Course Syllabus

Code - Course Title	**SAY613 - Data Analysis**
Course Type	I. SEMESTER
Laboratory + Practice	3+0
ECTS	**7.5**
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 Face to face
Place of Delivery	On Campus
Used Educational Platforms	Face-to-face
Prerequisites	There is no prerequisite or co-requisite for this course.
Courses Recomended	There is no recommended optional programme component for this course.
Recommended Resources	Myatt, Glenn J., Making Sense of Data, A Practical Guide to Exploratory Data analysis and Data Mining,2007, John Wiley & Sons, New JerseyField, A., 2009, Discovering Statistics Using SPSS, 3 rd edition, Sage.
Work Placement	Internship is not suitable for this course.
Aims of the Course	The course aims to cover the collection of data from data sources, coding, and preparing data for analysis.

Course Syllabus

Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 1	**LO-1**	Basic language of statistics	Lecture, Question & Answer, Discussion
Week - 2	**LO-1**	Conversion of data to information	Lecture, Question & Answer, Discussion
Week - 3	**LO-1**	Data pre-processing	Lecture, Question & Answer, Discussion
Week - 4	**LO-1**	Data pre-processing	Lecture, Question & Answer, Discussion, Case Study
Week - 5	**LO-2**	Tables and graphs	Lecture, Question & Answer, Discussion
Week - 6	**LO-2**	Tables and Graphs	Lecture, Question & Answer, Discussion, Problem Solving
Week - 7	**LO-1** **LO-2**	Presentation	Question & Answer, Discussion, Problem Solving

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Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 8	LO-2 LO-3	Descriptive Statistics	Lecture, Question & Answer, Discussion, Problem Solving
Week - 9	LO-3	Inferential statistics	Lecture, Question & Answer, Discussion
Week - 10	LO-3	Inferential statistics	Lecture, Question & Answer, Discussion, Case Study
Week - 11	LO-3	Grouping methods	Lecture, Question & Answer, Discussion, Case Study
Week - 12	LO-3	Grouping Methods	Lecture, Question & Answer, Discussion
Week - 13	LO-3	Predictive Modelling	Lecture, Discussion, Case Study, Problem Solving
Week - 14	LO-3	Presentation	Discussion, Problem Solving, Practice/Practical Work/Workshop, Document/Text/Data Analysis

Learning Outcomes

#	Learning Outcome
1	explain data pre-processing tasks
2	prepare the tables and graphs
3	implement the tasks including how to summarize and interpret data.

Sustainable Development Goals

✓ Quality Education

Course Theme

✓ Data Science

AKTS Workload

Activity	Duration (Hour)	Count	Workload
Teorik Derse Katılım	42.00	1	42

AKTS Workload

Activity	Duration (Hour)	Count	Workload
Sınıf Dışı Çalışma (Ön Hazırlık & Pekiştirme Amaçlı)	28.00	1	28
Ödevler	9.00	6	54
Proje - Rapor - Sunum Hazırlama	5.00	6	30
Ara Sınav Hazırlığı (sınav süresi dahil)	12.00	1	12
Final Sınavı Hazırlığı (sınav süresi dahil)	16.00	1	16
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 ✓ Homework ✓ Presentation