University of the Incarnate Word
ANGD 2340 • Animation I: Advanced Body Mechanics
Fall 2024 • M/W 3:00pm-5:45pm • Sec. 02

Professor Kassandra Arevalo
Office Hours: MW 11am-1pm | Friday 11am-2pm
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Course Overview: This studio course is focused on creating believable full body character motions with a focus on correct human body locomotion. Appropriate biomechanics, weight distribution, anatomical realities in movement, and plausible movement arcs will be explored.

Outcomes: At the end of this course, the student will be able to utilize Maya's animation tools to create sound keyframe animation with the proper principles of animation applied. Emphasis on full body animation mechanics.

Audience: This course is a sophomore level requirement for students majoring in 3D Animation & Game Design.

Date	Lecture	Exercise Due	Assignment Due
8/26	Class Overview, 12 Principles Recap, Rig Setup for Animation	Fox Jump	
8/28	Walk Review	Walk cycle in place	Rig file cleanup
9/2	**Labor Day | No Class**		
9/4	Analyzing Reference Notes Check	Reference analysis post	Walk to a stop spline
9/9	*Arms & Hands Focus* Fluidity & Appeal	Hand posing Ball toss constraint setup	Walk to a stop polish
9/11	Arm-Hand-Finger Animation Polish Notes Check	Ball toss progress	Ball toss spline
9/16	*Upper Body Focus* Reversals	Chair stand up	Ball toss polish
9/18	Spacing Review & Moving Holds Notes Check	Spacing implementation	Yoga spline
9/23	*Lower Body Focus* Animation Analysis	Animation clip recreation	Yoga polish
9/25	Foot Contacts + Leg Polish Notes Check	Stride jump progress	Stride jump spline
9/30	*Full Body Focus* Body Connectivity	Hand wave	Stride jump polish
10/2	Follow Through & Overlap in Full Body Animation Notes Check	Volleyball progress	Volleyball spline
10/7	Going Beyond Reference	Pushed posing	Volleyball polish
10/9	Overshoot & Settle + Moving Holds Continued Notes Check	Overshoot & settle implementation	Karate spline
10/14	Timing, Beats, Phrasing, Contrast & Rhythm	Post dance choices	Karate polish
10/16	Selling Weight Notes Check	Weight shift	Dance spline
10/21	Dance final polish reviews	Dance progress	Dance spline+
10/23	FK/IK Switching: When & Why to Use It Notes Check	One leg lift	Dance final polish
10/28	FK/IK Switching Polish	Ledge grab progress	Ledge grab spline

Date	Lecture/Topic	Exercise	Assignment
10/30	Dynamic Root Motion Notes Check	Kip up	Ledge grab polish
11/4	Arcs & Overlap in Full Body Animation	Balance beam progress	Balance beam spline
11/6	Heavy Weapon: Weight with Two-Handed Prop Notes Check	Heavy lift/push exercise Two-handed prop constraint setup	Balance beam polish
11/11	Pushing Weight with Spacing	Heavy weapon spacing adjustments	Heavy weapon spline
11/13	Run Cycles Notes Check	Run cycle blockout	Heavy weapon polish
11/18	Run & Jump Roll Reference Breakdown & Adjustments	Video ref editing practice	Run cycle final
11/20	Layered Animation Workflow Notes Check	Layered animation exercise	Run & jump roll spline
11/25	Final Project Discussion	Parkour reference analysis	Run & jump roll polish
11/27	**Thanksgiving Holiday | No Class**		
12/2	How to Create a Demo Reel	Demo reel	Parkour spline pass
12/4	Advanced Body Mechanics Recap Notes Check	Final project progress	Parkour spline+ pass
12/11	Finals Week Last Class Critiques, Work Day **(Attendance Required)** 1:30-3:30PM	Final project progress	Parkour spolish pass
12/13	**Parkour final polish pass due by Thursday @ 11:59PM**		

Grading Activities: Your final grade will be based upon attendance, exercises & check-in's (15%) and assignments (70%). The final project will count for 15%. 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.

Output: Render using 720 HD in your Render Settings. Post to ANGD Forums.

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 3 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 this class: 8 meetings) 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 had to miss class, the assignment is still due. There are no redos. Make every project you turn in count.

ANGD Academic Integrity Policy: No work previously completed in another section or another course can be turned in. (Self-Plagiarism) AI 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.

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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

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