# ANGD 3361 | Character Modeling II

## Syllabus and Outline

### University of the Incarnate Word

Classroom: AD 406 Fall 2024 | MW 10:30am - 01:15pm

#### **Course Description**

This course enhances students' understanding of the 3D character modeling pipeline, covering sculpting, optimization, texturing, and seamless integration. The skills gained are applicable across various 3D industries, including video games, animation, toys, film, TV, and advertising.

#### Course Items Needed

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

Professor Jacob Salazar (jjsalaz2@uiwtx.edu) Office: AD 402 Office Hours: MW 3:00pm – 5:30pm | F 10:30am – 2:00pm

#### Outcomes

Upon completing this course, students will master digital sculpting for high-fidelity characters, transform 2D concept art into captivating 3D assets, confidently navigate industry-standard software, and create professional-grade characters.

#### Audience

This is a Junior level course required of ANGD BFA majors.

| Date | Торіс   | Assignment Due                        |
|------|---|---------------------------------------|
| 8/26 | Course Overview<br>Open discussion on course objectives and core philosophies. This class aims to deepen understanding<br>of character production for films/games through lecture, demonstration, and hands-on practice.<br>Utilizing both quick and long turnarounds to maximize growth potential. | None                                  |
|      | Name, origins, fun fact/personal tidbit, artistic goals ZBrush Setup ZBrush custom interfaces, custom brushes, custom hotkeys, importance of workflow and speed. focal  |                                       |
| 8/28 | Eat, Sleep, Reference, Repeat<br>Brief overview of key components in reference and compiling good reference.<br>Narrative. Material callouts. Mood capture. Pose ideation.<br>Prop Blocking   | None                                  |
| 9/2  | Labor Day – No Class  |                                       |
| 9/4  | When in Doubt, Block it Out<br>Start building a character with fundamental shapes and forms.  | PurRef Board – Hero<br>Prop, Off Char |
| 9/9  | Shining and Exciting. The Importance of Lighting<br>Building a light rig demo. Setting up shot cameras. Renderings Tips n' Tricks.  | Char Blocking<br>Prop Blocking        |
| 9/11 | Merging the Block-Out/Refinement<br>Examining fine details, breaking CG look. Prop Model Demo - Hi Poly   | Light Rig, Prop WIP                   |

| 9/16  | The Keys to Quality, UV's and Topology   | Prop WIP, Char WIP    |
|-------|--|-----------------------|
|       | Topo that supports anatomy and deformation.  |                       |
|       | UV's that provide enough resolution for desired details.   |                       |
| 9/18  | In-Class Critiques, Where Feedback Speaks  | Hero Prop GEO         |
|       | Prop Texture Demo  |                       |
|       |  |                       |
| 9/23  | Frankenstein Speedsculpt Series: Head/Face   | Hero Prop Texture WIP |
|       | The series will start with a class session focused on analyzing muscles in both relaxed and flexed           | Hero Prop Shader WIP  |
|       | states, including various forms from pudgy to muscular. After the lecture, students will select a concept    |                       |
|       | from a pre-approved folder and engage in a group speed sculpting session of that specific anatomical         |                       |
|       | piece.<br>Starting off with the skull, face, and eyes.   |                       |
|       |  |                       |
| 9/25  | Frankenstein Series: Torso/Back  | Char Face WIP         |
|       | Continuation of human anatomy study  |                       |
|       | Texturing (Cheding Even  |                       |
|       | <b>Texturing/Shading Eyes</b><br>Shading an eye together in class to learn the fundamentals.                 |                       |
|       |  |                       |
| 9/30  | Frankenstein Series: Arms  | Char Torso/Back WIP   |
|       | Continuation of human anatomy study  |                       |
| 10/2  | Frankenstein Series: Legs  | Full Char WIP         |
| 10/2  | Continuation of human anatomy study  | Prop Texture WIP      |
|       |  | Prop Shader WIP       |
|       | Marvelous Designer   |                       |
|       | Anatomy of Cloth   |                       |
| 10/7  | Frankenstein Series: Hands/Feet  | Char Legs WIP         |
| 10/1  | Skin Shaders for Offline rendering. Skin Texture   | Clothing WIP          |
|       |  |                       |
| 10/9  | XGEN Hair Demo   | Char Hands/Feet WIP   |
|       | Creating hair from curves, techniques to make hair feel realistic, and finally shading.                      |                       |
| 10/14 | Look-Development   | Full Char WIP         |
| 10/14 | Discussion on presentation of your work. Rendering Tricks  | Textures & Shaders    |
|       |  | Groom                 |
| 10/16 | Studio Session   | Full Char WIP         |
|       |  | Textures & Shaders    |
|       |  | Groom                 |
| 10/21 | Develop Thick Skin, Let Critiques Begin  | Final Submission      |
|       | RT Char kick-off   |                       |
| 10/23 | No Time to Refresh. Starting from a Base Mesh  | PurRef Board - Hero   |
|       | Start building a character with a head start   | Prop, RT Char         |
| 10/00 |  |                       |
| 10/28 | RT Light Rig Demo<br>Frankenstein Series: Animal Skulls  | Char Blocking         |
|       | Start studying anatomy of animals which is an essential toolkit for aspiring creature artists. We'll look at | Prop Blocking         |
|       | similarities and differences to human anatomy before diving into a sculpt session.                           |                       |
|       | Frankanstein Osries: Animal Taras  |                       |
| 10/30 | Frankenstein Series: Animal Torso<br>Continuation of animal anatomy study                                    | Prop WIP              |
|       | Continuation of animal anatomy study   | Char WIP              |

| 11/4  | Character Crafting: Real-Time Refinement  | Light Rig             |
|-------|---|-----------------------|
|       | Reduce polycounts while maintaining detail, optimizing textures and UV maps,                        | Prop WIP              |
|       |   | Char WIP              |
|       | Frankenstein Series: Wings  |                       |
|       |   |                       |
| 11/6  | Frankenstein Series: Animal Legs  | Prop High Poly cutoff |
|       | Continuation of animal anatomy study  | Char WIP              |
|       |   |                       |
| 11/11 | Develop Thick Skin, Let Critiques Begin   | Hero Prop GEO Due     |
|       | Prop Texture Demo v2  |                       |
|       |   |                       |
| 11/13 | In The Loop Series: God of War  | RT Face WIP           |
|       | Taking a deep dive look and discussing ideas and intentions in character design from a professional |                       |
|       | piece of work with an emphasis on enhancing narrative. Studying peers and professionals can be      |                       |
|       | proven to be great stimuli and enhance personal knowledge.  |                       |
|       |   |                       |
|       | Frankenstein Series: Animal Feet  |                       |
|       | Continuation of animal anatomy study  |                       |
| 11/18 | Frankenstein Series: Head/Torso   | RT Head/Torso WIP     |
| 11/10 | Gender swap! Sculpting a different gender than your previous.                                       | Clothing WIP          |
|       | Center swap: Occupting a different gender than your previous.                                       |                       |
| 11/20 | Frankenstein Series: Arms/Legs  | RT Arms/Legs WIP      |
|       | Gender swap! Sculpting a different gender than your previous.                                       | Clothing WIP          |
|       |   | 0                     |
| 11/25 | RT Hair   | None                  |
|       | Real-Time hair creation, optimization, shading, and rendering                                       |                       |
|       |   |                       |
| 11/27 | Thanksgiving Holiday – No Class   |                       |
| 12/2  | Professional Development  | Professional          |
| 12/2  | Talking portfolio, resumes, and job search  | Development           |
|       |   | Dovolopmont           |
| 12/4  | Professional Development  | Professional          |
| , .   | Talking portfolio, resumes, and job search  | Development           |
|       |   |                       |
| 12/9  |   |                       |
| -12/3 | Finals Week– No Class   |                       |
| 12/11 | RT Char Final Submit Due – 12/11  |                       |
|       |   |                       |

**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. <u>http://forums.uiw3d.com</u>. Your grades will be posted on Canvas.

Points will be awarded as follows:

- 20 points Frankenstein Series
- 25 points Fullbody Offline Character Final Pixel
- 25 points Fullbody Realtime Character Final Pixel
- 15 points Offline Process
- 15 points Real-time Process

ANGD 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.

ANGD 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.

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

ANGD 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.