**Course Title:** Intro to Game Design

**Description:** This course will share introductory game design techniques enabling the student to assemble interactive and engaging experiences for the users of their systems and applications. As part of the learning experience, students will gain valuable skills while using the Unity 3D application development environment. Game design students will perform critical analyses of video games in order to gain a better understanding of play mechanics. These play mechanics will then serve as a foundation for learning the process of game design while completing projects which lead to the ultimate delivery of a casual online game.

**Prerequisite(s):** Junior or Senior classification

**Introduction:** Games have become a pervasive form of communication and entertainment. Some have recently discussed and argued that games should be considered a form of art. Whether or not you subscribe to this opinion, there are fundamental design components to games that are valuable in all aspects of interactive design. Games give us the ability to interact and engage with art, often enabled through the use of modern gaming technologies. However, not all game design is based upon modern design theory. Many board, card, and dice games developed thousands of years ago are still very popular and widely played today. Why is that? What is at the core of these ancient games that ties us to our ancestors so many years ago? With the continued advancement in graphic processing technology, surely we are creating new and vastly superior game experiences? During the semester, students will be challenged to examine classic games in order to critically evaluate the designs of what are to be considered “state of the art” video games today.

**Objectives:** Good game design is accomplished through the application of a systematic approach, which may similarly be applied to several aspects of the student’s career. The objective of this course is to learn each step of this approach while completing a rudimentary online casual game through the use of iterative and player centric design methodologies.

**Design Groups:** At the beginning of the course students shall form design groups. These groups are put in place so that students are able to share design ideas, develop concepts and hold deeper, more meaningful game related discussions. Portions of class time will be allocated to these group discussions so that students are able to utilize this resource to improve their designs and engage in play testing.

**Grading and Evaluation:** The final grade for the course will consist of the following components weighted by the appropriate number of points as indicated:

- Critical Game Analyses: 15 pts
- Knowledge Gates: 35 pts
- Game Design Documentation: 10 pts
- Final Game Project: 20 pts
- Play Testing Reports: 10 pts
- Class participation: 10 pts

Total 100 pts

Grades are assigned based upon the total number of points earned:

- A > 90 pts
- 80 < B < 89 pts
- 70 < C < 79 pts
60 < D < 69 pts  
F < 60 pts

The class participation grade will be based on attendance as well as participation within your design groups. It is the student’s responsibility to ensure the roll sheet is signed each class period. If you come in late, please do not disrupt the class in order to sign in, simply follow up at the end of class.

Work requirements and grading guidelines for each component will be distributed as needed throughout the semester.

**Critical Game Analyses**

Much as in many other forms of design, the critical analysis of existing game designs enables students to examine play mechanics, and aesthetics at work. While playing games, the student will learn to look internally as to which components of the game contribute to the experience, and document their understanding. Three critical game analyses are to be completed throughout the semester. It is the student’s choice as to which games are analyzed, however it is recommended that the selection is limited to casual online game experiences. The critical analysis is a formal document recording the players’ experiences.

**Knowledge Gates**

Much as in learning any technical application or computer science related topic, learning game design is accomplished through the application of both classic analysis as well as hands on design work. To be successful with a robust application development tool, such as Unity 3D, students must consistently work through the exercises and examples given during class. Knowledge gates assess the student’s understanding of the application development environment and game design topics on a regular basis throughout the semester.

**Game Design Documentation**

There are several steps in the game design process. Most games are designed and developed by teams. Good documentation is required in order to keep all members of the team coordinated and on the same page. Likewise, the course ensures students gain a solid understanding of the types of documentation which enable successful game design projects.

**Play Testing Reports**

Perhaps the most critical component of an iterative game design process is play testing. The game designer observes other players, playing the game. While passively observing, the designer records his or her observations and solicits player feedback. Four play testing reports will be prepared by the designer during the course of the semester revealing the continued refinement of the game design.

**Final Game Project**

The final game project is a shortened version of an exciting casual online game experience. There is flexibility in both the genre and style of gameplay selected. However, course lectures will make an assumption that a classic “platformer” game style is selected. Unity 3D ([http://unity3d.com](http://unity3d.com)) has been selected from many game editors and is well suited for creating casual games which can be played either online or on mobile platforms. Game projects will be graded on visual quality, playability and the “fun factor” in the game. Points will be awarded for innovation and creativity in game design, user interface and overall implementation. Final games will be turned in and demonstrated during our last regular class date (Tuesday – May 1st).

**Class Participation**

Participation in classroom activities is critical to the course’s learning experience. Design groups rely upon each member contributing their opinions and feedback in order to improve
upon design decisions. Members who are absent not only hinder their own learning, they hinder the learning of others. Because of this, the penalty for unexcused absences is rather steep. For each unexcused absence, 2 points will be deducted from the 10 points available.

**Attendance:** The University views class attendance as the responsibility of an individual student. Attendance is essential to complete the course successfully. A significant portion of the student’s final grade is based upon class participation. University rules related to excused and unexcused absences are located on-line at [http://student-rules.tamu.edu/](http://student-rules.tamu.edu/).

**Required Texts:**
  Kindle Edition Available - $16.49

**Optional Texts:**
- *Game Design Workshop: A Playcentric Approach to Creating Innovative Games* by Tracy Fullerton; Morgan Kaufmann, 2008. ISBN 0240809742

**Supplemental Readings:** As assigned in class.

**Costs:** There are no additional mandatory expenditures required in order to meet student obligations for the course, however, additional game design & development tools, game assets, and premium tutorials will be referenced throughout the course which are considered optional materials and software supporting the student’s game design learning interests.

**Contact Information:**
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**SPECIAL NOTES**

**Americans with Disabilities Act:** The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Department of Student Life, Services for Students with Disabilities, in Room B118 of Cain Hall or call 845-1637.

**Copyright:** The handouts used in this course are copyrighted. By “handouts,” we mean all materials generated for this class, which include but are not limited to syllabi, quizzes, lab problems, in-class materials, review sheets and additional problem sets and the contents of the class Web site. Because these materials are copyrighted, you do not have the right to copy the handouts, unless you are expressly granted permission. You have permission to make
printouts of the on-line class notes and the class web site strictly for your use in this class.

Each student retains joint, non-exclusive, copyrights to any work that he or she creates as part of this class.

**Plagiarism:**  In this course, collaboration and the free interchange of ideas among students is encouraged; in particular the discussion of reading and writing assignments and review questions, approaches to solving them, etc. However, we do not allow plagiarism, which, as commonly defined, consists of passing off as one's own the ideas, words, writings, etc. that belong to another. In accordance with this definition, you are committing plagiarism if you copy the work of another person and turn it in as your own, even if you have the permission of that person. Plagiarism is one form of scholastic dishonesty. If you have questions regarding plagiarism, please consult the latest issue of the Texas A&M University Student Rules, under the section on Scholastic Dishonesty.

**Aggie Honor Code:**  “An Aggie does not lie, cheat or steal or tolerate those who do”

Upon accepting admission to Texas A&M University, a student immediately assumes a commitment to uphold the Honor Code, to accept responsibility for learning and to follow the philosophy and rules of the Honor System. Students will be required to state their commitment on examinations, research papers and other academic work. Ignorance of the rules does not exclude any member of the Texas A&M University community from the requirements or the processes of the Honor System. For additional information please visit: [www.tamu.edu/aggiehonor/](http://www.tamu.edu/aggiehonor/).