Course Syllabus

Code - Course Title	**İST549 - Statistics**
Course Type	I. SEMESTER
Laboratory + Practice	3+0
ECTS	**6.0**
Language of Instruction	Türkçe
Course Type	Elective Courses
Course Instructor(s)	PROF. DR. ALİ ÖZDEMİR

Mode of Delivery	The mode of delivery of this course is distance education.
Place of Delivery	Online
Used Educational Platforms	Online
Prerequisites	There is no prerequisite or co-requisite for this course.
Courses Recomended	There is no recommended optional programme component.
Recommended Resources	İstatistik I, Özdemir A. (Editör), Şıklar E. (Editör), AÖF Yayınları 2022, İstatistik II, Özdemir A. (Editör), Şıklar E. (Editör), AÖF Yayınları 2013.
Work Placement	There is no internship for this course.
Aims of the Course	This course aims to implement and interpret techniques such as "data classification, data summarization, interpreting characteristic values used in data summarization, statistical estimation, and hypothesis testing" using spreadsheets.

Course Syllabus

Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 1	**LO-1**	Definition of Statistics, Basic Concepts, Importance of Statistics Education	Lecture, Question & Answer, Discussion, Problem Solving, Demonstration and Practice, Document/Text/Data Analysis
Week - 2	**LO-2**	Data Collection, Analysis	Lecture, Question & Answer, Case Study, Document/Text/Data Analysis
Week - 3	**LO-3**	Averages	Lecture, Problem Solving, Document/Text/Data Analysis
Week - 4	**LO-3**	Variability and Dispersion Measures	Lecture, Problem Solving, Practice/Practical Work/Workshop, Document/Text/Data Analysis
Week - 5	**LO-4**	Sampling and Sampling Methods	Lecture, Case Study, Problem Solving

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Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 6	LO-9	Data analysis applications in spreadsheets	Lecture, Problem Solving, Demonstration and Practice, Document/Text/Data Analysis
Week - 7	LO-5 LO-6	Normal Distribution and Standard Normal Distribution	Lecture, Practice/Practical Work/Workshop
Week - 8	LO-5	Estimation	Lecture, Problem Solving, Document/Text/Data Analysis
Week - 9	LO-6	Decision Making (Hypothesis Tests Concerning One Population)	Lecture, Problem Solving, Practice/Practical Work/Workshop, Document/Text/Data Analysis
Week - 10	LO-6	Decision Making (Hypothesis Tests Concerning Two Populations)	Lecture, Problem Solving, Practice/Practical Work/Workshop
Week - 11	LO-7	Chi-Squared Test	Lecture, Problem Solving, Practice/Practical Work/Workshop
Week - 12	LO-8	Regression Analysis	Lecture, Problem Solving, Practice/Practical Work/Workshop
Week - 13	LO-8	Correlation Analysis	Lecture, Problem Solving, Practice/Practical Work/Workshop
Week - 14	LO-5 LO-6 LO-8 LO-9	Data analysis applications in spreadsheets	Lecture, Problem Solving, Practice/Practical Work/Workshop

Learning Outcomes

#	Learning Outcome
1	Able to explain the basic concepts of statistics.
2	Able to explain the methods of data collection.
3	Able to calculate averages, variability and dispersion measurements.
4	Able to explain the sampling and sampling methods.
5	Able to explain the estimation.
6	Able to explain the decision making.
7	Able to apply the Chi-Squared test.

Learning Outcomes

#	Learning Outcome
8	Able to apply the Regression and Correlation Analysis.
9	Able to calculate descriptive statistics in a spreadsheet

Sustainable Development Goals

✓ Quality Education

Course Theme

✓ Logistics and Supply Chain ✓ Data Science

AKTS Workload

Activity	Duration (Hour)	Count	Workload
Teorik Derse Katılım	42.00	1	42
Sınıf Dışı Çalışma (Ön Hazırlık & Pekiştirme Amaçlı)	28.00	1	28
Ödevler	4.00	6	24
Proje - Rapor - Sunum Hazırlama	3.00	6	18
Ara Sınav Hazırlığı (sınav süresi dahil)	14.00	1	14
Final Sınavı Hazırlığı (sınav süresi dahil)	18.00	1	18
Uygulama (Laboratuvar, Müzik/Enstrüman Uygulaması, Atölye/Saha Çalışması vb.)	0.00	0	0
Staj Uygulaması	0.00	0	0
		Calculated ECTS	**6.0**

Assessment Method and Passing Requirements

✓ Open-Ended Test ✓ Homework