

Syllabus (2021-Fall)

Course Title	Statistics II	Course No.	20425
Department/ Major	Department of Statistics / Statistics	Credit/Hours	3 / 3
Class Time/ Classroom	Tuesday (9:30 ~ 10:45), Friday (11:00 ~ 12:15) Classroom: Synchronous zoom meeting		
Instructor	Name: Kyongwon Kim	Department: Department of Statistics	
	E-mail: kimk@ewha.ac.kr	Phone: 02-3277-3684	
Office Hours/ Office Location	Tuesday: 11:00 ~ 11:50 / 종합과학관B521		

I. Course Overview

1. Course Description

- Statistics II provides an introduction to the basic statistical inference. The course will cover point estimation, interval estimation, hypothesis test, analysis of variance, and linear regression.
- This course will cover applied statistical concept for real data using computer software (e.g. R). However, using R is not mandatory.
- This course will be delivered in synchronous zoom lecture. More details will be announced.

2. Prerequisites

None

3. Course Format

Lecture	Discussion/Presentation	Experiment/Practicum	Field Study	Other
100%	%	%	%	%

(Instructor can change to match the actual format of the class.)

4. Course Objectives

- Develop statistical problem-solving skills by applying concepts and theorems.
- Develop skills for communicating your thought process and while working through statistics problems.
- Familiarize students with the basic concepts and ideas of statistical inference

5. Evaluation System

Midterm Exam	Final Exam	Quizzes	Presentation	Projects	Assignments	Participation	Other
35%	35%	%	%	%	20%	10%	%

- The homework will typically be assigned when the relevant material is finished and will be posted on the website. Homework MUST be turned in online through the website. No email submission is accepted. Any submission after the due date will be considered as late submissions and will be subject to 10 pts penalty per day, out of 100 pts. They will be accepted only until the following week, and no submission will be accepted thereafter. In cases like sickness, family emergency, or university-related travel, please email me. Solutions for homework will be posted on the website, typically by the time the graded homework are returned.
- Midterm exam will be given during the semester. It is closed-book exam. Final exam will not be comprehensive. If you have a university-approved conflict with any of the exams, you must let me know at least one week before the exam. A conflict exam will be scheduled to take place just before or after the regularly scheduled exam.
- Attendance to each class meeting is required and beneficial. Students are responsible for all announcements and supplements given within each lecture and/or via course email/website.
- All Ewha Womans University, College of Science, and Department of Statistics policies regarding

ethics, honorable behavior, and mutual respect apply in this course.

II. Course Materials and Additional Readings

1. Required Materials

Introductory Statistics, 9th Edition by Prem S. Mann

2. Supplementary Materials

Probability and Stochastic Processes, 2nd Edition by R. D. Yates and D. J. Goodman.

3. Optional Additional Readings

현대통계학의 이해와 응용, 이외숙, 임용빈, 소병수, 이은경 공저, 자유아카데미

III. Course Policies

* For laboratory courses, all students are required to complete lab safety training.

IV. Course Schedule (15 credit hours must be completed.)

*The course schedule is tentative and subject to change.

Week	Date	Topics & Class Materials, Assignments
Week 1	(09/03)	Chap 8 (Estimation of the Mean and Proportion)
	(09/07)	Chap 8 (Estimation of the Mean and Proportion)
	(09/10)	Chap 8 (Estimation of the Mean and Proportion)
Week 2	(09/14)	Chap 8 (Estimation of the Mean and Proportion)
	(09/17)	Chap 9 (Hypothesis Tests About the Mean and Proportion)
Week 3	(09/21)	추석 (Thanksgiving)

Week	Date	Topics & Class Materials, Assignments
Week 4	(09/24)	Chap 9 (Hypothesis Tests About the Mean and Proportion)
	(09/28)	Chap 9 (Hypothesis Tests About the Mean and Proportion)
Week 5	(10/01)	Chap 9 (Hypothesis Tests About the Mean and Proportion)
	(10/05)	Chap 9 (Hypothesis Tests About the Mean and Proportion)
Week 6	(10/08)	Chap 10 (Estimation and Hypothesis Testing: Two Populations)
	(10/12)	Chap 10 (Estimation and Hypothesis Testing: Two Populations)
Week 7	(10/15)	Chap 10 (Estimation and Hypothesis Testing: Two Populations)
	(10/19)	Chap 10 (Estimation and Hypothesis Testing: Two Populations)
Week 8	(10/22)	Chap 10 (Estimation and Hypothesis Testing: Two Populations)
	(10/26)	Review Session
Week 9	(10/29)	Midterm
	(11/02)	Chap 10 (Estimation and Hypothesis Testing: Two Populations)
Week 10	(11/05)	Chap 11 (Chi-Square Tests)
	(11/09)	Chap 11 (Chi-Square Tests)
Week 11	(11/12)	Chap 11 (Chi-Square Tests)
	(11/16)	Chap 12 (Analysis of Variance)
Week 12	(11/19)	Chap 12 (Analysis of Variance)
	(11/23)	Chap 13 (Simple Linear Regression)
Week 13	(11/26)	Chap 13 (Simple Linear Regression)
	(11/30)	Chap 13 (Simple Linear Regression)
Week 14	(12/03)	Chap 13 (Simple Linear Regression)
	(12/07)	Chap 13 (Simple Linear Regression)
Week 15	(12/10)	Review Session
	(12/14)	Final Exam
Makeup Class	(mm/dd)	
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V. Special Accommodations

* According to the University regulation section #57-3, students with disabilities can request for special accommodations related to attendance, lectures, assignments, or tests by contacting the course professor at the beginning of semester. Based on the nature of the students' request, students can receive support for such accommodations from the course professor or from the Support Center for Students with Disabilities (SCSD). Please refer to the below examples of the types of support available in the lectures, assignments, and evaluations.

Lecture	Assignments	Evaluation
<ul style="list-style-type: none"> . Visual impairment : braille, enlarged reading materials . Hearing impairment : note-taking assistant . Physical impairment: access to classroom, note-taking assistant 	Extra days for submission, alternative assignments	<ul style="list-style-type: none"> . Visual impairment : braille examination paper, examination with voice support, longer examination hours, note-taking assistant . Hearing impairment : written examination instead of oral . Physical impairment : longer examination hours, note-taking assistant

- Actual support may vary depending on the course.

* The contents of this syllabus are not final—they may be updated.