



**University of International Business and Economics
International Summer School**

STAT 220 Introduction to Statistics

Term: May 29 – June 29, 2017

Instructor: Prof. Shali Wu

Home Institution: Kyunghee University (韩国庆熙大学)

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Class Hours: Monday through Thursday, 120 minutes each day (2,400 minutes in total)

Office Hours: TBD

Teaching Assistant: TBD

Email: TBD

Discussion session: 2 hours each week

Total Contact Hours: 64 contact hours (45 minutes each, 48 hours in total)

Credit: 4 units

Course Description

We first cover summary and descriptive statistics. We then cover the basic concepts and applications of probability, both discrete and continuous random variables and their probability distributions. After the midterm, we will start tackling the techniques in statistical inference that account for much common statistical methodology. By the end of the course, we will cover the introduction to regression analysis, which is one of the most widely used statistical tools.

Course Goals

This is NOT a class about memorizing a set of formulas and then plugging in numbers. Rather, the goal is to develop a strong conceptual and practical understanding of the statistical tools we use for business decisions making. I believe doing so not only enables you to use these tools more efficiently, but also allows you to understand which tool is more appropriate than the other in a given practical setting.

I plan this course with two broad objectives in mind. First, this is a “ground up” statistics class. While I recognize most students here are very intelligent, I have a responsibility (that I take very seriously) to make this class accessible to students who have literally never seen a sample mean or median. I also believe that the best way to understand statistics is to develop a solid foundation in data analysis and probability.

That said, my second objective is to give students sufficient background in statistics to take all but a handful of upper-level elective courses later on. I believe that if you have a firm grasp of the fundamental concepts in statistics, you can understand what’s going on in these classes, you’ll just have to invest a little more of your time to master the terminology and technical details that we won’t cover.



Required Text

Introductory Statistics, Global Edition, 10/E
Neil A. Weiss, Arizona State University
ISBN-10: 1292099720 • ISBN-13: 9781292099729
10th edition, Pearson 2016.

Required course materials

Other Materials will be distributed in class

Attendance

Summer school is very intense and to be successful, students need to attend every class. Occasionally, due to illness or other unavoidable circumstance, a student may need to miss a class. UIBE policy requires a medical certificate to be excused. Any unexcused absence may affect the student's grade. Moreover, UIBE policy is that a student who has more than 1/3 of the class in unexcused absences will fail the course.

Grading Policy

Exams (2 total)	20% *2
Participation	30%
Final Project	30%

Course Hours

The course has 20 class sessions in total. Each class session is 120 minutes in length for a total of 2,400 minutes of class time. The course meets from Monday to Thursday.

Grading Policy

Assignments and examinations will be graded according to the following grade scale:

A	90-100
A-	85-89
B+	82-84
B	78-81
B-	75-77
C+	72-74
C	68-71
C-	64-67
D	60-63
F	below 60

Class Rules

Exiting and Entering: You are expected to remain in the classroom for the duration of the class session unless an urgent need arises or prior arrangements have been made with the professor.

Laptop, PDA, and Other Electronic Device Usage: You are expected to use laptops, PDAs, and other electronic devices only with the professor's consent and for activities directly related to the class session. Accessing e-mail or the Internet during class is not permitted as they can be distracting for peers and faculty.

Cellular Phone and Pager Usage: You are expected to keep your mobile phones and pagers turned off or have them set on silent/vibrate during class. Answering phones or pagers while class is in session is not permitted.

*Other distractions-*specifically identified by individual instructors such as eating in the classroom. You will learn the most from this class if you and your classmates participate fully. You all have different experiences and insights, and a great deal of what you learn in class is from each other. Thus, each one of you is expected to contribute to class discussions, which will account for 30% of your final grade.

Course Schedule

Important Note: This schedule is tentative and may change as the term proceeds. It is your responsibility to keep up with any changes which may be made.

Week	Day	Session	Date	Topic
1	MON	1	2017-05-29	Lecture 1: Introduction
	TUE	2	2017-05-30	Lecture 2: Defining and Collecting Data
	WED	3	2017-05-31	Lecture 3: Organizing Data
	THU	4	2017-06-01	Lecture 4: Descriptive Statistics
2	MON	5	2017-06-05	Lecture 5: Probability and Statistics
	TUE	6	2017-06-06	Lecture 6: Discrete Probability Distribution
	WED	7	2017-06-07	Lecture 7: Normal Distribution
	THU	8	2017-06-08	Lecture 8: Sampling Distribution
3	MON	9	2017-06-12	Lecture 9: Confidence Interval Estimation
	TUE	10	2017-06-13	Exam I
	WED	11	2017-06-14	Lecture 10: Hypotheses Testing
	THU	12	2017-06-15	Lecture 11: One Sample Test
4	MON	13	2017-06-19	Lecture 12: Two Sample Test
	TUE	14	2017-06-20	Lecture 13: Chi-Square Test
	WED	15	2017-06-21	Lecture 14: Simple Regression
	THU	16	2017-06-22	Lecture 15: Multiple Regression
5	MON	17	2017-06-26	Exam II
	TUE	18	2017-06-27	Lecture 16: ANOVA
	WED	19	2017-06-28	Summary of the course
	THU	20	2017-06-29	Final Presentation