

DEPARTMENT OF POLITICAL SCIENCE AND INTERNATIONAL AFFAIRS

Course Details						
Code				Academic Year		Semester
INT 111				1		Fall Semester
Title				T	A	L
Quantitative Research Methods				2	0	0
				6		
ECTS						
Language		English				
Level		Undergraduate		Graduate	X	Postgraduate
Department / Program		Master Program of Political Science and International Affairs				
Forms of Teaching and Learning		Face to face				
Course Type		Compulsory	x		Elective	
Objectives		The aim of this course is to introduce students to the basic concepts of quantitative research methods in social sciences, statistical analysis techniques and data collection processes and to develop their skills in conducting scientific research. It is aimed to provide students with theoretical and practical knowledge in selecting and applying statistical methods appropriate to their research questions. In addition, it is also among the objectives of the course to gain competence in conducting data analysis processes through basic software such as SPSS and Excel.				
Content		This course covers the theoretical foundations and application areas of quantitative research methods used in social sciences. It covers major topics such as descriptive and inferential statistics, scaling methods, data collection techniques, correlation and regression models for analyzing the relationships between variables. In addition, applied studies on data processing, analysis and interpretation through software such as Excel and SPSS are also included in the course content.				
Prerequisites						
Coordinator		Asst. Prof. Dr. Dominic Heinz				
Lecturer(s)		Asst. Prof. Dr. Dominic Heinz				
Assistant(s)						
Work Placement						
Recommended or Required Reading						
Books / Lecture Notes		A list of required readings will be made accessible at the beginning of the term				
Other Sources						
Additional Course Material						
Documents						
Assignments						
Exams						

DEPARTMENT OF POLITICAL SCIENCE AND INTERNATIONAL AFFAIRS

Course Composition			
Mathematics und Basic Sciences			%
Engineering			%
Engineering Design			%
Social Sciences			100%
Educational Sciences			%
Natural Sciences			%
Health Sciences			%
Expert Knowledge			%
Assessment			
Activity	Count		Percentage (%)
Midterm Exam	1		20
Quiz			
Assignments	2		20
Attendance	Required		
Recitations			
Projects			
Final Exam	1		60
Total			100
ECTS Points and Work Load			
Activity	Count	Duration	Work Load (Hours)
Lectures	14	2	28
Self-Study	14	7	98
Assignments	2	10	20
Presentation / Seminar Preparation	2	7	14
Midterm Exam	1	4	4
Recitations			
Laboratory			
Projects			
Final Exam	1	4	4
Total Work Load			168
ECTS Points (Total Work Load /28 Hour)			6
Learning Outcomes			
1	The student defines the basic concepts of quantitative research methods and statistical analysis processes in social sciences.		
2	Students will be able to select and apply data collection, processing and analysis techniques appropriate to their research questions.		

### DEPARTMENT OF POLITICAL SCIENCE AND INTERNATIONAL AFFAIRS

3	The student interprets quantitative data using software such as Excel and SPSS and reports the results within the framework of scientific ethics.
---	---

#### Weekly Content

1	Research in social sciences: Basic concepts, research types and introduction to scientific method
2	Epistemological and methodological foundations of quantitative research approach
3	Hypothesis development, variable types and conceptual framework
4	Measurement, scale types and validity-reliability concepts
5	Sampling methods: Probability and non-probability sampling techniques
6	Survey and structured observation: Preparation of data collection tools
7	Coding of data and introduction to SPSS
8	Midterm Week
9	Descriptive statistics: Mean, median, mode, standard deviation
10	Correlation analysis and cross tables
11	Introduction to regression analysis
12	Hypothesis testing: Chi-square, t-test and ANOVA
13	Data analysis applications with SPSS
14	Interpretation of findings and scientific report writing
15	Research ethics and presentation of research reports
16	Final Exam

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

	P1	P2	P3	P4	P5	P6	P7
1	5	5	5	4	5	5	4
2	5	4	5	5	5	4	4
3	5	3	4	4	4	5	5

DEPARTMENT OF POLITICAL SCIENCE AND INTERNATIONAL AFFAIRS

Contribution Level	1: Low 2: Low-intermediate 3: Intermediate 4: High 5: Very High
<a href="https://obs.tau.edu.tr/oibs/bologna/progLearnOutcomes.aspx?lang=en&amp;curSunit=200">https://obs.tau.edu.tr/oibs/bologna/progLearnOutcomes.aspx?lang=en&amp;curSunit=200</a>	
Compiled by:	Res. Asst. Zehra Alkan
Date of Compilation:	29.04.2025