**University of the Incarnate Word** Principles of Animation
Fall 2024 T/R 10:30PM-1:15PM

**Course Overview:** This special topics lecture/studio
course examines the basic principles of believable
animation using prebuilt rigs.
Emphasis on solid keyframing techniques.
**Outcomes:** At the end of this course, be able to use
Maya’s animation tools to effectively create sound
keyframe animation. Emphasis on the principles of animation.

Professor Emily Sidler
Office Hours: Tuesday/Thursday/Friday: 10:30am-12pm
Email: sidler@uiwtx.edu

**Audience:** This course is a freshmen level requirement for students majoring in 3D Animation and Game Design.
**Course Type:** In person

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| **Week** | **Date** | **Lecture** | **In-Class Exercise** | **Assignment Due** |
| **1** | **Tuesday****August 27** | **Class Overview,Intro to Animation** |  |  |
|  | **Thursday****August 29** | **Timing and Spacing** | **2D Ball Bounce in Place** | **Spacing Chart** |
| **2** | **Tuesday****September 3** | **Intro to 3D Animation, Squash and Stretch, Importance of Breakdowns** | **3D Ball Bounce in place to settle** | **2D Bouncing Ball Animation** |
|  | **Thursday****September 5** | **Intro to Graph Editor** | **“Pole” fall with squash & stretch** | **3D Ball Bounce, different weights- First Pass** |
| **3** | **Tuesday****September 10** | **Anticipation, Drag, Overlapping Actions and Arcs** | **Ball Jump with 2D Tail** | **3D Ball Bounce, different weights- Final Pass** |
|  | **Thursday****September 12** | **Overlapping Action in 3D** | **Fox Jump with 3D Tail** | **Fox Jump Across Space** |
| **4** | **Tuesday****September 17** | **Straight Ahead & Pose to Pose Animation, Overshoots and Graph Editor Techniques** | **2D Pendulum Swing in Place** | **Fox Jump Across Space with 2D/3D Tail-Final Pass** |
|  | **Thursday****September 19** | **The Pendulum Swing** | **3D Pendulum Swing in Place** | **Pendulum Swing Through Environment- 2D Pass** |
| **5** | **Tuesday****September 24** | **Intro to Acting** | **-Group Critiques****-One flour sack jump in place** | **3D Pendulum Swing Through Environment- Final Pass** |
|  | **Thursday****September 26** | **Solid Posing/Drawing** | **Three full body poses** | **Fox personality-Blocking Pass** |
| **6** | **Tuesday****October 1** | **Exaggerations & Reversals** | **Flour Sack Fall (Single Drop)** | **Fox personality-Spline pass** |
|  | **Thursday****October 3** | **Weight Shifts, Robot Gap Jump** | **Robot Jump in Place** | **Fox personality-Final Pass** |
| **7** | **Tuesday****October 8** | **Side Step Mechanics/Jumping**  | **Ball Side Step** | **Robot Gap Jump-First Pass** |
|  | **Thursday****October 10** | **Obstacle Course** | **Group Critiques** | **Robot Gap Jump-Final Pass** |
| **8** | **Tuesday****October 15** | **Weight Mechanics** | **Shoulder Drop** | **Obstacle Course-First Pass** |

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|  | **Thursday****October 17** | **FALL BREAK-NO CLASS**  |  |  |
| **9** | **Tuesday****October 22** | **Acting** |  | **Obstacle Course-Final Pass** |
|  | **Thursday****October 24** | **Acting Reference** | **Acting Piece-Spine Progress** | **Acting Piece-First Blocking** |
| **10** | **Tuesday****October 29** | **Intro to Walking/Half Body Jump** | **Ball Walk in Place** | **Acting Piece-Final Pass** |
|  | **Thursday****October 31** | **Weight Shift Mechanics** | **Weight Shift** | **Half body Jump-First Pass** |
| **11** | **Tuesday****November 5** | **Half Body Jump Work Day**  |  | **Half body Jump-Spline Pass**  |
|  | **Thursday****November 7** | **Walk animation, weight, walk mechanics** |  | **Half body Jump- Final Pass** |
| **12** | **Tuesday****November 12** | **Animation Walks Clips** | **Walk Animation Cleanup File** | **Ball Walk w/Forward Translation-First Pass** |
|  | **Thursday****November 14** | **Timing Difference/Animation Drops** | **Arm drop w/different timing(Sigh)** | **Ball Walk w/Forward Translation-Final Pass** |
| **13** | **Tuesday****November 19** | **Full Body Walk Animation** | **Full Body Walk in Place** | **Full Body Fall Animation Progress** |
|  | **Thursday****November 21** | **Animation in Film/TV/Games** | **Acting OR Game Animation Blocking**  | **Full body Walk Forward (4 strides)-First Pass****Full Body Fall Final Pass** |
| **14** | **Tuesday****November 26** | **Tennis Serves/Sports** | **Acting OR Game Animation Spline**  | **Full Body Walk Forward (4 Strides)-Final Pass** |
|  | **Thursday****November 28** | **THANKSGIVING BREAK l NO CLASS** |  |  |
| **15** | **Tuesday****December 3** | **Making Characters** | **Acting OR Game Animation Final** | **Tennis Serve-Blocking Pass** |
|  | **Thursday****December 5** | **Final Project/Recap** |  | **Tennis Serve-Spline Pass** |
| **16** | **Tuesday****December 10** | **Finals Work Day**  |  | * **Tennis Serve-Final Pass**
* **Characters/References with drawovers for Finals**
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|  | **Thursday****December 12** | **Inspiration & Moving Forward Tips** |  | **Blocking for at least one part of Final** |
| **17** | **Friday** **December 13** | **FINALS WEEK** |  | **Final Projects due on May 4th by 5pm cst** |

**Grading Activities:** Your final grade will be based upon attendance, exercises (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.

**Attendance**: Attendance is mandatory. After one absence, each additional absence will result in a letter drop in your final grade. 3 tardies account for 1 absence.

**Projects:** There are no redos. Make every project you turn in count. No late assignments accepted.

**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>