Course Syllabus

Code - Course Title	**DOT407 - Virtual Reality (VR)/Augmented Reality (AR) Applications**
Course Type	III. SEMESTER
Laboratory + Practice	2+2
ECTS	**5.0**
Language of Instruction	Türkçe
Course Type	Area Elective Courses
Course Instructor(s)	DOÇ. DR. UFUK TUĞTEKİN

Mode of Delivery	The mode of delivery of this course is 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	Homo Ludens, The Art of Game Design, Fundamentals of Game Design, Game Mechanics: Advanced Game Design
Work Placement	N/A

Course Syllabus

Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 1		Definition and differences between VR and AR concepts	
Week - 2		Historical development and technological transformation	
Week - 3		VR/AR hardware: headsets, sensors, controllers	
Week - 4		Content production processes and planning	
Week - 5		Setting up VR/AR environments in game engines	
Week - 6		User interface and interaction design for VR/AR	
Week - 7		Cameras, scene management, and perspective settings	
Week - 8		Developing real-time user interaction	
Week - 9		Performance issues and optimization strategies	
Week - 10		Mobile VR/AR and platform differences	
Week - 11		Audio, haptics, and sensory feedback systems	
Week - 12		Storytelling and visualization techniques in VR/AR	
Week - 13		Ethics, privacy, and social impacts	

Course Syllabus

Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 14		Student project presentations and evaluation	

Learning Outcomes

#	Learning Outcome
1	Explain the fundamental concepts of VR and AR technologies
2	Develop content for virtual and augmented reality environments
3	Design interactive experiences for VR/AR projects
4	Implement VR/AR projects in game engines according to technical requirements
5	Produce content focused on ethics and user experience

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**