

**Content**

Course Code	Course Name	Semester	Theory	Practice	Lab	Credit	ECTS
Mİ501	Applied Statistics	1	3	0	0	3	6

Prerequisites	
Admission Requirements	

Language of Instruction	Turkish
Course Type	Elective
Course Level	Masters Degree
Objective	The objective of this course is to familiarize students with basic concepts and tools of statistical methodology
Content	<p>Week 1. Introduction to Statistics</p> <p>Week 2. Statistical series</p> <p>Week 3. Graphs to describe numerical variables</p> <p>Week 4. Measures of central tendency</p> <p>Week 5. Measures of variability</p> <p>Week 6. Probability and its postulates</p> <p>Week 7. Probability Rules</p> <p>Week 8. Bayes theorem</p> <p>Week 9. Random variables, mathematical expectation, variance and standard deviation</p> <p>Week 10. Discrete and continuous random variables and probability distributions</p> <p>Week 11. Hypergeometric distribution, Binomial distribution</p> <p>Week 12. The poisson probability distribution, the normal distribution</p> <p>Week 13. Analyse of variance</p> <p>Week 14. Analyse of Regression</p>
References	<p>Bernard Grais, "Statistique descriptive", 3eme edition, Dunod, Paris 1994</p> <p>Paul Newbold, William L. Carlson, Betty Thorne, "Statistics for Business and Economics", 6th edition, Prentice Hall, Upper Saddle River, New Jersey, 2007</p> <p>Roger C. Pfaffenberger, James H. Patterson, "Statistical Methods for Business and Economics", Irwin 2003</p> <p>Business Communication Today</p>

**Theory Topics**

Week	Weekly Contents
1	Introduction to Statistics

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2	Statistical series
3	Graphs to describe numerical variables
4	Measures of central tendency
5	Measures of variability
6	Probability and its postulates
7	Probability Rules
8	Bayes theorem
9	Random variables, mathematical expectation, variance and standard deviation
10	Discrete and continuous random variables and probability distributions
11	Hypergeometric distribution, Binomial distribution
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13	Analyse of variance
14	Analyse of Regression