Business Statistics and Data Analysis

<table>
<tr><td rowspan="3">Course Name</td><td>Course type (credit/hours)</td><td>Required course(3/3)</td><td>Course code</td><td>I008</td></tr>
<tr><td>Target students Division/major/grade</td><td>Business Administration/Freshman</td><td>Opening semester</td><td>2019 2ND SEMESTER</td></tr>
<tr><td>Class time and classroom</td><td>Wed D(DaB106)Fri D(DaB106)</td><td>English Grade</td><td>A(100%English)</td></tr>
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Reference to this course	Prerequisite courses	
	Related basic courses	
	Recommended concurrent courses	
	Related advanced courses	

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<tr><td rowspan="3">Instructor</td><td>Name (title/division)</td><td colspan="5">Seunghwan Kim(Associate Professor, Business Administration)</td></tr>
<tr><td>Office Room Number</td><td>다산관 432호</td><td>Office phone Number</td><td>3631</td><td>e-mail</td><td></td></tr>
<tr><td>Office hours</td><td></td><td>Homepage address</td><td></td><td></td><td></td></tr>
<tr><td rowspan="2">Teaching Assistant</td><td>Name (title/division)</td><td colspan="5"></td></tr>
<tr><td>Office Room Number</td><td></td><td>Office phone Number</td><td></td><td>e-mail</td><td></td></tr>
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1. Introduction

This course is an introduction to the basic statistical methods for solving managerial problems and it is a fundamental course for more advanced analytical methods. Statistical concepts for solving managerial problems are explained. Topics include descriptive statistics, probability theory, probability distributions, sampling distributions, estimation, hypotheses testing, ANOVA, and regression. Most importantly, in every topic the main focus is how to make an effective managerial decision based on the data analysis.

2. Course Objectives

This course will provide the basic statistical methods which are used both in the direct solution of managerial problems and as foundations for more advanced analytical methods. It will also satisfy the quantitative methods requirements of the common body of knowledge for business major.

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3. Class types and activities

There are 4 main methods that will be used in this course: Lectures/Discussions, Practice Problems, Team Assignments, and Exams. After each submodule of the course, Practice Problems will be given which will help students review/refresh/understand the contents of the given module. Practice Problems are in the textbook and are NOT required to submit. Then, Team assignments will be given based on the lectures and practice problems. This process will help the students get ready for the exams. In summary, the whole course is designed to go through lectures-->practice problems-->assignments-->exams step-by-step in order to maximize the learning outcome of the students.

4. Teaching Method

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

5. Support Systems in Use

- [V] AjouBb
- [ ] cyber lecture
- [ ] class behavior analyazing system
- [ ] automatic recording system
- [ ] online content
- [ ] others
- [ ] web-based assignment

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

PREREQUISITES:The course has no explicit prerequisites in mathematics; however, the equivalent of high school algebra 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		3%	Attendance
midterm exam		40%	Midterm Exam
final exam		40%	Final Exam
quiz			
presentation			
discussion			
homework		15%	Team Assignments
etc		2%	Peer Evaluation (Evaluation of team members)
study hours			

9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Main	Statistics for Management and Economics, 10th Edition	Gerald Keller	Cengage Learning	2015
Main	Lecture Notes on E-Class			

10. Class system and Class shedule

< Class Schedule >

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Introduction to Course Introduction to Statistics	E	Seunghwan Kim			
2	Introduction to Statistics Graphical and Tabular Descriptive Statistics	E	Seunghwan Kim			
3	Numerical Descriptive Techniques Data Collection and Sampling	E	Seunghwan Kim			
4	Introduction to Probability	E	Seunghwan Kim			
5	Random Variables Discrete and Continuous Distributions	E	Seunghwan Kim			
6	Sampling Distributions	E	Seunghwan Kim			
7	Interval Estimation	E	Seunghwan Kim			
8	Midterm Exam	E	Seunghwan Kim	Midterm Exam		
9	Hypothesis Testing	E	Seunghwan Kim			
10	Inference about a Single Population	E	Seunghwan Kim			
11	Inference about Comparing Two Populations	E	Seunghwan Kim			
12	Analysis of Variance	E	Seunghwan Kim			
13	Simple Linear Regression and Correlation	E	Seunghwan Kim			
14	Simple Linear Regression and Correlation	E	Seunghwan Kim			
15	Multiple Regression	E	Seunghwan Kim			

< Class Schedule >

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
16	Final Exam	E	Seunghwan Kim	Final Exam		

11. Other items of notification

CLASS POLICY: I strongly recommend you to read this carefully.

1. We will NOT discuss any issues with grades via email. Please make an appointment by email to discuss your grade or score IN PERSON ONLY.

2. Communication: Our main communication will be emails. Please put Course name & Time, your name, and your ID number in the subject of your emails.   This will facilitate the communication process and will help the instructor respond to your messages in a timely manner.

3. No use of Mobile phones during the class.

4. Do not walk in and out of the classroom during the class unless you really have to…

5. Final course grades are final. We will not change a final grade unless an error in calculating a final grade is found.

6. All assignments must be worked and completely prepared (written or typed) by each team. Violation of this rule will result in a zero grade for the   assignment. Also late assignments will get a 15% penalty.

7. If you miss a class due to a health/university/job related issues, just bring a document that can prove the reasons. Then you'll be excused.

8. Do not perform the 'Ghost Attendance'(someone else inputs atttendance or check & run). Random check might be done during the semester and if someone gets caught, the person will get 0 point in Attendance. There is no penalty up to 5 absences…so if you have to miss a class, just miss it…and do not lie !

ACADEMIC INTEGRITY:

As long as you remain enrolled in this course, you are indicating that you have read, understand, and accept the University policies and procedures regarding academic integrity and dishonesty. Especially on the exams, it is expected that you will not cheat or aid others in cheating. All work you submit is assumed to be your own, original work. Any misrepresentation of work, plagiarism, cheating etc. will be pursued to the fullest extent allowed by the University.