

ADVANCED STATISTICAL DATA ANALYSIS

| | | | |
|-----------|---|---|--|
| 1 | Course Title: | ADVANCED STATISTICAL DATA ANALYSIS | |
| 2 | Course Code: | EKO6108 | |
| 3 | Type of Course: | Optional | |
| 4 | Level of Course: | Third Cycle | |
| 5 | Year of Study: | 1 | |
| 6 | Semester: | 2 | |
| 7 | ECTS Credits Allocated: | 4.00 | |
| 8 | Theoretical (hour/week): | 2.00 | |
| 9 | Practice (hour/week): | 0.00 | |
| 10 | Laboratory (hour/week): | 0 | |
| 11 | Prerequisites: | No | |
| 12 | Language: | Turkish | |
| 13 | Mode of Delivery: | Face to face | |
| 14 | Course Coordinator: | Prof. Dr. Nuran Bayram | |
| 15 | Course Lecturers: | | |
| 16 | Contact information of the Course Coordinator: | E-mail : nuranb@uludag.edu.tr Phone: 0 224 29 41 126 Adress Uludag University, Faculty of Economics and Administrative Sciences ,Department of Econometrics, 16059 Gorukle/Bursa, Turkey: | |
| 17 | Website: | | |
| 18 | Objective of the Course: | The aim of the course is, describing the basic concepts and techniques of statistical analysis and applying them to related problems. | |
| 19 | Contribution of the Course to Professional Development: | | |
| 20 | Learning Outcomes: | | |
| | | 1 | To be able to modelling statistical problems. |
| | | 2 | To be able to use statistics for multidisciplinary studies. |
| | | 3 | To be able organize data sets and to be able Veri setlerini düzenleyebilme ve bu veri setlerinden istatistiksel olarak anlamlı sonuçlar çıkarabilme, |
| | | 4 | To be able to apply and interpret statistical analysis. |
| | | 5 | To be able to use statistical softwares. |
| | | 6 | To be able to understand differences between statistical analysis. |
| | | 7 | To be able to learn how to make, apply and interpret the statistical analysis. |
| | | 8 | To be able to learn which statistical techniques can be use for different data types. |
| | | 9 | |
| | | 10 | |
| 21 | Course Content: | | |
| | | Course Content: | |
| Week | Theoretical | Practice | |

| | | |
|--|--|--|
| 1 | A REVIEW OF PREVIOUS LESSONS (Variable types, Scale types, Descriptive Statistics, Hypothesis Tests) | |
| 2 | ONE WAY ANALYSIS OF VARIANCE AND SPSS APPLICATIONS | |
| 3 | TWO WAY ANALYSIS OF VARIANCE AND SPSS APPLICATIONS | |
| 4 | ONE WAY MULTIVARIATE ANALYSIS OF VARIANCE AND SPSS APPLICATIONS | |
| 5 | TWO WAY MULTIVARIATE ANALYSIS OF VARIANCE AND SPSS APPLICATIONS | |
| 6 | ANALYSIS OF COVARIANCE (ANCOVA) | |
| 7 | ANALYSIS OF COVARIANCE (ANCOVA) AND SPSS APPLICATIONS | |
| 8 | RELIABILITY ANALYSIS AND SPSS APPLICATIONS | |
| 9 | FACTOR ANALYSIS | |
| 10 | FACTOR ANALYSIS AND SPSS APPLICATIONS | |
| 11 | SIMPLE LINEAR REGRESSION AND CORRELATION ANALYSIS AND SPSS APPLICATIONS | |
| 12 | MULTIPLE LINEAR REGRESSION AND CORRELATION ANALYSIS AND SPSS APPLICATIONS | |
| 13 | BINARY LOGISTIC REGRESSION ANALYSIS AND SPSS APPLICATIONS | |
| 14 | MULTINOMIAL LOGISTIC REGRESSION ANALYSIS AND SPSS APPLICATIONS | |
| 22 | Textbooks, References and/or Other Materials: | HÜSEYİN TATLIDİL; UYGULAMALI ÇOK DEĞİŞKENLİ İSTATİSTİKSEL ANALİZ BAYRAM NURAN, SOSYAL BİLİMLERDE SPSS İLE VERİ ANALİZİ HAİR F. J. ANDERSON E. R. TATHAM L. R. BLACK C. W. (1998) MULTIVARIATE DATA ANALYSIS ŞEREF KALAYCI; SPSS UYGULAMALI ÇOK DEĞİŞKENLİ İSTATİSTİKSEL ANALİZ TEKNİKLERİ DAVİD J. BARTHOLOMCW; THE ANALYSIS AND INTERPRETATION OF MULTIVARIATE DATA FOR SOCIAL SCIENTISTS |
| 23 | Assesment | |
| TERM LEARNING ACTIVITIES | | NUMBER |
| | | WEIGHT |
| Midterm Exam | | 0 |
| Quiz | | 0 |
| Home work-project | | 0 |
| Final Exam | | 1 |
| Total | | 1 |
| Contribution of Term (Year) Learning Activities to Success Grade | | 0.00 |
| Contribution of Final Exam to Success Grade | | 100.00 |
| Total | | 100.00 |
| Measurement and Evaluation Techniques Used in the Course | | |
| 24 | ECTS / WORK LOAD TABLE | |

| Activites | Number | Duration (hour) | Total Work Load (hour) |
|----------------------------|--------|-----------------|------------------------|
| Theoretical | 14 | 2.00 | 28.00 |
| Practicals/Labs | 0 | 0.00 | 0.00 |
| Self study and preperation | 2 | 20.00 | 40.00 |
| Homeworks | 0 | 0.00 | 0.00 |
| Projects | 0 | 0.00 | 0.00 |
| Field Studies | 0 | 0.00 | 0.00 |
| Midterm exams | 0 | 0.00 | 0.00 |
| Others | 2 | 18.00 | 36.00 |
| Final Exams | 1 | 20.00 | 20.00 |
| Total Work Load | | | 124.00 |
| Total work load/ 30 hr | | | 4.13 |
| ECTS Credit of the Course | | | 4.00 |

| 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 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 3 | 0 | 0 | 0 | 0 |
| ÖK2 | 5 | 4 | 5 | 5 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 0 | 0 | 0 | 0 |
| ÖK3 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 4 | 4 | 4 | 5 | 3 | 0 | 0 | 0 | 0 |
| ÖK4 | 5 | 5 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 0 | 0 | 0 | 0 |
| ÖK5 | 4 | 4 | 4 | 3 | 4 | 5 | 5 | 4 | 4 | 5 | 4 | 4 | 0 | 0 | 0 | 0 |
| ÖK6 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 3 | 0 | 0 | 0 | 0 |
| ÖK7 | 4 | 4 | 4 | 3 | 3 | 4 | 5 | 4 | 4 | 5 | 3 | 3 | 0 | 0 | 0 | 0 |
| ÖK8 | 4 | 5 | 3 | 4 | 5 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 0 | 0 | 0 | 0 |
| LO: Learning Objectives PQ: Program Qualifications | | | | | | | | | | | | | | | | |
| Contribution Level: | 1 very low | | 2 low | | | 3 Medium | | | 4 High | | | 5 Very High | | | | |