DEPARTMENT OF "International Communication and Media Research"
COURSE SYLLABUS

Course Details				
Code		**Academic Year**		**Semester**
ICMR105		2021-2022		1
Title		**T**	**A**	**L**	**ECTS**
Data Analysis / Statistics in Communication Studies		2	0	0	5

Language	English			
Level	**Graduate**	x	**Postgraduate**	
Department / Program	International Communication and Media Research			
Forms of Teaching and Learning	Face-to-Face			
Course Type	**Compulsory**	x	**Elective**	
Objectives	With the help of computer-based practical applications, the students are provided with the ability to use basic mathematical and statistical methods required for data collection, interpretation and presentation, especially in Communication Sciences research.			
Content	Measurement and sampling methods, continuous and discrete probability distributions, hypothesis testing, linear regression analysis, programming in R language, web mining			
Prerequisites	–			
Coordinator	–			
Lecturer(s)	Asst.-Prof. Dr. Neşe Aral			
Assistant(s)	–			
Work Placement	–			

Recommended or Required Reading	
Books / Lecture Notes	Hayes, A. F. (2005). Statistical Methods for Communication Science. Mahwah, NJ: Lawrence Erlbaum Associates.
Other Sources	–

Additional Course Material	
Documents	–
Assignments	–
Exams	–

Course Composition		
Social Sciences		30%
Natural Sciences		70%
Engineering Sciences		%

DEPARTMENT OF "International Communication and Media Research"
COURSE SYLLABUS

Expert Knowledge		%

Assessment

Activity	Count	Percentage (%)
Midterm Exam	1	30
Quiz		
Assignments		
Attendance		
Recitations		
Projects	1	30
Final Exam	1	40
	Total	**100**

ECTS Points and Work Load

Activity	Count	Duration	Work Load (Hours)
Lectures	14	2	28
Self-Study	14	4	56
Assignments			
Presentation / Seminar Preparation			
Midterm Exam	1	3	3
Recitations			
Laboratory			
Projects	1	60	60
Final Exam	1	3	
		Total Work Load	**150**
		ECTS Points (Total Work Load / 30)	**5**

Learning Outcomes

1	They can recognize most used probability distributions.
2	They can compare two data groups with statistical methods.
3	They can interpret statistical data.
4	They can use hypothesis tests on data groups.
5	They can use R programming language on computer.
6	They can apply statistical methods to data in communication and media research.

Weekly Content

1	The Role of Statistics in Scientific Research

DEPARTMENT OF "International Communication and Media Research"
COURSE SYLLABUS

2	Basic Knowledge of Mathematics for Statistical Studies, Functions, Derivatives, Integrals
3	Measurement and Sampling Methods
4	Discrete and Continuous Probability Distributions (Binomial, Poisson, Normal)
5	Continuous and Discrete Variables, Hypothesis Testing, Chi-Square Test
6	Linear Regression Analysis
7	Visual Presentation of Data
8	Basic Applications with R Language
9	Applications with R Language on Real Cases
10	Web Mining
11	Social Media Analysis
12	Content Analysis in Linguistics and Politics
13	Analysis on Actual Data from Communication and Media Research
14	Presentation of Projects

Contribution of Learning Outcomes to Program Objectives (1-5)

	P1	P2	P3	P4	P5	P6
1	5	3	4	5	5	5
2	5	3	4	5	5	5
3	5	3	4	5	5	5
4	5	3	4	5	5	5
5	5	3	4	5	5	5
6	5	3	4	5	5	5

Contribution Level	1: Low 2: Low-intermediate 3: Intermediate 4: High 5: Very High

https://obs.tau.edu.tr/oibs/bologna/progProfile.aspx?lang=en&curSunit=6028

Compiled by:	Asst.-Prof. Dr. Neşe Aral
Date of Compilation:	20. 06. 2021

DEPARTMENT OF "International Communication and Media Research"
COURSE SYLLABUS