

GAME 150 – Project Development I (Animation and Rigging)

UNM Valencia, Game Design and Simulation

updated 1-2016

Spring 2016

Tuesday | Thursday, 12:00pm – 1:15pm

Instructor: Michael Brown

mbrowngame@unm.edu

Campus Office Hours: Monday & Wednesday 10:30-12:00
 Tuesday & Thursday 10:30-12:00
 Also by appointment
 LRC 138

Office: Learning Resource Center Rm. 138

Course Description

This course focuses on the rigging and animating of complex 3d models. The course also focuses on the best way to animate and bring these rigged characters to life.

Objectives

- Explain the fundamentals of project and file management
- Learn how to set up a model for proper rigging
- Develop a character rig with controls
- Develop an understanding of how the body moves
- Learn how to setup a character animation file for export to a game engine.
- Develop an understanding of blending animations and the controls required

Required Text - Optional

None

Student Responsibilities/Attendance/Participation

Student Responsibilities:

- Students must 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.

Grading Breakdown

Projects (6)	600 points	100 points each
Attendance – 250 points		
Participation – 200 points		
Total possible points 1050		

How to Contact the Instructor

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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:
 - o 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.

Course Schedule

Spring 2016:

Semester begins January 18

Semester ends May 14

HOLIDAYS:

Spring Break: March 13-20

Dates	Schedule	Projects
<u>Week 1</u>	<ul style="list-style-type: none"> • Introductions • Review Syllabus • Review Learn.unm.edu • Equipment Overview • Supplies Overview • Animation – What is it 	
<u>Week 2</u>	<ul style="list-style-type: none"> • Lecture: Setting up a bone system 	
<u>Week 3</u>	<ul style="list-style-type: none"> • Lecture: Animating a bone system 	Project 1: Create a rigged bone system
<u>Week 4</u>	<ul style="list-style-type: none"> • Lecture: Attaching to a model • Turn in Project 1 	
<u>Week 5</u>	<ul style="list-style-type: none"> • Lecture: Weight painting and proper bone control 	<i>Project 2: Properly rig and weight a character</i>
<u>Week 6</u>	<ul style="list-style-type: none"> • Work on Project 2 	
<u>Week 7</u>	<ul style="list-style-type: none"> • Lecture: A Walk Cycle • Turn in Project 2 	<i>Project 3: Creating a walk cycle</i>
<u>Week 8</u>	<ul style="list-style-type: none"> • Work on Project 3 	
<u>Week 9</u>	<ul style="list-style-type: none"> • Lecture: Creating a complex animation • Turn in Project 3 	Project 4: Complex run and jump over
<u>Week 10</u>	<ul style="list-style-type: none"> • Lecture: Using the environment • Work on and turn in Project 4 	<i>Project 5: Picking up a box</i>
<u>Week 11</u>	<ul style="list-style-type: none"> • Lecture: Assassin's Creed and climbing • Turn in project 5 	<i>Project 6: Climbing a building</i>
<u>Week 12</u>	<ul style="list-style-type: none"> • Work on and turn in Project 6 	

<u>Week 13</u>	<ul style="list-style-type: none"> • Lecture: Fight Scene – How to animate and control 2 characters or more in a scene 	Final Project: Create a fight scene using environmental animation ques
<u>Week 14</u>	<ul style="list-style-type: none"> • Work time 	
<u>Week 15</u>	<ul style="list-style-type: none"> • Work time 	
<u>Week 16</u>	<ul style="list-style-type: none"> • Final Project presentations • Final Exam 	<i>Final Project</i>