Syllabus (2021-2)

Course Title	Basic Probability Theory	Course No.	20634-01
Department/ Major	Statistics/Major	Credit/Hours	3.0
Class Time/ Classroom	Monday 11:00-12:15, Wednesday 9:30-10:45 / online class		
Instructor	Name: Kim, Mijeong	Department: Statistics	
	E-mail: m.kim@ewha.ac.k	Phone: (02)3277-2619	
Office Hours/ Office Location	by appointment/Science Building B516		

Ⅰ. Course Overview

1. Course Description

This course will provide an introduction of probability theory. In this course, you will learn the basic terminologies for statistics, characteristics of various probability distributions, expected values and conditional probability. Since this course deals with the fundamentals of statistics, this course is one of the most important courses in Statistics. Most homework problems require calculus, so that calculus is the prerequisite of this course.

학교 방침에 따라 9월 한달은 비대면 강의이고, 최종적으로 50명 이하의 학생이 등록할 경우, 10월부터는 대면강의로 변경될 가능성이 있습니다.

2. Prerequisites

You are strongly recommended to complete Calculus prior to taking this course.

3. Course Format

Lecture	Discussion/Presentation	Experiment/Practicum	Field Study	Other
90%	10%	%		%

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

Explanation of course format:

4. Course Objectives

The goal for this course is to
1) understand the basic probability theory
2) understand characteristics of various probability distributions.

5. Evaluation System

☐ Relative evaluation ☑ Absolute evaluation ☐ Others : _____

– Explanation of evaluation system:

1. **Assignments:** Students can discuss homework, but please do not simply copy others. All assignments must be original work. Student must upload scanned homework in pdf format on Cybercampus. **No late homework is accepted.**
2. **Attendance:** The attendance will be checked when a student watch a video completely on Cybercampus.
3. **Attitude:** Cheating or academic dishonesty in any form will not be tolerated and will result in swift punitive action. This includes but is not restricted to copying information from other students' exams, communicating with other students during exams, failing to follow the rules of the exams regarding notes, calculators, etc., altering an exam for the purpose of a regrade, and producing fraudulent written excuses. **Any incidents of cheating will result in an automatic zero in the case of assignments and an F for the course in the case of exams.**
4. **Midterm exam:** 10/11 (Monday 11:00-12:15)
5. **Final exam:** 12/1 (Wednesday 9:30-10:45)

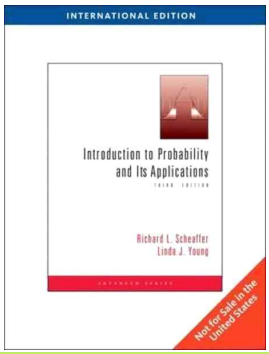
Midterm Exam	Final Exam	Quizzes	Presentation	Projects	Assignments	Participation	Other
35%	35%	%	%	%	25%	5%	%

* Evaluation of group projects may include peer evaluations.

Ⅱ. Course Materials and Additional Readings

1. Required Materials

Title: Introduction to Probability and Its Applications, 3rd Edition,
Publisher: Brooks,
Authors: Richard L. Scheaffer and Linda Young



2. Supplementary Materials

기초확률론(2013) – 이외숙 , 교우사

3. Optional Additional Readings

Introduction to Probability, Chapman & Hall/CRC Texts in Statistical Science by Joseph K. Blitzstein, Jessica Hwang

Ⅲ. Course Policies

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

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

Week	Date	Topics & Class Materials, Assignments
Week 1	9/1	Course description
	9/6	Chap2. Foundations of Probability
Week 2	9/8	Chap3. Conditional Probability and Independence
	9/13	Chap3. Conditional Probability and Independence
Week 3	9/15	Chap3. Conditional Probability and Independence
	9/20	Chap4. Discrete Probability Distributions
Week 4	9/22	Chap4. Discrete Probability Distributions
	9/27	Chap4. Discrete Probability Distributions
Week 5	9/29	Chap4. Discrete Probability Distributions
	10/4	Chap4. Discrete Probability Distributions
Week 6	10/6	Chap4. Discrete Probability Distributions
	10/11	Midterm exam

Week	Date	Topics & Class Materials, Assignments
Week 7	10/13	Chap5. Continuous Probability Distributions
	10/18	Chap5. Continuous Probability Distributions
Week 8	10/20	Chap5. Continuous Probability Distributions
	10/25	Chap5. Continuous Probability Distributions
Week 9	10/27	Chap5. Continuous Probability Distributions
	11/1	Chap5. Continuous Probability Distributions
Week 10	11/3	Chap5. Continuous Probability Distributions
	11/8	Chap5. Continuous Probability Distributions
Week 11	11/10	Chap5. Continuous Probability Distributions
	11/15	Chap6. Multivariate Probability Distributions
Week 12	11/17	Chap6. Multivariate Probability Distributions
	11/22	Chap6. Multivariate Probability Distributions
Week 13	11/24	Chap6. Multivariate Probability Distributions
	11/29	Chap6. Multivariate Probability Distributions
Week 14	12/1	Final exam
Makeup Class	9/17	Chap4. Discrete Probability Distributions
	9/24	Chap4. Discrete Probability Distributions
Makeup Class	11/12	Chap6. Multivariate Probability Distributions

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
· 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	· 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.