GAME 232: Online and Mobile Gaming

**Term:** Spring 2018  
**Meeting Time:** Online  
**Section:** DL1  
**Room:** Blackboard

**Instructor:** Andrew Sweeney  
**Email:** asweene7@gmu.edu  
**Office:** Art & Design Building  
**Office Hours:** N/A

**Course Description**
This course will cover the history, practice, and design of online and mobile games. Class will discuss the current state of 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 original and innovative applications in a team-based environment.

In this course, you will explore the ever-expanding world of mobile, pervasive, and “big” 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.

**Course Objectives**
Students who complete this course will:

- Be familiar with the process of mobile game development using Unity3D
- Analyze mobile games to understand their gameplay mechanics
- Deploy games for various mobile devices and markets
- Design and build a game in a professional environment
- Exercise project management skills
**Requirements and Evaluation**

Each week of this online course will feature a required video that students will need to watch to be successful. There will be a weekly assignment that students must complete and turn-in via blackboard.

All course content will be explained via online video, including assignment instructions. All assignments are posted and must be turned in via Blackboard. Any additional reading/watching material will be posted to Blackboard.

Students will learn the concepts and terminology of game development and game studies and be able to write and speak about games in both technical and formal ways. Students should explore and understand games as a form of art but also as a form of persuasive play.

For the mid-term, students will program and design a fully working 2D platformer. Instructions on how to build the core of the platformer game will be shown through weekly videos. Students are expected to take the core of the platformer and expand upon it to make it their own. Students must turn in a working project in order to be considered for full credit. (Details on the Midterm requirements will be posted to Blackboard and discussed in a weekly video.)

For the final, students will program and design an RPG game, designed with mobile devices in mind. Instructions on how to build the core of the RPG game will be given through weekly videos. Students are expected to use of their knowledge and skills gained from the course to expand upon the RPG game and make it into something great. Students must turn in a working project in order to be considered for full credit. (Details on the Final requirements will be posted on Blackboard and discussed in a weekly video.)

**Required Texts/Materials:**

There is no book required for this class, but some books will be recommended over the course of the semester in order to guide/aide students further.

**Required Software (All of which is available on Computer Lab Computers)**

- Unity Game Engine
- Art Creation Software, such as Adobe Photoshop, Illustrator and/or GIMP, etc.
- Sound Design Software, such as Audacity or Protools, etc.

**Recommended Materials:**

- PC Desktop / Laptop (For working on projects outside of class/lab)
- USB Flash Drive and/or Online File Sharing Account
Grading
Grading will be based on student performance in the following areas of assessment:

- Weekly Projects (40%)
- Midterm presentation and project (25%)
- Final presentation and project (35%)

Grades will be based on the following scale:
To receive a grade of "A" a student must achieve a minimum average grade of 90% on the course work requirements.
To receive a grade of "B" a student must achieve a minimum average grade of 80% on the course work requirements.
To receive a grade of "C" a student must achieve a minimum average grade of 70% on the course work requirements.
To receive a grade of "D" a student must achieve a minimum average grade of 60% on the course work requirements.
Failure to receive a "D" grade will result in a grade of "F".

Note on Weekly Projects:
Most weekly assignments will require students to turn in a game project. Details on what specifically to turn in will be discussed during the 2nd week's video. Turning in a project that will not run will lose half credit. Projects are graded between 0% and 100%, and a non-working project will result in a maximum possible score of 50%. Make sure you projects work!

Assignments
Students are expected to check Blackboard on a weekly basis to preview their upcoming assignments. Digital assignments must be turned in via Blackboard.

Written Material:
All written material must be typed, double-spaced, and free of typos, misspellings, and grammatical errors. It must be fully foot-noted (or end-noted) and utilize either the MLA or APA style consistently. If you do not when or how to footnote, it is incumbent upon you to discover how, there are resources available in the library and on campus. Be sure to cite video, games, news, websites, or any form of media also used in your assignments.
Late Work and Make-up Policy
Meeting deadlines is one of the most important aspects of game design. Please pay careful attention to the due date and time for each assignment. Assignments must be in before the due date and time to receive credit for the assignment.

If extenuating circumstances prevent a student from finishing an assignment before the due date and time, the student must contact the instructor before the assignment is due. Late work will only be accepted at the instructor's discretion. If it is accepted at all, grading may be adjusted based on the tardiness.

ACADEMIC INTEGRITY
Mason is an Honor Code university; please see the University Catalog 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.

MASSON EMAIL ACCOUNTS
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. All digital communication with the professor must be made using your “masonlive” email account.

OFFICE OF DISABILITY SERVICES
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. All academic accommodations must be arranged through the ODS. http://ods.gmu.edu
OTHER USEFUL CAMPUS RESOURCES:
WRITING CENTER: A114 Robinson Hall; (703) 993-1200; http://writingcenter.gmu.edu

UNIVERSITY LIBRARIES “Ask a Librarian”
http://library.gmu.edu/mudge/IM/IMRef.html

COUNSELING AND PSYCHOLOGICAL SERVICES (CAPS): (703) 993-2380;
http://caps.gmu.edu

UNIVERSITY POLICIES

The University Catalog, http://catalog.gmu.edu, is the central resource for university policies affecting student, faculty, and staff conduct in university academic affairs. Other policies are available at http://universitypolicy.gmu.edu/. All members of the university community are responsible for knowing and following established policies.
| Week 1 | Course Introduction  
**Assignment:** Self-Introduction Presentations |
|--------|--------------------------------------------------|
| Week 2 | Introduction to Unity: Creating Pong  
**Assignment:** Pong Project |
| Week 3 | Introduction to Unity: Creating Breakout  
**Assignment:** Breakout Project |
| Week 4 | Introduction to Unity: Creating Flappy Bird  
**Assignment:** Flappy Bird Project |
| Week 5 | Unity: Creating the Core Platformer  
**Assignment:** Core Platformer Project |
| Week 6 | Unity: Expanding the Core Platformer  
**Assignment:** Updated Platformer Project |
| Week 7 | Unity: Finishing the Core Platformer  
**Assignment:** Submit Questions for next week's Q+A session |
| Week 8 | Q+A videos, answering questions related to the mid-term  
**Assignment:** Mid-term due |
| Week 9 | Unity: Mobile RPG Basics  
**Assignment:** RPG Basics Project |
| Week 10 | Unity: Mobile RPG Continuation  
**Assignment:** RPG Project |
| Week 11 | Unity: Mobile RPG – Dialogue System  
**Assignment:** RPG Project |
| Week 12 | Unity: Enhancing Battle System  
**Assignment:** RPG Project |
| Week 13 | Unity: Final Elements of RPG  
**Assignment:** Continue working on RPG |
| Week 14 | Special Topics: Version Control and Deploying to Mobile  
**Assignment:** Submit Questions for next week's Q+A session |
| Week 15 | Q+A videos, answering questions related to the final  
**Assignment:** Submit Questions for next week's Q+A session |
| Week 16 | Final Q+A videos, answering questions related to the final  
**Assignment:** Finals due |