Extended syllabus

Course Title	Business Statistics	Course Number	MGT2002
Credit	Theory (3.0)	Eligible Student	
Class time	Tue/ Thur : 10:30~11:45 am	Venue	

Professor's Picture	Name:	Homepage:
	E-mail :	Telephone :
	Office hour/place: MA709	

Ⅰ. Course Description

1. Description

This course is an introduction to the use and limitation of mathematical and statistical techniques in management contexts. Several statistical techniques are covered and examined for application in quantitative decision-making. The main purpose of the course is to provide useful information and insights for the basic statistical data analysis.

Linkage to the Business School Objective"GLEE":
The course covers globalization through various international case studies to resolve problems. Also the course emphasizes ethical standards to protect professional integrity and to minimize ethical breaches. Finally, the course pursues the Excellencies in a view of professional analyst by introducing practical data analysis with statistics computer software as well as statistical theories.

SBS Values and Related AoL Assessment Traits
G: Globalization [AoL id#: 1-1 a]
E: Excellence [AoL id#: 3-1 a, b, c d; 3.4]
E: Ethics [AoL id#: 4-2]

2. Prior learning contents

Basic knowledge on mathematics (integration & differentiation)

3. Course Format(%)

Lecture	Discussion	Experiment/Practice	Field study	individual/T	Others/ Extra
70%	30%	%	%	%	%

4. Evaluation(%)

mid-term Exam	final exam	Quiz	Presentation	Project	Assignments	Participation	Others/ Extra
35%	40%	10%	%	%	10%	5%	%

Ⅱ. Course Purpose

Knowledge: This course is an introduction to the use and limitation of mathematical and statistical techniques in management contexts. Several statistical techniques are covered and examined for application in quantitative decision-making. The main purpose of the course is to provide useful information and insights for the basic statistical data analysis. There are two aspects to meeting these goals. The first aspect is the education of the following statistical techniques: (1) Exploratory Data Analysis, (2) Probability Distribution, (3) Estimation, (4) Hypothesis Testing (5) Regression Analysis. Another aspect is to show how statistical

techniques above are actually used in practice. Homework materials or class projects will include practical examples with tremendous savings in many areas.

Skill: You will learn how statistical techniques above are actually used in practice. Homework materials or class projects will include practical examples with tremendous savings in many areas.

Attitude: The course covers globalization through various international case studies to resolve problems. Also the course emphasizes ethical standards to protect professional integrity and to minimize ethical breaches. Finally, the course pursues the Excellencies in a view of professional analyst by introducing practical data analysis with statistics computer software as well as statistical theories.

Ⅲ. Course Format

1. To understand and uphold ethical standards for the statistics profession
2. To become familiar with the statistical terminology, basic principles and steps involved in planning and conducting statistical studies.
3. To apply statistical tools to interpret and convert data into useful information necessary to make sound business decisions.
4. To obtain a working knowledge of the following areas of statistics: descriptive statistics, probability and statistical inference.

Ⅳ. Course Requirements

4~6 Homeworks

Mid-exam/ Final-exam (If you do not take any one exam, you will fail the course)

Attendance

Ⅴ. Materials and References

1. Class materials and class related announcements will be uploaded at Sogang Cyber Campus before the class (http://cybernet.sogang.ac.kr/).

2. References: Statistics for Business and Economics
   by Anderson, Sweeney, Williams, Thomson South-Western International Edt.

Ⅵ. Course schedule

1 week	Learning objective	Introduction to Statistics
	Main learning contents	CH1
	Teaching method and materials	Lecture and discussion/ see materials and references above
	preparation must be done by student	It is important to read the textbook or class materials before the class begins.
	References	
2 week	Learning objective	Understanding basic concept of statistics such as population, sample, parameter, statistics, etc.
	Main learning contents	CH2
	Teaching method and materials	Lecture and discussion/ see materials and references above
	preparation must be done by student	It is important to read the textbook or class materials before the class begins.
	References	
3 week	Learning objective	Learning about the techniques of describing statistical results, and understanding and interpreting their meanings.
	Main learning contents	CH3
	Teaching method	Lecture and discussion/ see materials and references above

	and materials	
	preparation must be done by student	It is important to read the textbook or class materials before the class begins.
	References	
4 week	Learning objective	Learning about the concept of introductory probability.
	Main learning contents	CH4
	Teaching method and materials	Lecture and discussion/ see materials and references above
	preparation must be done by student	It is important to read the textbook or class materials before the class begins.
	References	
5 week	Learning objective	Learning about discrete probability distribution, and see some examples.
	Main learning contents	CH5
	Teaching method and materials	Lecture and discussion/ see materials and references above
	preparation must be done by student	It is important to read the textbook or class materials before the class begins.
	References	
6 week	Learning objective	Learning about continuous probability distribution, and see some examples.
	Main learning contents	CH6
	Teaching method and materials	Lecture and discussion/ see materials and references above
	preparation must be done by student	It is important to read the textbook or class materials before the class begins.
	References	
7 week	Learning objective	Learning about point estimation and sampling distribution.
	Main learning contents	CH7
	Teaching method and materials	Lecture and discussion/ see materials and references above
	preparation must be done by student	It is important to read the textbook or class materials before the class begins.
	References	
8 week	Learning objective	Mid-Exam
	Main learning contents	
	Teaching method	Lecture and discussion/ see materials and references above

	and materials	
	preparation must be done by student	It is important to read the textbook or class materials before the class begins.
	References	
9 week	Learning objective	Learning about interval estimation and its difference from the point estimation.
	Main learning contents	CH8
	Teaching method and materials	Lecture and discussion/ see materials and references above
	preparation must be done by student	It is important to read the textbook or class materials before the class begins.
	References	
10 week	Learning objective	Learning about the concept of statistical hypothesis.
	Main learning contents	CH9
	Teaching method and materials	Lecture and discussion/ see materials and references above
	preparation must be done by student	It is important to read the textbook or class materials before the class begins.
	References	
11 week	Learning objective	Learning about the techniques of statistical test under one population case.
	Main learning contents	CH9
	Teaching method and materials	Lecture and discussion/ see materials and references above
	preparation must be done by student	It is important to read the textbook or class materials before the class begins.
	References	
12 week	Learning objective	Test techniques over two populations are learned when two populations are independent.
	Main learning contents	CH10
	Teaching method and materials	Lecture and discussion/ see materials and references above
	preparation must be done by student	It is important to read the textbook or class materials before the class begins.
	References	
13 week	Learning objective	Test techniques over two populations are learned when two populations are dependent.
	Main learning	CH10

	contents	
	Teaching method and materials	Lecture and discussion/ see materials and references above
	preparation must be done by student	It is important to read the textbook or class materials before the class begins.
	References	
14 week	Learning objective	Learning about concepts of simple regression analysis
	Main learning contents	CH11
	Teaching method and materials	Lecture and discussion/ see materials and references above
	preparation must be done by student	It is important to read the textbook or class materials before the class begins.
	References	
15 week	Learning objective	Learning about tests in simple regression analysis
	Main learning contents	CH11
	Teaching method and materials	Lecture and discussion/ see materials and references above
	preparation must be done by student	It is important to read the textbook or class materials before the class begins.
	References	
16 week	Learning objective	Final-Exam
	Main learning contents	
	Teaching method and materials	Lecture and discussion/ see materials and references above
	preparation must be done by student	It is important to read the textbook or class materials before the class begins.
	References	

VII. Course Policy

Attendance Policy:
You are expected to attend class on a regular basis and are responsible for all material discussed in class. Any student with more than three unexcused absences may be dropped from the class. Any necessary absence occurring while a student is representing the BusinessSchoolinsomeofficialwaywillbeconsideredanexcusedabsence.

Homework Policy:
1. You are encouraged to discuss the homework problems with your class mates, but should try to solve them for yourself.
2. If you hand-in your homework without enough explanation to your answers, you will receive only partial scores.
3. You will receive partial scores for the late hand-ins.

Other Policy:
- Students who disturb or leave the class room in the middle of class w/o noticing a rational reason will be warned and will receive penalty in the final grade.
- Final grade will not change for any reason except for the case of miscounting the exam score, etc.
- If you do not take a mid-exam or a final-exam, your grade will be "F".

Cheating:
Cheating will not be tolerated. Anyone caught due to the cheating will be immediately removed from the class list and receive an "F" for the course with a disciplinary punishment.

Ⅷ. Special Accommodations

Disability related services:
If you have a documented disability that may impact your performance in this class and for which you may require accommodations, you must be registered and provide documentation of your disability to the Assistant for help.