COURSE DESCRIPTION

1. GENERAL

SCHOOL	MUSIC AND AUDIOVISUAL ARTS
DEPARTMENT	AUDIO AND VISUAL ARTS
LEVEL	Undergraduate

COURSE CODE	VIS630	**SEMESTER**	6th
COURSE TITLE	Computer Graphics		

INDEPENDENT TEACHING ACTIVITIES	**WEEKLY TEACHING HOURS**	**ECTS**
Lab Lecture	2	4

COURSE CATEGORY	Specific Background
COURSE TYPE	Elective
PREREQUISITES	VIS333
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/vis630/
ECLASS	

2. TEACHING RESULTS

Teaching Results
The course aims to introduce students in basic concepts of three-dimensional graphics. After the end of the course students will be able to create photorealistic three-dimensional environments.

General Skills
- Seek, analyze and synthesize data   - Autonomous work   - Team work   - Project design and management   - Freedom of thought

3. CONTENT

This course aims at presenting the terminology, functionality and the major applications of 3d computer graphics for the Arts. The practical exercises in the field of 3d graphics through the use of methods and tools allow the students to appreciate the potentialities and limitations of 3d graphics. This is achieved through the use of examples and applications, which are directly related to their artistic domain of interest.

1st Week. Introduction to 3ds max. Basic concepts. Navigating in the 3D world.

2nd Week. Modeling. Modeling techniques based on primitive shapes.

3rd Week. Modeling with polygons.

4th Week. Materials. Basic concepts.

5th Week. Textures. Texture mapping techniques.

6th Week. Progress.

7th Week. Lighting. Types of lights in 3d programms.

8th Week. Lighting. Illustrating a scene with various lighting techniques.

9th Week. 3d Rendering. Various types of rendering the final image.

10th Week. Progress.

11th Week. Camera motion. Techniques and tools.

12th Week. Photorealistic image rendering.

13th Week. Repetitions.

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 asyncrhonous e-learning platform e-class.
TEACHING STRUCTURE	Activity / Semester Workload Lab Lectures 26 Literature Study and Analysis 48 Practice and Preparation 26 **Course Total** (ECTS: 4) **100**
EVALUATION OF STUDENTS	Progress and assessment of the course is implemented by delivering artistic work during the semester and is completed with a total delivery of completed works at the end of the semester.

5. BIBLIOGRAPHY

Autodesk 3ds Max 2014 Bible, Kelly L. Murdock, John Wiley & Sons, 2013