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 2019 / WINTER 2020

Last Modified Date: 08/06/2019

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.

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INSTRUCTOR(S)

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<thead>
<tr>
<th>Name</th>
<th>Section / Format / Term</th>
<th>Contact Email</th>
<th>Contact Phone</th>
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<tr>
<td>Shaik, Yifat</td>
<td>Sec. A / LECT / F</td>
<td><a href="mailto:yifatshaik@gmail.com">yifatshaik@gmail.com</a></td>
<td><a href="mailto:yifatshaik@gmail.com">yifatshaik@gmail.com</a></td>
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SPECIAL FEATURES

Course director: Yifat Shaik
Teacher Assistant:
Lecture hours: Thursday 11:30 to 1:00
Office Hours: By appointment

Lecture location: ACW 005
Lab location: ACW 102 - Art and Technology
Learning Laboratory

Email: yshaik72@yorku.ca Course website: https://datt3300.wordpress.com/
Course Description:

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! (75%)
1. Game documentation- creating diagrams, maps and game design documents (10%)
2. Level Design- creating a graybox level of the game world (20%)
3. Procedural Elements- add procedurally generated elements to the game (15%)
4. Final result- an alpha build of the game, grading will focus on mechanics and overall gameplay and not on visual impact (30%)

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

LIST OF LEARNING OUTCOMES AND EXAMPLES OF

Required Text


Note: there will be a few other required texts and games which will be announced during the semester

Recommended Course Texts and References:
Important Course Information for Students:
All students are expected to familiarize themselves with the following information, available on the Senate Committee on Academic Standards, Curriculum & Pedagogy webpage (see Reports, Initiatives, Documents)

- Senate Policy on Academic Honesty and the Academic Integrity Website
- Ethics Review Process for research involving human participants
- Course requirement accommodation for students with disabilities, including physical, medical, systemic, learning and psychiatric disabilities
- Student Conduct Standards - Religious Observance Accommodation
- Last date to drop a fall term (F) course without receiving a grade: November 8, 2019

GRADED ASSESSMENT

Grade Breakdown:

Mini Projects- 15% (5%x3) Game documentation – 10% Level Design- 20%
Procedural Elements- 15%
Final Game- 30% 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

<table>
<thead>
<tr>
<th>Grade</th>
<th>Grade Point</th>
<th>Percent Range</th>
<th>Description</th>
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<tbody>
<tr>
<td>A+</td>
<td>9</td>
<td>90-100</td>
<td>Exceptional</td>
</tr>
<tr>
<td>A</td>
<td>8</td>
<td>80-89</td>
<td>Excellent</td>
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<tr>
<td>B+</td>
<td>7</td>
<td>75-79</td>
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<tr>
<td>B</td>
<td>6</td>
<td>70-74</td>
<td>Good</td>
</tr>
<tr>
<td>C+</td>
<td>5</td>
<td>65-69</td>
<td>Competent</td>
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Computer Lab:
There will be general introduction from the lab technician in the first class. Please clean your seat and log out before you leave for the next lab session. If you have a question about using lab, address it to the lab technician or instructor. Please turn your cell phones off before entering class and/or the computer lab. It is expected that the majority of the assignments will be completed outside of class time.
If you plan to use the lab outside of your class time, you must purchase a Digital Media Lab Card. Lab Cards are $30 for the year, or $20 for one term. The Digital Media Lab Card can be purchased in the Digital Media office, located in Rm. 235, Goldfarb Centre for Fine Arts. The office is open Monday to Friday, 8:30am–4:30pm

ADDITIONAL INFORMATION

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/).

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