1. GENERAL INFORMATION

Code and Name	ISL801 Advanced Research Methods I
Year / Semester	First Year / Fall Semester
Level of Course	Doctorate (PhD)
Department	Business Administration
Status	Compulsory
Prerequisites	None
Credits	3
ECTS Credits	9
Teaching Method	Face to face with theoretical and applied expression
Contact Hours	14 Weeks-3 Hours per week
Lecturer	Assoc. Prof. Dr. Ali Sait ALBAYRAK
Language of Instruction	Turkish

2. OBJECTIVE OF COURSE

The aim of this course is to teach students scientific research design and the stages of a scientific research and widely used statistical methods and techniques.

3. LEARNING OUTCOMES

LO #	Definition of outcome: Upon successful completion of the course the students will be able to…	CTPO	TOA
LO-1	Define general objectives (general hypothesis) and sub-objectives (sub-hypotheses) of a scientific research.	1-2	1
LO-2	Implement the stages of the process of a scientific and statistical research.	1-2-4	1
LO-3	Evaluate the scientific research process.	1-2-4-7	1
LO-4	Determine the ethical and non-ethical behaviors in a scientific research	7	1
LO-5	Prepare a scientific research in an effective way according to writing rules.	5-10	1
LO-6	Choose and implement suitable descriptive statistical measures for research objectives.	1-2-4	1
LO-7	Choose and apply hypothesis tests which are suitable for research objectives.	1-2-4	1
LO-8	Prepare and evaluate surveys in the field of business.	1-2-4	1

CTPO: Contribution to Program Outcomes**, LO:** Learning Outcomes, **TOA:** Type of Assessment (1=Written exam, 2=Oral Exam, 3=Homework, 4=Laboratory Exercise/Exam, 5=Seminar/Presentation, 6=Term Paper).

4. CONTENTS OF THE COURSE

Basic Concepts of Scientific Research, Scientific Research Design and Stages of a Scientific Research, Population of a Research and Sampling, Descriptive Statistical Measures Used in Researches, Applications of Parametric and Nonparametric Hypothesis Tests, Preparation and Evaluation of a Questionnaire.

5. COURSE SYLLABUS

Week #	Detailed Subjects	Related Notes/Files
Week 1	Basic Concepts of Scientific Research, Definition of Science and Research, Objectives and Basic Properties of Science, Scientific Description and Scientific Approaches, Measurement Scales Used in Scientific Research, Concepts of Validity and Reliability, Types of Validity and Reliability.	
Week 2	Errors in a Scientific Research: Planning Errors, Method Errors, Measurement Errors, Sampling (Random) Error, The Error Concept in Statistics and Statistical Errors.	
Week 3	Scientific Research Design and Stages of a Scientific Research.	
Week 4	Population of a Research and Sampling: Basic Concepts and General Overview.	
Week 5	Descriptive Statistical Measures Used in Researches and Its Properties: Measures of Central Tendencies, Measures of Variability and Skewness and Kurtosis and Proportions.	
Week 6	Applications of Parametric Hypothesis Tests-1	
Week 7	Applications of Parametric Hypothesis Tests-2	
Week 8	Midterm Exam	

Week 9	Applications of Nonparametric Hypothesis Tests-1	
Week 10	Applications of Nonparametric Hypothesis Tests-2	
Week 11	Writing Parts and Chapters of a Research Project.	
Week 12	Research Project Writing: First Section (Outer Cover Page, Inner Cover Page, Dissertation Approval Page, Abstract Page, Preface Page, Contents Pages, Table, Figure, Picture, Graph, List of Abbreviations Etc. Lists of Elements).	
Week 13	Research Project Writing: Text Section (Introduction, Parts of Thesis, Conclusion). Research Project Writing: Last Section (References, Appendices, Index and Curriculum Vitae-Only in PhD Thesis-).	
Week 14	Preparation and Evaluation of a Questionnaire: Survey Planning, Survey Design, Implementation of a Survey, Analysis of a Questionnaire, Writing a Research Report and a Questionnaire Application in SPSS.	

6. TEXTBOOK / MATERIAL

- ✓ Kalaycı, Şeref (Editör), Ali Sait Albayrak vd. (2011). *SPSS Uygulamalı Çok Değişkenli İstatistik Teknikleri*, 5. Baskı, Asil Yayın Dağılım, Ankara.
- ✓ Altunışık Remzi, R. Coşkun, S. Bayraktaroğlu, E. Yıldırım (2007). *Sosyal Bilimlerde Araştırma Yöntemleri: SPSS Uygulamalı*, Sakarya Yayıncılık, 5. Baskı, Sakarya.

7. RECOMMENDED READINGS

- ✓ Türkiye Bilimler Akademisi Bilim Etiği Komitesi (2002). *Bilimsel Araştırmada Etik ve Sorunlar*, Türkiye Bilimler Akademisi Yayınları, TÜBİTAK Matbaası, Ankara.
- ✓ Özdamar, Kazım (2000). *Paket Programlar İle İstatistiksel Veri Analizi*, Cilt 1-2, Kaan Kitabevi, Eskişehir.
- ✓ ZKÜ (2007). *Yüksek Lisans ve Doktora Tezleri Yazım ve Basım Yönergesi*, Zonguldak Karaelmas Üniversitesi Sosyal Bilimler Enstitüsü, Zonguldak.
- ✓ Yıldırım, A., H. Şimşek (2005). *Sosyal Bilimlerde Nitel Araştırma Yöntemleri*, Seçkin Yayıncılık, Ankara.

8. METHOD OF ASSESSMENT

Type of Assessment	Week	Date	Duration (Hours)	Weight (%)
Midterm Exam	8	02.11.2010	3	30
In-Term Studies	12	21.12.2010	3	10
Final Exam	15	04.01.2011	3	60

9. STUDENT WORK LOAD AND ITS DISTRIBUTION

Type of Activity	Duration Per Week (Hours)	Number of Weekly Activity	Hours in Total Per Term
Lectures (Face to Face Teaching)	3	14	42
Own Studies Outside Class	3	14	42
Own Study for Midterm Exam	80	1	80
Midterm Exam	3	1	3
Own Study for Final Exam	100	1	100
Final Exam	3	1	3
Total Work Load	**192**	**32**	**270**

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