

COURSE SYLLABUS

Course Title	Course Code	Semester	Course Hour/Week		Credit	ECTS
Environment & Level Design	GAME414	8	Theory 2	Practice 2	3	6
Course Type	Compulsory Courses	Department Elective	Faculty Elective	University Elective	CoHE (YÖK) Compulsory	Other
	YES	-	-	-	-	-
Level of Course	Associate Degree (Short Cycle)		Undergraduate (First Cycle)		Graduate/ Doctoral (Second /Third Cycle)	
	-		YES		-	

Language of Instruction	English
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Course Instructor	Danish Craig	E-mail : danish.craig@arucad.edu.tr Office : TI Off 7
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Course Objectives	<p>This course examines the active role of level designers in Game Development. Students will understand and interact with the intricacies of planning, greyboxing, texturing and building various playable concepts levels that cover a wide variety of thematic architectural locales, such as Gothic, Asian, Modern, Fantasy and Viking to name a few. Students will learn how to interpret, analyse and measure floor plans and building schemata and use that information to accurately measure and construct room features, as well as learn various material and texturing techniques to create a realistic portrayal of a visual scene.</p>		
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Course Learning Outcomes	Students will be able to:	Teaching Methods	Evaluation Methods
	Plan and design intricate, detailed and elaborate levels that can engage players and their respective play styles.	Project Based Learning	Mid-Term Submission

	Develop and outline playable levels through a combination of texturing, greyboxing and design techniques.	Project Based Learning	Mid-Term Submission
	Establish proper control over important level facets and features in order to produce engaging gameplay.	Project Based Learning	Final Submission
	Integrate visual design and architectural themes in order to create a cohesive and believable visual style.	Project Based Learning	Mid-Term Submission
	Produce high quality, ready to play levels that resonate and engage players.	Project Based Learning	Final Submission
Course Content	<p>Level Design is a vital and critical field within game development. This course aims to introduce the core foundational aspects of level design as well as a solid foundational understanding of the realistic architectural elements that contribute to good, interactive and convincing game worlds. Students will learn:</p> <ul style="list-style-type: none"> • Understanding how architecture influences player experience. • Key architectural principles as well as understanding blueprints, floor plans and schemata. • Various architectural styles and how environmental storytelling impacts players. • Understanding the features of game engines in regard to level design. • Effective greyboxing, layout and texturing techniques used in level design. • Different styles from different locales and learn how to incorporate them in both fantasy and realistic settings. 		

COURSE OUTLINE/SCHEDULE			
Week	Topic	Implementation (theory/practice)	Required Reading, Preliminary preparation
1	Introduction and overview of course content.	T	

2	Introduction to Level Design.	T/P	Salmond M. (2020). <i>Video Game Level Design</i> . Broadway, New York.: Bloomsbury Academic. Library Catalogue No: QA76.76.C672. S26 2020 Chapter 2
3	Fundamentals of Architectural Features. Architectural Styles in Games.	T/P	Salmond M. (2020). <i>Video Game Level Design</i> . Broadway, New York.: Bloomsbury Academic. Library Catalogue No: QA76.76.C672. S26 2020 Chapter 5
4	Reading and Understanding Floor Plans.	T/P	Ching FDK. (1996). <i>Architectural Graphics</i> . Hoboken, N.J.: John Wiley and Sons Inc. Library Catalogue No: NA2700.C45. A734 1996 Chapter 4
5	Greyboxing Basics.	T/P	No reading required
6	Spatial Composition & Flow.	T/P	Salmond M. (2020). <i>Video Game Level Design</i> . Broadway, New York.: Bloomsbury Academic. Library Catalogue No: QA76.76.C672. S26 2020 Chapter 3
7	Scale and Proportion. MID-TERM SUBMISSION	T/P	Salmond M. (2020). <i>Video Game Level Design</i> . Broadway, New York.: Bloomsbury Academic. Library Catalogue No: QA76.76.C672. S26 2020 Chapter 3
8	Verticality and Multi-Level Design.	T/P	Salmond M. (2020). <i>Video Game Level Design</i> . Broadway, New York.: Bloomsbury Academic. Library Catalogue No: QA76.76.C672. S26 2020 Chapter 5
9	Environmental Storytelling.	T/P	Salmond M. (2020). <i>Video Game Level Design</i> . Broadway, New York.: Bloomsbury Academic. Library Catalogue No: QA76.76.C672. S26 2020 Chapter 4

10	UV Mapping and Texture Application.	T/P	Salmond M. (2020). <i>Video Game Level Design</i> . Broadway, New York.: Bloomsbury Academic. Library Catalogue No: QA76.76.C672. S26 2020 Chapter 7
11	Lighting and Atmosphere.	T/P	Salmond M. (2020). <i>Video Game Level Design</i> . Broadway, New York.: Bloomsbury Academic. Library Catalogue No: QA76.76.C672. S26 2020 Chapter 7
12	Optimization and Performance.	T/P	No reading required
13	Final Project Concepts and Initial Planning.	P	No reading required
14	Initial feedback, final edits and revisions.	P	No reading required
15	FINAL SUBMISSION		

Required Course Material(s) / Reading(s)/ Text Book(s)	Salmond M. (2020). <i>Video Game Level Design</i> . Broadway, New York.: Bloomsbury Academic. Library Catalogue No: QA76.76.C672. S26 2020 Ching FDK. (1996). <i>Architectural Graphics</i> . Hoboken, N.J.: John Wiley and Sons Inc. Library Catalogue No: NA2700.C45. A734 1996
Recommended Course Material(s)/ Reading(s) /Other	Alexander R. (2011). <i>How to Draw and Paint Fantasy Architecture</i> . Hauppauge, New York.: Quarto Publishing. LCCN: 20100928093

ASSESSMENT		
Learning Activities	NUMBER	WEIGHT in %
Mid-Term	1	40
Quiz	-	-
Assignment	-	-

Project	-	-
Field Study	-	-
Presentation / Seminar	-	-
Studio Practice	-	-
Other	-	-
Contribution of Final Examination/Final Project/ Dissertation to the Final Grade	1	60
TOTAL		100

CONTRIBUTION OF COURSE LEARNING OUTCOMES TO PROGRAMME LEARNING OUTCOMES						
No	PROGRAMME LEARNING OUTCOMES	Level of Contribution (1-lowest/ 5-highest)				
		1	2	3	4	5
1	Knows the historical development of the field of communication, basic concepts, theories.	✓				
2	Knows the basic concepts and terminology related to the field of game design.				✓	
3	Has knowledge about the history of computer and video games and developments in this field.					✓
4	Knows game design processes and related applications.					✓
5	Has the ability to utilize various disciplines such as communication, art, music, psychology, mythology, cinema, etc. in the game design process.			✓		
6	Has the ability to analyze analog and digital game genres.					✓
7	Has the ability to use contemporary game engines and problem solving skills.				✓	
8	Has the knowledge of questioning the game designs with an analytic and critical perspective.				✓	
9	Has knowledge about media literacy.	✓				
10	Has the competence to prepare projects based on ethical principles in game development processes.				✓	

11	Has the competence to evaluate games as an art form.				✓	
12	Has the competence to use game design concepts and methods in related fields such as design, software development and media.					✓
13	Has the competence to take part and responsibility in game development teams.					✓
14	Has the competence to collect, analyze and interpret analytical data about games and players.				✓	
15	Has the competence to develop and present a digital game project by using game design practices effectively.					✓
16	Evaluates artificial intelligence applications in their studies with a critical approach in terms of aesthetics and originality, and uses them in accordance with ethical rules.			✓		












ECTS / STUDENT WORKLOAD				
ACTIVITIES	NUMBER	UNIT	HOUR	TOTAL (WORKLOAD)
Course Teaching Hour (X weeks * total course hours)	15		4	60
Preliminary Preparation and self- study	15		2	30
Mid-Term	1		20	20
Quiz	-		-	-
Assignment	-		-	-
Project	-		-	-
Field Study	-		-	-
Presentation / Seminar	-		-	-
Studio Practice	-		-	-
Final Examination/ Final Project/ Dissertation	1		40	40
Other	-		-	-
TOTAL WORKLOAD				150
TOTAL WORKLOAD / 25				6
ECTS				6

ETHICAL RULES WITH REGARD TO THE COURSE

Plagiarism Disclaimer

Detected and undetected plagiarism is a serious offence at any time and it could have devastating effects on your degree result and future professional lives.

Plagiarism is easy to avoid if you make sure you thoroughly identify and recognize your sources and do not copy from visual examples, designs or notes taken directly from your sources word for word. The maximum citation limit cannot exceed 20%. Artificial intelligence citations are also considered within this scope. If proven otherwise, the student will fail the course.

	SDG 1: No Poverty	
	SDG 2: Zero Hunger	
	SDG 3: Good Health and Well-Being	
	SDG 4: Quality Education	
	SDG 5: Gender Equality	
	SDG 6: Clean Water and Sanitation	
	SDG 7: Affordable and Clean Energy	
	SDG 8: Decent Work and Economic Growth	X
	SDG 9: Industry, Innovation and Infrastructure	X
	SDG 10: Reduced Inequalities	
	SDG 11: Sustainable Cities and Communities	
	SDG 12: Responsible Consumption and Production	
	SDG 13: Climate Action	
	SDG 14: Life Below Water	
	SDG 15: Life on Land	
	SDG 16: Peace, Justice and Strong Institutions	

	SDG 17: Partnership for the Goals	
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ASSESSMENT DETAILS AND EVALUATION CRITERIA:	
<p>Final Grades will be determined according to the Course Learning Activities and Final Examination Assessment Details as indicated below, and comply by the Education and Examination Regulation set forth by the University.</p> <p>Throughout the course, students will learn the theoretical base of the topic and they will be able to equip themselves with the practical know-how skills of Architectural Features and Level Design. Also, students are expected to create a playable in-game level with the knowledge they have gained in the course.</p> <p>During the class sessions, participation is a very important input for the learning process for the students.</p> <p>70% attendance to courses is compulsory. Health reports belong to 30% absenteeism right.</p> <p>Please be aware that the class uses teams. Thus, submissions have to be made Printed and Digitally.</p>	
PREPARED BY	Danish Craig
UPDATED	01/10/2025
APPROVED	Asst. Prof. Dr. Yunus Luckinger