

AN3D 4260 - ADVANCED 3D COMPUTER TOPICS

Credits: 3

Building on the skills and knowledge gained in previous classes, this advanced-level course will focus on learning specific concepts and techniques for the final stages of production and will focus heavily on the post-production phases of 3D computer animation. Advanced rendering techniques such as passes and layers will be covered as well as texture and light baking and occlusion passes. Students will focus heavily upon post-production techniques including compositing, post-production effects, and output methods.

Prerequisites: Completion of 90+ credit hours

Course Learning Outcomes:	Exceeding	Meeting	Developing	Not meeting	Program Outcomes	New Institutional Outcomes
Demonstrate production quality level of 3D art through utilization of advanced 3D art tools and techniques.	3D Assests created demonstrate a thorough understanding of the tools and techniques and require minimal or no additional polish for portfolio application	3D Assests created demonstrate a solid understanding of the tools and techniques and only require minimal polish for portfolio application	3D Assests created demonstrate a basic understanding of the tools and techniques and require considerable polish for portfolio application	3D Assests created demonstrate little understanding of the tools and techniques and require substantial polish for portfolio application	3DAN-1 3DAN-3 3DAN-4 3DAN-5 3DAN-6	Design Competence, Communication Competence Critical Thinking Cultural Competence
Produce a complete project from research and planning to post-production and delivery.	Project is complete and follows production stages and is ready for inclusion in portfolio	Project is complete and follows production stages but some additional polish may still be necessary	Project is incomplete and does not fully follow production stages a considerable amount of work is needed	Project is incomplete and does not follow production stages a substantial amount of work is needed	3DAN-1 3DAN-3 3DAN-4 3DAN-5 3DAN-6	Design Competence, Communication Competence Critical Thinking Cultural Competence
Incorporate design elements through a narrative approach and develop design documentation along with extensive subject matter reference to guide the production process.	Design Documentation is complete with an abundance of reference material. Project demonstrates a thorough understanding of incorporating narrative with design	Design Documentation is complete with sufficient reference material. Project demonstrates an understanding of incorporating narrative with design	Design Documentation is incomplete and lacks sufficient reference material. Project demonstrates a moderate understanding of incorporating narrative with design	Design Documentation is incomplete with insufficient reference material. Project demonstrates a lack of understanding of incorporating narrative with design	3DAN-1 3DAN-3 3DAN-4 3DAN-5 3DAN-6 3DAN-8	Design Competence, Communication Competence Critical Thinking Cultural Competence
Create various 3D assets using industry standard principles of modeling, texturing, UV mapping, lighting, and rendering.	3D assests demonstrate exellent application of modeling, UV, texture, lighting, and rendering techniques with no flaws.	3D assests demonstrate proper application of modeling, UV, texture, lighting, and rendering techniques with minimal flaws.	3D assests demonstrate a lack of understanding in the application of modeling, UV, texture, lighting, and rendering techniques and contains considerable flaws.	3D assests demonstrate a lack or no of understanding in the application of modeling, UV, texture, lighting, and rendering techniques and contains substaintial flaws.	3DAN-1 3DAN-3 3DAN-4 3DAN-5 3DAN-6	Design Competence, Communication Competence Critical Thinking Cultural Competence