Course Number	CS 585	Course Title	Advanced Topics in Computer Graphics
Semester Hours	3	Course Coordinator FA20	Tong Shu
Catalog Description	Study of computer graphics for realistic image synthesis. Object modeling and associated date structures. Advanced rendering techniques such as raytracing and radiosity. Efficiency considerations. Image composition and compression. Current advances and research problems in realistic computer graphics.		

Textbooks

References

Course Learning Outcomes

Assessment of the Contribution to Student Outcomes

Outcome →	1	2	3	4	5	6	7
Assessed →	X	X	X	X			

Prerequisites by Topic

CS 485

Major Topics Covered in the Course

1. Overview of 3D graphics and methods in realistic image synthesis
2. Introduction to PHIGS
3. Reflection and shading models
4. Object representation and modeling
5. Rendering
6. Anti-aliasing
7. Ray tracing and methods to enhance realism

Latest Revision: Spring 2021