

DEPARTMENT OF "International Communication and Media Research"

COURSE SYLLABUS

Course Details					
<b>Code</b>				<b>Academic Year</b>	<b>Semester</b>
ICMR105				2023-2024	1
<b>Title</b>	<b>T</b>	<b>A</b>	<b>L</b>	<b>ECTS</b>	
Data Analysis / Statistics in Communication Studies	2	0	0	5	
<b>Language</b>	English				
<b>Level</b>	<b>Graduate</b>	x	<b>Postgraduate</b>		
<b>Department / Program</b>	International Communication and Media Research				
<b>Forms of Teaching and Learning</b>	Face-to-Face				
<b>Course Type</b>	<b>Compulsory</b>	x	<b>Elective</b>		
<b>Objectives</b>	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.				
<b>Content</b>	Measurement and sampling methods, continuous and discrete probability distributions, hypothesis testing, linear regression analysis, programming in R language, web mining				
<b>Prerequisites</b>	–				
<b>Coordinator</b>	Prof. Dr. Cem Sefa Sütçü				
<b>Lecturer(s)</b>	Prof. Dr. Cem Sefa Sütçü				
<b>Assistant(s)</b>	–				
<b>Work Placement</b>	–				
Recommended or Required Reading					
<b>Books / Lecture Notes</b>	Hayes, A. F. (2005). Statistical Methods for Communication Science. Mahwah, NJ: Lawrence Erlbaum Associates.				
<b>Other Sources</b>	–				
Additional Course Material					
<b>Documents</b>	–				
<b>Assignments</b>	–				
<b>Exams</b>	–				

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

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Expert Knowledge		%
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Assessment		
Activity	Count	Percentage (%)
Midterm Exam	1	30
Quiz		
Assignments		
Attendance		
Recitations		
Projects	1	30
Final Exam	1	40
	<b>Total</b>	<b>100</b>

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			

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Projects	1	60	60
Final Exam	1	3	
<b>Total Work Load</b>			<b>150</b>
<b>ECTS Points (Total Work Load / 30)</b>			<b>5</b>

**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 Conte**

<b>it</b>	
1	The Role of Statistics in Scientific Research

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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

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13	Analysis on Actual Data from Communication and Media Research					
14	Presentation of Projects					
<b>Contribution of Learning Outcomes to Program Objectives (1-5)</b>						
	<b>P1</b>	<b>P2</b>	<b>P3</b>	<b>P4</b>	<b>P5</b>	<b>P6</b>
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
<b>Contribution Level</b>	1: Low 2: Low-intermediate 3: Intermediate 4: High 5: Very High					
<a href="https://obs.tau.edu.tr/oibs/bologna/progProfile.aspx?lang=en&amp;curSunit=6028">https://obs.tau.edu.tr/oibs/bologna/progProfile.aspx?lang=en&amp;curSunit=6028</a>						
<b>Compiled by:</b>	RA H. Zeynep Gürbener Şahin					
<b>Date of Compilation:</b>	29.11.2023					

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