Course Syllabus

Code - Course Title	**LEE510 - Ethics of Science and Research Techniques**
Course Type	I. SEMESTER
Laboratory + Practice	3+0
ECTS	**6.0**
Language of Instruction	Türkçe
Course Type	Elective Courses
Course Instructor(s)	PROF. DR. NEVZAT BİLGE İSPİR

Mode of Delivery	This course is conducted in the form of face-to-face or distance education.
Place of Delivery	Online
Used Educational Platforms	Online
Prerequisites	There is no prerequisite or co-requisite for this course.
Courses Recomended	N/A
Recommended Resources	Balcı, A. (2001). Sosyal Bilimlerde Araştırma: Yöntem, Teknik ve İlkeler. Ankara: Pegem Yayıncılık. Büyüköztürk, Ş. (2010). Sosyal Bilimler İçin Veri Analizi El Kitabı: İstatistik, Araştırma Deseni, SPSS Uygulamaları ve Yorum. Ankara: Pegem Akademi. Büyüköztürk, Ş., Kılıç, E., Akgün, Ö. E., Karadeniz, Ş., & Demirel, F. (2008). Bilimsel Araştırma Yöntemleri. Ankara: Pegem Akademi Yayıncılık.
Work Placement	N/A
Aims of the Course	The aim of this course is to enable students to understand the fundamental principles of the scientific research process and the key concepts of research ethics; to develop knowledge and skills in identifying research problems, conducting literature reviews, selecting appropriate research methods, and collecting and analyzing data; and to ensure that they are able to conduct scientific research in accordance with ethical principles.

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Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 1	**LO-1**	Foundations of Science and Scientific Knowledge	Lecture, Question & Answer, Discussion
Week - 2	**LO-1**	Scientific Research Process	Lecture, Question & Answer, Discussion
Week - 3	**LO-1**	Literature Review	Lecture, Question & Answer, Discussion
Week - 4	**LO-1**	Research Problem and Hypotheses	Lecture, Discussion
Week - 5	**LO-2**	Research Methods: Quantitative and Qualitative Research Methods	Lecture, Question & Answer, Discussion
Week - 6	**LO-2**	Population, Sample, and Sampling	Lecture, Question & Answer, Discussion

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Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 7	LO-2	Data Collection Techniques	Question & Answer, Discussion
Week - 8	LO-2	Measurement and Scales	Lecture, Question & Answer, Discussion
Week - 9	LO-3	Scientific Ethics and Research Ethics	Lecture, Question & Answer, Discussion
Week - 10	LO-3	Academic Integrity and Scientific Ethical Violations	Lecture, Question & Answer, Discussion
Week - 11	LO-3	Citation and Academic Writing	Lecture, Question & Answer, Discussion
Week - 12	LO-2	Data Organization and Analysis	Lecture, Question & Answer, Discussion
Week - 13	LO-2 LO-3	Preparation of the Scientific Research Report	Lecture, Question & Answer, Discussion

Learning Outcomes

#	Learning Outcome
1	Explains the fundamental stages of the scientific research process and appropriately defines a research problem.
2	Selects and applies appropriate research methods, data collection techniques, and basic data analysis procedures in accordance with the purpose of the research.
3	Applies ethical principles, academic integrity standards, and appropriate referencing methods in scientific research.

Sustainable Development Goals

✓ Quality Education ✓ Responsible Production and Consumption

Course Theme

✓ Data Science

AKTS Workload

Activity	Duration (Hour)	Count	Workload
Teorik Derse Katılım	3.00	14	42
Sınıf Dışı Çalışma (Ön Hazırlık & Pekiştirme Amaçlı)	4.00	14	56
Ödevler	4.00	14	56
Proje - Rapor - Sunum Hazırlama	0.00	0	0

AKTS Workload

Activity	Duration (Hour)	Count	Workload
Ara Sınav Hazırlığı (sınav süresi dahil)	15.00	1	15
Final Sınavı Hazırlığı (sınav süresi dahil)	15.00	1	15
Uygulama (Laboratuvar, Müzik/Enstrüman Uygulaması, Atölye/Saha Çalışması vb.)	0.00	0	0
Staj Uygulaması	0.00	0	0
		Calculated ECTS	**7.5**

Assessment Method and Passing Requirements

✓ Open-Ended Test ✓ Multiple Choice Test ✓ Performance Assessment (Individual/Panel-Based) ✓ Homework