



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Statistics							
Course Code		ZT462		Course Level		First Cycle (Bachelor's Degree)			
ECTS Credit	3	Workload	81 (<i>Hours</i>)	Theory	2	Practice	0	Laboratory	0
Objectives of the Course		The objectives of this course are teaching the concept of elementary statistics and giving the skill of use of statistical methods for student to analyze raw data and interpret results.							
Course Content		The course content include statistical reasoning, sampling and experimentation, descriptive statistics, probability theory and distributions, estimation, one sample and two sample hypothesis tests for means and ratios, regression and correlation analyses and one way analysis of variance (ANOVA).							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Demonstration					
Name of Lecturer(s)		Assoc. Prof. Onur YILMAZ							

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	25
Final Examination	1	70
Quiz	2	15

Recommended or Required Reading

1	Puskulcu, H., Ikiz, F., Eren, S. 2006. Introduction to Statistics. Baris Yayinlari. Fakulteler Kitabevi, Izmir.
2	Atil, H. 1998, Statistics (in Turkish). Published by Faculty of Agriculture of Aegean University, No.531, Bornova, İzmir.
3	Yildiz, N., Bircan, H., 2008. Applied Statistics (in Turkish). Nobel Press, Turkey. ISBN:9944770612

Week	Weekly Detailed Course Contents	
1	Theoretical	Introduction to statistical reasoning. Fundamental statistical terms
2	Theoretical	Descriptive statistics. Organizing and summarizing data: frequency tables and graphics.
3	Theoretical	Describing data with averages and describing variability
4	Theoretical	Basic concepts of probability theory. Probability distributions
5	Theoretical	Discrete probability distributions: binomial and poisson
6	Theoretical	Continuous probability distribution: normal distribution
7	Theoretical	Statistical inference: point and interval estimations
8	Intermediate Exam	Midterm exam
9	Theoretical	Statistical hypothesis testing. Errors of type I and II. Power of test
10	Theoretical	Large sample tests: z test to compare one population or two population mean or ratio
11	Theoretical	Small sample tests: t test for compare one sample, two independent samples and two related samples means.
12	Theoretical	Chi-Square (χ^2) tests
13	Theoretical	Relationships among variables: linear regression analysis
14	Theoretical	Relationships among variables: correlation analysis
15	Theoretical	Analysis of Variance (ANOVA) for one factor
16	Final Exam	Final Exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	16	1	2	48
Midterm Examination	1	14	1	15
Final Examination	1	17	1	18
Total Workload (Hours)				81
[Total Workload (Hours) / 25*] = ECTS				3

*25 hour workload is accepted as 1 ECTS



Learning Outcomes

1	To gain the statistical point of view
2	To be able to understand and use the probability distribution
3	To acquire ability of the statistical inference
4	To be able to write and test the hypothesis
5	To be able to use statistical techniques and methods

Programme Outcomes (Horticulture)

1	Ability to examine agricultural problems under the light of basic science, mathematics, and agriculture knowledge
2	Ability to plan and apply in different agricultural systems in horticultural crop plants
3	To constitute and realize breeding programmes according to market demands
4	Ability to propagate any kinds of stock materials in horticultural crop plants
5	Ability of transfer of modern technologies to production
6	Ability to have a consciousness of quality in production, storage, and evaluation in horticultural crop plants (To measure, evaluate, and manage different quality parameters)
7	To think analytically of protecting, providing transfer to future, and having responsibility to environment of all plant materials belong to horticultural crop plants area
8	Ability to search, think analytically, reach to knowledge, and obtain solution for solving of agricultural problems (Project, homework, thesis, summer training)
9	Ability to be aware of agricultural problems, to follow them, and to communicate own ideas of these subjects by verbal and written ways (Turkish, social course)
10	To be able to perform in a teamwork
11	Ability to work independently, give decision, and Express own thoughts by occupational-ethic values verbal and written ways in horticultural crop plants
12	Ability to think creatively, innovatively, and analytically, to comprehend the need of lifelong learning, be a part of a related subjects in a web of communication, and to develop by social means

Contribution of Learning Outcomes to Programme Outcomes 1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High

	L1	L2	L3	L4	L5
P8	5	5	5	5	5
P12	5	5	5	5	5

