



ERCIYES UNIVERSITY
FACULTY OF ECONOMICS & ADMINISTRATIVE
SCIENCES



I. GENERAL INFORMATION

Course Name:

Code	Instructor	Department	Semestr/Year	Lectured in:	Must / Elective	Course Level	Course Type	LC	ECTS
SRV212	Prof. Dr. Osman UNUTULMAZ	Business	Spring / 2	English	Must	Basic	Related	3	5
SRV212	Prof. Dr. Osman UNUTULMAZ	Economics	Spring / 2	English	Must	Basic	Related	3	5
SRV212	Prof. Dr. Osman UNUTULMAZ	Public Finance	Spring / 2	English	Must	Basic	Related	3	5

Instructor	E-mail
Prof. Dr. Osman UNUTULMAZ	osmanu@erciyes.edu.tr

II. COURSE INFORMATION

COURSE OBJECTIVES

The course is designed to provide a statistical foundation for statistical induction and the statistical decision making, including the statistical concepts, population parameters, sample statistics, distribution of sample statistics, point and interval estimation of the population parameters such as the population mean, population variance, the population proportion and the theoretical distributions which are utilized for those purposes, hypothesis testing steps and the test of hypothesis for one mean, one variance and one proportion. Test of hypothesis for the difference of two population means, two population proportions. Test of hypothesis for comparing the variances of two normal populations, the statistical estimation and the statistical inference, linear regression analysis, the time series analysis, index numbers, analysis of variance, nonparametric tests, sampling theory and sampling methods. In this course, some basic statistical concepts and the theoretical background associated with statistical induction and the statistical decision making will be provided to guide the students step by step through the materials in logical manner to prepare them for the real life problems that they encounter later in their field of study.

COURSE DESCRIPTION

The statistical induction and the statistical decision making will be presented to explain the role of statistics in research. The population parameters and the test statistics are defined and the distributions of the test statistics such as the distribution of the sample means, the distribution of the sample proportions and the distribution of the sample variances are discussed and the theoretical distributions that are employed for such purposes are presented with the theoretical backgrounds. The point of the population parameters, the interval estimations for one population parameter and the difference of the two population parameters are also discussed for different cases. The hypothesis testing for one and the difference of the two population parameters are also introduced and the theoretical support is provided. Analysis of variance, nonparametric tests, sampling theory and sampling methods are also discussed. In this course, some basic statistical concepts and the theoretical background associated with statistical induction and the statistical decision making will be provided to guide the students step by step through the materials in logical manner to prepare them for the real life problems that they encounter later in their field of study.

COURSE METHODOLOGY

For each topic, after giving the theoretical information, a number of problems are presented and solved. After finishing the subject, homework problems are assigned to the students. In the following lecture, students are allowed to ask questions on the homework problems they had difficulty while solving. The students' questions are answered by solving those problems on the board.

COURSE REQUIREMENTS

Student shall attend the lectures, look at the subject before it is lectured and go over the topics that are discussed earlier. To be able to realize his or her limitation every student shall solve at least the problem sets that are assigned as homework. When the student faces any difficulty while solving the problem sets, he or she shall ask questions to clarify the points that are not clear, in the following lecture.

GRADING INFORMATION & CRITERIA

30% of the midterm exam and 70% of the final exam constitute the raw grade of the course. Raw grade is then converted into letter grade through the curve system. The outcomes are e-mailed to the students.

The students who are subject to the previous grading system are required to receive a grade of at least 50 points from the final exam. The course grade which also must be at least 50 points is the weighted average the midterm exam and the final exam. The weights are 40% and 60% respectively.

REQUIRED & PROPOSED MATERIALS

Statistics For Business And Economics, Osman Unutulmaz, Lecture Notes, Erciyes University, Faculty of Economics and Administrative Sciences.

Statistics For Management And Economics Paul Newbold, Second Edition Prentice-Hall International Editions, Prentice-Hall International Inc., Englewood Cliffs, New Jersey,07632.

Supplementary Materials:

Statistics For Business And Economics William Mendenhall, James E. Reinmuth, Second Edition, Duxbury Press, A Division of Wadsworth Publishing Company Inc., Belmont, California,94002

Statistics For Management And Economics Paul Newbold, Second Edition Prentice-Hall International Editions, Prentice-Hall International Inc., Englewood Cliffs, New Jersey,07632.

Statistics For Business And Economics James T. McClave, P. George Benson, Dellen Publishing Company , San Francisco a Division of Macmillian, Inc., California, 94133

Complete Business Statistics, Amir D. Aczel, Richard D. Irvin Inc.,Homewood, IL 60430 Boston. MA 02116.

EXTRA INFORMATION

Office Hours:

Mondays: 09.00-10.00

Wednesdays: 14.00-15.00

Fridays: 10.00-11.00

COURSE OUTLINE

I. Week: Population parameters, sample statistics, distribution of sample statistics,

II. and III. Weeks: Point and interval estimation of population parameters like the population mean, population variance, the population proportion and the theoretical distributions which are utilized for those purposes,

IV. and V. Weeks: Hypothesis testing steps and the test of hypothesis for one mean, one variance and one proportion. Test of hypothesis for the difference of two population means, two population proportions. Test of hypothesis for comparing the variances of two normal populations,

VI. and VII. Weeks: The statistical estimation and the statistical inference,

VIII. Week: Linear Regression Analysis,

IX. Weeks: Time Series Analysis,

X. Week: Index Numbers,

XI. and XII. Weeks: Analysis of Variance,

XIII. Week: Non Parametric Tests,

XIV. Week: Sampling Theory and Sampling Methods.