Course Syllabus

Code - Course Title	**DİT501 - Human-Computer Interaction**
Course Type	I. SEMESTER
Laboratory + Practice	4+0
ECTS	**6.0**
Language of Instruction	Türkçe
Course Type	Required Courses
Course Instructor(s)	DOÇ. DR. UFUK TUĞTEKİN

Mode of Delivery	Face to face
Courses Recomended	-
Recommended Resources	-
Work Placement	-

Course Syllabus

Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 1		Foundations of HCI: Basic principles of Human-Computer Interaction and their application to game design.	
Week - 2		User-Centered Design (UCD): Process management, persona creation, and scenario-based design.	
Week - 3		Usability Evaluation: Heuristic analysis and usability testing methods.	
Week - 4		Interface and Interaction Models: Game UI design and optimization of interaction models.	
Week - 5		Input Devices and Control: Control mechanisms in games, input devices, and responsiveness.	
Week - 6		User Experience (UX): Experience design in games, game enjoyment, and engagement.	
Week - 7		Accessibility and Inclusivity: Inclusive design principles and accessibility standards in games.	
Week - 8		Sensory Feedback: Audio, visual, and tactile feedback systems in games.	
Week - 9		Haptic Technologies: Touch-based interaction and the role of haptic systems in game design.	
Week - 10		User Behavior Analysis: Observing user behavior in game testing and data collection	
Week - 11		Biometric Data and Eye Tracking: Use of eye-tracking and biometric data in testing.	
Week - 12		Interaction in XR Environments: Natural interaction design (NUI) in VR and AR environments.	
Week - 13		Cognitive Load and Human Performance: Managing cognitive load and the relation of learning curve to mechanics.	
Week - 14		Future Trends: Next-generation technologies in HCI, brain-computer interfaces, and current research.	

Learning Outcomes

#	Learning Outcome
1	Students who successfully complete this course will apply Human-Computer Interaction (HCI) principles to game design processes, analyze game usability using user-centered design methods, measure user behavior through techniques such as eye-tracking and biometric data analysis, develop natural interaction models for XR environments, and design accessible game interfaces considering cognitive load balance.

Sustainable Development Goals

No content has been provided.

Course Theme

No content has been provided.

AKTS Workload

Activity	Duration (Hour)	Count	Workload
Teorik Derse Katılım	0	0	0
Sınıf Dışı Çalışma (Ön Hazırlık & Pekiştirme Amaçlı)	0	0	0
Ödevler	0	0	0
Proje - Rapor - Sunum Hazırlama	0	0	0
Ara Sınav Hazırlığı (sınav süresi dahil)	0	0	0
Final Sınavı Hazırlığı (sınav süresi dahil)	0	0	0
Uygulama (Laboratuvar, Müzik/Enstrüman Uygulaması, Atölye/Saha Çalışması vb.)	0	0	0
Staj Uygulaması	0	0	0
		Calculated ECTS	**0**

Assessment Method and Passing Requirements

No content has been provided.

Assessment Method and Passing Requirements	Quamtity	Percentage (%)
1.Midterm Exam	1	40
Final Exam	1	60
	Sum (%)	**100**