

Course name: CENG315 Computer Graphics		Department: Computer Engineering						
Semester	Methods of Education							Credit (ECTS)
	Practice	Recitation/ (Etud)	Lab	Project/ Field Study	Homework	Other	Total	
2021 – 2022 Fall	42	-	-	20	60	28	150	5
Language	English							
Compulsory/Elective	E							
Prerequisites	CENG201, ENGR202							
Face to Face Lecture	2							
Online	1 (might be 2 sometimes)							
Course Contents	Week 1 – Introduction, Math basics Week 2 – 2D Transformations Week 3 – Transformation Hierarchies Week 4 – 3D Transformations Week 5 – Triangle Meshes Week 6 – Triangle Meshes & Data structures Week 7 – Viewing & Projections Week 8 – Midterm Week Week 9 – Shading Week 10 – Shading Week 11 – Rasterization Week 12 – Texture mapping Week 13 – Rendering pipeline review Week 14 – Displays Week 15 – Spline curves							
Course Objectives	Introducing fundamentals of Computer Graphics and practice using OpenGL (WebGL)							
Learning Outcomes and Competences	Students will have an understanding of fundamental computer graphics topics & theories. Students will experience making 3D applications with OpenGL							
Textbook and /or References	Book: Fundamentals of Computer Graphics 4th ed. Book: Interactive Computer Graphics with WebGL							
Assessment Criteria							%	
	Midterm						20	
	Quiz						15	
	Assignments						40	
	Final						25	
Instructors	M. Abdullah Bülbül							