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Introduction to Game Design, Development, and Criticism (GAME 201T)

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CHAPTER 17.

INTRODUCTION TO GAME DESIGN, DEVELOPMENT, AND CRITICISM (GAME 201T)

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Course Title: GAME 201T: Introduction to Game Design, Development, and Criticism.
Course University: Old Dominion University
Course College/School: College of Arts and Letters
Course Department/Program: Interdisciplinary Studies Game Design and Development Major
Course Level: Undergraduate
Course Credits: 3
Course Length: 15 Weeks
Course Medium: Face-to-face, Online Synchronous.
Course Keywords: Introduction to Game Design and Development, Iterative Design, Rapid Prototyping, Entrepreneurship, Critical Analysis, General Education, Face-to-Face and Online, Synchronous Delivery.

CATALOG DESCRIPTION

An introduction to the core concepts and methodologies that inform game design, development, and criticism. This course will provide students with a critical overview of each of these content areas and will demonstrate how their specific concerns intersect in the design, production, and reception of contemporary games. It will also teach students hands-on methodologies through which to translate these concepts into creative and critical praxis.

COURSE PURPOSE AND OBJECTIVES

Introduction

We are living in what is arguably the golden age of gaming and game design. After decades of being dismissed as frivolous, games have emerged as one of leading cultural and economic forces of

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1. Kevin Moberly is an Associate Professor of Rhetoric, Digital Media, and Game Studies in the English department at Old Dominion University in Norfolk, Virginia. He is also the program director of the Interdisciplinary Studies Game Design, Development and Criticism major. His research focuses on understanding how digital manifestations of popular culture reflect, contribute to, and transform contemporary cultural, political, and historical discourses. In particular, he is interested in the ways that contemporary computer games encode labor, often blurring already uneasy distinctions between work and play.

our times (Ebert 2010).[2] As such, games and game-like experiences have become a ubiquitous part of many areas of contemporary life above and beyond entertainment. **Not only are more people playing games and engaging in game-like activities, but a greater diversity of people actively seek out these experiences.**

What is more, low-cost, professional design and development solutions such as the Unity (2021) **and Unreal Engines** (2021) **have made game design and development more accessible than ever.** Taken in conjunction with the user communities that have emerged around these solutions and with digital distribution platforms such as Steam and Itch.IO, the cost and the technological barriers to designing, developing, and publishing games has dropped dramatically in recent years.

The gaming industry, as a result, is undergoing a rapid expansion and diversification. Spurred on by a passion for games and by the declining costs of entry into the industry, an increasingly diverse number of people have turned to game design and development as both a career path and as an artistic endeavor. This, in turn, has not only led to an exponential growth in game studios and communities dedicated to producing games, but to a corresponding increase in both the volume and the types of games being produced, especially as independent studios, independent designers, and hobbyists experiment with existing genres or attempt to develop new genres in order to reach more diverse audiences (Takahashi 2017).

Taken in conjunction with the degree to which gamers and the gaming industry value innovation, **the result is not only that new opportunities and applications for games are constantly being developed, but that new ways of understanding games, gaming, and the potentials of game design and development are also constantly emerging.**

Challenges

The radical expansion and diversification of games, gaming, and the gaming industry, however, poses a number of significant challenges for both established studios and for aspiring game designers and developers:

1. **The market for games has become increasingly competitive** as a direct consequence of the degree to which, as explained above, the barriers to designing, developing, and publishing games have diminished. More studios are not only publishing more games, but a greater diversity of games, making it increasingly difficult for both established companies and emerging designers and developers to establish a foothold, much less stand out (Wright 2018).

2. **The audiences for games have become much more discerning.** While good gameplay and compelling aesthetics will always be important, the culture of experimentation and innovation that has come to characterize the gaming industry in recent years has led audiences to variously demand "more" than just better graphics and improved mechanics from their games. At the same time, however, this culture of experimentation and innovation has also made it increasingly difficult for designers and developers to figure out what exactly constitutes this "more" (Tailford 201).

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2. Note on URLs: I distribute my syllabi electronically to students through my university's course management system. This method of delivery allows me to directly link to sources or other resources. I have included the full URLs of these links in the reference section at the end of the chapter.

3. **Game designers and developers can no longer ignore the diversity of their audiences.** For decades, the mainstream gaming industry labored under the illusion that gamers constituted a limited, homogenous, and relatively stable population. Many mainstream studios used this misconception to justify limiting the scope of the games they produced and the type of experiences that these games recognized as legitimate (Moosa 2017). Given the radical expansion of games and gaming in recent years, as well as the attendant changes that this expansion has brought to the industry, **it has become increasingly difficult, if not dangerous for game designers and developers to willfully ignore the diversity of their potential audiences and experiences.** Doing so risks alienating players and critics who, as discussed above, have variously come to expect "more" from the games they play (Webb 2020).

The Course

This course is designed to help you take advantage of the opportunities afforded by the radical expansion and diversification of games, gaming, and the gaming industry while simultaneously recognizing and negotiating the attendant challenges.

Accordingly, this course does not seek to teach you a single, unified answer to the challenges inherent in designing and developing successful games. Given the degree to which the gaming industry privileges innovation and experimentation, such an answer would be outdated by the time you could implement it. This course instead seeks to introduce you to the core concepts and methodologies that inform game design and development as a creative, critical, interdisciplinary, and entrepreneurial undertaking.

Specifically, this course will employ a variety of hands-on exercises, including three formal challenges, to model the game design and development process from ideation to working prototype. In doing so, it will show you how to use the core principles that inform agile development, iterative design, rapid prototyping, and a number of other key design and development strategies to produce unique solutions to the complex problems that are inherent in game design and development (Infallible Code 2019, GDC 2016, Unity 2018).

Finally, this course will teach you how to employ a variety of critical and analytical approaches that will not only help you better understand the social, economic, and political impact of games and gaming in contemporary society, but will also help you locate and thereby make sense of your own work and your own identity as both a gamer and a game designer or developer within these larger conversations.

COURSE OBJECTIVES

Through a mixture of theoretical readings, class discussion, and applied exercises, this course will:

- **Survey** the key concepts, debates, and methodologies that inform game design, development, and criticism.

- **Explore** how these concepts intersect in the design, production, and reception of contemporary games.

- **Study** the social, economic, cultural, and political impacts of games, gaming culture and the gaming industries on society.

- **Provide** you with hands-on experience using these concepts to create a variety of games and game-related materials.

Assessment Objectives

Upon completing this course, students should be able to:

- **demonstrate** familiarity with the core concepts and methodologies that inform in game design, development, and criticism as a creative, professional, and entrepreneurial undertaking.

- **articulate** the impacts of games, gaming culture, and the gaming industry on society.

- **apply** these concepts to achieve meaningful solutions to a variety of creative and critical problems in game design, development, and criticism.

COURSE CONTEXT

GAME 201T is the first course in Old Dominion University's Game Design, Development, and Criticism major. Designed to introduce students to game design and development as a creative, critical, and professional undertaking, it is required of all majors in the program. Interested non-majors can also take the course for ODU's Impact of Technology (T) general education credit. Although almost all of the students who enroll in the course are very invested in and passionate about gaming, only about a quarter have any previous experience designing and developing games. Of these, only a handful have attempted to translate their interest in game design and development into anything beyond the invention stage. They have often generated ideas for games and sometimes produced preliminary sketches of characters, assets, and scenes; however, only a small minority of the students who take the class have produced a paper or a digital prototype of a game. Likewise, many have never used a game engine or specialized software to produce games or assets for a game.

Complicating matters is the fact that the majority of the students who enroll in GAME 201T are also relatively new to the rigors of university-level coursework. Although they tend to be very familiar and comfortable with the test-based, skill-and-drill methodologies that characterize secondary education in the United States, they are less familiar with the more open-ended structure of university courses with their emphasis on self-discipline and personal responsibility. Likewise, they often have very little experience with the highly subjective nature of the assignments that are part and parcel of a course dedicated to game design and development. Which is to say, students tend to approach the major and minor assignments of the course as exercises in determining the single correct answer and likewise avoiding wrong answers rather than as a matter of perhaps contradictory rhetorical choices, some of which might be more effective than others, but only in certain circumstances and for certain audiences.

The onset of the COVID-19 pandemic brought an additional set of challenges to the course. In the Fall 2020 semester, approximately three-fourths of Old Dominion University's classes were moved online as a precautionary measure to limit the spread of the virus, including the two sections of GAME 201T I was teaching. Old Dominion University possesses a robust and well-supported infrastructure

to support online learning, so moving my sections of GAME 201T online was not a technological challenge. However, as is well documented in the research, online education poses a particular set of challenges for the first- and second-year university students who constitute the primary audience of the course (Beaudoin 2009, Gillett-Swan 2017). These challenges include a sense of alienation and disconnection from the instructor and their peers, a reluctance to participate due to the limitations of the distance technology, and the difficulties inherent in maintaining schedules or meeting due dates without the structure that the traditional, face-to-face university structure provides (Mann 2005, Rovai 2005, Li 2017). The result is that students who enrolled in my two Fall 2020 sections of GAME 201T faced the additional challenge of negotiating the difficulties inherent in online education, as well as the stress of the uncertainty of the pandemic.

The difficulties inherent in teaching the course during the COVID-19 pandemic thus exacerbated what I believe is the central challenge of GAME 201T—the fact that while many of the students who enroll in the course are excited about the subject and its possibilities, they are often intimidated by many aspects of it, including the open-ended nature of its major assignments and the technologies these assignments require them to use. In particular, many students express concerns about whether or not they will be asked to code or script as part of the course. The answer I give is always the same. I tell them that they will probably be required to code or scripting at one point or another and perhaps throughout the whole course. I am careful to add, however, that when the time comes, coding or scripting will feel like an opportunity rather than an imposition; it will be a means to an end of achieving the larger vision they are working towards. Although I do not know how many of my students believe me when I tell them this on the first day of the class, this is the primary goal and challenge of GAME 201T—to help students translate their enthusiasm and passion for playing games into the type of creative and critical performances that are required to build games. As I discuss at length in the next session, I accomplish this goal by leveraging the possibilities of critical play to create a low-stakes, open learning environment that is consciously designed to encourage students to explore and experiment with core the concepts and methodologies that inform game design, development, and criticism.

COURSE PEDAGOGY

The central challenge of GAME 201T is not simply to introduce students to the types of creative and critical performances that comprise game design, development, and criticism as professional and entrepreneurial endeavors, but to do so in a manner that helps them make the transition to the sort of more open-ended, subjective discourses that many university courses privilege and which are also crucial to success in creative industries that privilege innovation such as the gaming industry. It is important to recognize that this is very much the same challenge that Patricia Bizzell (1982), Kenneth Bruffee (1984), David Bartholomae (1986), and many other advocates of social constructivist pedagogy identify in writing studies—the challenge of helping students make a transition between the discourses with which they are familiar and those that are unfamiliar. Understood in this sense, the central challenge of GAME 201T is helping students make a transition from the sort of performances that are inherent in playing games to those that comprise game design and development as a creative, critical, and entrepreneurial undertaking. As Bizzell, Bruffee, and Bartholomae recognize, making this sort of transition can be difficult for students, as it requires them to relinquish positions of privilege

and expertise in communities in which they have established themselves and start anew in unfamiliar communities where they have very little experience and therefore standing.

As discussed above, this is doubly the case with GAME 201T. Students generally take the course in their first or second semester at Old Dominion University and as a result, are very new to the discourses and performances that the university classroom privileges. Likewise, they often do not have a substantial amount of experience with game design or development. Much of the same can be said about the core technologies around which the course is constructed. It is not simply that many have never tried working with a game engine or sophisticated 3D modeling software. Many of the students who enroll in the course also do not have experience with courseware such as Blackboard, which ODU uses, and in some instances, with technologies such as email.

Accordingly, I consciously integrate critical play and exploration into GAME 201T in an attempt to lessen the sense of apprehension and disorientation that students experience in the course. GAME 201T is, after all, not the capstone course in the major but the first. Moreover, many non-majors take the course for general education credit out of curiosity or because they want to learn more about games. Recognizing this, I try my best to replicate the atmosphere of low stakes, open-ended experimentation that I remember from the introductory art and technical theater courses I took as an undergraduate. Which is to say, I scaffold all of the major assignments of the course—the invention, development, and design challenges—as a series of low stakes exercises for which students receive the full amount of points just for attempting. These exercises, however, are not just busy-work. Taken in combination, they represent discreet parts of each of the larger challenge assignments so that students find that by completing the smaller assignments, they have completed the majority of the work required for each of the larger challenges. Likewise, I do not grade the challenges on whether or not students succeed at the goals they establish for themselves. Dealing with setbacks, unexpected difficulties, and outright failure is one of the most important performances that students who are interested in working in game design or development must master. As a result, I grade these major challenge assignments entirely on the basis of informal postmortems that, structured as a series of questions, require students to reflect on their goals, their successes, failures, and future plans. In doing so, I attempt to encourage students to explore and experiment with the possibilities inherent in game design and development in a way that simultaneously requires them to reflect on their own progress and development.

I specifically construct GAME 201T to help students make the transition to two primary modes of performance that I believe are crucial to aspiring game designers and developers. The first is a critical mode of gameplay that, grounded in analysis and close-reading techniques, helps students approach games as a collection of choices, good or bad, that can be systematically analyzed, quantified, and reverse-engineered. As discussed above, the vast majority of the students who enroll in GAME 201T not only possess a considerable amount of expertise playing games but are also very invested in specific franchises, titles, and designers. At the same time, these students tend to play games to win rather than to understand how they create meaning and value from their discrete mechanics and aesthetic elements. Likewise, students tend to approach the titles, franchises, and designers they are passionate about through a kind of ludic auteur-theory, one that is often grounded in a kind of close-reading methodology, but which often leaves unexamined larger questions about the genre, culture,

economics, distribution, industry practices, and any number of other external factors that impact the design and development of games and franchises.

One of the objectives of GAME 201T is, in this sense, to help students translate their passion for games and gaming culture into a kind of interpretive and analytical praxis that will help them identify, assess, and ultimately understand the underlying rhetorical strategies through which games create experiences through the complex interplay of mechanics and aesthetic elements. Accordingly, the course not only introduces students to a number of representative theoretical concepts via its assigned readings and videos. It challenges students to apply these concepts through discussions, activities, and homework to a number of small-scale, browser-based games. In doing so, GAME 201T attempts to teach students a heuristic, critical approach to gameplay, one that in keeping with McKenzie Wark's (2007) notion of "trifling," empowers them to actively interrogate and experiment with the games they play in order to better understand the affordances and the limitations of their underlying rhetorical strategies.

The second major objective of GAME 201T is to teach students how to translate the insights they gain through this analytical praxis into concrete design and development outcomes through application. As with the critical methodologies discussed above, the key to achieving this goal lies in helping students make the transition from the familiar to the unfamiliar—from what is often their default approach to design and development as a waterfall process to the iterative design, rapid prototyping, and agile development methodologies privileged by the gaming industry. I accomplish this objective primarily through the three challenges that comprise the course's major assignments. As described above, these challenges are composed of a number of small-scale, scaffolded assignments designed to provide students with hands-on experience with the specific performances that intersect in ideation, game design, and development. These challenges, however, are also scaffolded in the sense that they not only build on each other, but overlap. The development challenge, for example, explicitly requires students to use many of the same brainstorming, research, and evaluation methodologies introduced by the ideation challenge. Likewise, the design challenge is also predicated on the iterative design and rapid prototyping methodologies introduced during the development challenge. Taken together, these challenges are designed to simultaneously provide students with hands-on experience with many of the core performances that comprise ideation, game design, and development, as well as to help them understand how these performances intersect with each other and depending on the task.

The course's three major challenge assignment culminate in the game project and the design expo that is held in lieu of a final exam. This project asks students to produce either a paper or digital prototype of the game that they have been developed through the successive challenge assignments. Alternatively, students have the option to substantially revise their final submissions for one of the challenge assignments. For example, students can turn the mini proposal that they produced as part of the ideation challenge into a formal design document. Likewise, they can add additional features to the digital prototype that they produced as part of the development challenge or further develop the game assets they produced as part of the design challenge. Whatever option they chose, students must construct a physical display for the game expo held during the final exam period of the class. Advertised and open to visitors from outside of the class, this expo explicitly requires students to present and explain the work they have accomplished during the course of the semester to unfamiliar

audiences. In its final moments, then, GAME 201T requires players to construct themselves and perform as experts—to justify and explain their work to non-specialist audiences.

Implementing this experiential pedagogy proved much more complicated during the Fall 2020 semester, when the threat of the pandemic mandated moving both of my sections of GAME 201T online. In order to preserve the sense of structure and real-time interaction that characterizes face-to-face university classrooms, I scheduled both sections synchronously rather than asynchronously. I also made a point of maintaining as much of the structure of the traditional classroom as well. For instance, I took attendance before each class and used that time to ask students questions about where they were connecting from and how they were doing in order to minimize their sense of alienation and disconnection. I also made a point of connecting to each classes' Zoom session early and staying after to talk with students if they wanted. I held office hours in Discord and in Minecraft and logged into the Minecraft server regularly to engage students. I distribute almost all of my course materials digitally, though Blackboard, so that did not require much if any adjustments.

Replicating many of the hands-on activities I developed for the class was a bit more difficult. Cognizant of the research on the relative ineffectiveness of lecture-based pedagogies, I typically organize each class meeting around a collaborative activity that requires students to apply concepts from the assigned readings (Carrió 2011, Lisette 2011). I then reconvene the class and to share what each group has produced and to reflect on what that work reveals about the key concepts from the reading. While Zoom does allow for group work via its breakout room function, it proved difficult if not impossible to replicate many of the more tactile of these activities, especially those involving crafting, Legos, and the like. I addressed this difficulty through two strategies. First, I assigned much of the crafting exercises as homework rather than as an in-class activity. For instance, instead of having students make paper bag puppets in class and use these puppets to present main points about a reading, I provided them with links to tutorials on making puppets from common everyday objects and had them puppets before the class. Second, I tried as much as possible to find digital alternatives to as many of the exercises as possible. As I discuss in the course outline below, I used the collaborative features of Miro's (2021) online collaborative whiteboard app to implement Brenda Romero's (2008) "The Easiest Game Design Exercise Ever (Really)." I also had the class meet regularly in Minecraft and Discord, which worked well for activities such as the environmental storytelling exercise. I had students construct exhibits for their final Game Expo as Google Slide presentations, which I then compiled into a virtual gallery. I distributed the link to the gallery to the college and invited visitors to meet with students about their work during a Zoom session for the final exam.

Ultimately, though, my most successful strategy for dealing with the stresses of the pandemic and the subsequent transition online was to present these challenges as symptomatic of the larger challenges of working and succeeding in a creative industry, especially one such as the gaming industry in which volatility, uncertainty, and change is very much the state of the art. In short, I presented the difficulties of meeting through Zoom and completing assignments and exercises despite the limitations of the technology as a design and development challenge in and of itself. I not only asked students to actively help me recreate the experience of the class and its exercises in the face of the limitations imposed by distance delivery, but prompted them to reflect on our shared successes and failures in doing so. I thus incorporated the challenges of teaching and being a student during the pandemic as an object lesson in cultivating the spirit of resilience and innovation that is a perquisite for succeeding not only in the

mainstream gaming industry but in arguably many other aspects of the larger employment landscape that students will confront upon graduating.

COURSE TEXTS, GAMES, SOFTWARE, AND HARDWARE

Textbooks and Texts

- **Fullerton, Tracy.** *Game Design Workshop: A Playcentric Approach to Creating Innovative Games, Second Edition.*

- **Schell, Jesse.** *The Art of Game Design: A Book of Lenses, Second Edition.*

- **Linkedin Learning:** Linkedin Learning (formally Lynda.com) is a repository of tutorials on a broad range of subjects, including many aspects of game design and development. As an ODU student, you have unlimited access to Linkedin Learning. We'll be using some of these tutorials in class.

- **Other readings as assigned** (available through Blackboard).

Software

- **Minecraft: Java Edition:** GAME 201T will experiment with using Minecraft as an alternative classroom. You will work and play together with students in two other courses to transform the MonarchCraft server into a virtual learning environment. **Note:** it is very important that you purchase the Java version. The Windows 10 version will not work with our server.

- **Discord:** GAME 201T will use Discord to facilitate class meetings in Minecraft and content streaming.

- **Free Website Hosting:** You'll need this to build and host your design portfolio (details below).

- **Blackboard:** GAME 201T course uses Blackboard to facilitate communication between the instructor and students. Specifically, I use Blackboard to post announcements, course readings and assignment sheets. I also use it to manage assignment submissions and post grades.

- **A Tube Sock**: of any color and style, but preferably clean.

COURSE ASSIGNMENTS

The major writing assignments required for completion of this class are listed as follows:

- **Invention Challenge**

- **Design Challenge**

- **Development Challenge**

- **Design Portfolio**

- **Final Project / Design Expo.**

Assignment sheets will be distributed detailing the specific requirements of each major assignment. All major assignments are due by midnight on the day assigned and must be formatted as

detailed on the assignment sheet. Assignments must be submitted electronically through Blackboard's Assignment Manager.

I will not deduct points for late assignments; however, you can earn achievement points by turning in turning in assignments on time. **Also, recognize that I might not be able to provide feedback on assignments that are submitted substantially past their deadlines.**

Design Portfolio

As a game designer or developer, you will need an effective portfolio to showcase your work to prospective employers. Accordingly, this assignment is designed to help you get started building your portfolio. It will teach you template-based web design strategies that you can use to showcase and document your work. In order to complete this assignment, you will need to sign up for an account with Wix, Weebly, Google Sites, or another free website building and hosting service (Brandl 2021).

Invention, Design, and Development Challenges

This sequence of assignments is designed to model the game design and development process from inspiration to implementation. Through experiments in ideation, you will learn how to generate and evaluate the feasibility of a game concept. You will then learn how to transform this concept into a series of objectives and how to use these objectives to guide the design and development of specific game mechanics and assets.

This sequence of assignments is also designed to introduce you to many of the underlying, entrepreneurial concerns that inform the game design process, including how to pitch a game idea, how to locate and evaluate resources, and resiliency in the face of setbacks or failure.

You are required to post a brief postmortem to your portfolio for each of these challenges that discusses the choices you made, as well as the successes and setbacks you encountered while completing the challenge. These postmortems should also discuss how the content of the course (readings, homework, in-class exercises, etc.…) contributed to the completion of the challenge.

Assignment sheets detailing the specific requirements of each challenge will be distributed in class.

Final Project / Design Expo

In lieu of a final exam, you will create and demonstrate a working game during a public design expo, which will be held on the date of the final exam. You will be required to submit a reflection essay that discusses their choices, successes, and setbacks in completing their proposed final projects. An assignment sheet detailing the specific requirements of this assignment will be distributed in class.

COURSE ASSESSMENT

Grading:

Assignments and Course Requirements

- **Major Assignments:**
  - Invention Challenge: 150 points
  - Design Challenge: 150 points
  - Development Challenge: 150 Points
  - Design Portfolio: 150 Points
  - Final Game Design Project: 150 Points
  - Game Design Expo: 100 Points
- **Minor Assignments:**
  - Homework 150 Points

EXPANDED COURSE OUTLINE

*The following course outline is taken from a face-to-face section of GAME 201T that meets twice a week. Where appropriate I have added footnotes that describe how I adapted key exercises for online, synchronous delivery of the course.

Week One: Playing with Stuff

First Class Meeting

Assignments

- **Read:** Course Syllabus

Class Topics / Activities

- **Discuss:** Introduce the course and course policies and provide an overview of course technologies.
  Discuss: the challenges inherent in game design and development and explain how GAME 201T attempts to answer these challenges.

Second Class Meeting

Assignments

- **Read:** Schell, Jesse. "Chapter 1: In the Beginning, There Is the Designer" and "Chapter 2: The Designer Creates an Experience" from *The Art of Game Design.*

- **Homework (20 points):** Assign students to use the mypokecard.com Pokémon card generator (MyPokéCard.com 2021) to create Pokémon cards representing themselves. These cards should explicitly reference one of more of the roles that Fullerton and Romero identify in next week's readings. Require students to post these cards to a premade, public discord channel entitled Pokéclass.

Class Topics / Activities

- **Exercise:** dump a large quantity of Legos onto a central table or desks in the classroom.

Divide students into teams of 2-3 and challenge them to use exactly 12 Lego pieces and 15 minutes to build something that represents the students they are grouped with.[3]

  ◦ After the 15 minute-building session has elapsed, have each group show-off their creations and explain how these represent their respective group members.

- **Discuss:** use the Lego exercise as the impetus for a discussion / reflection about how games create experience through rules, aesthetics, mechanics, etc.,

Week Two: Role Play

First Class Meeting

- Class canceled for Labor Day Holiday.

Second Class Meeting

Assignments

- **Read:** Fullerton, Tracy (2008). "Chapter One: The Role of the Game Designer." *Game Design Workshop.*

- **Watch:** Romero, Brenda (2017). "The Role of a Game Designer" and "Types of Game Designers."

- **Play:** HexGL (Despoulain 2021)**.**

- **Homework (10 points): S**tudents chose one of the classic Atari games assigned for the next class and write a brief paragraph explaining how the game employs any four of the formal structures that Fullerton identifies in Chapter Two.

Class Topics / Activities

- **Discuss:** the Pokémon cards students created as a means of further introducing the students to one another and also introducing them to the possibilities of game design and development per the roles and categories Fullerton and Romero discuss in the readings.

- **Exercise:** Have students play *HexGL* for five minutes write job ads for a team of designers and developers to produce a similar game.

- **Housekeeping:** distribute the Invention Challenge assignment sheet and discuss the sub-assignments that comprise it.

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3. The Lego exercise does not translate well to online classes. However, the avatar creator included with Nickelodeon's (2021) "Loud House Cartoon Creator" can be adapted to achieve much of the same purpose. Divide students in groups of 2-3 and ask them to use the avatar creator to produce avatars that represent each other. Have students share their screens and present the avatars they created. Then engage students in an open-ended discussion about the rules, mechanics, affordances, and limitations of the types of play in which students engaged in the process of completing the exercise.

Week Three: Formal Structures

First Class Meeting

Assignments

- **Read:** Fullerton, Tracy (2008). "Chapter Two: The Structure of Games." *Game Design Workshop*

- **Read:** Koster, Raph (2013). "Chapter Three: What Games Are." *A Theory of Fun for Game Design.*

- **Watch:** Romero, Brenda (2017). "What is a Core for a Game?"

- **Play:** Classic Atari Games (Davis 2021).

- **Homework (20 points):** Students complete the initial quest in Minecraft to affiliate themselves with the course's town on the MonarchCraft server. They claim a plot of land using the Grief Prevention plugin and build a house for themselves in creative mode either freeform or by following a tutorial. Students document this assignment by submitting screenshots and coordinates to a preestablished directory channel in Discord.

Class Topics / Activities

- **Discuss:** the insights students discovered in the process of completing the Atari Games homework assignment.

- **Exercise:** divide students in groups of 4-5 and assign each group one of the specific structures that Fullerton discusses (players, rules, procedures, etc.). Give them 15 minutes to imagine what centipede would look like if they drastically altered that structure.

- **Discuss:** how approaching games as structures and patterns helps students better understand how games create experience for players.

Second Class Meeting

Assignments

- **Read:** Fullerton, Tracy (2008). "Chapter Three: Working with Formal Elements." *Game Design Workshop.*

- **Watch:** Extra Credits (2014). "The Magic Circle – How Games Transport Us to New Worlds."

- **Play:** The Impossible Quiz (Slapp-Me-Do 2021).

Class Topics / Activities

- **Exercise (step 1):** Divide students into groups of 4-5 and ask them to pretend that they have been hired as game librarians and tasked with creating a categorization schema to organize games based on what they think are the six most relevant formal elements Fullerton discusses in chapter three. Allow them 15 minutes to generate this schema.

- **Discuss:** Have each group present and justify their schemas to the rest of the class. Of all the elements Fullerton lists, why did they choose those six?

- **Exercise (step 2):** allow each group 10 minutes to use the schemas they generated to first

attempt to categorize *Halo* and then *The Impossible Quiz.*

- **Discuss:** how *The Impossible Quiz* challenges / complicates the traditional categories / elements that comprise games. Present Huizinga's Magic Circle as a partial answer to these complications—as a way of understanding the relationship between the formal elements that comprise games.

- **Housekeeping**: take questions about the upcoming Brainstorming Exercise and the Goals / Obstacles / Mechanics Exercise for the Invention Challenge.

Week Four: What's the Big Idea

First Class Meeting

Assignments

- **Read:** Fullerton, Tracy (2008). "Chapter 6: Conceptualization." *Game Design Workshop.*

- **Watch:** Romero, Brenda (2017). "Generating Ideas for a Game."

- **Play:** Gods Will be Watching (Deconstructteam 2021).

- **Invention Challenge:** Brainstorming Exercise Due.

Class Topics / Activities

- **Exercise:** divide students into groups of 4-5 and assign them two of the "Brainstorming Best Practices" Fullerton describes in chapter 6. Ask them to take 15 minutes to use those techniques to imagine how to transform *Gods Will be Watching* into an *X-Com* clone.

- **Discuss:** students share the results of this exercise. Specifically ask them to reflect on the benefits / downsides of the techniques.

  Discuss: The Invention Challenge's brainstorming exercise in light of Fullerton's chapter and Romero's video. Make the point that creativity is often a function of / response to crisis, and that each of the brainstorming options students can select are games in themselves designed to put their minds in a state of crisis.

- **Housekeeping:** discuss the upcoming Obstacles / Mechanics Exercise for the Invention Challenge.

Second Class Meeting

Assignments

- **Read:** Schell, Jesse (2014). "Chapter 6: The Game Begins with an Idea" *The Art of Game Design.*

- **Watch:** Freeman, Jessie (2106). "Game Design 101."

- **Play:** Swooop (2021).

- **Invention Challenge:** Goals / Obstacles / Mechanics Exercise Due.

- **Discuss:** have students compare and contrast the brainstorming techniques Schell discusses with those that Fullerton and Romero mention.

- **Exercise:** divide students into groups of 4-5 and, building on the notetaking methodology Freeman discusses in his video, ask them to use the Minecraft Book Editor (Minecraft Tools 2021) to record 15 observations about effective and ineffective aspects of *Swooop's* gameplay.

- **Housekeeping:** Discuss the upcoming Trading Cards Exercise for the Invention Challenge.

Week Five: Dramatic Systems

First Class Meeting

Assignments

- **Read:** Fullerton, Tracy (2008). "Chapter Four: Working with Dramatic Elements." *Game Design Workshop.*

- **Watch:** Romero, Brenda (2018). "Game Systems."

- **Play:** A Dark Room (Doublespeak Games 2013).

- **Invention Challenge:** Character Trading Cards Due.

Class Topics / Activities

- **Exercise:** Students meet in Minecraft and Discord. Briefly introduce the concept of affect and then assign them to work in creative mode in groups of 4-5 for 40 minutes to build a structure that recreates the affect of *A Dark Room* as closely as possible.

- **Discuss:** how game designers achieve affect through the combination of the dramatic elements Fullerton enumerates. Specifically discuss how *A Dark Room* creates affect through its interface / systems and the difficulty of recreating that via the relatively static elements available in *Minecraft*.

- **Housekeeping:** Discuss the upcoming Environment / Backstory Treatment Exercise for the Invention Challenge.

Second Class Meeting

Assignments

- **Read:** Fullerton, Tracy (2008). "Chapter Five: Working with System Dynamics." *Game Design Workshop.*

- **Watch:** Romero, Brenda (2018). "Chance in Games" and "Strategy in Games."

- **Play:** Cookie Clicker (Orteil 2020).

- **Invention Challenge: Environment / Backstory Treatment Due.**

Class Topics / Activities

- **Exercise:** divide students in groups of 4-5 and allow each group 30 minutes to complete and

play Brenda Romero's (2008) "The Easiest Game Design Exercise Ever (Really)."[4]

- **Discuss**: have students present their games to the class. Use the games to facilitate a discussion of games as systems by asking students to identify specific elements Fullerton mentions in chapter five of her textbook.

- **Housekeeping:** discuss the final stage of the Invention Challenge, the mini proposal, due at the end of next week.

Week Six: Pete and Repeat Sat on a Prototypical Horse

First Class Meeting

Assignments

- **Read:** Fullerton, Tracy (2008). "Chapter 7: Prototyping." *Game Design Workshop.*

- **Watch:** Romero, Brenda (2017). "Defining the Core Loop of a Game."

- **Play:** Pixel Race (Arabaci 2021).

Class Topics / Activities

- **Exercise:** divide students into groups of 4-5 and allow each group 45 minutes to paper-prototype and play the "Up the River" game from chapter 7 of Fullerton's textbook.[5]

- **Discuss:** what building the "Up the River" game reveals about paper prototyping as a methodology, as well as what it reveals about designing the game loop, per Romero's video. Ask students to brainstorm how they can paper prototype *Pixel Race*.

- **Housekeeping:** discuss the final stage of the Invention Challenge, the mini proposal, due next class meeting.

Second Class Meeting

Assignments

- **Read:** Schell, Jesse (2014). "Chapter 7: "The Game Improves Through Iteration." *The Art of Game Design.*

- **Read:** Luton, Will (2009). "Making Better Games Through Iteration."

- **Read:** Zimmerman, Eric (2003). "Play as Research: The Iterative Design Process."

- **Watch:** Dewett, Todd (2019). "Learning from Failure."

- **Play:** Kingdom Rush (Ironhide Game Studio 2013).

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4. Miro's (2021) online collaborative whiteboard application offers a good online alternative to the pen and paper mechanics of Romero's exercise. Create a Miro whiteboard and divide it into several large squares. Assign each group one of the squares and ask students to build their games in the square using Miro's post-it-notes and other affordances. Students can then playtest their games with the aid of an online dice program and by using post-it-notes as player-pieces.

5. When teaching GAME 201T online, I assign this exercise as homework a week before this class meeting and have students make brief google slide presentations that showcase the games they built. I compile these presentations into a gallery of links which I published through Blackboard. On the day of the class meeting, I have each student briefly discuss and justify the alterations they made to the game as part of the exercise.

- **Invention Challenge Due.**

Class Topics / Activities

- **Exercise:** divide students in groups of 4-5 and have each group complete the "Spaghetti Tower Marshmallow Challenge"(Doorley 2021).[6]

- **Discuss:** have students watch Tom Wujec's (2010) Ted Talk, "Build a Tower, Build a Team." Use this video to prompt discussion about what strategies worked and did not work during the spaghetti tower exercise. Use the combination of the exercise and the video to discuss how iterative design incorporates testing and setbacks into its methodology.

- **Housekeeping:** distribute the Development Challenge assignment sheet and discuss the sub-assignments that comprise it.

Week Seven: Digital Prototyping

First Class Meeting

Assignments

- **Read:** Fullerton, Tracy (2008). "Chapter 8: Digital Prototyping." *Game Design Workshop.*

- **Watch:** Extra Credits (2015). "Making your First Game—How to Start your Game Development."

- **Play:** Line Rider (Emergent Studios 2020).

- **Homework (20 points):** have students research three game engines they can use to complete the development challenge and rank these engines using Abhinav Narain's (2016) six questions from next class's reading.

Class Topics / Activities

- **Exercise:** divide students into groups of 4-5 and have each group work for 10 minutes using Line Rider to prototype a track. Have the groups then spend 20 minutes attempting to recreate classic Atari arcade games with Gamefroot (2021).

- **Discuss:** *Line Rider* and Gamefroot as digital prototyping tools. Referencing last week's paper prototyping exercise, compare and contrast the advantages and disadvantages of paper versus digital prototyping. Ask students to identify best use cases for each.

- **Housekeeping**: discuss the Development Challenge's Technology-self Assessment exercise due in a week.

Second Class Meeting

Assignments

- **Read:** Schell, Jesse (2014). "Chapter 26: The Team Builds a Game with Technology." *The Art of*

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6. The spaghetti tower marshmallow challenge is one of the key exercises in the class, but is also difficult to reproduce online. An alternative is to have students watch an episode of Junkyard Wars in class and take bets throughout the episode on which team they predict will win. Then have students watch Tom Wujec's (2010) Ted Talk and use his discussion of the spaghetti tower marshmallow challenge as a starting point to analyze the success and failure of each team in the Junkyard Wars' episode.

Game Design.

- **Read:** Narain, Abhinav (2016). 6 Crucial Questions to Ask Before Choosing Your Game Engine.
- **Watch:** Bradley, Christian (2016). "Choose a Game Engine."
- **Play:** Missile Game (Mather 2020).

Class Topics / Activities

- **Exercise:** students meet in Minecraft and Discord. They work in groups of 4-5 in creative mode to prototype randomly assigned machines that employ Redstone components to complete simple tasks.
- **Discuss:** Redstone as a technology. How Redstone both extends the capabilities of players in the game and how it limits them. Discuss *Minecraft* as a game engine rather than a game and the relationship between game engines and game assets / data.
- **Housekeeping:** discuss the Development Challenge's Technology-self Assessment exercise due next class.

Week Eight: Agile Development

First Class Meeting

Assignments

- **Read:** Apostol, Raluca (2016). "Agile Game Development – A Quick Overview."
- **Read:** Clinton, Keith (2010). "Chapter One: The Crisis Facing Game Development" and "Chapter Two: Agile Development." *Agile Game Development with Scrum.*
- **Play:** Cross Code (Radical Fish Games 2012).
- **Development Challenge: technology self-assessment due.**

Class Topics / Activities

- **Exercise:** divide students into groups of 4-5 and have them work together to deliver 5-minute paper bag puppet presentations (Stedman 2014) designed to provide their classmates with an overview of agile development and its advantages based on selections from the assigned readings.[7]
  - Allow each group 25 minutes to create their puppets and plan their presentations. Stipulate that every group member must have a speaking part.
- **Discuss:** what the presentations reveal about the exigency and the affordances of agile development. How an agile development methodology might have impacted the process of putting together the presentations.
- **Housekeeping:** introduce the pre-Halloween sock puppet party. Students make sock puppet versions of their favorite video game characters and, on the class before Halloween, use these

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7. The best way to translate this exercise for online delivery is to assign students to make puppets before the class meeting based on tutorials that show how to make a variety of different puppets from common household items.

puppets to deliver elevator pitches for the prototypes they are making as part of the development challenge.

Second Class Meeting

Assignments

- **Read:** Fullerton, Tracy (2008). "Chapter Nine: Playtesting." *Game Design Workshop.*
- **Watch:** Extra Credits (2012). "Playtesting – How to Get Good Feedback on Your Game."
- **Play:** Biolab Disaster (Szablewski 2021).
- **Homework (20 points):** students work in groups over the weekend to refine their roller-coaster designs based on results observed during playtesting.

Class Topics / Activities

- **Exercise:** Students meet in *Minecraft* and Discord. They work in groups of 4-5 for 40 minutes to prototype roller coasters. The instructor then ride each roller coaster in survival mode so that her player-character can die.
- **Discuss:** what building and testing the roller coasters reveals about the way that Fullerton and Schell discuss the relationships between iterative design, rapid prototyping, and playtesting.

Week Nine: Playtesting

First Class Meeting

Assignments

- **Read:** Fullerton, Tracy (2008). "Chapter Ten: Functionality, Completeness, and Balance." *Game Design Workshop.*
- **Read:** Schell, Jesse (2014). "Chapter 25: Good Games Are Created Through Playtesting." *The Art of Game Design.*
- **Play:** CodeCombat (CodeCombat, Inc. 2021).
- **Development Challenge:** Students write brief justifications for the tutorials they plan to use to complete the development challenge.

Class Topics / Activities

- **Exercise:** students meets in Minecraft / Discord for a final round of rollercoaster playtesting.
- **Discuss:** what the students changed and why based on playtesting results.
- **Exercise:** students then play *Code Combat* for 10 minutes.
- **Discuss:** how *Code Combat* incorporates playtesting and iterative design into its coding-based gameplay. Discuss how *Code Combat* achieves functionality, completeness, and balance. Pose the question of whether or not the Minecraft roller coasters players created achieved functionality, completeness, and balance? How would students have to alter their playtesting methodologies to test for this?

- **Housekeeping:** discuss the Development Challenge due next week.

Second Class Meeting

Assignments

- **Read:** Fullerton, Tracy (2008). "Chapter Eleven: Fun and Accessibility. "*Game Design Workshop.*
- **Watch:** GDC (2020). "Tools Tutorial Day: Playtesting *Overwatch.*"
- **Play:** Elevator Saga (Wolffelt 2020).

Class Topics / Activities

- **Exercise:** Pre-Halloween sock puppet costume party. Students use the sock-puppets they created to pitch the games (3-5 minutes) they are working on for the Development Challenge.
- **Discuss:** using chapter eleven of Fullerton's textbook as a provocation, discuss what was fun and accessible about the sock puppet exercise and what was not. Discuss how sock puppets function as a technology and how they change the medium of the elevator pitch.
- **Housekeeping:** discuss the development challenge due next class.

Week Ten: The Language of Design

First Class Meeting

Assignments

- **Read:** Macklin, Colleen and John Sharp (2016). "Chapter Six: Design Values." *Games, Design, and Play: A detailed approach to iterative game design*
- **Watch:** Extra Credits (2017). "How Games Speak – Learn the Language of Design."
- **Play:** Candy Box 2 (Aniwey 2018).
- **Development Challenge Due.**

Class Topics / Activities

- **Exercise:** have the class meet in Minecraft and Discord. Divide students into groups of 4-5 and allow them 30 minutes to work in creative mode to reproduce one of a number of randomly assigned national landmarks.
- **Discuss**: what the arrangement and combination of the individual blocks players uses to recreate the landmarks reveals about isolated meaning, associated meaning, and dynamic meaning per the Extra Credits video. Then discuss how Chapter Six of Colleen Macklin's and John Sharp's textbook complicates these categories.
- **Housekeeping:** distribute the Design Challenge assignment sheet and discuss the sub-assignments that comprise it.

Second Class Meeting

Assignments

- **Read:** Stout, Mike (2016). "A Beginner's Guide to Designing Video Game Levels."
- **Watch:** Extra Credits (2018). "How Games Challenge Us – Empathy and Intuition in Puzzle Design."
- **Play:** Nothing to Hide (Ncase 2020).
- **Homework (20 points):** randomly assign students brief fairy tales and ask them to use Inklewriter (2012) to transform one of the key moments of the fairy-tale into a branching narrative. Have students submit links to the story-games they create.

Class Topics / Activities

- **Exercise (part 1):** students play *Nothing to Hide* for 7 minutes.
- **Discuss:** how the different levels of *Nothing to Hide* make use to the components parts that Stout identifies in his level-design tutorial. Discuss how *Nothing to Hide* represents an empathy puzzle game and how it achieves this through Stout's components.
- **Exercise (part 2):** divide groups into groups of 4-5 and, following Stout's guidelines, allow them 15 minutes to produce a bubble diagram then a rough map for a new level of *Nothing to Hide* that is designed to elicit a specific response from players.
- **Discuss:** the new levels students created and what this reveals about the levels as a collection of puzzles designed to achieve specific effects and affects.

Week Eleven: Game Narratives and Storytelling

First Class Meeting

Assignments

- **Read:** Schell, Jesse (2014). "Chapter 15: One Kind of Experience Is the Story." The Art of Game Design.
- **Read:** Campbell, Colin (2019). "How to write a Video Game Story: I took a Game Writing course. Here's what I learned."
- **Watch:** Extra Credits (2018). "The Three Pillars of Game Writing – Plot, Character, Lore."
- **Play:** Last Horizon (Coolmath.com LLC 2021).
-        Class Topics / Activities
- **Exercise (part 1):** students spend 10 minutes playing the fairy-tale games their classmates produced for homework.
- **Discuss:** what creating these story-games reveals about the similarities and differences between traditional storytelling techniques and branching narratives. Discuss branching narratives as puzzles and how they use plot, character, and lore. Discuss the affordances and limitations of branching narratives.

- **Exercise (part 2):** have students play Last Horizon for 5 minutes.

- **Discuss:** Last Horizon as a story-machine versus a branching narrative. Pose the question of whether or not storytelling is inherently a game.

- **Housekeeping:** discuss the Research Exercise due next class as part of the Design Challenge.

Second Class Meeting

Assignments

- **Read:** Schell, Jesse (2014). "Chapter 17: Stories and Games Take Place in Worlds." *The Art of Game Design.*

- **Read:** Schell, Jesse (2014). "Chapter 18: Worlds Contain Characters." *The Art of Game Design.*

- **Watch:** Extra Credits (2013). "More Than Exposition – Building Worlds without Info Dumps."

- **Play:** Good Impression (Ellian 2016).

- **Design Challenge**: Research Exercise Due.

Class Topics / Activities

- **Exercise (part 1):** divide the class into groups of 4-5 students. Randomly assign them an apocalyptic event and ask them to alter the environment of the classroom in 12 specific ways to illustrate the effects of that event. Allow the groups 25 minutes to complete this task.[8]

- **Exercise (part 2):** have the students leave the room and reconstitute the class into groups of 4-5 different students. Send the groups back into the classroom and ask them to generate a narrative account of what happened there based on the clues left behind from the previous phase of the exercise. Allow the groups 10 minutes to complete this task.

- **Discuss:** have each group share their narrative account. Discuss what this exercise reveals about environmental storytelling from a designer's perspective (part 1 of the exercise) and from a player's perspective (part 2). Discuss how traditional elements of storytelling, including characters, both change and stay the same in environmental storytelling. Discuss how this exercise helps students understand environmental storytelling in *Good Impression* and other mainstream games.

Week Twelve: World Building

First Class Meeting

Assignments

- **Read:** Schell, Jesse (2014). "Chapter 19: Worlds Contain Spaces." *The Art of Game Design.*

- **Read:** Schell, Jesse (2014). "Chapter 20: The Look and Feel of a World Is Defined by Its

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8. This exercise can be replicated online through Minecraft. Prior to the class meeting, the instructor should create a village of houses or alternatively locate a premade village on the Minecraft server. During the class meeting, assign students to work in groups of 4-5 for 30 minutes in creative mode to place objects or otherwise alter the houses they have been assigned to reflect the effects of a random apocalyptic event. One the groups have finished this task, the instructor divides the class into new groups of 4-5 and asks them to explore the whole village and produce a narrative account of what happened there.

Aesthetics." *The Art of Game Design.*

- **Watch:** Extra Credits (2016). "Understanding the Fantasy – How to Shape a Game's Design."

- **Play:** Entanglement (Gopherwood Studios 2021).

- **Homework (20 points):** Have students find an in approximately 100 words annotate a tutorial on how to make a tutorial. Compile these into a resource that the class can reference to complete the Design Challenge.

Class Topics / Activities

- **Exercise:** Divide students into groups of 4-5. Have them work for 20 minutes with Twine's online story-generator (Interactive Fiction Technology Foundation 2021) to make text-based representations of randomly assigned famous movie starships. Stipulate that each group must keep the starship they have been assigned secret from the other groups.[9]

- **Discuss:** have each group rotate around the room and play / explore the Twine starships the other groups have created. Challenge each group to try and guess the name of each starship. Discuss how each Twine starship invokes the aesthetics of the original through their architecture and arrangement of space.

  - Finally, discuss the aesthetic affordances and limitations of Twine as an engine. Discuss strategies to recreate the theme and fantasy of *Entanglement* through these affordances and limitations.

Second Class Meeting

Assignments

- **Read:** Schell, Jesse (2014). "Chapter 16: Story and Game Structures can be Artfully Merged with Indirect Control." *Art of Game Design.*

- **Watch:** Extra Credits (2015). "Exploration in Games – Four Ways Players Discover Joy."

- **Play:** Contre Jour (Mokus 2011).

Class Topics / Activities

- **Discuss:** the difference between direct and indirect control using the examples Schell gives.

- **Exercise (part 1):** have students play *Contre Jour* for 10 minutes. Ask them to document 5 examples of direct control in the game and 5 examples of indirect control.

- **Discuss:** the differences between the four different forms of exploration enumerated in the Extra Credits video.

- **Exercise (part 2):** have students play *Contre Jour* for 10 minutes. Ask them identify examples of each of the four types of exploration.

- **Discuss:** the relationship between exploration and indirect control in games and how to

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9. As with the paper bag puppet exercise, the best way to facilitate this exercise online is to have the students use Twine to model starships as homework, and the compile links to the finished stories into an online gallery that students can explore and discuss in class.

leverage this relationship as a game designer.

- **Housekeeping:** Discuss Design challenge due next class.

Week Thirteen: Game Sound and Music

First Class Meeting

Assignments

- **Read:** Kilford, Matthew (2021). "Composing Music for Video Games."
- **Read:** Kiel, Alyssa (2019). "Sound Design for Video Games: A Primer."
- **Watch:** Scruffy (2019). "'Invisible' Sound Design in *Breath of the Wild.*"
- **Listen:** Seabrook, Andrea (2008). "The Evolution of Video Game Music."
- **Play:** Onslaught Arena (Lost Decade Games 2010).
- **Design Challenge Due**

Class Topics / Activities

- **Exercise (part 1):** Have students watch six minutes of a *Myst* playthrough video—four minutes with the sound on and 2 minutes with the sound off.
- **Discuss:** what watching the playthrough with the sound off reveals about the ways that sound and music work in the game.
- **Exercise (part 2):** Have students watch six minutes of a *Katamary Damacy* playthrough video—four minutes with the sound on and 2 minutes with the sound off. do the same for a playthrough video.
- **Discuss:** what watching the playthrough with the sound off reveals about the ways that sound and music work in the game. Compare and contrast the way sound and music works in *Myst* and *Katamary Damacy.*
- **Housekeeping:** distribute the Final Project / Game Expo assignment sheet and discuss it.

Second Class Meeting

- Class Canceled for Thanksgiving Holiday.

Week Fourteen: Next Steps

First Class Meeting

Assignments

- **Read:** Fullerton, Tracy (2008). "Chapter 15: Understanding the Game Industry." *Game Design Workshop.*
- **Read:** Koster, Raph (2013). "Chapter Eleven: Where Games Should Go" *A Theory of Fun.*
- **Play:** Tiny Monsters (Kuckir 2021).

Class Topics / Activities

- **Exercise:** Divide Students into groups of five. Give each group 15 minutes to list as many ways as possible that the gaming industry has changed from the 2008 description that Fullerton provides in her chapter.

- **Discuss:** compare and contrast the lists that students generate. Using the provocation in Koster's chapter as inspiration, have students identify strategies through which they can stay relevant in the gaming industry despite its changes.

Second Class Meeting

Assignments

- **Read:** Fullerton, Tracy (2008). "Chapter 16 Selling Yourself and Your Ideas to the Game Industry." *Game Design Workshop.*

- **Read:** Koster, Raph (2013). "Chapter Twelve: Taking Their Rightful Place" A Theory of Fun.

- **Watch:** DaveControl (2019). "Games as Art."

- **Play:** Shell Heroes (Csharks 2021).

- **Homework (20 points):** Students create a promotional flyer for their exhibit in the upcoming game design expo.

Class Topics / Activities

- **Exercise:** divide the class into groups of 4-5 students. Assign each group a random, little-known art game. Give students 15 minutes to research the game and to put together a 5-minute pitch designed to convince the head curator of the Louvre to include the game in an exhibition dedicated to Video Games as art.

- **Discuss:** the criteria that groups explicitly and implicitly reference to make the case for the games they were assigned. Compare and contrast these to the criteria that Dave Control employs in his video. Make the point that definitions of art as often as much about groups and categories of people as different production values. Pose the question of what sorts of players are included and excluded by definitions as games as art.

- **Housekeeping:** discuss the upcoming Final Project / Game Expo assignment.

Week Fifteen: Conclusions

First Class Meeting

Assignments

- **Read:** Schell, Jesse (2014). "Chapter 30: Games *Transform* their Players." *Art of Game Design.*

- **Read:** Schell, Jesse (2014). "Chapter 31: Designers Have Certain *Responsibilities*." *Art of Game Design.*

- **Read:** Schell, Jesse (2014). "Chapter 32: Each Designer has a *Motivation*." *Art of Game Design.*

- **Watch:** Extra Credits (2017). "Politics in Games – All Media is Political."

- **Play:** Zork I (Infocom 1980).

Class Topics / Activities

- **Exercise (part 1):** class meets in Minecraft and Discord. Divide students into groups of 4-5 and give each group to work together for 30 minutes to work in creative to create a garden maze with specific waypoints and monuments that embody their experience in the class during the semester.

- **Exercise (part 2):** students explore each other's mazes for 10 minutes.

- **Discuss:** what the combination of all of the mazes reveals about the collective experience of the course. Discuss how the course has transformed students. Discuss strategies that students have learned in negotiating the course and how to transfer these strategies as they move forward. Pose the question of whether or not the course was a game?

- **Housekeeping:** discuss the upcoming Final Project / Game Expo assignment.

Second Class Meeting

- Reading day for final exams.

COURSE BEST PRACTICES

- **Construct yourself as a fellow explorer rather than as the expert in the class**. Require students to be experts whenever possible, especially about the games they enjoy playing. Pose the exercises and the course discussions as problems that you can only solve with the help of students.

- **Assign a textbook, but not the newest version**. A good textbook such as Fullerton's or Schell's can go a long way in helping structure the course. Textbooks can also provide you with a repository of ready-made exercises and offer students with a familiar sense of structure. Textbooks, however, can be cost-prohibitive. Since there are usually only very slight differences between early and later editions of textbooks, consider assigning older editions to cut down on costs for the students.

- **A little document design goes a long way:** although it is not explicit from the template required for this chapter, I spend a considerable amount of time designing my course documents. I use contrasting colors, clear sections, and compelling layouts to help students more easily understand the course and to also set the tone of the course.

- **Triangulate all readings.** One of the primary performances that any introductory-level university class teaches students is how to read at the college level. Likewise, one of GAME 201T's goals is to provide students with the critical literacy that they need to evaluate and take advantage of the vast amount of resources dedicated to game design and development.

  - To this end, try to supplement textbook chapters with *YouTube* videos and readings taken from popular or well-known gaming sites such as *Gamasutra*. Try to find readings that offer slightly different takes on the same subject or which offer contradictory views. Call attention to these contradictions during discussions by presenting them as a shared problem that you and the students must work through to achieve

understanding.

- **Make students responsible for the course readings** by designing in-class, collaborative assignments that explicitly require them to use information from the readings to complete. As detailed in the course outline above, the general formula I employ is to assign students group exercises based on the readings. I then use these exercises to foster discussion and reflection about the readings.

- **Ask students for help.** Although we often face a considerable amount of pressure to perform as experts in the classroom, one of the best ways to engage students is to ask them for help and to draw on their expertise. This can be as simple as asking students to use their phones to report when a particular game was published. Instructors, however, can also ask students for help with more complex subjects, including the games or other technologies in the course or determining the best outcomes for major assignments. Doing so both requires and rewards students for performing as experts.

- **Rotate between groups during exercises.** Doing so will give you a chance to keep the students on task and direct flagging groups towards the exercise's objectives. Rotating between groups also allows you to engage with students on a more personal level. It gives students a chance to ask questions about upcoming assignments that they might be hesitant to ask in front of the whole class.

- **Recognize that students may not have a considerable amount of experience with many of the core technologies of the course**; these technologies not only include game engines like *Unity* or *Unreal*, but also courseware like Blackboard and even technologies that faculty take for granted, such as email. Incorporate small-scale, low stakes assignments and in-class exercises explicitly designed to teach students how to use these technologies.

- **Major and minor assignments need not be due on the day classes meet.** Posting and collecting assignments though courseware like Blackboard means that you can place due dates at the end of each week or on days the class does not meet. Doing so will help address the tendency of students to skip classes on days that assignment are due to finish them. It will also give you more time discuss / model the assignments in class before they are due.

- **Invite visitors to speak to the class**, but not just visitors who have experience working in the AAA gaming industry. Instead try to find visitors who have experience working in diverse and underrecognized aspects of game design and development such as independent game designers and designers working for companies that produce games as training and simulation. Doing so will help students better understand the diversity opportunities available to them.

- **Offer bonus points on all assignments** and use these points to encourage and direct experimentation. For example, offer students 5 bonus point if the web-based mini proposal they produce for the invention challenge includes images, another 5 bonus points if it contains a section above and beyond those stipulated on the assignment sheet, and 5 more bonus point if it is comprised of multiple webpages. Doing so will challenge students to take initiative and reinforce best practices for digital portfolios.

- **Provide students with models of all assignments.** This practice helps alleviate the anxiety that students feel about the otherwise open-ended nature of the major assignments. Models

also provide students with invaluable experience designing their own solutions by reverse-engineering and modifying solutions that others have developed.

- **Allow students to revise all major assignments for a higher grade.** Revision is one of the key affordances of portfolio grading. It also underscores one of the key-principles of iterative design: the ability to learn from setbacks.

- **Recognize that students will ask a lot of questions in a course of this nature**, and will often ask the same questions. This is a symptom of the open-ended assignments at the heart of the course, which students can find daunting. Oftentimes students will ask the same question over and over again not because they do not understand the assignment, but because they are unsure of their approach to the assignment. Use these questions as an opportunity to engage and challenge students.

- **Gradually try to answer question with questions.** One of the overriding objectives of a course like GAME 201T is to empower students to construct themselves (and thereby perform) as experts rather than novices. Gradually avoid giving students direct answers to their questions and instead use a directed series of questions such as "what are the benefits and the costs of that solution" to prompt them to take responsibility for the decisions the open-ended assignments require of them.

FUTURE COURSE PLANS

As I explain in the introduction to GAME 201T's course syllabus, one of the primary challenges that aspiring game designers and developers face is the fact that the gaming industry is inherently unstable and volatile. Accordingly, GAME 201T does not attempt to provide students with a single, unified answer or approach to game design and development. Likewise, it does not pretend to be able to teach students how to make a successful game or even how to succeed in the gaming industry.

GAME 201T instead takes a methodological, entrepreneurial approach to these questions. Employing a variety of hands-on exercises, including a number of formal design and development challenges, it teaches students how to exploit the potentials of iterative design, rapid prototyping, and critical analysis to produce unique solutions to the complex problems inherent in game design and development. In doing so, GAME 201T approaches the problematics of working and succeeding in the gaming industry as a design and development challenge in and of itself. It teaches students how to transform their aspirations into actuality in the face of the volatility, ambiguity, and uncertainty that has become the state of the art not only in the mainstream gaming industry, but arguably, in many aspects of the larger employment landscape that students will encounter upon graduating.

GAME 201T, in other words, attempts to prepare students for the inherent uncertainty of the gaming industry by teaching them how to teach themselves: how to locate resources and solve problems as they arise. That said, there are a number of areas that I would like to further develop in the class. For instance, I have found that many students respond better to course exercises that have a narrative component. Accordingly, I would like to incorporate the major challenges in the game into a larger, quest-like narrative structure. Likewise, I would like to make *Minecraft* and *Discord* a more central part of the course. Many of the students who enroll in GAME 201T are already intimately familiar with both of these technologies and thus they have a lot of potential to either replace courseware like Blackboard entirely or at least remedy some of Blackboard's deficiencies. Finally (and perhaps

most significantly), I would like to give students more options in terms of assignments and perhaps even in the sequence of assignments. Instead of assigning a single ideation, development, and design challenge, I would like to give students the ability to pick between two or three different versions of each. This would allow students interested in design and development to better configure the course to their interests, and would also allow students who come to class to class with more experience in game design and development more leeway in shaping the course to their own needs.

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