

SYLLABUS
Social Sciences Institutes

Course Code	Course Title	Credits	ECTS Value	
OSD 593	BIG DATA Applications in Business	(2-1-3)	8	
Prerequisite Courses:	None			
Course Language:	Turkish	Course Delivery Mode:	Face-to-Face	
Course Type and Level:	Elective / Master's Level			
Instructor's Title, Name, and Surname		Course Hours	Contact	
Prof. Dr. Murat KOÇ		3	muratkoc@cag.edu.tr	
Course Coordinator:	Asst. Prof. Dr. Yonca BİR		yoncabir@cag.edu.tr	
Course Objectives				
Course Learning Outcomes	Upon successful completion of this course, the student will be able to;		Relations	
			Program Outcomes	Net Contribution
	1	Analyze complex data sets in the business environment.	7	5
	2	Apply big data analytics techniques to analyze and interpret large datasets.	3	5
	3	Develop analytical reports using data visualization tools.	3	5
4	Explain information and makes fast and accurate decisions in business environments.	3	5	
Course Content:	Big data, analysis, reporting, use in business processes, applications and examples are examined, within the scope.			
Course Schedule (Weekly Plan)				
Week	Topic	Preparation	Teaching Methods and Techniques	
1	Introduction to the Course, Getting Acquainted and Sharing Expectations	Course syllabus; students write their expectations and prepare a short paragraph to introduce themselves	Lecture, Padlet application	
2	Concepts of Information & Data	At the end of the class, students prepare a summary	Lecture, In-class written reflective activity and group work	
3	Transformation of Information into Data	Preparing a briefing note on the topic before the class.	Lecture, Group work	
4	Enterprise Data Warehouses	Preparing a briefing note on the topic before the class.	Lecture, Group work, In-class scenario analysis	
5	Analysis of Big Data	At the end of the class, students prepare a summary.	Lecture, Group work, Storytelling	

6	Reporting	Conducting research on the topic and examining relevant examples.	Lecture, Discussion, Student Panels
7	Big Data Management	Conducting research on the topic and examining relevant examples.	Lecture, Discussion, Q&A session
8	Midterm Exam		
9	Case Examples	Prepare 3 questions on the topic and bring to class and discuss	Lecture, Group work, In-class text analysis
10	Measurement and Performance	Before class, prepare a short information note on the topic and present.	Student Panels, Lecture, Debate
11	Use of Technology in Business Processes	Before class, students find a relevant article and bring it to class and present.	Lecture, Group work, Discussion
12	Decision Points, Criteria & Formulas	Before class, find a sample case and bring to class	Lecture, Group work, Case analysis
13	Demand Management & Prioritization	Students find an example case before the class and bring it to class.	Lecture, Q&A session
14	Capacity Management	Students present an example of scientific study from daily life.	Lecture, In-class Group work, Case analysis
15	Continuous Education and Development	Conducting research on the topic and examining relevant examples.	Flipped Classroom, Discussion, Q&A session
16	Final Exam		

Course Resources

Textbook:	Halil Aksu, 2019, Big Data, Pusula Publishing.
Recommended References:	Necmi Gürsakal, 2021, Büyük Veri, Seçkin Publishing.

Course Assessment and Evaluation

Activities	Number	Percentile	Notes
Midterm	1	%30	Assignment
Project	1	%20	Research project
Final	1	%50	Assignment

ECTS Table

Content	Number	Hours	Total
Course Duration	14	3	42
Out-of-Class Study	14	3	42
Project	1	40	40
Midterm (Midterm Assignment Duration + Preparation)	1	50	50
Final (Final Assignment Duration + Preparation)	1	55	55
Total:			229

Total / 30:	229/30=7.6
ECTS Credit:	8