

STA1001-04 (1ST SEMESTER, 2020)



Created DateCreated Date	2019-12-14 13:37:25	Last-ModifiedLast-Modified	2019-12-14 13:44:44
Course TitleCourse Title	INTRODUCTION TO STATISTICS	CreditCredit	3
LocationLocation	DWHMB110(DWHMB110)	TimeTime	Tue3,4,Thu3(Thu4)
InstructorInstructor	Kim Mijung	DepartmentDepartment	상경대학 응용통계학
OfficeOffice		TelephoneTelephone	
e-mail & Office Hour e-mail & Office Hour	mjkim@yonsei.ac.kr		

Target StudentsTarget Students	Undergraduate students who want to learn statistics.
Course Description & Goals Course Description & Goals	<p>This course will provide an introduction to probability and statistics with a view toward applications. It includes topics on mathematical models for random phenomena, random variables, expectation, and discrete & continuous distributions. This course also covers laws of large numbers, central limit theorem, and basic techniques of inferential statistics.</p> <p>Students are expected to be familiar with statistical thinking and the basic concepts of descriptive statistics, probability distribution, and inferential statistics through this course.</p>
PrerequisitePrerequisite	Calculus
Course RequirementsCourse Requirements	Every week, 3-hour lecture with hand-writing & ppt and 1-hour discussion session. A scientific calculator is needed in exams.
Grading PolicyGrading Policy(Absolute)	Midterm 45%, Final Exam 45%, Learning Participation & Attendance 10%
Texts & ReferencesTexts & References	Probability and Statistics for Engineers and Scientists. Walpole, Myers, Myers, Ye. Prentice Hall
Instructor's ProfileInstructor's Profile	<p>PhD in stat & MS in biostat at U of Illinois at Chicago MS & BS in mathematics at Yonsei Univ</p> <p>Career: Visiting assistant prof at Worcester Polytechnic Institute, US Visiting assistant prof at U of Nebraska-Lincoln, US Assistant prof at U of Southern Maine, US</p> <p>Fields of interest: Multivariate Data Analysis, Biostatistics</p>
TA's Name & Contact Information TA's Name & Contact Information	TBA
Syllabus in EnglishSyllabus in English	.

Week	Period	Weekly Topic & Contents	Assignments Course Material Range & Assignments	Reference
1	2020-03-02 2020-03-08	Introduction to: relation between probability and statistics statistics & data analysis	chapter 1	(3.2.) Spring semester classes begin (3.5. - 3.9.) Course add and drop period
2	2020-03-09 2020-03-15	Concepts for Probability : Definition of Probability, Conditional Probability, Properties of Probability	chapter 2	(3.5. - 3.9.) Course add and drop period
3	2020-03-16 2020-03-22	Random Variables, Probability Distributions	chapter 3	
4	2020-03-23 2020-03-29	Expectation and Variance	chapter 4	
5	2020-03-30 2020-04-05	Discrete probability models	chapter 5	(4.1. - 4.3.) Course withdrawal period
6	2020-04-06 2020-04-12	Continuous probability models (1)	chapter 6	
7	2020-04-13 2020-04-19	Continuous probability models (2)	chapter 6	(4.15.) Temporary holiday
8	2020-04-20 2020-04-26	Make-up class for Temporary holiday (4/23 Thursday) Midterm Exam (4/25 Saturday, 14:00~15:40)		(4.20. - 4.24.) Midterm Examinations
9	2020-04-27 2020-05-03	Random Sample Statistics and their distributions Distribution of sample mean	chapter 8	(4.30.) Buddha`s Birthday
10	2020-05-04 2020-05-10	Central Limit Theorem Distribution of sample variance Distribution of sample proportion	chapter 6, 8	(5.5.) Children`s Day
11	2020-05-11 2020-05-17	Inference : Estimation (1)	chapter 9	(5.15.) Second third of the semester ends
12	2020-05-18 2020-05-24	Inference : Estimation (2)	chapter 9	
13	2020-05-25 2020-05-31	Inference : Testing Hypotheses (1)	chapter 10	
14	2020-06-01 2020-06-07	Inference : Testing Hypotheses (2)	chapter 10	(6.6.) Memorial Day
15	2020-06-08 2020-06-04	Make-up class for Buddha`s Birthday (6/11 Thursday) Final Exam (6/13 Saturday, 14:00~15:40)	chapter 8~10	(6.8. - 6.19.) Self-study and Final Examinations
16	2020-06-15 2020-06-21			(6.8. - 6.19.) Self-study and Final Examinations

* Notice for changes in semester based Regular Exchange/Visiting Program

During midterm and final exam period, students who do not have exams should do self-studying or take lectures.* Notice for changes in semester based Regular Exchange/Visiting Program

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* According to the University regulation section 57-2, students with disabilities can request special support related to attendance, lectures, assignments, or exams by contacting the course professor at the beginning of semester. Upon request, students can receive such support from the course professor or from the Office for Students with Disabilities(OSD). The following are examples of types of support available in the lectures, assignments, and exams:

(However, actual support may vary depending on the course.)

[Lecture]

- Visual Impairment: alternative, braille, enlarged reading materials, note-taker
- Physical Impairment: alternative reading materials, access to classroom, note-taker, assigned seat
- Hearing Impairment: note-taker/stenographer, recording lecture
- Intellectual Disability/Autism: note-taker, study mentor

[Assignments and Exam]

- Visual, Physical, Hearing Impairment: extra days for submission, alternative type of assignment, extended exam time, alternative type of exam, arranging separate exam room, and proctors, note-taker
 - Intellectual Disability/Autism: personalized assignments, alternative type of evaluation*
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