Course Syllabus

Code - Course Title	**DİT505 - Digital Game-Based Learning**
Course Type	I. SEMESTER
Laboratory + Practice	4+0
ECTS	**6.0**
Language of Instruction	Türkçe
Course Type	Elective Courses
Course Instructor(s)	DR. ÖĞR. ÜYESİ FATİH ÖZER

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

Course Syllabus

Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 1		Introduction: Relationship Between Games and Learning; Homo Ludens and History of Games in Education.	
Week - 2		Theoretical Foundations: Constructivism, Experiential Learning, and Historical Development of GBL.	
Week - 3		Gamification Principles: Gamification vs. Educational Games; Points, Badges, and Leaderboards (PBL).	
Week - 4		Motivation Theories and Behavior Design: Flow Theory, Self-Determination Theory, and Fogg Model.	
Week - 5		Pedagogical Approaches: Learning Theories in Educational Game Design and 4C-ID Model.	
Week - 6		Integration of Learning Objectives: Curriculum Analysis and Embedding Outcomes into Game Worlds.	
Week - 7		Game Mechanics: MDA Framework and Its Impact on the Learning Process.	
Week - 8		Rewards and Feedback Systems: Intrinsic/Extrinsic Rewards and Immediate Feedback Loops.	
Week - 9		Interdisciplinary Design: GBL Environments for Different Disciplines and Educational Levels.	
Week - 10		Design by Educational Levels: Design Differences from K-12 to Adult Education (Andragogy).	
Week - 11		Serious Games and Simulations: Use of High-Fidelity Simulations in Education.	
Week - 12		Virtual Environments and XR: Role and Impact of VR, AR, and MR Technologies in Education.	
Week - 13		Learning Analytics: Data Collection, In-Game Telemetry, and Performance Evaluation Methods.	
Week - 14		Research and Measurement: Researching the Effectiveness of GBL Applications and Literature Review.	

Learning Outcomes

#	Learning Outcome
1	Students who successfully complete this course will analyze the historical development and theoretical foundations of game-based learning, integrate motivation theories and behavior design principles into educational game mechanics, design digital learning environments suitable for different disciplines and educational levels according to pedagogical approaches, and evaluate the effectiveness of educational games using data-driven methods through in-game learning analytics.

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**