



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Applied Statistics							
Course Code		ZT201		Course Level		First Cycle (Bachelor's Degree)			
ECTS Credit	4	Workload	100 ( <i>Hours</i> )	Theory	2	Practice	2	Laboratory	0
Objectives of the Course		Provide the student with the fundamental statistical knowledge and toolbase to perform statistical data analysis							
Course Content		Theoretical and applied statistics, statistical term and notations, descriptive statistics (mean, mode, median, variance, standard deviation), statistical distributions, sampling distribution of statistics, hypothesis testing, correlations and simple regression analysis and analysis of variance							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Demonstration, Discussion, Case 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	70

### Recommended or Required Reading

1	Kesici, T., Kocabaş, Z. 1998. Biyoistatistik. Ankara Üni. Eczacılık Fak. Yayın No: 79.
2	Yüzer, A.F., Ağaoğlu, E., Tatlıdil, H., Özmen, A., Şıklar, E. 2004. İstatistik. Anadolu Üni. Açıköğretim Fak. Yayın No: 771.

Week	Weekly Detailed Course Contents	
1	Theoretical	Theoretical and applied statistics, statistical notations and definitions
2	Theoretical	Data types and statistical graphics
3	Theoretical	Data types and statistical graphics
4	Theoretical	Descriptive statistics (mean, mode and median, etc.)
5	Theoretical	Descriptive statistics (variance, standard deviation, etc.)
6	Theoretical	
7	Theoretical	Probability
8	Theoretical	Statistical distributions
9	Theoretical	Statistical distributions
10	Intermediate Exam	Midterm Exam
11	Theoretical	Sampling distribution of statistics, hypothesis testing
12	Theoretical	Sampling distribution of statistics, hypothesis testing
13	Theoretical	Correlations
14	Theoretical	Simple regression analysis
15	Theoretical	Analysis of variance
16	Final Exam	Final Exam

### Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Lecture - Practice	14	0	2	28
Midterm Examination	1	15	2	17
Final Examination	1	25	2	27
Total Workload (Hours)				100
[Total Workload (Hours) / 25*] = ECTS				4

\*25 hour workload is accepted as 1 ECTS



**Learning Outcomes**

1	Learning about Statistics and relationships between statistics and other departments
2	Earning fundamental knowledge about application of statistics
3	Learning how to use at least one statistical package
4	Learning how to collect, organize and analyze data
5	Learning how to interpret statistical results
6	Earning the ability of decision making for future based on the statistical results
7	Earning the ability to use statistical experiences in others areas

**Programme Outcomes (Dairy Technology)**

1	Having sufficient infrastructure in basic sciences and engineering subjects and ability to use the theoretical and applied info instantly in this field.
2	Determining the modern techniques, tools and information technologies required for applications related with his field and ability to use them efficiently
3	Ability for planning, projecting, and designing, following up, analyzing and finding target-driven solutions related with his field
4	Ability to have professional ethic and awareness.
5	Ability to work, decide, express opinions orally and in written individually
6	Ability to participate team studies, taking responsibility, making leadership.
7	Ability to conceive Atatürk's principles and reforms, to communicate in Turkish and foreign language.
8	Ability to comprehend the necessity to learn for a life time, to monitor developments in science and technology and continuously renew himself.
9	Having sufficient level of information about production and quality control of milk and dairy products and also product development, increasing product quality and food security fields.
10	Ability to detect, define, solve problems related with his field and to select and apply suitable methods and modeling techniques for this purpose.
11	To be conscious about workplace applications, worker health, work security and environment subjects, to have knowledge about legal results of the engineering applications related with his subject.

**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	5	5	5	5	5	5	5
P10	5	5	5	5	5	5	5

