Instructor Name: Professor Gregory Grimsby
Meeting Time: Thursday 4:30PM – 7:10PM
Classroom: Fairfax Campus, Art and Design Building, Room 1018
Campus Office: Fairfax Campus, Art and Design Building, Room 2021
Campus Office Hours: Thursday 12:00PM to 1:00 PM, or by appointment: Friday 1:30PM-2:00PM
Office Phone #: 703-993-5733
Email: gggrimsby@gmu.edu

Prerequisites

- GAME 231 with a ‘C’ grade or better.

Course Description:

Intermediate topics in 3d modeling and animation for games are explored including more complex character designs and environment models. Students will be exposed to a wider array of game art topics including characters, environments, VFX, lighting, and normal mapping. Additionally, texturing techniques via Photoshop and character animation via Biped will be explored in depth. Studies will culminate in an end of term project, where students will create a playable demo produced in a current game engine.

Objectives:

To build an intermediate level of skill and knowledge in the making of 3D game art. Students who complete this course will more specifically:

- Demonstrate intermediate skill in modeling objects in 3DS MAX.
- Demonstrate intermediate ability to texture their models.
- Demonstrate thorough knowledge of importing models into a game engine (Unity3D).
- Demonstrate intermediate ability to animate 3D models using transforms, curves, and Biped.
- Demonstrate introductory ability to create game VFX.
- Demonstrate an intermediate understanding of the art production pipeline and asset management.

Course Structure

Learning Activities include the following:

1. In-class lectures
2. In-class tutorials and exercises
3. Online Video tutorials
4. Online Video lectures
5. Online Practice exercises
6. Individual assignments

This course meets each scheduled week of GMU’s instructional calendar. See the Course Schedule for a list of topics and assignments. Online materials are provided via the Blackboard Learning Management system (LMS) housed in the MyMason portal.

Contacting the Professor

The primary method of contacting the professor outside of class will be via email. Students can expect a response within 24 hours, except for during holidays, which will delay responses until the next class day. Responses will not come after 10PM, nor before 9AM. Students can visit during my campus office hours, but an appointment is suggested as I tend to get queued up.
If you are having trouble with a file, be prepared upon my request, to send it .ZIP or .RAR archived to me via email, so I can debug any issues. Additionally, the best method for helping you may be to connect via Blackboard Collaborate and for you to share your screen.

**Expectations**

**Course Week:**
Class will meet each scheduled week of GMU’s academic calendar.

**Log-in Frequency:**
Students must actively check the course Blackboard site and their GMU email for communications from the instructor, class discussions, and/or access to course materials at least twice times per week.

**Participation:**
Students are expected to actively engage in all course activities throughout the semester, which includes viewing all course materials, completing course activities and assignments, and participating in course discussions and group interactions.

**Technical Competence:**
Students are expected to demonstrate competence in the use of all course technology. Students who are struggling with technical components of the course are expected to seek assistance from the instructor and/or College or University technical services.

**Technical Issues:**
Students should anticipate some technical difficulties during the semester and should, therefore, budget their time accordingly. Late work will not be accepted based on individual technical issues.

**Workload:**
Please be aware that this course is not self-paced. Students are expected to meet specific deadlines and due dates listed in the Class Schedule section of this syllabus. It is the student’s responsibility to keep track of the weekly course schedule of topics, readings, activities and assignments due.

**Instructor Support:**
Students may schedule a one-on-one meeting to discuss course requirements, content or other course-related issues. Those unable to come to a Mason campus can meet with the instructor via telephone or web conference. Students should email the instructor to schedule a one-on-one session, including their preferred meeting method and suggested dates/times.

**Etiquette:**
The course environment is a collaborative space. Experience shows that even an innocent remark typed in the online environment can be misconstrued. Students must always re-read their responses carefully before posting them, so as others do not consider them as personal offenses. Be positive in your approach with others and diplomatic in selecting your words. Remember that you are not competing with classmates, but sharing information and learning from others. All faculty are similarly expected to be respectful in all communications.

**Accommodations:**
Learners who require effective accommodations to insure accessibility must be registered with George Mason University Disability Services.

**Assessment and Grading:**

**Assignments**
Students will be given several assignments throughout this course. The assignments are listed at the end of this syllabus. Specifics for each will be given in Blackboard. **It is the students’ responsibility to refer to Blackboard and the syllabus to see the exact date and time assignments are due.**

**Final Project**
The final week of classes students will turn in their final project. For this project, students will integrate their character into the Unity game engine. The student must animate a core set of motions for the character. The student must also model, texture, and integrate a basic environment into which their character is placed. Additionally, the student will record a FRAPS gameplay video of their animated character and scene in Unity. All of these assets are submitted as the final project. Specifics will be given in Blackboard.

**Checkpoint Submission**
A checkpoint submission is an assignment turned in multiple times as it progresses to completion. The final character has multiple checkpoint submissions. Specifics will be given in Blackboard.
Classroom Participation
Students are expected to actively engage in class discussions, answer questions when prompted, and in general, add to the collective dialogue.

Final Exam
There is no final exam in this course. The final project replaces it.

Grading Scale

Grade Weighting and Scale
All grading is done on a point scale used to assess assignments, participation in classroom activities, the mid-term project, and the final project. At the end of the course, the student’s grade is a percentage of total points earned over total points possible. Students will see the point value for each assignment posted in Blackboard.

<table>
<thead>
<tr>
<th>Coursework</th>
<th>Point Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assignments (each)</td>
<td>varies but 50-100</td>
</tr>
<tr>
<td>Checkpoints (each)</td>
<td>50</td>
</tr>
<tr>
<td>Final Project</td>
<td>200</td>
</tr>
<tr>
<td>Classroom Participation</td>
<td>50</td>
</tr>
</tbody>
</table>

Grades will be assigned based on the following scale:

\[
\begin{align*}
97\% & = A+ \\
96-93\% & = A \\
92-90\% & = A- \\
89-87\% & = B+ \\
86-83\% & = B \\
82-80\% & = B- \\
79-77\% & = C+ \\
76-73\% & = C \\
72-70\% & = C- \\
69-60\% & = D \\
<60\% & = F
\end{align*}
\]

Failure to turn in a Final Project will result in a grade of ‘F’ for the course, regardless of the student’s point total, as this project replaces the final exam.

!!Note that after points are totaled, the instructor may adjust a student’s final grade to better reflect their accomplishments.

‘C’ Grade Minimum
Students must have earned a ‘C’ grade or higher in prerequisite courses in the Game Design Major and Minor. For example, to take GAME 398, a ‘C’ or higher must have been earned in GAME 231.

Grading Criteria
Most assignments and projects are graded based on the criteria given below:

- completeness
- ambition/effort
- specification adherence
- technical execution
- aesthetic qualities

Specific criteria are given in Blackboard for each assignment.

Late Work and Make-up Policy
The first late assignment is given half credit. No late work will be accepted beyond the first. Please pay careful attention to the DUE DATE & TIME for each assignment. DO NOT PROCRASTINATE!!! If extenuating circumstances prevent a student from finishing an assignment, the student must contact the instructor BEFORE the assignment is due. Late work is not accepted by Blackboard. It will need to be send via email if under 16MB in size or turned in the next class via thumbdrive if too large for email.

Attendance
Attendance is mandatory. Unexcused absences reduce a student’s final grade using the chart below. Two tardies equal one absence. Email the instructor if you know you will be missing class.
Deductions for Absences

<table>
<thead>
<tr>
<th>Days Absent</th>
<th>Deduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 2</td>
<td>No deduction</td>
</tr>
<tr>
<td>3</td>
<td>-1 letter grade</td>
</tr>
<tr>
<td>4</td>
<td>-2 letter grades</td>
</tr>
<tr>
<td>5+</td>
<td>Grade of 'F'</td>
</tr>
</tbody>
</table>

Each class is a building block for the next. Absent students miss important material and typically do not do well in this course. The video tutorials do not replace the lectures but supplement them. If you have to miss class, you are responsible for making up the work and completing the assignments on time.

Resources

A traditional textbook is not used in this course. Instead, students will use online resources posted at Blackboard [http://gregorygrimsby.com](http://gregorygrimsby.com) as their study material. The website contains dozens of video tutorials offered in a progression of chapters that correspond to the lecture. These are meant to augment class lectures, not replace them and ARE NOT a viable alternative to attending class.

The website is password protected. When prompted, enter this password: mason

Game Lab

In the Art and Design building, room 2002 (subject to change) is a monitored computer lab available outside of class hours for students to work on their projects. Hours are posted on the door and on the program website:

Students will need at least 8 hours outside of class each week to complete coursework.

Class Discord channel

There is a discord server set up by Professor Grimsby for all of his courses. It’s a great place to help each other out, get to know one another outside of class, and group think any issues. Although it is not required, I strongly suggest you join the discord. Here is the link: [https://discord.gg/rY2gwCC](https://discord.gg/rY2gwCC)

On the Discord welcome page you will see the Terms and Expectations of netiquette required to post there.

Required Class Material:

It is the student’s responsibility to obtain consistent, stable access to 3DS MAX 2020 and other software used in the class (listed below). Students who can use the lab to complete all assignments are not required to have a computer to do the coursework.

Software Needed:

The software below is needed in this course. It is installed on all class and game lab computers. Students do not need to acquire this software IF they are able to use the lab to complete assignments

- 3ds max 2020 (student version available at [http://students.autodesk.com](http://students.autodesk.com))
- Unity3D (free version available for download from [www.unity3d.com](http://www.unity3d.com))
- Zip or Rar archive program
- FRAPS (free version available) or other screen recording software
- Handbrake (free version available)
- Photoshop (no free version available). Adobe creative cloud for students is $10/mo.
- Online backup, aka Dropbox or Google Drive.

It is suggested that students use an online backup service to prevent their project files from being lost. Every semester multiple students report lost work due to damaged or misplaced thumbdrives, corrupted files, or dead drives. Most services offer free storage that is sufficient in size for this course.

How to Be Successful in this Course

Every 3D model represents a puzzle. This class teaches students how to approach and solve these challenges. Modeling is heavy on problem solving and process and light on rote memorization. Students who excel in this course are the ones who practice diligently. Additionally, consider the following:

- View and attempt all the video tutorials on the website. Don’t just do the graded assignments.
- Pursue additional help on the internet, aka Google, Youtube, Autodesk, etc.
• Put in the time. You cannot cram your way through this course.
• Attend every session of class.
• Do not procrastinate on your projects.
• Consider taking this course later or adjusting your schedule if you are on credit hour overload or if you are taking other time-consuming classes (like studio art classes).

GMU Honor Code:

GMU is an Honor Code university; please see the Office for Academic Integrity for a full description of the code and the honor committee process. The principle of academic integrity is taken very seriously and violations are treated gravely. What does academic integrity mean in this course? Essentially this: when you are responsible for a task, you will perform that task. When you rely on someone else’s work in an aspect of the performance of that task, you will give full credit in the proper, accepted form. Another aspect of academic integrity is the free play of ideas. Vigorous discussion and debate are encouraged in this course, with the firm expectation that all aspects of the class will be conducted with civility and respect for differing ideas, perspectives, and traditions. When in doubt (of any kind) please ask for guidance and clarification.

The integrity of the University community is affected by the individual choices made by each of us. GMU has an Honor Code with clear guidelines regarding academic integrity. Three fundamental and rather simple principles to follow at all times are that: (1) all work submitted be your own; (2) when using the work or ideas of others, including fellow students, give full credit through accurate citations; and (3) if you are uncertain about the ground rules on a particular assignment, ask for clarification. No grade is important enough to justify academic misconduct. Plagiarism means using the exact words, opinions, or factual information from another person without giving the person credit. Writers give credit through accepted documentation styles, such as parenthetical citation, footnotes, or endnotes. Paraphrased material must also be cited, using MLA or APA format. A simple listing of books or articles is not sufficient. Plagiarism is the equivalent of intellectual robbery and cannot be tolerated in the academic setting. If you have any doubts about what constitutes plagiarism, please see me.

Disability Accommodations

• If you are a student with a disability and you need academic accommodations, please see me and contact the Office of Disability Services (ODS) at 993-2474, http://ods.gmu.edu. All academic accommodations must be arranged through the ODS.

Privacy

Students must use their MasonLive email account to receive important University information, including messages related to this class. See http://masonlive.gmu.edu for more information.