AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Three Dimensional Modelling Design						
Course Code	BPR191		Couse Level	Short Cycle (Associate's Degree)			
ECTS Credit	2	Workload	50 *(Hours)*	Theory	2	Practice	0	Laboratory	0
Objectives of the Course	The aim of this course is to teach how to design and design 3D computer models and animations and to develop 3D educational content using 3Ds Max program.						
Course Content	3D modeling is the process of developing a three-dimensional mathematical model of a living or inanimate object with special programs for 3D modeling in general using computer graphics. The 3D models prepared with the 3D modeling process are often used simultaneously with the tools that provide a realistic look to the 3D rendering model. In the process of 3D modeling, the data of the computer graphics are usually obtained by the user by step by step processing like sculpture and plastic arts. In most cases, manual 3D modeling can be performed automatically by the user. Automated 3D modeling can be done by entering certain values ??into previously made algorithms or by various scanning devices such as a 3D scanner. For example, MRIs used in hospitals serve as a kind of 3D scanner. Turkey and areas in the world, which is quite extensive 3D modeling, manufacturing as it used to make three-dimensional model of a structure to be constructed model is also used for the preparation of a product to be made. Today, the history of 3D models, which become an indispensable part of the gaming and animation world, is even older than personal computers. At the beginning, we apply for interactive presentations such as films, video games, 3D models used in interior design and architecture, and anatomy in the medical sector. In this context, examining the sample applications and developing new 3D model designs suitable for the content form the content of the course.						
Work Placement	N/A						
Planned Learning Activities and Teaching Methods		Explanation (Presentation), Discussion, Individual Study, Problem Solving					
Name of Lecturer(s)							

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	70

Recommended or Required Reading

1	3D Studio Max (Kodlab)

Week	Weekly Detailed Course Contents	
1	Theoretical	Introduction to 3D model and animation in education
2	Theoretical	3D modeling and animation programs, basics of 3Ds Max program, menus of 3Ds Max program, usage of 3Ds Max tees,
3	Theoretical	3D modeling bases, explaining the properties of different modeling methods, working with sub-objects
4	Theoretical	Curve modeling, working with sub-objects of 2D objects
5	Theoretical	Expansion and collapse, use of Loft command, polygon edges softening
6	Theoretical	Modeling for motion graphics, using some 2D editors
7	Theoretical	Modeling for motion graphics, using some 2D editors
8	Theoretical	Polygon modeling technique, modeling lines, use of regulators, subsections of surface modeling
9	Intermediate Exam	midterm
10	Theoretical	Polygon modeling with modeling strip, Introduction to Nurbs modeling, editing of curves and surfaces
11	Theoretical	Using material bases and usage, adjusting opacity, using transactional overlay and bitmaps
12	Theoretical	Camera creation and viewing angle adjustment, Lighting bases and stage light settings
13	Theoretical	Key frame animations, transition animation preparation, repetitive animation creation.
14	Theoretical	Hierarchies, linking objects and playing a hierarchy and optimizing animation
15	Theoretical	Animation controls, gripping controllers and using the motion panel
16	Final Exam	Final Examination

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Assignment	1	0	5	5
Term Project	1	0	5	5
Midterm Examination	1	5	1	6
Final Examination	1	5	1	6
			Total Workload (Hours)	50
			[Total Workload (Hours) / 25*] = **ECTS**	2

25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	They will have the ability to design 2-D character and multi-angle design planning required for 3-D modeling.
2	They will have concept design knowledge that can meet their animation production needs.
3	Will be able to transfer 2D designs to 3D space
4	They will have the ability to conceptualize a design idea.
5	Have an idea about the aesthetic dimension of design
6	To have the necessary drawing techniques and skills during the animation design process
7	To be able to define 3D animation software and materials

Programme Outcomes *(Garment Manufacturing Technology)*

1	To be able to use theoretical and practical knowledge related to Garment Manufacturing Technology
2	To carry out brand management, marketing and promotional activities related to Garment ManufacturingTechnology
3	Having the skills of data collection, research report preparation and presentation for the research, preparing the project
4	Being able to plan the processes / processes related to Garment Manufacturing Technology to meet the expectations of the sector, to be able to make business organization, production plan and control, prepare working instructions
5	To be able to determine textile raw materials and surface properties, to choose garment auxiliary materials, to be able to control materials
6	To be able to carry out steps of pattern preparation, grading, pattern layout preparation
7	To be able to use necessary equipments and machines for applications related to Garment Manufacturing Technology and to make adjustments and maintenance
8	To be able to use computer aided pattern and design programs, production applications in Garment Manufacturing Technology
9	Having the ability to manage and organize business by creating the idea of establishing a business in the field
10	To be able to create a model by applying technical drawings of clothing and basic arts education
11	To be able to realize basic sewing techniques, production stages of women's, men's and children's wear

Contribution of Learning Outcomes to Programme Outcomes *1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High*

	L1	L3
P8	1	3