### COMP 5970/6970/6967:

# **Game Design For Social Change Fall 2020**

**Textbook(s)** - Game Design Workshop: A Playcentric Approach to Creating Innovative Games, Third Edition by Tracy Fullerton, CRC Press, ISBN: 078-1482217162, 2014. (*Required*)

Unity From Zero To Proficiency (Foundation): A Step-by-Step Guide To Creating Your First Game b Patrick Felicia, self-published, ISBN: 978-1795806633, 2019. (*Required*)

Unity Game Development Cookbook: From the Basics to Virtual Reality, by Paris Buttfield-Addison, Jon Manning & Tim Nugent, O'Reilly Press, ISBN: 978-1491999158, 2019. (*Required*)

Instructor -

Dr. Jakita O. Thomas, 3101G Shelby Center, jnt0020@auburn.edu NOTE: This semester, I will be remote and will not be in my office. Please come to my zoom office hours OR email me to make an appointment.

#### **Graduate Assistants:**

Dongji Feng (dzf0023@tigermail.auburn.edu)

**Instructional Mode:** The instructional mode for this course is Online Asynchronous. The course will be conducted online in its entirety, and you will not have to be on campus for any part of this course. There will be no class meetings for you to attend, and there will be no specific time of day during which you have to participate in a course activity. You will be responsible for setting your own schedule for completing course readings, watching pre-recorded lecture videos, and submitting assignments no later than the published deadlines, and completing all other activities required by this course.

**Office Hours**: 1:00pm - 2:00pm Monday - Friday and by appointment (please email for an appointment)

#### **COURSE DESCRIPTION**

Game Design for Social Change is an online asynchronous course that employs active learning project-based learning to provide an introduction to the game design cycle. This course explores the game design cycle through the construction of a production quality computer/video/mobile game that addresses or brings awareness to some local, regional, national, or global issue, particularly one that is aligned with or informed by the United Nations' (UN) 2017 Sustainable Development Goals

(http://www.un.org/sustainabledevelopment/). This course focuses on design primarily and not development, though students will gain development experience using Unity.

#### **COURSE LEARNING OBJECTIVES**

By the end of this course, you should be able to:

- Describe and define the phases of the game design cycle
- Describe and define each of the formal and dramatic elements
- Understand and enact playtesting, including designing a playtesting session, collecting data during a playtesting session, analyzing data from a playtesting session, and using that analysis to inform the iterative design of your game
- Describe, define, and apply DMA and flow to your game design
- Implement a game using the Unity game engine
- Create and deliver a pitch for your video game
- Understand the game design industry including the process for getting a game published, industry professional organizations and major conferences in the video game industry

#### **Tentative Course Outline**

Торіс	Content Source	
Overview of games and game design cycle	Video lecture	
UN 2017 Sustainable Development Goals	Guest Speaker & Video lecture	
Formal and Dramatic Elements	Chapters 3 & 4 (Fullerton) and Video Lecture	
Systems	Chapter 5 (Fullerton) & Video Lecture	
Brainstorming	Chapter 6 (Fullerton) and Video Lecture	
Storyboarding	Video Lecture	
Playtesting/Gallerywalking	Chapter 9 (Fullerton) & Video Lecture	
Physical Prototyping	Chapter 7 (Fullerton) & Video Lecture	
Design Document	Chapter 12 & 14 (Fullerton) and Video Lecture	
Dynamics, Mechanics & Aesthetics (DMA)	Chapter 4 (Fullerton) & Video Lecture	
Software Prototyping	Chapter 8 (Fullerton) & Video Lecture	
Flow	Video Lecture & Academic Papers	
Implementation/Unity	(Felicia / Buttfield, et. al.) & Video Tutorials	
Understanding the Game Design Industry	Chapter 15 (Fullerton) & Video Lecture	

## COMP 5970/6970/6976 – GRADING POLICY

Weekly Assessments	20%
Weekly Reflections	20%
Peer Reviews	10%
Computer/Mobile/Video Game Design Project	30%
Summative Reflection	20%

#### **IMPORTANT ITEMS**

**Instructional Mode:** The instructional mode for this course is Online Asynchronous. The course will be conducted online in its entirety, and you will not have to be on campus for any part of this course. There will be no class meetings for you to attend, and there will be no specific time of day during which you have to participate in a course activity. You will be responsible for setting your own schedule for completing course readings, watching pre-recorded lecture videos, and submitting assignments no later than the published deadlines, and completing all other activities required by this course.

Given the asynchronous nature of the course, you will design and implement a video game, individually, for a particular target audience. That game should addresses a particular issue on a local, regional, national, or global scale that aligns with the UN's 2017 Sustainable Development Goals (http://www.un.org/sustainabledevelopment/).

Along the way, you will learn about the game design cycle, hear from experts in the field of game design, conduct research to inform the design of your game, and present your final products to the Auburn community.

Each week, you will be assigned readings, which will come from both the texts as well as conference and journal articles relevant to game design or the use of games to address some complex problem. Assigned readings aid in the discussion and project-based learning activities. Each week, you will also engage in some or all of the following activities:

- 1. **Take a pre-assessment** for that week's module to determine your prior knowledge about the course content. If you receive a 80% or better on the assessment, you can skip directly to that week's deliverable (Step 3). If not, you will move on to step 2.
- 2. Watch the video lecture presenting that week's module content and concepts.
- 3. Work on game deliverable(s). You will complete a semester-long project in which you will develop game design skills and capabilities in a scaffolded environment by designing a video game to address a social issue that aligns with the UN Sustainable Development Goals. This project is in alignment with project-based learning (PBL) an approach with a research base that documents its effectiveness in promoting deep, integrated, and flexible learning. PBL activities are an integral part of the course and help students acquire and develop game design skills and capabilities in a scaffolded environment during class time. Many of your deliverables will require that you also conduct playtesting sessions with players who fit your target demographic, to get formal feedback

that you will use to inform the iterative design of your game. Each module's activities will be due no later than 11:59pm on the due date assigned (which will typically be a Sunday).

4. Review the work of your peers/Receive feedback from your peers and/or Conduct Playtesting Session(s). Game Design is largely a player-centered endeavor, which means that in order to design an effective gaming experience, you must engage with players early and often. You will also have the opportunity to give and receive informal feedback to and from your peers to inform the design of your game. This is known as the gallery walk.

You will be assigned a set of students whose deliverables you will peer review over the course of the semester. In particular, you will provide feedback using the deliverable rubric. You will also provide feedback regarding aspects of the game design that are confusing, aspects of the game that you like and dislike, and suggested additions, modifications, or deletions to the game. You will also receive the same feedback from several of your peers. Please keep in mind that not all deliverables will require peer review, but you are expected to review those deliverables assigned to you where peer review is requested. The deliverable description will indicate explicitly whether peer review is required.

You will conduct formal playtesting sessions for some game deliverables. Please keep in mind that not all deliverables will require playtesting sessions, but you are expected to conduct playtesting sessions for those deliverables where playtesting is required. The deliverable description will indicate explicitly whether playtesting is required.

5. **Iterate on final game deliverable(s)**. One you have received feedback from your peers and/or from playtesting sessions on the design of your game, you will iterate on the design of the deliverable, which will be submitted for grading. Each module's deliverable(s) will be due no later than 11:59pm on the due date assigned (which will typically be a Sunday).

Project deliverables will serve as grades for the course. Each deliverable will have an accompanying rubric in Canvas. All deliverables will carry equal weight for each game design project, as each step in the game design cycle is equally important.

Weekly Reflection: Each week, I will post content that relates to that week's content. The content will be in the 'Discussions' area of Canvas. You will need to write a reflection describing how the posted content is related to that week's module content and/or deliverables. In order to receive credit for the weekly reflection, you will need to write a substantive reflection (usually more than 80 words). If you complete at least 14 out of 16 of your weekly reflections you will receive an additional 5 points added to your final grade.

Major Assignments and Exams: There are no exams for this course.

**Summative Assessments**: At the end of the semester, you will complete a reflective activity around the entirety of the content, concepts, and activities for the course as well as how your skills, capabilities, and knowledge have changed over the course of the semester. It will be an opportunity to look back and see how far you have come while also looking forward to ideas you have about taking your games further in the future.

Additional details about the summative assessment will be provided in the course Canvas.

**Deliverable Due Dates:** Deliverable due dates will be posted on Canvas. Deliverables are due at their assigned date and time.

Late Policy: No deliverables will be accepted late unless there was a prior agreement with me (the instructor), or if the failure to submit deliverables on the due date is the result of a situation that would be considered an excused absence if the class were held in person. Deliverables submitted late without prior agreement with me (the instructor) or as the result of a situation that would not be considered an excused absence in an in-person setting will result in an automatic 0.

**Re-submission of Deliverables**: While no late work will be accepted, you will have an opportunity to rework and re-submit deliverables that receive a grade of less than 75. Resubmission of assignments is allowed no later than 10 calendar days after the initial grade is received.

#### SPECIAL ACCOMMODATIONS

Students who need special accommodations are asked to make an appointment to see me the first week of the semester during office hours or email me to arrange a meeting time. Please forward your memo from the Program for Students with Disabilities to me via email prior to this meeting.

#### PROJECT DESCRIPTION(S)

Console, Mobile Phone, Video (CMV) Game Design Project: For this project, students design a board game that models some real-world system of their choosing (e.g., nuclear reactor, the stock market, global climate, Auburn University, etc.) with an eye toward addressing some issue or problem within that system that aligns with the UN Sustainable Development Goals. You will be using the Unity game engine, for implementation. You can design and test the game for the number of players of your choosing.

This project constitutes 30% of the final grade and the deliverables are as follows:

- System Exploration Presentation
- Brainstorming Presentation
- Storyboards
- Physical Prototype
- Design Document
- Software Prototypes
- Implementation / Analysis of Data Gathered during Playtesting Session(s)
  Iterations
- Final CMV Game Deliverables (final game code)