**CSE 490 Animation VR Capstone**

**Winter Quarter, 2019**

**5:30-8:20 Lecture, Allen Room 403**

**Lab and Office Hours – See Course Calendar**

**Syllabus**

**Instructors:**

Natalie Burke

Barbara Mones

**Course Staff:**

Cody Wilcoxon

Xavier James

Sophia Baker

**Course TA’s**

Andrew Rudasics

Teng ( Alex) Yue

Chenyan (Jackie) Hu

**Student Groups:**

*Group 1*

Staff: Andrew

Alice

Peter

Rebecca

Daoyi

*Group 2*

Staff: Alex

Ellie

Phillip

Jose

Gabrielle

*Group 3*

Staff: Jackie

Sherry

Sharanya

Jialiang

Dana

**Grading**

4 Skills Acquisition Projects 40% (10% each)

Group Project Part One 30%

Group Project Part Two 30%

Attendance and Participation in class and within your groups will comprise 15% of each of Part One and Part Two grades.

**Course Description**

This course is designed to give students an overview of designing and executing projects that present scenarios to be experienced in an immersive Virtual Reality. The course is project based and group based. There will be many visitors and there will be outside lab and staff nand group review time each week. The projects will be presented in the Jacob Lawrence Gallery on the UW Campus on March 12th as part of a VR installation exhibition. The concept this quarter will be to design and present an Orca Pod – a family of J Pod Orcas that live in the PNW in a cove that the class will design based on the area in the PNW where the Orcas reside. The students will work in groups and each will be assigned an Orca to “ adopt” and will research that Orca. There will be two parts to the experience designed – one will be to create a very short 15-30 second experience to let your VR participant/viewer “be an Orca” and move beside their best friend Orca. Part Two will involve the design of an interactive experience that will allow the viewer to experience the other Orcas and the Pod as a whole. Part Two will be slightly longer – maybe 20-45 seconds. Each group will design and execute their Orca experiences with instructors and staff and pitch their work to visitors. Each student will be expected to provide both Individual and Group weekly reports and to meet with their Staff once a week outside of class time. They will adhere to the production calendar and contribute to Production Agendas.

**Week One**

Overview of the Quarter

Introduction to Groups

*Assignment One:*

**Part One:** Design your experience with your group that will be 15-30 seconds, will feature your assigned Orca, and will both accentuate the “best friend” experience and a “gift.”

**Part Two:** Skills Acquisition project. Set up the Unity working environment and learn the full VR story pipeline

Learn Git Source Control.

**Week Two**

Review project set ups

Tech Presentation

Visitor

Review shading and cove design

*Assignment #2*

Complete Design Project

Import Whale, Salmon and Sea Lion Models into your Unity setup

Complete Skill Acquisition Project

**Week Three**

Review*Assignment #2*

Modeling Shading and Lighting Lecture

Reference and reference reels

*Assignment #3*

Complete Skills Acquisition Assignment

Model, Shade and Light a set in Unity with our story in mind.

**Week Three**

*Review Assignment #3*

Presentation on Motion Interaction

*Assignment  #4*

Complete Skills Acquisition Assignment

Create Motion for individual Whales with story/scenario or gag in mind

**Week Four**

*Review Assignment #4*

Lecture by Bruce Hemingway

Review in time for Jacob Lawrence installation

*Assignment #5*

Complete Skills Acquisition Assignment

Add Directed Audio into individual and team projects

**Weeks Five- Week Eleven**

*Assignment #6 Final Project*

*Review Production Work.*

Goal: Each Group’s Completion of it’s VR design experience:

Part One - Be an Orca and experience it with your “best Friend Orca” that includes a gift.

Part Two – Design Interaction with the other Orcas so that everyone can experience all of the Gifts.

Your groups will design experiences with some different goals but all groups will present their experiences in the same space – the Cove of the Orca Pod.