ESOGÜ Electrical-Electronics Engineering Department

COURSE CODE: 151227646 – 151247646 **COURSE TITLE:** Introduction to 3D Modeling & Animation

Semester	**Weekly Hours**		**COURSE**			
	Theoretical	**Practical**	**Credits**	**ECTS**	**Type**	**Language**
FALL	3	0	3	4	Compulsory ( ) Elective (✔)	Turkish () English (X)

Write the credit (for non-credit courses weekly hours) below (If necessary distribute the credits.).

Math and Basic Science	**Electrical Engineering** [mark (√) if there is high design content]	**General Education**	**Humanities**
	( )		✔

Assessment	**THEORETICAL-PRACTICAL COURSES**			**LABORATORY COURSES**		
Midterm	**Type**	**Number**	**%**	**Activity Type**	**Number**	**%**
	Midterm	1	40	Quiz		
	Quiz			Lab performance		
	Homework	1	20	Report		
	Project			Oral exam		
	Other (……)			Other (……)		
Final		1	40			
Makeup exam (Oral/Written)						

Prerequisites	none
Brief content of the course	Course begins with giving the importance of 3D modeling and Animation. Explains what is involved and how in the process. Following chapter involves about modeling, painting, rigging, animation, physics, rendering, compositing and other advanced techniques.
Objectives of the course	1-To give student a better understanding for 3D modeling and animation 2-To give student awareness about what are the work steps and involvements of 3D modeling and animation. 3-To give student the idea of how 3D may change their communication and presentation styles in their professional life after the graduation.
Contribution of the course towards professional education	It may contribute to the student's visual communication and presentation skills. These contributions may effectively show up also in the professional life after the graduation in very good ways.
Outcomes of the course	Op1, op2, op3, op4
Textbook of the course	Blender 3D User Manual
Other reference books	Any book, or user guides can be helpful. Video tutorials strongly advised.
Required material for the course	Students may download and install Blender 3D software package into their personal computers. They may also benefit from department's computers the same way.

WEEKLY PLAN OF THE COURSE	
Week	**Topics**
1	Introduction
2	Blender 3D, installing and user interface
3	Data System
4	Modelling
5	Painting and sculpting
6	Rigging
7	Animation experiments
8	Midterm
9	Midterm
10	Motion capture
11	Physics
12	Compositing
13	Rendering
14	Advanced Design Techniques
15,16	Final

NO	OUTCOMES OF THE PROGRAMME	4	3	2	1
1	Adequate knowledge of mathematics, science and Electrical and Electronic Engineering; ability to practice theoretical and practical knowledge of these areas into modeling and solving problems of Electrical and Electronic Engineering			x	
2	Ability to identify complex engineering problems in Electrical and Electronic Engineering and related fields, for this purpose having skills to formulate, select and apply appropriate methods.			x	
3	Having skills to apply modern design methods to design a complex system, equipment or product that should work under realistic conditions and constraints and satisfy specific requirements concerning the Electrical and Electronic Engineering.		x		
4	Having skills to develop, select and apply modern techniques and tools needed for Electrical and Electronic Engineering applications, skills to use information technology effectively.		x		
5	Skills to design and conduct tests, collect data, analyze results, and interpret data for the experimental investigation of Electrical and Electronic Engineering problems				x
6	Ability to function effectively as an individual and as a member of teams within the discipline and in multidiscipline areas.				x
7	Communicating effectively in oral and written form both in Turkish and English.				x
8	Awareness of the necessity of lifelong learning, access to information, monitoring developments in science and technology and the ability to self-renewing				x
9	Understanding of professional and ethical responsibility				x
10	Information on project management, change management and risk management practices, awareness on entrepreneurship, innovation and sustainable development.				x
11	Information about universal and societal effects of engineering applications on health, safety and environment; awareness of the legal consequences of engineering solutions.				x

Scale for assessing the contribution of the course to the program outcomes:

4: Very high **3: Medium**

2: Low **1: None**

Name of Instructor(s):

Yrd.Doç.Dr.Gökhan Dındış

Signature(s):

Date: