Course Syllabus

Code - Course Title	**EÖD509 - Test Development**
Course Type	I. SEMESTER
Laboratory + Practice	3+0
ECTS	**6.0**
Language of Instruction	Türkçe
Course Type	Elective Courses
Course Instructor(s)	DOÇ. DR. BAŞAK ERDEM KARA

Mode of Delivery	This course is delivered through face-to-face instruction.
Place of Delivery	On Campus
Used Educational Platforms	Face-to-face
Prerequisites	This course has no prerequisites or corequisites.
Courses Recomended	There are no recommended courses.
Recommended Resources	• Anastasi, A. & Urbina, S. (1997). Psychological testing (7th ed.). New Jersey: Prentice-Hall.• Doğan, N. (Eds.) (2021). Eğitimde ölçme ve değerlendirme (3. Baskı). Pegem Akademi.• Downing, S. M., & Haladyna, T. M. (Eds.). (2006). Handbook of test development. Lawrence Erlbaum Associates Publishers.• Gronlund, N. E. (1977). Constructing achievement test (2nd ed.).Prentice-Hall Inc.• Haladyna, T. M. (1994). Developing and validating multiple-choice test items. Hillsdale: Lawrence Erlbaum.• Linn, R. L., & Miller, M. D. (2005). Measurement and assessment in teaching (9th edition). Prentice-Hall.• Murphy, K. R. & Davidshofer, C. O. (2005). Psychological testing: principles and applications (6th Ed.). Pearson Education.• Özçelik, D. A. (2013). Test hazırlama kılavuzu (5. Baskı). Pegem Akademi• Özgüven, İ., E. (2023). Psikolojik testler (18. Baskı). Nobel Akademi.• Şahin, M. D. (Eds.) (2021). Eğitimde ölçme ve değerlendirme. Nobel Akademi.
Work Placement	There is no work placement in the context of this course.
Aims of the Course	The aim is to equip students with the ability to independently develop tests in accordance with scientific principles; in addition, to provide them with knowledge and critical thinking skills in areas such as test engagement, measurement invariance and AI-assisted item/test development.

Course Syllabus

Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 1	**LO-1**	Foundations of Test Development and Classification of Tests	Lecture, Question & Answer, Discussion, Brain Storming
Week - 2	**LO-1**	Test Development Process and Defining the Purpose of the Test	Lecture, Question & Answer, Discussion, Team/Group Work, Brain Storming
Week - 3	**LO-1**	Taxonomy of Cognitive Domain Behaviors	Lecture, Question & Answer, Discussion, Brain Storming

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Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 4	LO-1 LO-2	Item Writing and Scoring (Selected Response Item Format)	Lecture, Question & Answer, Discussion, Problem Solving, Brain Storming
Week - 5	LO-1 LO-2	Item Writing and Scoring (Constructed Response Item Format)	Lecture, Question & Answer, Discussion, Problem Solving, Brain Storming, Practice/Practical Work/Workshop
Week - 6	LO-1 LO-2	Practices on Item Writing and Scoring	Lecture, Question & Answer, Discussion, Team/Group Work, Problem Solving, Brain Storming, Practice/Practical Work/Workshop
Week - 7	LO-1 LO-3	Field Testing, Item Analysis and Item Selection	Lecture, Question & Answer, Team/Group Work, Case Study, Practice/Practical Work/Workshop
Week - 8	LO-1 LO-3	Item and Test Statistics	Lecture, Question & Answer, Discussion, Practice/Practical Work/Workshop
Week - 9	LO-4	Reliability and Validity Analyses	Lecture, Question & Answer, Discussion, Team/Group Work, Brain Storming, Practice/Practical Work/Workshop
Week - 10	LO-5	Artificial Intelligence Applications in the Test Development Process	Lecture, Question & Answer, Brain Storming, Research and Inquiry, Document/Text/Data Analysis
Week - 11	LO-5	Item Response Theory in Test Development Process	Lecture, Question & Answer, Brain Storming, Practice/Practical Work/Workshop, Document/Text/Data Analysis

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Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 12	LO-5	Item Response Theory Applications in Test Development Process	Lecture, Question & Answer, Discussion, Team/Group Work, Practice/Practical Work/Workshop
Week - 13	LO-5	Test and Item Bias	Lecture, Discussion, Team/Group Work, Practice/Practical Work/Workshop, Document/Text/Data Analysis
Week - 14	LO-5	Computer Based Test Applications	Lecture, Question & Answer, Team/Group Work, Practice/Practical Work/Workshop, Document/Text/Data Analysis

Learning Outcomes

#	Learning Outcome
1	Students will be able to analyze the types of educational tests and the fundamental stages of the test development process.
2	Students will be able to develop test items appropriate to assessment objectives and apply item writing and scoring procedures.
3	Students will be able to evaluate test items statistically through pilot testing and item analysis.
4	Students will be able to interpret test results by evaluating their reliability and validity characteristics.
5	Students will be able to evaluate current approaches and computer-based applications in the test development process.

Sustainable Development Goals

✓ Quality Education

Course Theme

✓ Educational Sciences and Educational Technologies ✓ Data Science ✓ Innovation Skills

AKTS Workload

Activity	Duration (Hour)	Count	Workload
Teorik Derse Katılım	14.00	3	42
Sınıf Dışı Çalışma (Ön Hazırlık & Pekiştirme Amaçlı)	14.00	4	56
Ödevler	1.00	10	10
Proje - Rapor - Sunum Hazırlama	1.00	30	30

AKTS Workload

Activity	Duration (Hour)	Count	Workload
Ara Sınav Hazırlığı (sınav süresi dahil)	1.00	15	15
Final Sınavı Hazırlığı (sınav süresi dahil)	0.00	0	0
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 ✓ True-False Test ✓ Fill-in-the-Blank Test ✓ Project ✓ Homework

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