

STATISTICAL METHODS

1	Course Title:	STATISTICAL METHODS
2	Course Code:	GMD1402
3	Type of Course:	Compulsory
4	Level of Course:	First Cycle
5	Year of Study:	1
6	Semester:	2
7	ECTS Credits Allocated:	5.00
8	Theoretical (hour/week):	1.00
9	Practice (hour/week):	2.00
10	Laboratory (hour/week):	0
11	Prerequisites:	NONE
12	Language:	Turkish
13	Mode of Delivery:	Face to face
14	Course Coordinator:	Prof. Dr. CENGİZ ELMACI
15	Course Lecturers:	Prof.Dr.Cengiz ELMACI Prof.Dr.Abdurrahim Tanju GÖKSOY
16	Contact information of the Course Coordinator:	elmaci@uludag.edu.tr, 224 2941554 U.Ü. Ziraat Fakültesi Zootečni Bölümü, Bursa
17	Website:	
18	Objective of the Course:	Gain knowledge basic statistical principals used in food and biology field with their samples
19	Contribution of the Course to Professional Development:	
20	Learning Outcomes:	
	1	Having the ability of forming the hypotheses for the trials
	2	Ability to test the hypotheses
	3	Planning of the experiments
	4	Ability to appreciate the measurement and data collection methods
	5	Being able to apply the suitable statistically analyses for data
	6	Knows evaluation and interpretation of results
	7	Ability to earn skill on objective deciding
	8	Being able to apply the basic statistical technics and methods
	9	
	10	
21	Course Content:	
	Course Content:	
Week	Theoretical	Practice
1	Introduction to statistics; some definitions, population and sample	Solving problems about population and sample
2	Data and summarization of the data	Solving problems about distribution of frequency
3	Descriptive statistics	Solving problems about mean, variance, Standard deviation, Standard error, median and mode

4	Linear correlation and regression	Solving problems about linear correlation and regression
5	Test, incident and probability	Solving problems about test and probability
6	Discrete probability distributions (poisson and binomial distributions)	Solving problems about poisson and binomial distributions
7	Continuous probability distribution (Normal distribution)	Overview; Mid-term Exam
8	Continuous probability distribution (Normal distribution)	Solving problems about Normal distribution
9	Sampling distributions	Solving problems about sampling distributions
10	Test distributions; z and t tests	Solving problems about z and t tests
11	Test distributions; F test and Chi-square test	Solving problems about F and Chi-square tests
12	Statistical estimation; Point estimation of population mean	Solving problems about statistical estimation
13	Estimation of some parameters and confidence interval	Solving problems about confidence interval
14	Testing hypothesis	Solving problems about testing hypothesis

22	Textbooks, References and/or Other Materials:	<p>İstatistik, Z. Metin Turan. U.Ü. Z.F. Ders Notları,No: 78.</p> <p>İstatistik Metodları. O.Düzgüneş. Ankara Ü. Z.F. Yayınları No:578</p> <p>İstatistiğe Giriş. H. Püskülcü ve F. İkiz. Ege Üniversitesi Basımevi, Bornova-İzmir</p>
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Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14		
Midterm Exam	1	40.00	1.00
Practicals/Labs	14	2.00	28.00
Self study and preparation			
Home work-project	0	0.00	3.00
Homeworks	12	2.00	24.00
Projects			
Total	2	100.00	0.00
Field Studies	0	0.00	0.00
Students Grade	1	14.00	14.00
Others	4	2.00	8.00
Final Exams	1		
Total	100.00	20.00	20.00
Total Work Load			150.00
Total work load/ 30 hr			5.00
ECTS Credit of the Course			5.00

[illegible]

ÖK5	4	5	0	0	5	0	0	0	0	0	0	0	0	0	0	0
ÖK6	4	5	0	0	5	0	0	0	0	0	0	0	0	0	0	0
ÖK7	4	5	0	0	5	0	0	0	0	0	0	0	0	0	0	0
ÖK8	4	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0
LO: Learning Objectives PQ: Program Qualifications																
Contribution Level:	1 very low			2 low			3 Medium			4 High			5 Very High			