



AYDIN ADNAN MENDERES UNIVERSITY
GRADUATE SCHOOL OF SOCIAL SCIENCES
EDUCATIONAL SCIENCES
CURRICULUM AND INSTRUCTION
CURRICULUM AND INSTRUCTION MASTER
COURSE INFORMATION FORM

| | | | | | | | | | |
|--|---|--------------|-------------|--------------------------------|---|----------|---|------------|---|
| Course Title | Applied Educational Statistics | | | | | | | | |
| Course Code | EPÖ503 | Course Level | | Second Cycle (Master's Degree) | | | | | |
| ECTS Credit | 5 | Workload | 127 (Hours) | Theory | 2 | Practice | 2 | Laboratory | 0 |
| Objectives of the Course | At the end of this course, the students; 1) comprehend basic statistical terminology 2) carry out analyses in accordance with types of variables | | | | | | | | |
| Course Content | The course focuses on basic concepts of statistics, parametric and non-parametric tests which are used in social sciences. Those techniques are used with computer practically. | | | | | | | | |
| Work Placement | N/A | | | | | | | | |
| Planned Learning Activities and Teaching Methods | Explanation (Presentation), Demonstration, Discussion, Individual Study | | | | | | | | |
| Name of Lecturer(s) | Lec. Özge BIKMAZ BİLGİN | | | | | | | | |

Assessment Methods and Criteria

| Method | Quantity | Percentage (%) |
|---------------------|----------|----------------|
| Midterm Examination | 1 | 20 |
| Final Examination | 1 | 60 |
| Practice | 8 | 10 |
| Assignment | 7 | 10 |

Recommended or Required Reading

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| 1 | Büyüköztürk, Ş. (2012). Sosyal bilimler için veri analizi el kitabı. Ankara: PegemA Yayınları. |
| 2 | Williams, F. (1992). Reasoning with Statistics. Fort Worth: Harcourt Brace Jovanovich College Publishers. |
| 3 | Büyüköztürk, Ş. (2013). Sosyal Bilimler için İstatistik. Ankara: PegemA Yayınları. |
| 4 | Kalaycı, Ş. (2006). SPSS uygulamalı çok değişkenli istatistik teknikleri (Vol. 2). Asil Yayın Dağıtım. |
| 5 | Çokluk, Ö., Şekercioğlu, G., & Büyüköztürk, Ş. (2010). Sosyal bilimler için çok değişkenli istatistik: SPSS ve LISREL uygulamaları. Pegem Akademi. |
| 6 | Alpar, R. (2006). Spor bilimlerinde uygulamalı istatistik. Nobel. |
| 7 | Tabachnick, B. G., Fidell, L. S. (2001). Using multivariate statistics. Pearson Education |
| 8 | Whittaker, J. (2009). Graphical models in applied multivariate statistics. Wiley Publishing. |
| 9 | Grimm, L. G., & Yarnold, P. R. (1995). Reading and understanding multivariate statistics. American Psychological Association. |
| 10 | Alpar, R. (2003). Uygulamalı çok değişkenli istatistiksel yöntemlere giriş 1. Nobel Yayın Dağıtım. |
| 11 | Alpar, R. (2010). Spor, sağlık ve eğitim bilimlerinden örneklerle uygulamalı istatistik ve geçerlik-güvenirlilik. Detay Yayıncılık. |
| 12 | Büyüköztürk, Ş. (2001). Deneysel desenler: Öntest sontest kontrol gruplu desen ve veri analizi. Pegem Yayınları, Ankara. |

| Week | Weekly Detailed Course Contents | |
|------|---------------------------------|--|
| 1 | Theoretical | Reconstructing the syllabus |
| 2 | Theoretical | Central tendency measurement, normality, curtosis, and skewness. |
| | Practice | Studying the concepts "central tendency measurement, normality, curtosis, and skewness" on computer package programs |
| | Preparation Work | Reading about "central tendency measurement, normality, curtosis, and skewness" |
| 3 | Theoretical | Developing an achievement test |
| | Preparation Work | Reading about achievement tests |
| 4 | Theoretical | Developing a test |
| | Practice | Developing an achievement test about any subject |
| 5 | Theoretical | Developing a test |
| | Practice | Developing an achievement test about any subject |
| 6 | Theoretical | Scales and scale development |
| | Preparation Work | Reading about "scale and scale development" |
| 8 | Theoretical | Scales and scale development |
| | Practice | Study on "scale and scale development" |



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|----|-------------------|--|
| 9 | Intermediate Exam | Mid term exam |
| 10 | Theoretical | T-test |
| | Practice | Study on T-test on computer package programs |
| | Preparation Work | Reading about T-test |
| 11 | Practice | Study on ANOVA on computer package programs |
| | Preparation Work | Reading about ANOVA |
| 12 | Theoretical | Regression analysis |
| | Preparation Work | Reading about regression analysis |
| 13 | Theoretical | Regression analysis |
| | Practice | Study on regression analysis on computer package programs |
| 14 | Theoretical | Non-parametric testler |
| | Preparation Work | Reading about non-parametric tests |
| 15 | Theoretical | Non-parametric tests |
| | Practice | Study on non-parametric tests on computer package programs |
| 16 | Final Exam | Final exam |

Workload Calculation

| Activity | Quantity | Preparation | Duration | Total Workload |
|---------------------------------------|----------|-------------|----------|----------------|
| Lecture - Theory | 14 | 0 | 2 | 28 |
| Lecture - Practice | 14 | 0 | 2 | 28 |
| Assignment | 3 | 3 | 1 | 12 |
| Reading | 3 | 0 | 5 | 15 |
| Midterm Examination | 1 | 15 | 2 | 17 |
| Final Examination | 1 | 25 | 2 | 27 |
| Total Workload (Hours) | | | | 127 |
| [Total Workload (Hours) / 25*] = ECTS | | | | 5 |

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

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|---|--|
| 1 | To be able to choose the right statistics techniques for research problems |
| 2 | To be able to use the statistic technique properly |
| 3 | To be able to use SPSS package programs |
| 4 | To be able to interpret the analysis tables |
| 5 | To be able to evaluate the statistics in different studies |
| 6 | To be enthusiastic to apply different statistics techniques on data |

Programme Outcomes (Curriculum and Instruction Master)

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|---|--|
| 1 | To be able to use the basic concepts in the field of Curriculum Development and Instruction correctly |
| 2 | To be able to comprehend philosophical, social, historical and psychological principles influencing curriculum |
| 3 | To be able to analyze theoretical bases of learning-teaching theories and approaches |
| 4 | To be able to evaluate any curriculum in accordance with scientific principles |
| 5 | To be able to prepare a curriculum design cooperatively in accordance with principles and criteria |
| 6 | To be able to follow contemporary implementations, and national and international academic publications |
| 7 | To be able to prioritize scientific methods and ethical principles in educational sciences while considering and implementing field specific professional issues |
| 8 | To be willing to do scientific research in the field of Curriculum and Instruction |
| 9 | To be able to appreciate curriculum development profession as a professional identity |

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

| | L1 | L2 | L3 | L4 | L5 | L6 |
|----|----|----|----|----|----|----|
| P1 | 4 | 4 | 3 | 4 | 4 | 5 |
| P2 | 5 | 5 | 5 | 3 | 4 | 5 |
| P3 | 3 | 5 | 5 | 5 | 4 | 5 |
| P4 | 5 | 5 | 4 | 5 | 5 | 5 |
| P5 | 4 | 4 | 4 | 5 | 5 | 5 |



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|----|---|---|---|---|---|---|
| P6 | 4 | 4 | 3 | 4 | 5 | 4 |
| P7 | 4 | 4 | 3 | 5 | 4 | 4 |
| P8 | 5 | 4 | 4 | 5 | 4 | 5 |
| P9 | 5 | 4 | 4 | 5 | 4 | 5 |

