

# EST-310 : Design of Computer Games

## Course Syllabus for Spring 2020

<b>Credits:</b>	3
<b>Meeting Days:</b>	Tuesday & Thursday
<b>Meeting Time:</b>	12:30 - 13:50
<b>Meeting Room:</b>	TBD
<b>Instructor:</b>	Maurice Bess
<b>Office:</b>	B 321
<b>Office Phone:</b>	032.626.1339
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### I. Course Description

Fundamental ideas underlying the design of games, which occurs before the programming stage. How games function to create experiences, including rule design, play mechanics, game balancing, social game interaction and the integration of visual, audio, tactile and textual elements into the total game experience. Game design documentation and play testing. Students will design their own game during the semester. This course is offered as both EST 310 and ISE 340.

**Advisory Prerequisite:** Basic computer skills

### II. Learning Outcomes

- Identify game mechanics and their related systems through active play and observation
- Define fundamental principles of good game design
- Design, develop and playtest game mechanics
- Write well organized pitch documents for game concepts

### III. Evaluation

Students will be evaluated based on their completed assignments, class participation, and weekly attendance. Weekly assignments will be graded based on following directions and crafting well-thought-out and documented concepts. There will be two graded in-class group projects that will allow students to work in groups to create physical prototypes of their designed game mechanics. Attendance in all classes is mandatory. Students not present during attendance will be marked absent unless the professor is notified of your late arrival at the end of the class. Every 3 lates will be marked as 1 absence and 7 unexcused absences is recorded as an automatic fail.

## IV. Grade Percentage

Assignments:	50%
Class Participation:	25%
Attendance:	25%

## V. Course Schedule

The following schedule represents the intended order of lectures for this course. The instructor has the academic freedom to revise the order of this material at their discretion or in response to the students needs and interests provided it adheres to the overall course objectives and learning outcomes.

Week	Class Session
1	<b>Lecture:</b> Introduction to the Concept of Play What is it? Why do we do it? <b>Assignment:</b> Analyze and document a games mechanics as you play
2	<b>Lecture:</b> Creative Thinking and How to Improve Creativity Where do creative ideas come from? <b>Assignment:</b> Create mind maps for a list of topics
3	<b>Lecture:</b> Psychographic Profile Creation and Analysis Who is my target audience and how do I design for them? <b>Assignment:</b> Create 2 psychographic profiles of player types
4	<b>Lecture:</b> Designing Game Mechanics How do I design a good game? <b>Assignment:</b> 2 page game concept
5	<b>Lecture:</b> Defining Gaming Genres What are the defining attributes of different game genres? <b>Assignment:</b> Analyze and document a games mechanics as you play
6	<b>Lecture:</b> Design Documentation and the Creation of a Pitch Document How do I best present my Idea? <b>Assignment:</b> Revise your first design document
7	<b>Lecture:</b> Prototyping and the Iterative Process of Design How do I test my mechanics? When should I test them? <b>Assignment:</b> Begin in-class game prototype

8	<p><b>Lecture:</b> The Importance of Playtesting How well does my game REALLY play? How do I get feedback on my ideas?</p> <p><b>Assignment:</b> Continue working on in-class prototype; Psychographic profile #2</p>
9	<p><b>Lecture:</b> None</p> <p><b>Assignment:</b> Finish and submit in-class prototype</p>
<b>Week</b>	<b>Class Session</b>
10	<p><b>Lecture:</b> Monetization How can I make my game profitable?</p> <p><b>Assignment:</b> Game design document #2</p>
11	<p><b>Lecture:</b> Storytelling in Games; Gamification What makes for a good story? ; Applying game theory to non-game systems</p> <p><b>Assignment:</b> TBD</p>
12	<p><b>Lecture:</b> Augmented Reality, Virtual Reality, and Mixed Reality What are they? What design challenges will I face?</p> <p><b>Assignment:</b> 1-2 page concept for and Ar, Vr or MR game</p>
13	<p><b>Lecture:</b> None</p> <p><b>Assignment:</b> In-class Prototype 2</p>
14	<p><b>Lecture:</b> None</p> <p><b>Assignment:</b> In-class Prototype 2</p>
15	<p><b>Lecture:</b> None</p> <p><b>Assignment:</b> In-class Prototype 2 and final playtest</p>

## VI. Recommended Readings

- Game Design: The Art & Business of Creating Games - Bob Bates
- Game Design Workshop – Tracey Fullerton, Christopher Swain, Steven Hoffman
- Better Game Characters by Design: A Psychological Approach – Katherine Isbister
- The Art of Game Design: A Book of Lenses – Jesse Schell

## VII. Useful Online Resources

- <https://www.gamasutra.com/category/design/>
- <https://www.gdcvault.com/free>

- <https://www.gamesindustry.biz/>
- <https://gamedocs.org/category/pitch/>

## VIII. University Policies

**Class Disruptions:** Stony Brook University expects students to respect the rights, privileges, and property of other people. Faculty are required to report to the Office of Judicial Affairs any disruptive behavior that interrupts their ability to teach, compromises the safety of the learning environment, or inhibits students' ability to learn. Faculty in the HSC Schools and the School of Medicine are required to follow their school-specific procedures.

**Plagiarism Statements and Academic Dishonesty:** Each student must pursue his or her academic goals honestly and be personally accountable for all submitted work. Representing another person's work as your own is always wrong. Faculty are required to report any suspected instances of academic dishonesty to the Academic Judiciary. Faculty in the Health Sciences Center (School of Health Technology & Management, Nursing, Social Welfare, Dental Medicine) and School of Medicine are required to follow their school-specific procedures. For more comprehensive information on academic integrity, including categories of academic dishonesty, please refer to the academic judiciary website at <http://www.stonybrook.edu/uaa/academicjudiciary/>

**The Americans with Disabilities Act:** If you have a physical, psychological, medical or learning disability that may impact your course work, please contact the One-Stop Service Center, Building A201, (82) 32-626-1117. They will determine with you what accommodations, if any, are necessary and appropriate. All information and documentation is confidential. Students who require assistance during emergency evacuation are encouraged to discuss their needs with their professors and Disability Support Services. For procedures and information go to the following website: <http://www.sunysb.edu/ehs/fire/disabilities.shtml>.

**Sexual Misconduct:** Title IX makes it clear that violence and harassment based on sex and gender (which includes sexual orientation and gender identity/expression) is a civil rights offense subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories such as race, national origin, color, religion, age, status as a person with a disability, veteran's status or genetic information. If you or someone you know has been harassed or assaulted, you are encouraged to report it.