MART 333.01: 3D Animation II

Heejoo Gwen Kim
University of Montana - Missoula, heejoo.kim@mso.umt.edu
COURSE DESCRIPTION
This course builds on the modeling skills learned in 3D Animation I and teaches students how to animate, texture map, add visual effects and render using the Maya software. Students will learn advanced lighting, texture and render 3D images with alpha channels for compositing. Students will be exposed an understanding of composition through lighting, camera, and color manipulation. Also, students will build a standard skeleton with properly aligned rotation axes character rig. Students will construct Full Body IK control rigging and bind skin for the model object. The character setup and rigging techniques will include kinematics, inverse kinematics, and deformers. This course will be a continuation of this series and introduces animation, dynamics (including particle and fluid systems), rigging, and an introduction to MEL scripting.

OBJECTIVES
Students will demonstrate understanding of the following principles and techniques through the semester:
: Advanced concepts and Terminology 3D computer animation
: Application of 3D modeling package and how to make a project from concept to final render
: Project Development and presentation
: Creating 3D scenes including advanced lighting, texturing and rendering.

TOPICS
: Topics will be based on student surveys and requests throughout the semester
: Professional Artistic Process via web conference sessions with various artists and professionals in the animation/film/post production businesses
: Portfolio presentation

GRADING
Philosophy
It is a common misconception that teachers assign grades when in reality it is the student who earns the grade. You are responsible for the effort put into each project therefore you assign your own grade. The purpose of grading, from a teachers perspective, is to clearly and accurately pinpoint the strengths and weaknesses of your progress.

Evaluation
Your overall grade will be based on your understanding of the information and ideas discussed, your formal, technical, and conceptual progress as demonstrated in projects, your participation in class discussions, and professionalism during the course.

Each project will be graded on the application of technique and conceptual principles to the creative work, the organization of the production process, participation, technical proficiency with the various software applications, their aesthetic application, problem solving, project presentation and the ability to meet deadlines. The exercises/projects and descriptions are listed on the 15-week schedule sheet.

**Expectations for class participation**
Participation by all members is critical to the success of this studio. Excellent participation is a given and includes contributing to ongoing discussions and critiques, suggests alternative ways of approaching projects, along with a thoughtful process and strong work ethic.

**Attendance & participation**
Good attendance and punctuality are expected for this course and will strongly affect your grade. This class only meets once a week, so only two (2) unexcused absences will be allowed. Every unexcused absence beyond this will lower your grade by a letter grade. A total of five (5) absences, excused or unexcused, will result in you receiving a grade of “F” for the class. Excused absences include religious holidays, a verifiable death in the family or illness with a doctor’s note.

**Classroom etiquette**
You are expected to conduct yourself with proper respect for the classroom environment. Disruptive behavior will not be tolerated. *Turn off your cell phones* and face book, games prior to class.

**THE LAB**
*What this lab is..........* This lab has been established so that students in the **Media Arts department** can have a dedicated lab in which to do their course work. You will have Griz Card access to this lab all day, every day. After hours access to the McGill building (locked after 10pm) can now be activated via approved Griz Cards on the south entrance nearest the tennis courts.

* : : *What this lab is not..........* This lab will **not** be used to work on things that are outside of the course requirements and will not be used by students outside of the program. If you want to spend time fooling around with your friends, then do it at home. Abuse of this lab will not be tolerated.

**SOFTWARE INFORMATION**
The primary software programs that you will be using, but not limited to are:
* Maya 2014
* Mudbox 2014
After Effect CS 6
You will also be using the Internet and the network browser in the lab.

It is important that throughout the class you take advantage of the manuals, the program help menu, and related articles downloaded from the web.

THIS COURSE SYLLABUS IS SUBJECT TO CHANGE AT THE DISCRETION OF THE INSTRUCTOR.
Academic Misconduct and the Student Conduct Code
All students must practice academic honesty. Academic misconduct is subject to an academic penalty by the course instructor and/or disciplinary sanction by the University. All students need to be familiar with the Student Conduct Code. The Code is available for review online at www.umt.edu/SA/VPSA/Index.cfm/page/1321.

SCHEDULE

Week 1
01.27.14 : Course Introduction / discussion / Basic rigging
01.29.14 : Simple Rigging / Individual meeting

Week 2
02.03.14 : Human / Animal Rigging + Skeleton
02.05.14 : Human / Animal Rigging + Skeleton

Week 3
02.10.14 : Human / Animal Rigging + Animation
02.12.14 : Human / Animal Rigging + Animation

Week 4
02.17.14 : No Class
02.19.14 : Particle / Hair / FXHair

Week 5
02.24.14 : Qualoth / ezCloth
02.26.14 : Qualoth / ezCloth

Week 6
03.03.14 : Particle / FluX
03.05.14 : Particle / FluX
Week 7
03.10.14 : Particle / FluX / Dynamics
03.12.14 : Particle / FluX / Dynamics

Week 8
03.17.14 : Mel Scripting
03.19.14 : Mel Scripting

Week 9
03.24.14 : Final Project Discussion
03.26.14 : Individual Meeting

Week 10
**Spring break**
03.31.14 :
04.02.14 :

Week 11
Working on a Final project / Individual meeting
04.07.14 :
04.09.14 :

Week 12
04.14.14 : Working on a Final project / Individual meeting
**04.16.14 : Final project presentation**

Week 13
Refining on a Final project / Individual meeting
04.21.14 :
04.23.14 :

Week 14
Refining on a Final project / Individual meeting
04.28.14 :
04.30.14 :
Week 15
Refining on a Final project / Individual meeting
05.05.14 :
05.07.14 :

Final project presentation