Course Syllabus

Code - Course Title	**ARY550 - Research Methods in Education Sciences**
Course Type	I. SEMESTER
Laboratory + Practice	3+0
ECTS	**6.0**
Language of Instruction	Türkçe
Course Type	Required Courses
Course Instructor(s)	PROF. DR. YAVUZ AKBULUT

Mode of Delivery	This course is conducted only in the form of face to face education.
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	Fraenkel, J. R., Wallen, N. E., & Hyun, H. (2019). How to design and evaluate research in education (10th ed.). McGraw Hill Higher Education.
Work Placement	Not Applicable
Aims of the Course	This course aims to provide students with a foundation in the epistemological and methodological principles of scientific research and develop their skills in critically evaluating quantitative, qualitative, and mixed research methods and designing appropriate studies in educational sciences.

Course Syllabus

Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 1	**LO-1**	Functions and basic characteristics of science	Lecture, Question & Answer, Discussion, Brain Storming
Week - 2	**LO-1**	Fundamental features of the scientific method	Lecture, Question & Answer, Discussion, Brain Storming
Week - 3	**LO-1**	Epistemological foundations of scientific methods	Lecture, Question & Answer, Discussion, Brain Storming
Week - 4	**LO-2**	Definition of research problems and formulation of research questions	Lecture, Question & Answer, Discussion, Brain Storming
Week - 5	**LO-2**	Literature review and development of theoretical frameworks	Lecture, Question & Answer, Discussion, Problem Solving, Brain Storming

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Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 6	LO-3 LO-4	Sampling and sampling methods	Lecture, Question & Answer, Discussion, Problem Solving, Brain Storming
Week - 7	LO-3	Survey research and correlational research	Lecture, Question & Answer, Discussion, Brain Storming
Week - 8	LO-3	Causal-comparative and experimental research designs	Lecture, Question & Answer, Discussion, Brain Storming, Practice/Practical Work/Workshop
Week - 9	LO-3	Quantitative research process: data collection and analysis	Lecture, Question & Answer, Problem Solving, Practice/Practical Work/Workshop
Week - 10	LO-4	Ethnographic research approaches	Lecture, Question & Answer, Discussion, Brain Storming
Week - 11	LO-4	Case study and grounded theory research	Lecture, Question & Answer, Discussion, Brain Storming
Week - 12	LO-4	Action research and its applications in educational research	Lecture, Question & Answer, Discussion, Brain Storming
Week - 13	LO-4	Mixed research methods	Lecture, Question & Answer, Discussion, Brain Storming
Week - 14	LO-4	Qualitative research process: data collection, analysis, and interpretation	Lecture, Question & Answer, Discussion, Case Study, Practice/Practical Work/Workshop

Learning Outcomes

#	Learning Outcome
1	Students will be able to critically evaluate the epistemological foundations of scientific inquiry and the functioning of the scientific method.
2	Students will be able to define research problems and develop research designs grounded in the scholarly literature.
3	Students will be able to apply quantitative research designs and data collection procedures in accordance with research problems.

Learning Outcomes

#	Learning Outcome
4	Students will be able to evaluate research processes using qualitative and mixed-method approaches.

Sustainable Development Goals

✓ Quality Education

Course Theme

✓ Educational Sciences and Educational Technologies

AKTS Workload

Activity	Duration (Hour)	Count	Workload
Teorik Derse Katılım	3.00	14	42
Sınıf Dışı Çalışma (Ön Hazırlık & Pekiştirme Amaçlı)	3.00	14	42
Ödevler	6.00	2	12
Proje - Rapor - Sunum Hazırlama	10.00	1	10
Ara Sınav Hazırlığı (sınav süresi dahil)	12.00	2	24
Final Sınavı Hazırlığı (sınav süresi dahil)	15.00	1	15
Uygulama (Laboratuvar, Müzik/Enstrüman Uygulaması, Atölye/Saha Çalışması vb.)	0.00	0	0
Staj Uygulaması	0.00	0	0
		Calculated ECTS	**6.0**

Assessment Method and Passing Requirements

✓ Open-Ended Test ✓ Multiple Choice Test ✓ Short-Answer Test ✓ Project ✓ Homework ✓ Take Home Exam

Assessment Method and Passing Requirements	Quamtity	Percentage (%)
1.Midterm Exam	1	20
Final Exam	1	50
2.Midterm Exam	1	30
	Sum (%)	**100**