Course Syllabus

Code - Course Title	**DOT203 - Game Engine I**
Course Type	III. SEMESTER
Laboratory + Practice	3+2
ECTS	**6.0**
Language of Instruction	Türkçe
Course Type	Required Courses
Course Instructor(s)	DR. ÖĞR. ÜYESİ FATİH ÖZER

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		Concept and history of game engines	
Week - 2		Basics of interface and scene management	
Week - 3		Game objects and component structure	
Week - 4		Physics engine and interactive elements	
Week - 5		Camera systems and lighting techniques	
Week - 6		Texture, material, and shader concepts	
Week - 7		Basic animation applications	
Week - 8		Trigger systems and interactive objects	
Week - 9		UI elements: button, menu, indicator	
Week - 10		Basic gameplay logic and control schemes	
Week - 11		Scene transitions and loading screens	
Week - 12		Optimization techniques	
Week - 13		Platform-specific setup and testing	

Course Syllabus

Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 14		Project presentation and evaluation	

Learning Outcomes

#	Learning Outcome
1	Define the basic structure and components of game engines
2	Integrate 2D and 3D content into a game engine
3	Manage camera, lighting, and user interface elements
4	Set up simple interactive systems and design scene transitions
5	Apply basic logic related to gameplay
6	Perform optimization through the game engine and prepare for publishing

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**