ANGD 2361 - 02 | Character Modeling I
Syllabus and Outline

University of the Incarnate Word
Classroom: AD 406
Spring 2025 | TR 1:30pm – 4:15pm

Instructor Carlos Garcia (cagarc12@uiwtx.edu)
Office: AD 403
Office Hours: M 1:30pm – 2:30pm | W 3:00pm – 4:00pm | F 12:30pm – 3:30pm

Course Description
This studio course is focused on introducing and practicing full character creation workflow. Detailed human body topology will be created (nose, eye, mouth, hand, and feet). Detailed head, hand, and body anatomy will be explored. Basic UV, texturing, and rendering techniques will be introduced in the context of character creation.

Outcomes
Create production-ready 3D characters for games through a series of focused projects. These include anatomy studies, customizable armor swaps, realistic hair for games, and believable CG portraits. The course culminates in a fully realized, real-time 3D character, showcasing an efficient and professional character creation workflow.

Course Items Needed
Graphic Tablet and Hard-drive or USB/C Storage Device

Audience
This is a sophomore level course required of ANGD BFA majors.

Date	Topic	Assignment Due
1/14	Syllabus & Outline, Class Expectations, Introduction to 3d Character Art	None
1/16	Skeletal Meshes: Characters Deform – Topology of the Human Form	Anatomy Base Mesh – WIP
1/21	Studio Day: Allocated Time to Work and Receive Feedback	None
1/23	Base Mesh Postmortem, Armor Swap Kickoff: Character Customization	Anatomy Base Mesh – Final Deliverable
1/28	Topology Theory: Deformation Friendly Topology	Armor Swap – Reference Board
1/30	Proxy Models & Rigs: A Bottleneck Free Production	Armor Swap – Block-in
2/4	Material Studies: Cloth, Stitches, Tears, Leathers, & More	Armor Swap – High Poly
2/6	Lighting & Shader Setup: UE5 for Production Ready Assets	Armor Swap – Optimization
2/11	Production Ready Character Pipeline: Integrating Rigged Character Models	Armor Swap – Textures
2/13	Armor Swap Postmortem, Eyes Kickoff: Real-time Eye Creation	Armor Swap – Final Deliverables
2/18	Understanding the Iris: Anatomy and Sculpting in ZBrush	Eyes – Work in Progress (Base Mesh)
2/20	Baking the Eyes: Cornea and Eye (Iris, Sclera, & Pupil) Bakes	Eyes – Work in Progress (High)
2/25	Texture the Regions of the Eyes and Material Setup (Parallax Occlusion)	Eyes – Work in Progress (Bakes)
2/27	Texturing and Shading the Eye: Layers, Layers, and More Layers	Eyes – Work in Progress (Textures)
3/4	Eyes Postmortem, Character Asset Kickoff	Eyes – Final Deliverables
3/6	Character Asset Workshop – Project Specific Lecture	Real-time Portrait – Reference Board
3/11 3/13	Spring Break – No Class	
3/18	Studio Workday – Allocated Time to Work on Your Character Assets	Character Asset – Work in Progress
3/20	Studio Workday – Allocated Time to Work on Your Character Assets	Character Asset – Work in Progress
3/25	Character Asset Postmortem, Real-Time Character Kickoff	Character Asset – Final Deliverables
3/27	Sculpting the Human Head: Anatomy for Sculptors	Real-time Character – Reference Board

Date	Topic	Assignment
4/1	Topology Theory: Loops, Stars, and Deformation of the Face	Real-time Character – WIP Block-in
4/3	Production Ready 3d Character Art Studies: From Mobile to PC	Real-time Character – Block-in
4/8	Marvelous Designer for Character Block-ins	Real-time Character – WIP High Poly
4/10	Polished Garments: Marvelous Designer, ZBrush, & Optimization	Real-time Character – WIP High Poly
4/15	Material Studies: Texturing & Shading Cloth	Real-time Character – High Poly
4/17	The Art of Baking; Baking Complex Character Models	Real-time Character – WIP Optimization
4/22	Studio Day: Allocated Time to Work and Receive Feedback	Real-Time Character - None
4/24	Integration: Model & Shading Setup	Real-time Character – WIP Optimization
4/29	Character Lighting & Rendering for Real-time Productions	Real-time Character – Optimization
5/1	Portfolio Considerations and Presentations: Every Picture, Every Pixel Matters	Real-time Character – WIP Textures
5/6	Finals Week– No Class	
5/8	Real-time Character Due – 5/8	

Grading Activities: Your final grade will be based upon Attendance, Assignments and Participation. Your grade will be based upon the percentage of 100 pts you have earned. 100-90=A, 89-80=B, 79-70=C, 69 and below = F. All assignments will be given and collected on the forums. http://forums.uiw3d.com. Your grades will be posted on Canvas.

Percentages will be awarded as follows:
> Anatomy Base Mesh – 5%
> Armor Swap – 15%
> Eyes – 10%
> Character Asset – 25%
> Real-time Character – 35%
> In-class Exercises – 10%

ANGD Course Policies

Attendance Policy: Attendance is mandatory. After one absence, each additional absence will result in a letter drop in your final grade. If you are late three times, that counts as an absence. Illnesses or doctor's appointments are excused but try to avoid appointments during class time. If you miss 30% of class for any reason - even if medically excused - you will need to withdraw; the class needs to be retaken.

Late Work Policy: No late assignments accepted. All assignments are due before the beginning of class on the day they were due. If you are sick or miss class, the assignment is still due. There are no redoes. Make every project you turn in count.

Academic Integrity Policy: Self Plagiarism: No work previously completed in another section, or another course can be turned in. AI use or downloaded content is prohibited in all coursework, unless otherwise specified by your instructor.

Phone/Device Policy: When in class, no phones or devices. Keep them put away unless otherwise specified by your instructor. Phone usage in class will be considered a tardy. Three phone uses in class equals an absence and thus a letter drop in grade.

UIW Course Policies, Guidelines and Accommodation: This course complies with all UIW academic policies and federal guidelines, including but not limited to academic integrity, disability accommodations, pregnancy accommodations, Title IX non-discrimination, and class absences for religious observances. Current policy statements will be provided to all students through the learning management system and in information provided on the first day of class.
https://www.uiw.edu/academics/academicpolicies.html

*Please note that due to the dynamic and distinct nature of each class, this syllabus and outline should be treated as a living document in response to feedback and student engagement. This document may undergo revisions to address the specific needs and progress of the students in each class section.