EXPANDED COURSE DESCRIPTION
DIGITAL MEDIA PROGRAM
School of the Arts, Media, Performance and Design
Computational Arts
FA / DATT 3300 3.0 SECTION A
GAME MECHANICS
FALL 2020 / WINTER 2021

COURSE CALENDAR DESCRIPTION
Explores the rules and procedures followed by players and games-more broadly and not limited to computer games-that are the building blocks that make up gameplay. Students look at the various aspects of game mechanics; what they are, how they can be formed, how they interact with each other, what values they transmit and topics relating to the application of game mechanics. Examines system dynamics, balancing luck and skill, cooperation and competition, in variety of gaming and non-gaming contexts. Students will prototype, test, and implement mechanics in games and learn how to visualize, simulate and operationalize game mechanics. Topics include: emergent gameplay, balancing game mechanics and level design, and scripted events vs. dynamic progression systems. Prerequisites: FA/DATT 2300 3.00 and FA/DATT 2301 3.00, or permission of the Instructor.

INSTRUCTOR(S)

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<th>Name</th>
<th>Section / Format / Term</th>
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<tr>
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SPECIAL FEATURES
Due to the class being online, hours of meeting might change during the semester to accommodate a better learning experience.
Lecture: Thursday 9:30-11:00 on class Discord
Lab 01: Thursday 11:00-13:00 on class Discord
Lab 02: Thursday 13:00-15:00 on class Discord
Game Mechanics
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TOPICS AND CONCEPTS

Project Descriptions:
Mini Projects – during the semester you will have three small in-class projects each of them worth 5% of your grade (15%)
1. Micro games- The students will create 7 analog micro games
2. Analysis- the student will analyze the game loop of an existing game
3. twitter bot- The student will make a procedurally generated bot
Game Project – The main project of the semester will have you choose one story from Italo Calvino’s Invisible Cities and create a game based on it. The project will be divided into four parts which will be graded separately! (85%)
1. Game documentation- creating diagrams, maps and game design documents (10%)
2. Level Design- creating a graybox level of the game world (20%)
3. Mechanics- adding the main mechanics of the game (20%)
4. Final result- an alpha build of the game, grading will focus on mechanics and overall gameplay and not on visual impact (35%)

Note: there will not be lab assignment but part of your grade (and deliverables) for the projects will be done in class. More details on the projects and assignments will be presented in class

Some Issues to consider:
Game Development is fun, but it does require some consideration from the students:
· Game Development requires time, do not leave your assignments to the last minute as it will just be imposable to complete on time!
· We will be making prototypes not complete projects as the average game development time is 2 years
· Try to explore creative concepts outside of your comfort zone
· The Labs are an extension of the lectures, not coming to lecture will hurt your understanding of the subject

As this is a cumulative learning environment attendance in all classes is mandatory (I will check attendance). Failure to attend class and arrive to class on time will result in academic penalty on your final grade, and/or a request for withdrawal from the course. Exceptions to the lateness penalty for valid reasons such as illness, compassionate grounds, etc., will be considered by the Course Instructor but will require supporting documentation (e.g., a doctor’s letter).

Projects and assignments to be marked for course credit will be submitted on the scheduled date. There will be no extensions except for verified reasons. All work submitted for evaluation will be original work created in full by the student. York students are required to maintain high standards of academic integrity and are subject to the Senate Policy on Academic Honesty (http://www.yorku.ca/secretariat/legislation/senate/acadhone.htm). It is highly recommended that all students complete the Academic Integrity Tutorial (http://www.yorku.ca/tutorial/academic_integrity/).

GRADED ASSESSMENT

Grade Breakdown:
· Mini Projects- 15% (5%x3)
· Game documentation – 10%
· Level Design- 20%
· mechanics- 20%
· Final Game- 35%
Overall 100%
Failure to complete any project, assignment or to participate in lectures and lab practice will result in failure of the class. It is mandatory for all students to adhere to the course schedule. The evaluation will be based on cumulative achievement, regular attendance and the student’s participation in research, making, and creative expression. It is expected that students will show a commitment to completing all projects and assignments with creative & aesthetic solutions based consistent work habits both in class time and outside of class time.

Evaluation/grading criteria:
Specific project rubric will be published with the details of each project, but overall what I am looking for is:
· Quality of the work produced, with the balance of the student’s artistic expression & sensitivity as well as technical understanding.
· The engagement of the student in their research studies,
· The degree and details to which students challenged themselves.
· Commitment - includes attendance, participation, and completing work on time

When you submit your work, please name your assignment as the following format: last name_first name_date_assignment

Grade Grade Point Percent Range Description
A+ 9 90-100 Exceptional
A 8 80-89 Excellent
B+ 7 75-79 Very Good
B 6 70-74 Good
C+ 5 65-69 Competent
C 4 60-64 Fairly Competent
D+ 3 55-59 Passing
D 2 50-54 Marginally Passing
E 1 Marginally below 50 Marginally Failing
F 0 below 50 Failing

(For a full description of York grading system see the York University Undergraduate Calendar - http://calendars.registrar.yorku.ca/pdfs/ug2004cal/calug04_5_acadinfo.pdf)

Required Text
Recommended Course Texts and References:
An Architecture Approach to Game Design, Christopher W. Totten
Game Feel: A Game Designer's Guide to Virtual Sensation, Steve Swink
Procedural Generation in Game Design, Tanya X Short & Tarn Adams
Spelunky, Derek Yu
Recommended Game to play (or watch playthrough):
Those are games I will mention frequently so I will recommend playing them or watching a playthrough video as it will help the class conversation
Journey (2012)
Shadow of the Colossus (2005)
Spelunky (2008)
Firewatch (2016)
Course Schedule:
Course schedule can be found at: shorturl.at/qAEP

ADDITIONAL INFORMATION

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This is a studio class, which means there is no lecture component and you will be expected to present and work on your project during the class. Due to the nature of online only classes, we will not be meeting every week, rather we will be meeting every three weeks (see schedule for specific dates). More details on how this will work will be given in week 1 lecture.
All work will be group work, you are not expected to work with the same group for all four projects.
We will primarily using Discord for class communication (including lectures), you will be getting an invite a few days before the semester starts.

IMPORTANT COURSE INFORMATION FOR STUDENTS
Last date to drop a fall term (F) course without receiving a grade: November 06, 2020
Last date to drop a winter term (W) course without receiving a grade: February 05, 2021
Last date to drop a full year (Y) course without receiving a grade: March 12, 2021

Academic Policies / Information
The Senate Academic Standards, Curriculum and Pedagogy Committee (ASCP) provide a Student Information Sheet that includes:
York's Academic Honesty Policy and Procedures / Academic Integrity Web site · Access/Disability · Ethics Review Process for Research Involving Human Participants · Religious Observance Accommodation · Student Code of Conduct
http://secretariat.info.yorku.ca/files/CourseInformationForStudentsAugust20121.pdf · Academic Accommodation for Students with Disabilities · Alternate Exam and Test Scheduling · Grading Scheme and Feedback Policy The Senate Grading Scheme and Feedback Policy stipulates that (a) the grading scheme (i.e. kinds and weights of assignments, essays, exams, etc.) be announced, and be available in writing, within the first two weeks of class, and that, (b) under normal circumstances, graded feedback worth at least 15% of the final grade for Fall, Winter or Summer Term, and 30% for ‘full year’ courses offered in the Fall/Winter Term be received by students in all courses prior to the final withdrawal date from a course without receiving a grade.
· Important University Sessional Dates ( you will find classes and exams start/end dates, reading/co-curricular week, add/drop deadlines, holidays, University closings and more.
http://www.registrar.yorku.ca/enrol/dates/index.htm
· Manage my Academic record http://myacademicrecord.students.yorku.ca/
"20% Rule" No examinations or tests collectively worth more than 20% of the final grade in a course will be given during the final 14 calendar days of classes in a term. The exceptions to the rule are classes which regularly meet Friday evenings or on Saturday and/or Sunday at any time, and courses offered in the compressed summer terms.

Many courses utilize Moodle, York University's course website system. If your course is using Moodle, click here to access it.
Moodle @ York University