

Course Description	
Course Code	YS 426
Course Name	ANIMATION AND APPLICATIONS
Prerequisite Courses	
Language of the Course	The English
Course Coordinator	
Instructor(s)	
Course Assistants	
The aim of the course	The course will cover the advanced concepts in computer graphics
Course Content	Basic transformations and animation applications using OPENGL software.

Weekly Course Content	
Week 1	Introduction to OPENGL
Week 2	Introduction to OPENGL
Week 3	Drawing Geometric Objects using OPENGL
Week 4	Drawing Geometric Objects using OPENGL
Week 5	2-dimensional transformations using OPENGL
Week 6	3-dimensional transformations using OPENGL
Week 7	3-dimensional transformations using OPENGL
Week 8	Midterm Exam
Week 9	Color using OPENGL
Week 10	Color using OPENGL
Week 11	Display Lists in OPENGL
Week12	Display Lists in OPENGL
Week 13	Lighting in OPENGL
Week 14	Lighting in OPENGL
Week 15	Final exam.

Course Learning Outcomes	
1	The teaching of the advanced concepts of the computer graphics
2	Ability to create basic applications using OPENGL software
3	-
4	-

Contribution of the Course to Program Qualifications			Contribution Level
01	The student will have the ability to apply analytical approach, mathematics and science knowledge in software and engineering issues.		3
02	The student will have the ability to identify, define, formulate and solve a problem in software and computer systems.		4
03	The student will have gains scientific research skills in software and engineering problems, has the ability to design a system, part or process.		0
04	The student will have the ability to use the design capability, techniques and tools required for engineering applications.		4
05	The student will have the ability to design, implement and interpret experimental work and software projects by analyzing the results.		0
06	The student will have the ability to work between disciplines and teamwork.		4
07	The student will have the ability to work in international environments and adapt to different cultures.		3
08	The student will have verbal and written communication skills in Turkish and English.		0
09	The student will have the awareness of the necessity of lifelong learning and the ability to realize it.		4
10	The student will gain knowledge of legal issues with the awareness of professional and ethical responsibility.		0
11	The student will have managerial skills (leadership, organization, time and risk management, quality awareness, efficiency, etc.).		3
12	The student will have the ability to participate in social activities, to acquire regular sports habits and to use time in the best way.		4
13	The student will have the ability to find unusual ways and produce projects.		3
14	The student will have professional self-confidence, being an entrepreneur and taking initiative.		3
15	It is sensitive about the problems of the age and looks after the national interests.		3

ECTS WORKLOAD			
	Number	Duration (hours)	Number*Duration
Face to face education	14	2	28
Out-of-class study time (pre-study, reinforcement)	7	2	14
Homeworks	2	6	12
Presentation / Seminar preparation	1	2	2
Quizzes	0	0	0
Preparation for midterm exams	1	6	6
midterm exams	0	0	0
Project (Semester assignment)	1	10	10
Lab	1	5	5
field work	0	0	0
Preparation for the final exam	1	10	10
Semester final exam	1	2	2
Research	0	0	0
<b>TOTAL WORKLOAD</b>			<b>89</b>
<b>ECTS</b>			<b>3</b>

Evaluation		
SEMESTER EVALUATION	Number	Contribution Percentage
Midterm	1	20
Quiz	0	0
Homework	2	20
<b>SEMESTER TOTAL</b>		<b>40</b>
Contribution rate of mid-term evaluations to success		40
Contribution rate of the final exam to success		60
<b>GRAND TOTAL</b>		<b>100</b>

RESOURCES

Textbook	
Helpful Resources	Computer Graphics:Principles and Practice in C, Addison-WesleyFoley, J. D., Dam, A., Feiner, S. K., Hughes, J. F., Geometric Tools for Computer Graphics, Morgan Kaufmann, Schneider, P., Eberly, D. DComer, D.E.