EASTERN MEDITERRANEAN UNIVERSITY

SCHOOL OF COMPUTING AND TECHNOLOGY

DEPARTMENT OF INFORMATION TECHNOLOGY

COURSE POLICY SHEET

Course Title	3D Modeling and Animation
Course Code	ITEC450
Type	Full Time
Semester	2019-2020 Spring
Category	AE (Area Elective)
Workload	180 Hours
EMU Credit	(3,1,0) 3
Prerequisite	-
Language	English
Level	Fourth Year
Teaching Format	3 Hours Lecture and 1 Hour Laboratory per week
ECTS Credit	6
Course Web Site	http://staff.emu.edu.tr/birolozkaya/en/teaching/itec450

Instructor(s)	Birol Özkaya	**Office Tel**	+90 392 630 1660
E-mail	birol.ozkaya@emu.edu.tr	**Office No**	CT115

Course Description

This course is designed to teach students the basic principles of 3-dimensional (3D) modeling and animation. With the aid of a commercial 3D graphics application, the students will gain necessary knowledge and skills to create 3D objects, environment and atmospheric effects, different types of lights and cameras in a scene; learn how to create and apply realistic textures on objects; and also how to render an animation video by using the basic keyframe and procedural animation techniques.

General Learning Outcomes

On successful completion of this course students should be able to:

- Create and edit 3D models.
- Create and apply realistic materials on objects.
- Employ different types of lights and cameras in a scene.
- Apply basic keyframe and procedural animation techniques.
- Produce quality pictures and animation videos of 3D objects.

Teaching Methodology / Classroom Procedures

- 3 hours of lecture and 1 hour of laboratory per week are conducted for this course.
- Lecture and Laboratory attendances affect the Class Participation (8% of Grading), and may have a positive effect on the student's final letter grade.
- There are FOUR practical assignments namely Assignment 1, Assignment 2 Assignment 3, and Assignment 4. The assignments are to be done using the 3DS MAX software package, and should be submitted to the instructor by e-mail.

Course Materials / Main References
Textbook: Ami Chopine, ***3D Art Essentials The Fundamentals of 3D Modeling and Animation***, Focal Press, 2011. ISBN: 978-0-240-81471-1 ***Course Materials:*** The lecture notes, laboratory exercises, assignments, and announcements are available on the course web site.

Weekly Schedule / Summary of Topics	
Week 1	**Course Registration**
Week 2	**Introduction of the course**
Week 3	**Creating 3D Objects (Standard Primitives); Boolean/Proboolean Operations**
Week 4	**Creating 3D Objects from 2D Shapes: Extrude, Bevel, Bevel Profile, Lathe, Loft methods**
Week 5	**Spline Modeling**
Week 6	**COVID-19 OUTBREAK**
Week 7	**COVID-19 OUTBREAK**
Week 8	**Polygon Modeling**
Week 9	**Polygon Modeling**
Week 10	**Materials**
Week 11	**Lighting, Cameras**
Week 12	**Basic Keyframe Animation**
Week 13	**Procedural Animation**
Week 14	**Animating lights, and materials**
Week 15	**Gizmos, Particle Systems**
Week 16-18	**Final Examinations**

Requirements
▪ There is no make-up assignment for the missed assignment/s. ▪ Students who fail to attend the lectures (Microsoft Teams Meetings) regularly may get a NG grade. ▪ Students should frequently visit the course web site for downloading the course materials, and observing the deadlines of important events. ▪ Students are expected to attend the lecture and laboratory sessions (Microsoft Teams Meetings) on time (within the first 10 minutes).

Method of Assessment					
Evaluation and Grading	**Assignment1**	**Assignment2**	**Class Participation**	**Assignment3**	**Assignment4**
Percentage	23 %	23 %	8 %	23 %	23 %

Grading Criteria *											
A	**A-**	**B+**	**B**	**B-**	**C+**	**C**	**C-**	**D+**	**D**	**D-**	**F**
90 -100	85 - 89	80 - 84	75 - 79	70 - 74	65 - 69	60 - 64	56 - 59	53 - 55	50 - 52	40 - 49	0 - 39

* Letter grades will be decided upon after calculating the averages at the end of the semester and distribution of the averages will play a significant role in the evaluation of the letter grades.