Course: Game -2372-81501 VFX for Games

Professor: Ashley Lyons

Email: vfx4games@gmail.com

Hours: 5:40-9:30

Room: T248

Drive Link: https://drive.google.com/open?id=0BwmntZPDFmxudkRUTVlIxY2xxcUU

Grading Scale:

A: 91 - 100
B: 81 - 90
C: 71 - 80
D: 61 - 70
F: 0 – 60

Points Breakdown:

Projects: 10 (40 total)
Participation: 20
Final: 40

Week 1: 1/16

Overview of vfx and the Unreal Engine:
1. Basic navigation of the Unreal Engine
2. Introduction to material editor and basic material creation

Week 2: 1/23

Continuation of navigating the Unreal Engine:
1. Introduction to and navigating through Cascade
2. Creating a particle system
3. Beginning of Project 01 with gray packed and subUV textures

Week 3: 1/30

Project 01 - Creating a fire particle system:
1. Creating the smoke
2. Creating the embers
3. Introduction to flipbooks and subUV materials
Week 4: 2/6

**Project 01 - Creating a fire particle system:**

1. Introduction to Houdini (video lecture)
2. Using After Effects to create flipbooks (video lecture)

Week 5: 2/13

**Project 01 - Creating a fire particle system:**

1. Creating the logs
2. Importing geometry and introduction to vertex coloring

Week 6: 2/20

**Project 02 - Creating weapon fx – blade fx:**

1. Creating a basic sword/knife swipe

Week 7: 2/27

**Project 02 - Creating weapon fx – gun fx:**

1. Creating the muzzle flash particle system
2. Replacing particle systems in blueprint

Week 8: 3/6

**Project 02 - Creating weapon fx – gun fx:**

1. Adding the reload fx, shell ejection, and smoke fx

Week 9: 3/13

**Spring Break: No Class**

Week 10: 3/20

**Project 03 - Creating a hologram/sci fi fx:**

1. Introduction to world position offset
2. Creating our first particle system with world position offset
3. Project 02 Due

Week 11: 3/27

**Project 03 - Creating a hologram/sci fi fx:**

4. Continuation of hologram fx

Week 12: 4/3

**Project 04 - Explosion fx:**

Commented [1]: I'm excited to make FIRE!!!
1. Using Houdini to create explosion
2. Project 03 Due

**Week 13: 4/10**

**Project 04 - Explosion fx:**
1. Continuation of Houdini Explosion and rendering
2. Creating flipbook in After Effects
3. *Implementing flipbook material into cascade*

**Week 14: 4/17**

**Project 04 - Explosion fx:**
1. Using Houdini to create debris
2. Exporting and importing debris geometry
3. Implementing debris geometry into particle system

**Week 15: 4/24**

**Project 04 - Explosion fx:**
1. Adding in secondary effects (distortion, embers, etc)

**Week 16: 5/1**

**Project 04 - FX Freestyle:**
1. Using Houdini to create a dynamic explosion

**Week 17: 5/8**

Final Due: