# STATISTICS I

| 1 | Course Title: | STATISTICS I |
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| 2 | Course Code: | EKO2209 |
| 3 | Type of Course: | Compulsory |
| 4 | Level of Course: | First Cycle |
| 5 | Year of Study: | 2 |
| 6 | Semester: | 3 |
| 7 | ECTS Credits Allocated: | 6.00 |
| 8 | Theoretical (hour/week): | 3.00 |
| 9 | Practice (hour/week): | 0.00 |
| 10 | Laboratory (hour/week): | 0 |
| 11 | Prerequisites: | None |
| 12 | Language: | Turkish |
| 13 | Mode of Delivery: | Face to face |
| 14 | Course Coordinator: | Prof. Dr. ERKAN IŞIGIÇOK |
| 15 | Course Lecturers: | Öğr.Grv:Dr.Filiz GÜLSOY |
| 16 | Contact information of the Course Coordinator: | E-mail: eris@uludag.edu.tr<br>Telefon: 224 29 41101<br>Adres: Bursa Uludağ Üniversitesi İktisadi ve İdari Bilimler Fakültesi,Ekonometri Bölümü,Görükle,Bursa |
| 17 | Website: | |
| 18 | Objective of the Course: | Introduction to probability theory and learning the basic statistical concepts and theories. |
| 19 | Contribution of the Course to Professional Development: | Statistical methods and techniques of education is to give the students can apply to their fields. |
| 20 | Learning Outcomes: | |
| | | 1 | The student gains the ability to create the model in data collection. |
| | | 2 | Acquires knowledge of organizing and evaluating the collected data. |
| | | 3 | The student can make the necessary arrangements and taking measures according to the results of statistical techniques. |
| | | 4 | Ability to easily adapt the subject after receiving the basic information of interest to develop. |
| | | 5 | Ability to easily participate in team practices. |
| | | 6 | The student gains the ability to solve the problem of theoretical and statistical techniques. |
| | | 7 | Knows and applies the daily problems of probability functions. |
| | | 8 | Hypothesis testing can create and solve. |
| | | 9 | Hypothesis testing can be applied to problems in various models. |
| | | 10 | The student can analyze by using probability and statistical informations. |
| 21 | Course Content: | |

## Course Content:

| Week | Theoretical | Practice |
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| 1 | Set Theory | |
|---|---|---|
| 2 | Necessary Basic Concepts | |
| 3 | Statistical data, data collection, tables and graphics support | |
| 4 | Measures of Central Tendency | |
| 5 | Measures of Central Distribution | |
| 6 | Probability and Probability Distributions | |
| 7 | Continuous probability distributions | |
| 8 | Discrete Probability Distributions | |
| 9 | Discrete probability distributions-applications | |
| 10 | Hypothesis testing-I | |
| 11 | Hypothesis testing-II | |
| 12 | Regression and correlation analysis | |
| 13 | Variance Analysis | |
| 14 | General review and applications | |

| 22 | Textbooks, References and/or Other Materials: | 1) Prof.Dr. Fikri Akdeniz Probability and Statistics Nobel Publishing (in Turkish).<br> 2) Prof. Dr. Aziz Bener, Mathematical Statistics (Probability), YTU Publishing (in Turkish). |
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| 23 | Assesment | |

| Activites | Number | Duration (hour) | Total Work Load (hour) |
|---|---|---|---|
| Quiz | 0 | 0.00 | |
| Theoretical | 14 | 3.00 | 42.00 |
| Home work project | 0 | 0.00 | |
| Practicals/Labs | 0 | 0.00 | 0.00 |
| Final Exam | 1 | 60.00 | |
| Self study and preperation | 14 | 3.00 | 42.00 |
| Total | 0 | 100.00 | |
| Homeworks | 0 | 0.00 | 0.00 |
| Contribution of Term (Year) Learning Activities to Success Grade | 40.00 | | |
| Projects | 0 | 0.00 | 0.00 |
| Field Studies | 0 | 0.00 | 0.00 |
| Contribution of Final Exam to Success Grade | 60.00 | | |
| Midterm exams | 1 | 40.00 | 40.00 |
| Total | 100.00 | | |
| Others | 0 | 0.00 | 0.00 |
| Measurement and Evaluation Techniques Used in the Course | Multiple choice test questions and written questions | | |
| Final Exams | 1 | 60.00 | 60.00 |
| Total Work Load | | | 224.00 |
| Total work load/ 30 hr | | | 6.13 |
| ECTS Credit of the Course | | | 6.00 |

| 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 | 1 | 1 | 3 | 1 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 |
| ÖK2 | 1 | 1 | 3 | 1 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 |
| ÖK3 | 1 | 1 | 3 | 1 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 |
| ÖK4 | 1 | 1 | 3 | 1 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 |

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| ÖK5 | 1 | 1 | 3 | 1 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 |
| ÖK6 | 1 | 1 | 3 | 1 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 |
| ÖK7 | 1 | 1 | 3 | 1 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 |
| ÖK8 | 1 | 1 | 3 | 1 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 |
| ÖK9 | 1 | 1 | 3 | 1 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 |
| ÖK10 | 1 | 1 | 3 | 1 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 |

**LO: Learning Objectives    PQ: Program Qualifications**

| Contribution Level: | 1 very low | 2 low | 3 Medium | 4 High | 5 Very High |
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