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:	Prof. Dr. Cengiz ELMACI Bursa Uludağ Üniversitesi, Ziraat Fakültesi Zootekni Bölümü Tel: 0(224)2941554 e-posta:elmaci@uludag.edu.tr
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:	1)They will increase productivity in the professional job by using basic statistical methods. 2)They are able some decision more objectively in production process. 3)They will show rational and successful management by benefit the statistical methods.
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:	İstatistik, Z. Metin Turan. U.Ü. Z.F. Ders Notları,No: 78. İstatistik Metodları. O.Düzgüneş. Ankara Ü. Z.F. Yayınları No:578 İstatistiğe Giriş. H. Püskülcü ve F. İkiz. Ege Üniversitesi Basımevi, Bornova-İzmir
23	Assesment	

TERM LEARNING ACTIVITIES	**NUMBER**	**WEIGHT**
Midterm Exam	1	40.00
Quiz	0	0.00
Home work-project	0	0.00
Final Exam	1	60.00
Total	2	100.00
Contribution of Term (Year) Learning Activities to Success Grade		40.00
Contribution of Final Exam to Success Grade		60.00
Total		100.00
Measurement and Evaluation Techniques Used in the Course		For assessment and evaluation, article 29 of the Bursa Uludag University Rules and Regulations governing undergraduate studies are used.

24	**ECTS / WORK LOAD TABLE**

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	1.00	14.00
Practicals/Labs	14	2.00	28.00
Self study and preperation	14	3.00	42.00
Homeworks	12	2.00	24.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	1	14.00	14.00
Others	4	2.00	8.00
Final Exams	1	20.00	20.00
Total Work Load			150.00
Total work load/ 30 hr			5.00
ECTS Credit of the Course			5.00

25	**CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS**															
	PQ1	**PQ2**	**PQ3**	**PQ4**	**PQ5**	**PQ6**	**PQ7**	**PQ8**	**PQ9**	**PQ10**	**PQ11**	**PQ12**	**PQ13**	**PQ14**	**PQ15**	**PQ16**
ÖK1	4	5	0	0	5	0	0	0	0	0	0	0	0	0	0	0
ÖK2	4	5	0	0	5	0	0	0	0	0	0	0	0	0	0	0
ÖK3	4	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0
ÖK4	4	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0
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**