# Course Syllabus Basic Statistics in Psychology Spring 2021

#### 1. Basic Information

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Time: Mondays and Thursdays

Place: Untact

# 2. Course overview and objectives

This course is designed to help students learn the introductory descriptive and inferential statistical procedures that are used in behavioral and social science research studies. Students will learn the assumptions underlying, the hypotheses being tested by, and the inferences that can be made with the use of the procedures. These skills will provide the student with a basis to conduct their own such analyses and to evaluate critically others' uses of statistics.

## 3. Textbook

Recommended:

F. J. Gravetter & Wallnau, L. B. (2017). Statistics for the Behavioral Sciences, 10<sup>th</sup> Edition, International Edition.

김수영 (2019). 사회과학통계의 기본: R예제와 함께. 서울: 학지사.

The lecture notes in pdf format that will be distributed before the class are based on these two books. <u>Buying these books is NOT mandatory; any introductory statistics book that covers the class topics will be okay.</u>

Reading the handouts does <u>not</u> provide the student with the learning experiences/material equivalent to that obtained by attending class. The handouts provide a skeleton of what is being covered each day and will thus be an incomplete version of the material actually covered.

#### 4. Calculators

Students are required to bring to class a calculator that can be used to sum, multiply, take the square root, and square of numbers. Calculators are recommended for use with tests as well as during class time. A smart phone as an alternative is not allowed.

## 5. Course requirements and grading

Your mastery of the topics described above will be assessed on 3 exams designed to familiarize you with basic statistics in psychology. The tests may consist of multiple choice items, short answer/essay questions, calculation of equations, and/or interpretation of some statistical output.

Your grade will be based on the following proportions.

7 assignments: 50%

1 take-home exam: 40%

Attendance and assignments: 10%

#### 6. Communication

In this course, e-mails will be used as a means of communication with students. You will be responsible for checking your e-mail regularly for class work, deadlines, changes and announcements. <u>If you have not registered your email</u> address in the Cyber Campus system, YOU MUST DO THAT RIGHT NOW.

# 7. Academic integrity policy

Please comply with standards of academic integrity in this course. For the exams, you are not allowed to work with or request help from anyone. Especially, you are not allowed to share any information about the exams with the students in the Basic Statistics class in Korean. The consequence for violating policies of academic integrity and other elements of the student code of conduct are serious and can have a tremendous negative impact on your academic progress and future career.

## 8. Tentative\* class schedule

Date	Topic
Week 1	Course introduction
	Introduction of statistics
Week 2	Frequency distributions
	Measures of central tendency
Week 3	Measures of variability
Week 4	Z-scores
Week 5	Sampling distributions
Week 6	One-sample hypothesis testing
Week 7	The t-statistic
Week 8	Confidence interval
Week 9	Two-sample hypothesis testing
Week 10	Related samples
Week 11	Analysis of Variance (ANOVA)
Week 12	Analysis of Variance (ANOVA)
Week 13	Correlation, Regression
Week 14	Regression
Week 15	Chi-squared tests (optional)
	Final Take-Home Exam

<sup>\*</sup>This schedule is REALLY TENTATIVE, so it can be changed for any reason.