

YAŞAR UNIVERSITY
FACULTY OF SCIENCE AND LETTERS
SCIENCE CULTURE DEPARTMENT
COURSE SYLLABUS

Course Title	Course Code	Semester	Course Hour/Week		Yaşar Credit	ECTS
Fundamentals of Game Development and Design	UFND 2220	FALL / SPRING	Theory 2	Practice 0	2	2
Course Type						
1. Compulsory Courses						
1.1. Programme Compulsory Courses						
1.2. University Compulsory Courses (UFND)						x
1.3. YÖK (Higher Education Council) Compulsory Courses						
2. Elective Courses						
2.1. Program Elective Courses						
2.2. University Elective Courses						
3. Prerequisites Courses						
3.1. Compulsory Prerequisites Courses						
3.2. Elective Prerequisites Courses						

Language of Instruction	English
Level of Course	Associate Degree (Short Cycle) X Undergraduate (First Cycle) Graduate (Second Cycle) Doctoral Course (Third Cycle)
(compulsory)	
Special Pre-Conditions of the Course (recommended)	NA

Course Coordinator		Mail: Web page:
Course Instructors		
Course Assistant(s)/Tutor (s)		
Aim(s) of the Course	The aim of this course is to provide students with basic knowledge and hands-on experience in designing games using a game engine, introduce fundamental game engine concepts, and support the development of basic level design skills.	
Learning Outcomes of the Course	Students who successfully complete the course will be able to: 1. Use the game engine interface. 2. Write C# code for game development. 3. Design levels for games. 4. Develop game mechanics. 5. Collaborate effectively in team-based work.	
Course Content	This course includes designing a game level, understanding and customizing the game engine interface, learning the component and node systems of game objects, creating user interfaces via canvas, and writing custom scripts to control the behavior of game objects.	

COURSE OUTLINE/SCHEDULE (Weekly)			
Week	Topics	Preliminary Preparation (Readings)	Methodology and Implementation (Theory, practice, assignment etc)
1	Research and production about level design	Borromeo, Nicolas Alejandro, Hands on Unity 2022 Game Development p.137	Theory
2	Critics on level design and introduction to the game engine	Borromeo, Nicolas Alejandro, Hands on Unity 2022 Game Development p.1-16	Theory
3	Critics on level design continues	Level Design - In Pursuit of Better Levels – Alex K. p.9-15	Theory
4	Project management in the game engine	Udemy - Complete C# Unity Game Developer 3D Ben Tristrem, Rick Davidson	Theory
5	Navigation in scene, windows and their purposes		Theory
6	Hierarchy window/parent and child and components		Theory
7	Canvas and UI		Theory
8	Animation system		Theory
9	Animation system continues		Theory
10	Finalising level design in the game engine and Functionalizing level design and game production 1		Assignment
11	Functionalizing level design and game production 2		Theory
12	Functionalizing level design and game production 3		Theory
13	Functionalizing level design and game production 4		Theory
14	Functionalizing level design and game production 5 Final project critique		Theory
15	Functionalizing level design and game production 5 Final project critique		
16	Final Project Presentation and submission	Assignment	Project

Recommended (additional) Course Material (s)/Reading(s)/Other The major course materials will be uploaded to the Sakai platform in the module sections. However, if you would like to make further readings, you may find a list of the recommended materials here in this list:	Udemy - Complete C# Unity Game Developer 3D Ben Tristrem, Rick Davidson (video) Borromeo, Nicolas Alejandro, Hands on Unity 2022 Game Development, 2022. ISBN: 1803236914 Level Design - In Pursuit of Better Levels – Alex K.
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ASSESSMENT		
Semester Activities/ Studies	NUMBER	WEIGHT in %
Mid – Term Exam (Test)		
Attendance		
Quiz		
Assignment (s)	1	40

Project	1	50
Laboratory		
Field Studies (Technical Visits)		
Presentation/ Seminar	1	10
Practice (Laboratory, Virtual Court, Studio Studies etc.)		
Final Examination (Test)		
Other (Placement/Internship etc.)		
TOTAL		100
Contribution of Semester Activities/Studies to the Final Grade		50
Contribution of Final Examination/Final Project/ Dissertation to the Final Grade		50
TOTAL		100

CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME OUTCOMES						
No	Programme Outcomes	Level of Contribution (1- lowest/ 5- highest)				
		1	2	3	4	5
1	To identify changes in the surrounding world and compare, question and interpret data during the formation and advocacy of thought and decisions.				X	
2	To demonstrate skills in learning, critical thinking and reasoning about human behavior and experiences.					X
3	To show ability of gathering information from many sources to present a conclusive argument.					X
4	To demonstrate competence in reading and evaluating original scientific papers				X	
5	To recognize the significance of lifelong learning and use the learning skills and competences that developed in this program in other areas of life				X	
6	To demonstrate informational competence and the ability to use computers and other information technologies for many purposes				X	
7	To conduct a study/project independently or take charge in a teamwork and to take responsibility to formulate solutions for unpredictable, complex problems in the study/project				X	
8	To conduct efficient communication in oral and written forms within multi-cultural business environments					X
9	To formulate distinctive strategies through project management and innovative problem-solving skills				X	
10	To be sensitive to social and individual problems with high consciousness of social responsibility					X

ECTS /STUDENT WORKLOAD				
ACTIVITIES	NUMBER	UNIT	HOUR	TOTAL (WORKLOAD)
Course Teaching Hour (14 weeks* total course hours)	14	Week	2	28
Preliminary Preparation and finalizing of course notes, further self- study		Week		
Assignment (s)		Number		
Presentation/ Seminars		Number		
Quiz and Preparation for the Quiz		Number		
Mid- Term(s)		Number		
Project (s)	1	Number	10	10
Field Studies (Technical Visits, Investigate Visit etc.)		Number		
Practice (Laboratory, Virtual Court, Studio Studies etc.)		Number		
Final Examination/ Final Project/ Dissertation and Preparation	1	Number	12	12
Other (Placement/Internship etc.)		Number		
Total Workload				50
Total Workload/ 25				2
ECTS				2

STUDENT WITH DISABILITIES OR SPECIAL NEEDS

Students with disabilities or special needs are encouraged to contact the instructor and the Unit for Student with Disabilities (<http://eob.yasar.edu.tr/>) for academic adaptations.

ASSESSMENT and EVALUATION METHODS:	
Final Grades will be determined according to the Yaşar University Associate Degree, Bachelor's Degree and Graduate Degree Education and Examination Regulation.	
PREPARED BY	
UPDATED	
APPROVED	