ANGD 2333 - 02 | Environment Prod Arts I

Syllabus and Outline

University of the Incarnate Word

Classroom: AD 406

Fall 2024 | TR 7:30am - 10:15am

Course Description

This studio course will direct student's skills through the rigors of producing environment art through a range of real-time and prerendered assets. Advanced optimization, texturing, lighting, and rendering workflows will provide students with a solid foundation in environmental construction for animations, video games, and architectural visualizations.

Course Items Needed

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

Professor Carlos Garcia (cagarc12@uiwtx.edu)

Office: AD 402

Office Hours: TR 1:00pm - 2:45pm | F 10:30am - 2:00pm

Outcomes

Upon successfully completing this course the student will be able to: Create real-time game-ready props, offline rendered props, and develop real-time diorama's, create tiling and trim textures, generate foliage that is game ready and optimize both geometry and textures for several industries.

Audience

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

| Date | Topic | Assignment Due |
|-------|--|--------------------------------------|
| 8/27 | Syllabus & Outline, Class Expectations, Art Test Kickoff (Diagnostic Assessment) | None |
| 8/29 | Asset Stubbing – The Power of Blocking in, Rapid Prototyping (MVP) | Art Test – Production Plan |
| 9/3 | Crease Set Workflow – Modeling High Poly Assets for Subdivision | Art Test – None |
| 9/5 | Floaters – Modeling High Poly Tertiary Details | Art Test – None |
| 9/10 | Art Test – Postmortem, Real-Time Prop Kickoff | Art Test – Final Deliverables |
| 9/12 | Studio Time – Workday, Feedback, and Critiques | Hard-Surface Prop – PureRef |
| 9/17 | Optimizing Game Ready Assets – High to Low Workflow (Topology, Polycount, UV's) | Hard-Surface Prop – Stub |
| 9/19 | The Fundamentals of Baking – Substance Painter | Hard-Surface Prop – Block-in |
| 9/24 | The Fundamentals of Baking – Marmoset Toolbag 4 | Hard-Surface Prop – WIP Polish |
| 9/26 | Texturing Realistic Assets – Substance Painter | Hard-Surface Prop – WIP High Poly |
| 10/1 | Texturing Stylized Assets – Substance Painter | Hard-Surface Prop – High Poly |
| 10/3 | Lighting and Rendering – Unreal Engine 5 | Hard-Surface Prop – WIP Optimization |
| 10/8 | Lighting and Rendering – Unity | Hard-Surface Prop – Optimization |
| 10/10 | Lighting and Rendering – Marmoset Toolbag 4, Portfolio Setup | Hard-Surface Prop – WIP Textures |
| 10/15 | Real-Time Prop for Games – Postmortem, Art Test Kickoff (Summative Assessment) | Hard-Surface Prop - Rendering |
| 10/17 | Fall Break – No Class | |
| 10/22 | Professional Development Week – Resume, Cover Letters, LinkedIn, ArtStation | Application Package – Rough Draft |
| 10/24 | Professional Development Week – Resume, Cover Letters, LinkedIn, ArtStation | Application Package – Refined Draft |
| 10/29 | ZBrush Sculpting High Poly Assets from Maya | Organic Prop – PureRef, App Pack |
| 10/31 | Sculpting to Retopology Workflow – Optimization (Setup, Retopology, UV) | Organic Prop – Stub |
| 11/5 | Sculpting to Retopology Workflow – Baking | Organic Prop – Block-in |
| 11/7 | Material Breakdowns – Sculpting Wood, Metal, and Cloth in ZBrush | Organic Prop – WIP Polish |

| 11/12 | Material Breakdowns – Texturing Wood, Metal, and Cloth in Substance Painter | Organic Prop – WIP High Poly |
|-------|---|---------------------------------|
| 11/14 | Complex Shader Breakdown – UE5, Unity, and Marmoset | Organic Prop – High Poly |
| 11/19 | Lighting and Rendering Studies – Rembrandt, Chiaroscuro, Cameo, and Butterfly | Organic Prop – WIP Optimization |
| 11/21 | Presentation Breakdown – Animated Cameras and Dynamic Compositions | Organic Prop – Optimization |
| 11/26 | Real-Time Prop – Postmortem, Art Test Kickoff (Summative Assessment) | Organic Prop - Rendering |
| 11/28 | Thanksgiving Holiday – No Class | |
| 12/3 | Studio Time – Workday, Feedback, and Critiques | Art Test – Production Plan |
| 12/5 | Studio Time – Workday, Feedback, and Critiques | Art Test – None |
| 12/10 | Finals Week– No Class | |
| 12/12 | Art Test Due – 12/12 | |

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.

Points will be awarded as follows:

10 points – Art Test 01 (Diagnostic Assessment)

25 points – Hard-Surface Prop (Project 01)

25 points - Organic Prop (Project 02)

30 points – Art Test 02 (Summative Assessment)

10 points - Participation and Attendance

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. Al 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.