GAME 150 – Character Animation

updated 1-2019

UNM Valencia, Game Design and Simulation

Fall 2019

Online

Instructor: Michael Brown

mbrowngame@unm.edu or mibrown@nmsu.edu

Online Office Hours: Monday and Wednesday 9:00-10:00

Course Description

This course focuses on character animation including the skeletal setup and rigging of meshes.

Objectives

- Explain the fundamentals of project and file management
- Students know how to create a skeleton
- Students know how to animate a 3d skeleton
- Students know how to set up a model for proper rigging
- Students know how to Develop a character rig with controls
- Students develop an understanding of how the body moves
- Students develop an understanding of blending animations and the controls required

Required Text - Optional

None

Student Responsibilities/Attendance/Participation

Student Responsibilities:

- Students <u>must</u> have basic computer and file management skills for all GAME courses. Custom tutoring services are available through the TLC. Required pre/co requisite is IT 101: Computer FUNdamentals. Students that fall behind due to lack of basic computer skills will be dropped.
- Bring a USB Flash Drive (at least 2 GB) to every class. Make sure it is clearly labeled with your name on it.
- Have access to the required text(s) and other subscriptions as required
- If you have a disability, please inform me of your needs as soon as possible to ensure that your needs are met in a timely manner.

- Cell phones need to be muted during class times. If you must receive a call, leave the lab before you answer. No
 phone conversations in the studio. No web browsing, email, or text messaging during lectures, demos,
 discussions, or critiques.
- COMPUTERS WILL BE OFF DURING ALL CRITIQUES!!!

Attendance/Participation:

- Students are required to complete all projects on time, participate in scheduled critiques/class discussions/presentations, and maintain a safe, respectable, positive lab environment.
- Students are required to attend class, arrive on time, remain present until the end of class, and be prepared for each day's work. More than three absences without prior consultation may result in a failing grade or a drop from the class. Leaving early or arriving late three times results in one absence.
- If you have not attended class for two consecutive class periods and have made no attempt to call/email/IM/contact me, you WILL be dropped.
- Students who do not attend the first week of class will automatically be dropped.

Grading Policy

Grading:

- Grading is based on a timely completion of course assignments, the quality of individual technical and critical development, conceptual progress, personal commitment and the ability to work in a community studio setting.
 Personal commitment involves regular attendance, consistent effort, completion of work, participation in presentations, critiques and class discussions, and the general willingness to try. Make each project meaningful to yourself!
- Each assignment will culminate in a presentation, which will consist of discussing your work and/or projecting your completed work in class for all to see. All due dates will be announced in the YELLOW BOX on WebCT, as well as on the syllabus. No full credit will be given for any late work. If an assignment is not presented on time, an automatic 0 will be issued. You will need to make arrangements with me if you are planning to make-up the work, and a fair grade will be issued once the work has been submitted, presented, and critiqued, minus an automatic one letter grade deduction.
- Incompletes are rarely issued. If 75% of the semester's work/projects/deliverables and participation/attendance have been completed with a satisfactory grade, and incomplete may be issued.

How to Contact the Instructor

mbrowngame@unm.edu or mibrown@nmsu.edu

Online Office Hours: Monday and Wednesday 9:00 – 10:00

Support Information, Resources, & Tutorials

Access to the book:

- University of New Mexico Valencia Bookstore:
 - o http://www.unm.edu/~unmvc/Bookstore/Bookstore.htm
- Library System:
 - University of New Mexico Valencia Campus Library:
 - http://www.unm.edu/~unmvclib/
 - There will be one copy on reserve. You will need to check it out at the front desk. It will only be available for 2-hour checkout, and cannot ever leave the library.
- Purchase Online:

If you plan on purchasing this book online, you need to do so immediately. We will start using it right away! A couple of sources for purchase online are:

- Amazon.com: www.amazon.com some new, some used
- Half.com: www.half.ebay.com discounted prices for used books!

Open Studio Time – Digital Media Arts Open Lab & Darkroom:

- Located in Room 123A in the Business & Technology Building (directly in front of the current B&T open computer lab Room 123). You will need to enter the lab through the current B&T computer lab and sign-in to use the computers.
- Monday through Thursday 8:00am to 8:00pm
- Friday 8:00 am to 2:00 pm

Other tutorials:

- I will post a number of links to video tutorials in Blackboard for this course.

Instructor Support:

- Please see "How to Contact the Instructor" for methods of contacting the instructor for help.

Community Support:

- We will have a HELP FORUM discussion board in the WebCT course. Use this as a place to post questions to the community. It is important for peer learning and peer communication to enhance our community.

Accommodation Statement:

"In accordance with University Policy 2310 and the Americans with Disabilities Act (ADA), academic accommodations may be made for any student who notifies the instructor of the need for an accommodation. It is imperative that you take the initiative to bring such needs to the instructor's attention, as he/she are not legally permitted to inquire. Students who may require assistance in emergency evacuations should contact the instructor as to the most appropriate procedures to follow. Contact Accessibility Resource Center at 277-3506 for additional information."

Title IX Statement:

In an effort to meet obligations under Title IX, UNM faculty, Teaching Assistants, and Graduate Assistants are considered "responsible employees" by the Department of Education (see pg 15 -

http://www2.ed.gov/about/offices/list/ocr/docs/qa-201404-title-ix.pdf). This designation requires that any report of gender discrimination which includes sexual harassment, sexual misconduct and sexual violence made to a faculty member, TA, or GA must be reported to the Title IX Coordinator at the Office of Equal Opportunity (oeo.unm.edu). For more information on the campus policy regarding sexual misconduct, see: https://policy.unm.edu/university-policies/2000/2740.html

Course Schedule

Fall 2019

Dates	Schedule	Projects
Week 1	Introduction	Assignment 1 – Create a skeleton
	Review Syllabus	
	Creating a skeleton	
Week 2	Basics of Animation	Assignment 2 – Create a 3 second walk animation
Week 3	Weight Transfer in Animation	Assignment 3 – Picking up an object
Week 4	Work on Assignment 3	
Week 5	Assassin's creed tower climb	Assignment 4 – Running an obstacle course – Assassin's creed animation challenge
Week 6	Work on Assignment 4	
Week 7	Rigging a model	Assignment 5 – Rigging a model
Week 8	Painting weights	Assignment 6 – Weight Painting
Week 9	Mantle Animation	Assignment 7 – Gears of War Mantle
Week 10	Work on Assignment 7	
Week 11	Animating with a prop (weapon etc)	Assignment 8 – Prop animation
Week 12	Work on Assignment	
Week 13	Final – recreating an action scene from a movie or game	Final Project: recreate an animation following a movie or game. Recreating a Street Fighter 5 Ultra etc.
Week 14	Work on Final	
Week 15	Work on Final	
Week 16	Turn in Final	Final Project