GAME 270 – Modeling and Animation

UNM Valencia, Game Design and Simulation   updated 1-2016
Spring 2018
Tuesday | Thursday, 1:30pm – 2:45pm
Instructor: Jonathan Morrison
jonmorri@unm.edu

Campus Office Hours: Monday & Wednesday   10:30-12:00
                          Tuesday & Thursday   10:30-12:00
                          Also by appointment
                          B&T 107C

Office: Business & Technology Room 107C

Course Description

This course focuses on modeling techniques using 3d studio max and how to properly prepare a model for engine implementation.

Objectives

- Explain the fundamentals of project management
- Learn and become familiar with the 3d Studio Max interface
- Learn modeling ideals such as subdivision, box and organic modeling
- Develop an understanding of modeling constraints required by different projects
- Develop, arrange, and refine projects to include in a Game Design portfolio

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 32 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 Blackboard, 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 (5)   500 points   100 points each
Attendance – 250 points
Participation – 200 points
Total possible points 950

How to Contact the Instructor

Campus Office Hours: Monday & Wednesday   10:00-12:00
                                 Tuesday & Thursday   10:00-12:00
                                 Also by appointment
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Support Information, Resources, & Tutorials

Access to the book:

- University of New Mexico Valencia Bookstore:
    - 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.

Course Schedule

Spring 2018:
Semester begins January 15
Semester ends May 12
HOLIDAYS:
Spring Break: March 12-16

Dates	Schedule	Projects
Week 1	- Introductions - Review Syllabus - Review Learn.unm.edu - Equipment Overview - Supplies Overview	
Week 2	- Lecture: Modeling - Build a room and fill it	
Week 3	- Lecture: Modeling a basic object - Creating Alleyway	Project 1: Alleyway
Week 4	- Lecture: Basic full scene construction - Turn in Project 1 - Ball bounce project	Project 2: Ball Bounce Project
Week 5	- Modeling from a box - Turn in Project 2	*Project 3: Model a ship from box*
Week 6	- Lecture: Model ship from concept - Turn in Project 3	Project 4: Model a ship from concept with hanger
Week 7	Lecture: How to UV an object for texturing	
Week 8	- Lecture: Animation on a path - Turn in Project 4	Project 5: City ship paths
Week 9	Work on and Turn in Project 5	
Week 10	- Lecture: Intro to CAT - Create a dance	*Project 6: Use CAT to animate a dance of your choice*
Week 11	Work on and Turn in Project 6	
Week 12	Lecture: How dynamics are used	*Project 7: Dynamics project*

Week 13	• Lecture: Model expectations – How to maintain a required polycount without converting to triangles • Turn in Project 7	Final Project
Week 14	• Work time	
Week 15	• Work time	
Week 16	• **Final Project presentations** • **Final Exam**	*Final Project*