the quantitative methods requirements of the common body of knowledge for business major.

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3. Class types and activities

4. Teaching Method

☑ lecture	☑ discussion and debate
☑ team project(presentation and case studies)	☐ experiments(role-playing,etc)
☐ designing and production	☐ on-site learning(on-site training)
☐ others	

5. Support Systems in Use

☑ AjouBb	☐ automatic recording system	☐ web-based assignment
☐ cyber lecture	☐ online content	
☐ class behavior analyazing system	☐ others	

6. Teaching Tools

☐ PBL(Problem Based Learning)   ☐ CBL(Case Based Learning)   ☐ TBL(Team Based Learning)

☐ UR(Undergraduate Research)   ☐ FL(Flipped Learning)   ☐ DSAL(Data Science Active Learning)

☐ others

7. Knowledge and ability required for taking this course

The course has no explicit prerequisites in mathematics; however, the equivalent of high school algebra and calculus will be assumed. Basic knowledge of using spreadsheets such as Microsoft EXCEL is expected.

8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance			1 point panelty for each unexcused absence
midterm exam		35%	
final exam		35%	
quiz		30%	Together with occasional Case analyses
presentation			
discussion			
homework			
etc			
study hours	5-7 hours		

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	Managerial Statistics, 9th Ed.	Keller	South-Western	2011

10. Class system and Class shedule

To facilitate logical flow and understanding, the lectures will be in the order of the following:

Descriptive statistics.
Probability theory
Probability distribution
Sampling distribution
Inferencial statistics
Correlation and regression

< Class Schedule >

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Introduction to Statistics. Descriptive Statistics. Stem and Leaf Displays, Histograms, Box-Whisker Plots.		Sung, Minje	Lecture		
2	Excel Introductory. Basic Probability Theory. Other views of probability.		Sung, Minje	Lecture		
3	Probability theory continued		Sung, Minje	Lecture		
4	Random Variables and Probability Models.		Sung, Minje	Lecture		
5	Discrete and Continuous Distributions. Binomial, Poisson, and Normal Distributions.		Sung, Minje	Lecture		
6	Sampling Distributions. Simulating from Probability Distributions. The Central Limit Theorem.		Sung, Minje	Lecture		
7	Midterm Exam		Sung, Minje	Test		
8	Point and Interval Estimation		Sung, Minje	Lecture		
9	Statistical Inference: Inference about a Single Population.		Sung, Minje	Lecture		
10	Statistical Inference: Inference about two populations. Inference from paired-samples. Chi-square Tests.		Sung, Minje	Lecture		
11	Simple Linear Regression and Correlation. Ordinary Least Squares. The Regression Model. Sampling Variability.		Sung, Minje	Lecture		

< Class Schedule >

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
12	Multiple Regression.		Sung, Minje	Lecture		
13	Multiple Regression Models. Dummy (0-1) Variables. Analysis of Variance by Regression.		Sung, Minje	Lecture		
14	Business Ethics		Sung, Minje	Lecture		
15	Review		Sung, Minje	Lecture		
16	Final Exam		Sung, Minje	Test		

11. Other items of notification