

ATCM 2365: GAME DESIGN FUNDAMENTALS

Monday - Wednesday ATC 2.602

Spring 2018

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COURSE DESCRIPTION

This course is an introduction to game design, development, production, and studies for incoming ATEC students. Students in the course will explore various aspects of gaming, including but not limited to: game history and culture, mechanics, systems, level design, art and animation, narrative, programming and technology, multiplayer design, platforms, virtual communities, educational games, serious games, and gaming academia. Students will also begin to strategically plan future courses within the ATEC curriculum.

Students will be expected to complete weekly reading assignments as well as play multiple short digital games and engage in class discussion. Students will also complete five quizzes and four brief writing assignments. Course culminates in a final project that includes either a game design document with paper prototype or a research paper on a current issue in gaming.

COURSE OBJECTIVES

Through the successful completion of this course students will:

- Establish an understanding of the basic processes involved in creating digital and analog games
- Establish an understanding of the various career opportunities in the game industry
- Develop a new set of vocabulary of terms and concepts related to the design, development, and study of digital games
- Develop an appropriate academic writing style for game studies
- Establish a clear path for future course work within the ATEC major

REQUIRED TEXTS AND MEDIA

Jesse Schell, *The Art of Game Design: A Book of Lenses*, **second edition**, ISBN-13: 978-1466598645

Pen/pencil and paper for in-class quizzes

Additional online games and readings will be assigned at the discretion of the instructor

REQUIRED GAMES

FTL: Faster Than Light, Subset Games, 2012, available on Steam

Passage, Jason Rohrer, Free, hcsoftware.sourceforge.net

Portal, Valve, 2007, available on Steam

The Stanley Parable, Galactic Café, 2013, available on Steam

Braid, Number None, 2008, available on Steam

GRADING POLICY

Students must demonstrate satisfactory achievement of course objectives through fulfillment of course assignments and by contributing to class discussions. Grading will be based on completion of: five quizzes covering class discussions, game assignments, and reading assignments; daily attendance quizzes; four 2-3 page papers, and a final project. Extra credit assignments may be assigned at the discretion of the instructor. Course evaluation will be based on the following grading criteria:

Assignment Point Values:

- Quizzes: 20 points (4 points each)
- Attendance quizzes: 10 points
- Writing assignments: 40 points (10 points for each paper)
- Final project: 30 points

Class Attendance: All students are required to be on time and in attendance for each and every class. Students who fail to attend are responsible for learning the missed materials via classmates. Missing multiple classes will greatly impact student ability to complete assignments.

Late Assignments: Adherence to deadlines is expected. It is the individual student's responsibility to keep track of the goals and deadlines and to turn in finished work on the specified dates. Assignments are due by hard copy only at the beginning of class unless otherwise noted by the instructor in writing.

Late assignments may or may not be accepted based upon the discretion of the instructor and the situations involved.

Making up missed work: Makeups are available only to students who have a legitimate excuse for missing a quiz, such as scheduled job interview out of town, athletic team event out of town, illness, death in the immediate family, etc. If you know in advance that you must miss a quiz, give a written notice to the instructor in advance, and bring documentation to support your anticipated absence. If you miss a quiz unexpectedly because of last minute illness or accident, submit a note to the instructor when you return to campus (or as e-mail attachment if you will be away for some time) with documentation of your situation.

There *may* be opportunities for students to resubmit improved work for extra consideration. In order to be eligible the student must have turned in the completed assignment on its original due date and fulfilled all specified requirements. Revisions should be based upon instructor feedback.

Class Participation and Classroom Citizenship:

- Cell phones and pagers must be powered off during formal class hours.
- Do not talk when others (the instructor, guests, and fellow students) are talking.
- Students will not use computers for personal reasons (checking personal email, browsing the web, etc.) during class time.
- Participate in class discussions, particularly with guest lecturers.

Student Conduct and Discipline:

Students can find all university rules and regulations on Academic Dishonesty here:

<http://www.utdallas.edu/deanofstudents/dishonesty/>

<http://www.utdallas.edu/deanofstudents/integrity/>

<http://www.utdallas.edu/deanofstudents/bigfour/>

<http://www.utdallas.edu/deanofstudents/maintain/>

Copyright Violations: It is a federal crime to reproduce copyrighted software. Anyone caught reproducing software from the UTD labs will be subject to disciplinary action. In addition, anyone caught reproducing outside software in the lab will automatically lose all lab privileges and will be subject to other disciplinary action as deemed necessary.

Email Use: Only UT Dallas email accounts will be used for this course. All email communication from the instructor will be mailed to students UT Dallas email accounts and no other. Students are responsible for checking their UT Dallas email regularly for course information and updates.

Withdrawal from Class: The administration of this institution has set deadlines for withdrawal of any college-level courses. These dates and times are published in that semester's course catalog. It is the student's responsibility to handle withdrawal requirements from any class.

Student Grievance Procedures: Students can find information about Academic Integrity and its processes by reviewing the following links: <http://policy.utdallas.edu/utdsp5005>

Incomplete Grades: As per university policy, incomplete grades will be granted only for work unavoidably missed at the semester's end and only if 70% of the course work has been completed. An incomplete grade must be resolved within eight (8) weeks from the first day of the subsequent long semester. If the required work to complete the course and to remove the incomplete grade is not submitted by the specified deadline, the incomplete grade is changed automatically to a grade of F.

Student Accessibility: The University of Texas at Dallas is committed to equal access to educational, recreational and social endeavors for students with disabilities. Please review the provided link for information: <http://www.utdallas.edu/studentaccess/>

Religious Holidays: The University of Texas at Dallas will excuse a student from class or other required activities for the travel to and observance of a religious holy day for a religion whose places of worship are exempt from property tax under Section 11.20, Tax Code, Texas Code Annotated. The student is encouraged to notify the instructor or activity sponsor as soon as possible regarding the absence, preferably in advance of the assignment. The student, so excused, will be allowed to take the exam or complete the assignment within a reasonable time after the absence: a period equal to the length of the absence, up to a maximum of one week.

Additional information on university policies and procedures can be found at: <http://go.utdallas.edu/syllabus-policies>

COURSE SCHEDULE

This syllabus is subject to change at the discretion of the instructor. All changes will be furnished to students in writing.

| Date | Topic | Due: |
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| Jan 8: | Introduction to the course. Defining "game." | |
| Jan 10: | History, culture, and development teams | Ch. 1, Ch. 2 |
| Jan 15: | MLK Day, No Class | Ch. 5, Ch. 6 |
| Jan 17: | Elements of game design/prototyping | Ch. 5, Ch. 6, Ch. 8 |
| Jan 22: | Game mechanics | Ch. 12, Paper 1 Due |
| Jan 25: | Guest Lecture | <i>FTL: Faster Than Light</i> |

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| Jan 29: Jan 31: | Single-player systems; flow and interest curves Guest Lecture | Quiz One , Ch. 10, Ch. 11 |
| Feb 5: Feb 7: | Systems analysis, tuning, balancing Guest Lecture | Ch. 13 <i>Portal</i> |
| Feb 12: Feb 14: | Puzzles and Level Design Guest Lecture | Ch. 14, Paper 2 Due |
| Feb 19: Feb 21: | Narrative Guest Lecture | Quiz Two , Ch. 17 <i>Passage</i> |
| Feb 26: Feb 28: | Characters Guest Lecture | Ch. 20 Ch. 18, <i>The Stanley Parable</i> |
| Mar 5: Mar 7: | Multiplayer systems; virtual communities Guest Lecture | Ch. 23, Ch. 24, Paper 3 Due |
| Mar 12: Mar 14: | No class: Spring Break No class: Spring Break | |
| Mar 19: Mar 21: | Community, ethics, esports Guest Lecture | Quiz Three |
| Mar 26: Mar 28: | Documentation, Pitch Guest Lecture | Ch. 26, Ch. 30 |
| Apr 2: Apr 4: | Technology Guest Lecture | Ch. 28, Paper 4 Due |
| Apr 9: Apr 11: | Serious games, art and education Guest Lecture | Quiz Four , <i>Braid (or Limbo)</i> |
| Apr 16: Apr 18: | Project Workshop Day Futures | Quiz Five |
| Apr 23: Apr 25: | Academia Last day of class | Ch. 32, Ch. 33, Ch. 34 Final Project Due |