# AYDIN ADNAN MENDERES UNIVERSITY
# COURSE INFORMATION FORM

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|---|---|---|---|---|---|---|---|---|---|
| Course Title | Statistical Evaluation Techniques | | | | | | | | |
| Course Code | LBT217 | | Couse Level | | Short Cycle (Associate's Degree) | | | | |
| ECTS Credit | 2 | Workload | 50 *(Hours)* | Theory | 2 | Practice | 0 | Laboratory | 0 |
| Objectives of the Course | At the end of this course, students will learn basic statistical analysis methods that will enable students to understand basic probability and statistics concepts and use them in their own fields. | | | | | | | | |
| Course Content | Normal and Standard Normal Distribution, Kikare - Tests, Probability Tables, Hypothesis Tests, Simple Linear Regression Analysis, Probability, Random Variables and Probability Distributions, Frequency Distributions, General Graphs, Descriptive Statistics: Central Tendency Measurements and Distribution Measures | | | | | | | | |
| Work Placement | N/A | | | | | | | | |
| Planned Learning Activities and Teaching Methods | Explanation (Presentation), Case Study | | | | | | | | |
| Name of Lecturer(s) | | | | | | | | | |

| **Assessment Methods and Criteria** | | |
|---|---|---|
| Method | Quantity | Percentage (%) |
| Midterm Examination | 1 | 40 |
| Final Examination | 1 | 70 |

| **Recommended or Required Reading** | |
|---|---|
| 1 | Şanslı Şenol, “Tanımlayıcı İstatistik”, Nobel Yayın Dağıtım, ISBN 978-605-395-146-9 |

| Week | Weekly Detailed Course Contents | |
|---|---|---|
| 1 | Theoretical | Basic statistical concepts |
| 2 | Theoretical | Frequency distribution table |
| 3 | Theoretical | Main graphics |
| 4 | Theoretical | Central tendency measures: Arithmetic mean, Median, Mode |
| 5 | Theoretical | Variability measures: Openness, Variance and Standard Deviation |
| 6 | Theoretical | Probability: Basic Definitions of Probability Concept |
| 7 | Theoretical | Random Variables and Functions |
| 8 | Intermediate Exam | Mid-term Exam |
| 9 | Theoretical | Continuous Random Variables and Functions |
| 10 | Theoretical | Normal Distribution, Standard Normal Distribution |
| 11 | Theoretical | Hypothesis Thesis, Mass Average Based Single Sample Z-Test |
| 12 | Theoretical | Single Sample T-Test Based on Mass Average |
| 13 | Theoretical | Simple Linear Regression Analysis |
| 14 | Theoretical | Kikare Tests and Distribution |
| 15 | Theoretical | Kikare Tests and Distribution |
| 16 | Final Exam | Final Exam |

| **Workload Calculation** | | | | |
|---|---|---|---|---|
| Activity | Quantity | Preparation | Duration | Total Workload |
| Lecture - Theory | 14 | 0 | 2 | 28 |
| Midterm Examination | 1 | 10 | 1 | 11 |
| Final Examination | 1 | 10 | 1 | 11 |
| | | | Total Workload (Hours) | 50 |
| | | | [Total Workload (Hours) / 25*] = **ECTS** | 2 |
| **25 hour workload is accepted as 1 ECTS* | | | | |

| **Learning Outcomes** | |
|---|---|
| 1 | Knowledge of basic statistical concepts |
| 2 | Basic probability knowledge |

| | |
|---|---|
| 3 | Basic concept knowledge about hypothesis testing |
| 4 | Statistical tables reading information |
| 5 | To comprehend the basic definitions of the concept of probability |

| **Programme Outcomes** *(Laboratory Technology)* | |
|---|---|
| 1 | To be able to comprehend social, cultural and social responsibilities, to be able to follow national and international contemporary problems and developments |
| 2 | Atatürk is bound to Atatürk nationalism in the direction of principles and reforms; Adopting the national, moral, spiritual and cultural values of the Turkish people, open to universal and contemporary developments, the Turkish language is a rich, rooted and productive language; Have a love of language and a consciousness; To have the ability to use as much of a foreign language as he would need to read, taste and habit and professionally. |
| 3 | To be able to recognize the basic hardware units and operating systems of a computer, having information about internet usage and preparing documents, spreadsheets and presentations on computer by using office programs. |
| 4 | Acquires theoretical and practical knowledge at the basic level in mathematics, science and vocational field. |
| 5 | With the knowledge of laboratory technology in the field, he knows and analyzes problems, brings interpretation of data and suggests solutions. |
| 6 | In laboratories, according to the prepared business plan and program, necessary work can be done to obtain the desired quality products. |
| 7 | To have professional and ethical responsibility in business life. |
| 8 | Development and change are open, follow scientific social and cultural innovations, and develop themselves constantly. |

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

| | L1 | L2 | L3 | L4 |
|---|---|---|---|---|
| P4 | 5 | 5 | 5 | 5 |
| P7 | 3 | 3 | 3 | 3 |
| P8 | 5 | 5 | 5 | 5 |