Online & Mobile Gaming
GAME232
TR 9:00 am – 10:15 am
Spring 2018
A&D 2002

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Office Hours: By Appointment M-TH

MASON MISSION STATEMENT
A public, comprehensive research university established by the Commonwealth of Virginia in the National Capital Region, we are an innovative and inclusive academic community committed to creating a more just, free, and prosperous world.

MASON GAME DESIGN MISSION STATEMENT
The Mission of the Computer Game Design Program at George Mason University is to prepare students for employment and further study in the computer game design and development field, doing so with a curriculum designed to reflect the gaming industry’s demand for an academically rigorous technical program coupled with an understanding of the artistic and creative elements of the evolving field of study.

CATALOG DESCRIPTION
This class covers the practice, and design of online and mobile games. Class will discuss the current state of the smartphone applications, and study the best practices to be successful in the applications market. Students will learn the development process for smartphone applications and develop applications in a team-based environment.

COURSE OVERVIEW
In this course, you will explore the ever-expanding world of online mobile games. You will use professional game design techniques to create playable mobile games that you can add to your game design portfolio. Using Unity 3D, you will learn the fundamentals of game design, apply competition and playfulness, implement game design elements by modifying game templates from various video game genres, and debug using iterative game design.

STUDENT LEARNING OBJECTIVES
Upon completion of this course, students will
● Be familiar with the process of mobile game development using Unity 3D
● Analyze mobile games to understand their gameplay mechanics
● Utilize game mechanics to create a simple game
● Deploy games for various mobile devices and markets
● Design and build a game in a team based environment
● Exercise project management skills

REQUIRED TEXTS
There’s no required text for this course. Necessary materials will be distributed via online if applicable.
However, there are recommended online texts from unity3d.com. Especially, students are recommended to read documentation from the URL below:

REQUIRED MATERIALS
Students are strongly recommended to have access to an Android mobile device that can be used for debugging. Individual projects will not require submission of Android builds, but group projects (including the final) will so at least one person in a group should have access to an Android device.

REQUIRED SOFTWARE
Students will be required to have existing knowledge of the following software to the extent that they can efficiently develop games and game assets.

Unity game engine V. 2017.2.0f3: http://www.unity3d.com

Art asset creating software such as Adobe Photoshop and/or Illustrator.

Sound design/creation software such as Audacity.

Writing and presentation software such as that found in MS Office (Word, Powerpoint, Excel, etc.) or on Google Drive.

CLASS POLICIES
Cell phones must be turned off or turned to “silent” mode.
Please do not text during class.
No food is allowed in the classroom unless related to class activities.

EXCUSED ABSENCES
Students have the right to miss class for religious observances. Students wishing for time off for this reason should let the instructor know within the first two weeks of class. Sometimes absences from class are unavoidable because of illness. Emergencies, other than illness, could cause absence from class. In these cases, students are expected to meet with the instructor as soon as possible after the crisis has passed and arrange to make up any missed work. However, a written document that proves your absence was unavoidable must be submitted, and the instructor reserves the right to determine whether or not to excuse such an absence.

ACADEMIC HONESTY
For complete information about the University’s policies on academic honesty, please see: http://www.gmu.edu/cte/Teaching/Getting Started/Designing Syllabus/academic_honesty.html

GMU HONOR CODE
http://www.gmu.edu/catalog/apolicies/index.html#Anchor12
Honor Code: To promote a stronger sense of mutual responsibility, respect, trust, and fairness among all members of the George Mason University community and with the desire for greater academic and personal achievement, we, the student members of the university community, have set forth this honor code: Student members of the George Mason University community pledge not to cheat, plagiarize, steal, or lie in matters related to academic work.

ADDITIONAL RESOURCES
GMU Student information and resources: http://www.gmu.edu/mlstudents/.
The University Libraries maintain info guides for various majors. You can find links to various game design resources on the Computer Game Art & Design info guide: http://infoguides.gmu.edu/games

If you are a student with a disability and you need academic accommodations, please see me and contact the Disability Resource Center (DRC) at 703-993-2474. All academic accommodations must be arranged through that office. Students must inform the instructor at the beginning of the semester, and the specific accommodation will be arranged through the Disability Resource Center.

DISCLAIMER
In this class, I reserve the right to show a broad range of course materials, some of which assume the audience to be adult in age and demeanor. Should you at any time in the course of the class feel offended by something you have seen or heard, we would appreciate you staying to be part of a dialogue. If you feel that you cannot stay, remove yourself from the classroom as discreetly as possible. You may be asked to report on your response.

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.

COURSE SCHEDULE
Please, refer to the class Blackboard for the course schedule as well as important dates, such as assignment due dates, exam dates, and so on.

GRADING & ASSESSMENT OVERVIEW
Course work will include:

30% Assignments (Writing/In-Class Assignments, Quizzes)
45% Projects (3 Individual Projects)
25% Final Project (Group Project to be presented on Final Exam Day in lieu of an exam)

* Note that if you are having trouble in the class, need an extension on a given assignment, or things outside of class are affecting your ability to do the work, talk with me about it sooner. In general, we can work something out.

Projects are graded on a combination of technical and creative competence.

A: 90% - 100%  B: 80% - 89%  C: 70% - 79%  D: 60% - 69%  F: 0% - 59%

PROJECT BREAKDOWN
The meat of work in this course is developing games in the Unity game engine. For these projects, we will follow a series of steps:

1. **Pre-production**: In class, I will introduce the goal of the project. You will for groups and will be expected to come up with solutions on how to approach developing specific aspects of the project. For instance, I may ask you to produce pseudo-code on the logic of a function, or ask you to organize those functions under different classes.

   2. **Production**: I will then make the assignment and accompanying tutorial video available on Blackboard. If applicable, I will also provide a Unity project with any necessary assets. Individually, you will follow the instructions on the video and replicate my code and project. I will dedicate some time in class to helping you de-bug tricky errors. You will then submit a build of the playable game. This will be pass or fail.
3. **Post-production:** For this step, I will ask you to apply your knowledge to make changes or additions to the project. You will submit another build, and you will be graded based on functionality, creativity, and transformation of the game.

**FINAL PROJECT BREAKDOWN**
For the final project, you will work in groups and follow these steps:

1. **Pre-production:** Submit a proposal on a simple game that you want to develop that includes tutorials and materials that you will utilize to achieve your goal. Your game must not be a carbon-copy of the tutorial, and should be transformed enough that you can claim ownership of your work.

2. **Production:** On the night before the Final Exam Day, you will submit a build of your playable game. You will be graded based on ambition, functionality, creativity, and transformation of the game.

3. **Present:** On the Final Exam Day, you will present and demo your game in class.