AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Statistics in Agriculture and Biology								
Course Code	ZZO508		Couse Level	Second Cycle (Master's Degree)					
ECTS Credit	7	Workload	175 *(Hours)*	Theory	2	Practice	2	Laboratory	0
Objectives of the Course	Statistical analysis of observational and research data from agriculture and biology using SPSS statistical software								
Course Content	Data organization and factors, calculation of descriptive statistics, use of SPSS statistical software, simple and multiple regression analysis, analysis of variance for completely randomize design, block design, latin square and split plot designs								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Demonstration, Discussion, Case Study, Project Based Study, Individual Study, Problem Solving								
Name of Lecturer(s)	Prof. Kadir KIZILKAYA								

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	60

Recommended or Required Reading	
1	1. Düzgüneş, O., Kesici, T., Kavuncu, O., ve Gürbüz, F. 1987. Araştırma ve Deneme Metotları. AÜ Ziraat Fakültesi yayınları: 1021, Ankara
2	2. Neter, J., Kutner, M.H., Nachtsheim, C.J. and Wasserman, W. 1996. Applied Linear Statistical Models, Irwin, USA.
3	3. Kuehl, R.O. 2000. Design of experiment: Statistical principles of research design and analysis. Duxbury press, USA
4	4. Rao, P.V. 1998. Statistical research methods ın the life sciences. Duxbury press, USA.

Week	Weekly Detailed Course Contents	
1	Theoretical	Introduction to statistics, notations and definitions
2	Theoretical	SPSS statistical software
3	Theoretical	Entering data and data organizations
4	Theoretical	Graphics from SPSS
5	Theoretical	Transformations of data
6	Theoretical	Correlations and regression analysis
7	Theoretical	Multiple regression analysis
8	Theoretical	Completely randomize design
9	Intermediate Exam	Midterm Exam
10	Theoretical	One-way Analysis of Variance
11	Theoretical	Analysis of variance with multiple factors
12	Theoretical	Completely randomize design
13	Theoretical	Analysis of latin square
14	Theoretical	Analysis of Split plot design
15	Final Exam	Terms

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	1	2	42
Lecture - Practice	14	1	2	42
Assignment	7	4	2	42
Midterm Examination	1	20	2	22

Final Examination	1	25	2	27
			Total Workload (Hours)	175
			[Total Workload (Hours) / 25*] = **ECTS**	7
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	1. Earning fundamental knowledge about application of statistics
2	2. Learning how to use SPSS statistical software
3	3. Experimental designs in agricultural research
4	4. Earning experiences about making experimental designs and conducting experiments
5	5. Earning expeiences about collecting, organizing data for statistical analrysis
6	6. Earning experiences about analyzing research data
7	7. Earning experiences about interpreting statistical results and making decision for future plans

Programme Outcomes *(Plant Protection Master)*	
1	To develop knowledge and abilities that gained during undergraduate education
2	To gain ability to search and pursue current literature
3	To gain ability to plan and write projects that help solving problems in field of study.
4	To gain ability to conduct research, analyze data, evaluate research results scientifically and preapare reports and thesis writing.
5	Students will be able to learn and apply the laboratory test and analysis methods
6	To recognize occupational and ethical responsibility

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

	L1	L2	L3	L4	L5	L6	L7
P1	3	3	3	4	4	4	3
P2	4	4	4	5	5	5	4
P3	5	5	5	5	5	5	5
P4	4	4	4	5	5	5	5
P5	5	4	4	4	4	4	5
P6	4	4	4	4	5	4	5