

Dept Number	CS 585	Course Title	Advanced Topics in Computer Graphics							
Semester Hours	3	Course Coordinator	Michael Wainer							
Catalog Description	Study of computer graphics for realistic image synthesis. Object modeling and associated data 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 Program Outcomes										
Outcome →	1	2	3	4	5	6	7	8	9	10
Assessed →										
Prerequisites by Topic										
CS 485.										

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Major Topics Covered in the Course		
<ol style="list-style-type: none"> 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 		