

COURSE DESCRIPTION

1. GENERAL

SCHOOL	MUSIC AND AUDIOVISUAL ARTS		
DEPARTMENT	AUDIO AND VISUAL ARTS		
LEVEL	Undergraduate		
COURSE CODE	AVA942	SEMESTER	9 th
COURSE TITLE	Design & Development of Video Games		
INDEPENDENT TEACHING ACTIVITIES	WEEKLY TEACHING HOURS	ECTS	
Lecture, Lab Lecture	3	5	
COURSE CATEGORY	Deepening Knowledge		
COURSE TYPE	Elective		
PREREQUISITES	(AVA341)		
LANGUAGE OF TEACHING and EXAMINATIONS	Greek		
THE COURSE IS OFFERED TO ERASMUS STUDENTS	YES (In English)		
URL	https://avarts.ionio.gr/en/studies/undergraduate/courses-descriptions/ava942/		
ECLASS	https://e-class.ionio.gr/courses/DAVA310		

2. TEACHING RESULTS

Teaching Results
Students who successfully complete the course will know how to implement the following: analysis of the game characteristics, description of objectives, planning & action design, appropriate selection of implementation platform for a new game, design and creation of the user environment, character configuration, score design, design of the gaming experience, creation of a test game based on each individual students' programming skills in environments that include: MIT Scratch, Unity3D, Unreal Engine and others.
General Skills
<ul style="list-style-type: none"> • Seek, analyze and synthesize data • Autonomous work • Team work • Project design and management • Freedom of thought

3. CONTENT

<p>The course describes the modern video game design and development process. Various games and platforms are used to present and focus on the development of new gaming experiences including augmented and virtual reality platforms. Research and development issues that include the transformation of an idea to a gaming experience, the design processes for the development of a sound game structure is analysed including issues relating to scoring, rules and strategies that need to be implemented in order to create a rewarding experience. Immersion issues are also discussed involving the process that covers the period between purchasing the game to the date that the player stops playing. The course examines specific categories of games in relation to real-world applications (cryptography) and games using mixed media and multiple forms of interaction.</p> <p>Week 1: Introduction Week 2: Games in practice - playing without the computer Week 3: Types of computer games, examples Week 4: Playing games - Test AR - VR games in the classroom, recording characteristics (A) Week 5: Describing the game experience Week 6: Playing games - Test AR - VR games in the classroom, recording characteristics (B) Week 7: Game Design - Opinion Student</p>

Week 8: From Ideas to Game characteristics (turning a story into the game)
Week 9: Choosing the Right Platform
Week 10: Presentation of Game Environments & Tools
Week 11: Content Creation and Conversion of Existing Games
Week 12: Media Creation
Week 13: Game Presentation

4. TEACHING AND LEARNING METHODS - EVALUATION

TEACHING METHOD	Lectures												
USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES	Enhanced by multimedia content. The learning process is supported by the asynchronous e-learning platform e-class.												
TEACHING STRUCTURE	<table> <tr> <td>Activity</td> <td>Semester Workload</td> </tr> <tr> <td>Lectures</td> <td>13</td> </tr> <tr> <td>Lab Lectures</td> <td>26</td> </tr> <tr> <td>Literature Study and Analysis</td> <td>56</td> </tr> <tr> <td>Practice and Preparation</td> <td>30</td> </tr> <tr> <td>Course Total (ECTS: 5)</td> <td>125</td> </tr> </table>	Activity	Semester Workload	Lectures	13	Lab Lectures	26	Literature Study and Analysis	56	Practice and Preparation	30	Course Total (ECTS: 5)	125
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EVALUATION OF STUDENTS	<p>The exercises can be completed in English.</p> <p>Progress in this course is assessed during the semester by quality implementation and timely submission of the required work and participation in the course activities (presentations, visits, projects, experiments). Submitted work is rated for the quality and scope of the implementation, proper formatting and completeness of the presentation that is often required to be implemented by the students to present the results of their research as part of the lecture. Work sent via other communication channels such as e-mail, social media will not be considered. Students are responsible to seek clarification if they do not understand the assignment and solve their queries during the course laboratory. In order for students to receive their final grade, they must submit a signed statement stating that their work does not contain plagiarism and it was solely created for this particular course. They must also sign the marking form provided by the lecturer during the exam period.</p> <p>Students who do not complete the course and fail for a specific term, can complete and submit the work requested during the most recent semester. As the course progresses from year to year, they should always enquire about the latest exercises which should be present within the e-class system. Those exercises are submitted during the examination date as it is programmed centrally by the department and the students should also sign the form provided during the examination in order for their work to be evaluated and receive the final mark.</p>												

5. BIBLIOGRAPHY

The books listed are distributed in Greek language. Please contact the professor of the course should you require particular references in your language for easier reading.

Μιχάλης Λυγκιάρης & Γιάννης Δεληγιάννης: Ανάπτυξη Παιχνιδιών, Σχεδιασμός Διαδραστικής Αφήγησης, Θεωρίες, Τάσεις και Παραδείγματα, Fagotto Books, 2017.

