

EDUC/DIGITAL 333: Video Games & Learning

Course Assignments & Policies – 2020*

Professor: Barry Fishman (fishman@umich.edu)

Class Location: Prechter Lab, 2202 School of Education Building

Meeting Times: Tuesdays and Thursdays, 10:00 am – 11:20 am

Office Hours: 4435 North Quad, times vary. Sign up at <http://tinyurl.com/fishman-officehours>

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Course Objectives:

Students will be able to:

- ... describe what makes a successful game a good learning environment.
- ... describe core learning theories and how they manifest in different learning designs.
- ... describe core motivational theories and how they shape engagement.
- ... provide an informed critique of interactive media and games for learning.
- ... describe how empirical research/evaluation can be used to assess the relationship between games (or any interactive media) and learning.
- ... represent and defend ideas through discussion, writing, and oral presentation.

Course Overview:

Why are video games fun? The answer isn't as obvious as you might think. Good games draw you in, teach you how to succeed, and keep you engaged with a "just right" level of challenge. Most importantly, players *learn* while playing a well-designed game. Why isn't school like that? This class takes a close look at video games, a close look at education, and considers ways that each can be improved to maximize learning and performance.

This course is designed to be a unique and (hopefully) engaging learning experience. You may think you know how to "play the game of school," but the rules in this course may not be what you're expecting. *Please read this syllabus carefully!* The assignments and grading system may seem confusing at first, but if you take a little time to read the syllabus and pay attention in class, everything will be explained. Almost everything you need to know is explained in these pages. Did I mention that you should read this syllabus?

Required Texts:

- Card, O. S. (1977). *Ender's Game*. New York: Starscape.
- A video game selected by you (and approved by the professor; see below for details).
- Other readings are distributed through Canvas or available online. Be sure to check prior to completing each week's reading/reaction to make sure you're reading the most recent set.

***Course assignments and schedules are subject to change! Always check GradeCraft for the latest.**

Grading Policy

School is a Game. Your Grade is Your Score.

This is a games class, and so we will take a game-like approach to grading. All assignments and class activities are worth a certain number of *points*; you will earn *badges* as well. Your point total will determine your final grade in the class. In most courses, there is no choice in assignments or exams, and your grade is based on your percentage correct. don't make any mistakes! In *this* course, you get to choose your pathway, and can do as many assignments as you would like to earn the grade you choose. Take some risks. Use GradeCraft (<http://gradecraft.com> or through Canvas) to plot your path through the course.

See below for possible points, how assignments will be graded, and how points are translated into grades.

Activity	Due	Possible Points	Unlock Requirements
Grinding			
Class Attendance	ongoing	5,000/class session	n/a
Quiz on Grading System	taken on 1/22	Up to 5,000	n/a
Readings: Online Quiz	ongoing	up to 5,000 points each	n/a
Learning Game Review	up to 3x: 2/7, 2/27 & 4/10 @ 4pm	60,000/75,000*	Permission of team leader (can be done up to 3 times)
Learning from Playing a Game			
Game Play Selection Paper	1/16 @ 4pm	20,000	(Required for <i>everyone</i>)
Game Play Update Poster 1 (must be unlocked with Game Play Selection paper)	in class by 2/25	96,000/120,000*	n/a
Game Play Update Poster 2 (must be unlocked with Poster 1)	in class by 4/9	96,000/120,000*	Complete Game Play Update Poster 1
Game Play Reflection Paper (must be unlocked)	4/17 @ 4pm	128,000/160,000*	Complete Game Play Update Poster 1
Boss Battles			
Individual Paper/Project 1 (must be unlocked with proposal)	by 3/12 @ 4pm	160,000/200,000*	n/a
Individual Paper/Project 2 (must be unlocked with Project 1 & proposal)	by 4/21 @ 4pm	160,000/200,000*	Complete Individual Paper/Project 1
Group Game Design Project (must be unlocked with proposal)	by 4/21 @ 4pm	280,000/350,000*	Confirm project with team leader(s).

* “Meets Expectations” points / “Above & Beyond” points (see rubrics in GradeCraft). Reaching the *Meets Expectations* level in an assignment for this class is good. You have done what we asked you to do. If you wish to earn more points than that (Above & Beyond), you need to really impress us. Above & Beyond will often not be clearly defined. The point is not to do what we tell you to do... it is to be creative, to be deeply analytical or inventive, to... go *beyond* our expectations.

Finally, your point total for the course is translated into levels and then a *course grade* as follows: As you complete assignments, come to class, do your reading reactions, and so forth, your points will quickly accumulate. As you earn points, you will “level up.” At the end of the term, your final level corresponds to the grade you will receive for the course. Be sure to use the Grade Predictor tool in *GradeCraft* to help determine what assignments you should do to earn the grade you want!

Total points available in course: 1,595,000

Points, Levels, & Course Grades		
0	Baer’s Brown Box	---
10,000	Magnavox Odyssey	
50,000	Coleco Telstar	
75,000	Mattel Intellivision	
100,000	Atari 5200	
125,000	NES	
150,000	Game Boy	
200,000	Neo Geo	
225,000	Super NES	F
300,000	Sega Saturn	D-
350,000	Sony PlayStation	D
475,000	Nintendo 64	D+
551,000	Sega Dreamcast	C-*
575,000	PlayStation 2	C
590,000	Game Boy Advance	C+
610,000	Microsoft Xbox	B-
630,000	Nintendo GameCube	B
679,000	Nintendo DS	B+
749,000	PlayStation 3	A-
925,000	Nintendo Wii	A*
1,300,000	PS4/Xbox One	A+

*You must earn at least 80,000 attendance points to earn a C-, and at least 100,000 attendance points to earn an A in this course.

Policies on Late Work and Assignment Resubmission

Policy on Late Work

All late work will be docked 10% of the points earned each 24 hours it is late, starting at the EXACT time it is due. If an assignment is 5 minutes late, it will be docked 10%. 2 days late, it will be docked 20%, 3 days, 30%, and so on. If you know you must submit an assignment late for a legitimate reason, please communicate with Professor Fishman *in advance* of the due date (he tries to be a decent human).

Also, late assignments are *final*; they may not be resubmitted for additional points.

Rules for Assignment Resubmission:

- To be eligible for revision and re-grading, an assignment must be COMPLETE when submitted and be a reasonable attempt to meet the requirements for “meets expectations” as stated in the rubric. Incomplete or shoddy work, to be determined by the Professor, may not be resubmitted.
- To be eligible for revision and re-grading, an assignment must be submitted ON TIME. Late assignments are not eligible for re-grading.
- You may discuss any grade with Professor Fishman, *but you must wait at least 24 hours after the work is returned to you to contact the professor.*
- You may revise and resubmit most* assignments ONCE for re-evaluation.
- You have 1 week from the time a grade is released to make any re-submission.
- *Resubmission MUST be accompanied by a cover sheet specifying all changes made in order to redress the problems noted in the original evaluation. (Cover sheet is available on Canvas)*
- *If at all possible, please submit a Word document using “track changes” to make your improvements to the assignment easily visible.*
- No assignment will be re-evaluated after 1 week.
- If an assignment has a rubric category for “Scholarly Sourcing” (typically specifying a number and type of references expected in support of your argument), this category is NOT eligible for more points in a revision. Note that you may still want to improve your scholarly sources in a revision, especially in response to a critique of your assignment in some *other* rubric category. You just won’t get more points for adding additional references or for correcting your APA style alone as part of a revision.

To resubmit work, use GradeCraft, and click the “Edit Submission” button.

*NOTE that the following assignments may *NOT* be resubmitted for re-evaluation:

- Reading or other Qualtrics Quizzes
- Posters
- Game Play Reflection Paper
- Group Game Design Project
- Individual Paper/Project 2

Assignments (You've Got Choices)

The main assignments in this class fall into three categories: (1) Class participation; (2) Learning from playing a game; and (3) a “boss battle” that can either be two individual projects or one group game-design project (you can also choose to do more than one kind of “boss battle,” for instance, an individual paper/project AND a group project, if you want to hedge your bets or shoot for a really high grade).

I. Class Participation

Attendance and Active Participation

We will work to build a *learning community* in EDUC/DIGITAL 333, and I want this to be a great learning experience for all. To do this requires that you commit to the class and participate. If you *must* miss a class, be sure to let your team leader and professor know. You will receive 5,000 points towards your course “score” for each class you attend. There is no such thing as an “excused” absence... if you aren’t in class, you don’t get the points, period. (But there are other ways to earn points.)

Please note: *under no circumstances will “double registrations” be tolerated.* I do recognize that students sometimes register for multiple overlapping courses prior to the start of the term as you consider your options, but this *must* be resolved by the end of the first week. I won’t share you with another professor.

Also: It is possible to only earn *partial* attendance points for a class, if you arrive very late or leave early, or are tragically off-task during class (e.g., online shopping, asleep, etc.). Be present!

Team Activities and Competition

You will be assigned to a team, and each team will work with team leaders throughout the semester on many in-class assignments and challenges. Be a good teammate and participate. That’s right... this is a massively multiplayer course.

Weekly Reading Quiz (offered each Monday, check syllabus)

Each week, there will be a multiple-choice quiz online to check your understanding of the readings. This quiz will be made available online for a limited window of time each week – from Sunday at 8pm until Monday at 11:59 pm. If you get *all* of the answers on this quiz correct, you will receive 5,000 points.

Learning Game Review (can be completed up to 3 times)

This class is about games that teach, but we don’t have time to explore *all* of them. So I invite you to explore, play, and write a critique of games that are *explicitly designed for school or education*. Where to find these games? Start by looking at places like <https://www.brainpop.com/games/>, <http://www.funbrain.com/>, or any one of hundreds of other sites. Choose *one* game to focus on for each paper and examine it thoroughly.

Your critique should be between 3 and 5 pages long, and analyze the game from the perspectives of learning, motivation, and assessment. Cite readings from class directly. Your focus should be on how the game supports learning of core or 21st century skills... things that *school* wants to teach. (This is different from learning from playing your game for the entire term (see below), where the focus does not have to be on “academic” learning.) You should also comment on how the game is or might be integrated with classroom or school-based learning.

You can do this assignment up to three times, *but you must get each paper topic/game approved by your team leader in advance*. This is to make sure that you have chosen an appropriate game, and that you have a good focus for your paper. Refer to the assignment overview on Canvas and the rubric in GradeCraft for more details. *NOTE: We will not approve games that have already been extensively examined in class.*

II. Learning from Playing a Game

Required Game “Text” and Game Play Selection Paper

For your first assignment, you will choose the game you’ll play this semester. It can be a Mac, PC, console or mobile game (e.g., DS, Wii, Xbox, PS3 or PS4, PS5(!)), but it must be a contemporary video game, the kind you could buy at a game store or online today. Do *not* pick an explicitly “educational” game.

Before you choose your game, you must do a little research and then write a brief report of what your research told you, why you valued the sources you chose, and why you chose the game you did. Your report must also state what you hope to learn, accomplish, or achieve by playing your game, and most importantly... what you believe the potential learning or educational value of the game might be. This report should be between 2 and 3 double-spaced pages. For your research, you are required to consult and cite in APA style the following sources. At minimum:

- TWO human beings (should be cited as “personal interviews” and do not need to be in your reference list, just cited in-text)
- TWO online or print sources (such as gamer magazines, online reviews or enthusiast web sites)

You are encouraged to choose a game that you think will be satisfying and motivating, but it **MUST** be a game that’s **NEW** to you. In other words, if you’re already a World of Warcraft player, you can’t just re-roll. You need to choose a new game or a different genre of game altogether. If you play sports games (e.g., Madden), you can’t just pick a different edition or another sports game. If you are an athlete, you cannot play a game related to your sport (e.g., soccer players cannot play FIFA). Think also about whether you suspect that the game will hold your interest for the entire term.

Just in case your choice is not a good fit for the class, hold off on any purchases until you get feedback on this assignment!

Looking for some game ideas? Check out the Computer & Video Games Archive at the Duderstadt Center. The Computer & Video Games Archive (CVGA) is in the basement of The Dude, which is located on North Campus. Their web site: <http://www.lib.umich.edu/computer-video-game-archive>.

Your game selection paper is worth up to 20,000 points. See the rubric on GradeCraft for more details about the elements of this assignment and how each element will be evaluated.

“Show and Tell” Critique Poster Sessions (you must sign up on Google Docs)

Throughout the term you will present a report and analysis of your ongoing game play from your “game text.” These presentations will be “walk around” poster sessions. This means that you will create a poster and display it on the wall of the classroom. Each week we’ll have about 18 people present posters. The rest of the class will be able to wander around the room and visit the posters. *If you wish, you may present a second poster later in the term for extra points, so long as you presented a first poster.*

This assignment is meant to give you practice and experience with presenting your theories, analyses, and ideas to a friendly audience. I expect that as you read and consider the materials we discuss during the week, you *will* connect those ideas to your experiences with your game. If there are particularly interesting moments, ideas, concepts, happenings, etc. with your game that you think are relevant to class discussions, readings, and course materials, you are encouraged to explore those ideas more deeply in this presentation. You should find a way to bring your game (or recorded moment in the game) in order to *show* people what your poster is talking about.

This assignment will also help broaden the number of games we are exposed to in class. Because our speakers and readings are mostly K-12 focused, your show and tell is a great opportunity to bring in more commercial and off-the-shelf games. It also gives you a chance to work with the ideas from the readings in a concrete way.

Analyses can be either a close reading of a particular moment in a game or else a broader (but focused) discussion of a particular game rule, narrative structure, character model, social phenomenon, etc. that you consider relevant and meaningful. For example, you may wish to present the *World of Warcraft* community's reactions and dealings with Chinese farmers or the way that a game's tutorial level elegantly teaches players the game's "design grammar." Or maybe you want to present the elements of a game that are meant to promote "learning" and suggest ways you might evaluate that learning. Whatever your choice, you must directly connect your game to the readings and discussions from class.

As a poster presenter, you are responsible for the following logistics:

- Posters should reference and connect to readings in the course (and cite them properly).
- Posters should be constructed and displayed individually, but you may consult others in your preparation and collaborate with others who are playing the same game.
- Posters are not necessarily arguments for your particular approach to your game; instead, they should take the form of analyses, connecting theory to the text or experience you're examining. Tell us what you notice, what you observe, what's interesting to you and for what reasons.
- Posters should have two or three main points. Structure is important! Tell us at the start what you will be discussing and be sure to connect the examples you use in a way that helps us clearly see what you see.
- You must bring the materials needed to display your poster with you to class and hang the poster up *before class begins*.

The first poster session must be presented on or before "Spring" Break. You must do the first poster in order to unlock the ability to do a second poster. If you choose to do an (optional) second poster, it must be presented after spring break. Each poster session is worth up to 120,000 points, for a total of up to 240,000 points if you opt to do both.

NOTE: The second poster session will have different grading criteria than the first.

Please see the poster rubrics and overviews on GradeCraft for complete information on the required elements.

Game Play Reflection Paper

This paper, due at the end of the semester, is a summation of your experiences with your game play text throughout the entire semester. You must complete at least one poster session to unlock the Game Play Reflection Paper assignment. If you've done a good job on your poster session(s), then you've already done most of the hard work. Now all you have to do is write a paper to tie the whole experience together. See the rubric on GradeCraft for details on required elements of this paper and how each element will be assessed.

A full rubric is posted on GradeCraft, but here are some of the requirements for this paper:

- The length is 10 pages *maximum* (double spaced, images not included in page count).
- The paper will be a complete analysis of your game play, with a focus on *what you learned* in the course of the play.
- You must include ideas from across the entire term, with proper APA-style citations.
- The paper should address your experiences both within and around the game, e.g., with fan communities.

III. The Boss Battles

In a game, a boss battle is when you take what you've learned and re-combine it in inventive ways to defeat foes stronger than any you've faced before. You should have all the necessary knowledge to win the fight from the levels you've already completed; but you might need to apply that knowledge in ways you hadn't previously considered if you are to prevail... And sometimes, you have to *earn* the right to take on a challenge.

We will have two options for your boss battle assignments. You can choose to *either* complete two (2) small individual projects worth up to 200,000 each, or one (1) group game-design project worth up to 350,000 points. Note that you may "hedge your bets" by combining these. For instance, you may choose to do *one* individual project, *plus* a group game design project. Or if you're totally nuts, you could do both individual projects *and* the group project... but are you totally nuts?

Individual Projects/Papers (Two chances; first one unlocks the second)

This is actually *two* different projects that will be due at two different points during the semester. The first due date is right after "spring" break, and the second is at the end of the term. (Note that you may of course submit any work in this course *before* the official due date.) Your projects may be completely independent of each other, or they may build upon each other. The topic is completely of your choosing but must be approved by your team leader and by the professor to make sure it is going to be a fruitful and worthwhile investigation before you begin your work. *NOTA BENE: You may only do the second individual project if you successfully complete (unlock) the first individual project, earn a grade, and read your feedback.*

This project may take the form of a paper, or you can feel free to be creative (but scholarly) in other media. Short film? Podcast? Really impressive diorama? In terms of scope, if you were to write a more traditional academic paper, I would expect it to be at least 8 pages, single-spaced. And it *must* be a work of scholarship in that it should draw from and cite class readings, references you identify on your own from the library or other sources, and be analytical and critical. In short, it should make some form of *argument* about games and learning, and that argument should be well-supported.

A list of criteria to guide your work will be posted on GradeCraft/Canvas. The first individual project is worth up to 200,000 points. The second project (which can only be done *if you complete* the first project) is worth up to another 200,000 points.

Group Game Design Project

In this project, you will work together with a group of your classmates on the design of a game that has well-defined learning objectives of the type that would be useful in K-12 education. You are not responsible for the actual development or prototyping of the game, though if you wish to do some development, knock yourself out.

You are responsible for forming your own group. A group must have *at least 3 students and not more than 4 students* (this will be strictly enforced). All group projects and teams must be approved by your team leader(s) and the professor.

This will be a *group* project, and you will be graded as a group. We will provide some group process support to help you structure this task.

Your final project will be submitted to GradeCraft *as a group*. Only one team member needs to submit the final report online. In addition to the written paper, you will also prepare a group *poster* that will be shared in the final class meeting. Part of your grade will be a reflection of the quality of this poster.

The following are the core required components of your report (with some initial thoughts on each):

- Game Description: Of course, you have to describe the game! You should focus on game play and a full description of the learning goals. Storyboards or screen mock-ups are a great idea.
- Motivation and Learning Theory: You must separately address both learning theory and motivational theory in your project. Go back to the readings and presentations on these topics. What theory underlies the design of your game? How is our understanding of motivation and engagement leveraged to help promote learning? Citations are a requirement in this section! This is one of the most important parts of the report.
- Logic Model: Logic models make an appearance in the lecture on research design. This is the “bridge” between what your learning goals and motivational elements are and how they manifest themselves in the game. A graphic is a requirement here (think flow chart), but text to explain yourself is also important.
- Research Evaluation Plan: This is the other most important section of the report. You need to fully describe how you plan to investigate whether players of your game actually achieve the desired learning goals. The methods should be appropriate to the questions you frame. NOTE that you don’t actually have to conduct this research. I just want to see that, given a set of claims about learning, you know what you would look for to evaluate those claims.

There is no minimum page length for your final report, but there is a maximum of 15 pages of text (1.5 line spacing, please). Figures, graphics, and instruments are not included in this count. Please make sure that you are properly addressing each of the required grading criteria (see GradeCraft for rubric).

IV. Badges

There are many for your efforts in class to be recognized. In most classes, your final grade is all you have to show for your efforts. But does that number really represent your true effort? Does a single number (89%) capture what you learned? Are *you* an “A-”, or a “B+”? Of course not! You’re much more than that.

Badges are part of a movement to find ways to recognize accomplishments that go beyond grades. Badges aren’t a new idea (see: scouting), but they are experiencing a resurgence in informal learning (clubs, museums), and increasingly in formal school settings. Badges can be used to record the mastery of specific skills or dispositions. In EDUC/DIGITAL 333, you can earn badges for skills such as demonstrating creative thinking, being an excellent presenter, showing leadership in your team, and so forth (see GradeCraft or Canvas for a list of all of the badges).

V. The Fine Print

General Comments on Assignments and Course Requirements

- As the semester continues, the instructor may alter or add to the assignments. Pay attention!
- For all assignments, you are expected to draw heavily on readings from the entire course in justifying your design choices, research rationale, etc. If all you can offer is your own opinion, why bother taking the class at all?
- Professionalism is important. Grammar, style, organization, and clarity count.
- Cite all your sources in APA format—points will be deducted for failing to do this. If you don't know APA format, use a web site such as Citation Machine (<http://www.citationmachine.net/apa/cite-a-book>) to get help. Also, many of our readings use APA style, so you can try to mimic what they do. My insistence on APA style isn't (just) narrow-mindedness; common formats help reduce uncertainty and facilitate the sharing of work and ideas, a critical component of a healthy intellectual community. To make life easier, acquire some form of computer-based reference and citation manager and use it (like Zotero). If you start building a reference collection now, it will serve you for a long time.
- Incompletes are given only under unusual extenuating circumstances.
- Communication is KEY. Always keep in touch with your professor and/or team leader. If we don't know that you're having a problem, we can't help you. The professor is always happy to talk about stuff with you... even stuff that isn't related to the course.

Policy on Original Work

Unless otherwise specified, all submitted work must be your own, original work. Any excerpts from the work of others must be clearly identified as a quotation, and a proper citation provided. You may obtain copy editing assistance, and you may discuss your ideas with others, but all substantive writing and ideas must be your own or be explicitly attributed to another. An exception is group work, which is assumed to be a collaboration by all group members. See both the University policy on Academic Integrity (<http://spg.umich.edu/policy/303.03>) and the LSA Office of the Assistant Dean for Academic Affairs (<https://lsa.umich.edu/lsa/academics/academic-integrity.html>) for definitions of plagiarism, and associated consequences. Any violation of standards for academic integrity will result in severe penalties, which might range from failing an assignment to failing the course.

Accommodations for Students with Disabilities

If you think you need an accommodation for a disability, please let me know at your earliest convenience. Some aspects of this course, the assignments, the in-class activities, and the way we teach may be modified to facilitate your participation and progress. As soon as you make me aware of your needs, we can work with the Office of Services for Students with Disabilities (SSD) to help determine appropriate accommodations. SSD (734-763-3000; <http://ssd.umich.edu/>) typically recommends accommodations through a Verified Individualized Services and Accommodations (VISA) form. I will treat any information you provide as private and confidential.

Information about Mental Health and Wellbeing

The University of Michigan is committed to advancing the mental health and wellbeing of its students, while acknowledging that a variety of issues, such as strained relationships, increased anxiety, alcohol/drug problems, and depression, directly impacts students' academic performance.

If you or someone you know is feeling overwhelmed, depressed, and/or in need of support, services are available. For help, contact Counseling and Psychological Services (CAPS) at (734) 764-8312 and <https://caps.umich.edu/> during and after hours, on weekends and holidays or through its counselors physically located in schools on both North and Central Campus. You may also consult University Health Service (UHS) at (732) 764-8320 and <https://www.uhs.umich.edu/mentalhealthsvcs>, or for alcohol or drug concerns, see www.uhs.umich.edu/aodresources.

For a more comprehensive listing of the broad range of mental health services available on campus, please visit: <http://umich.edu/~mhhealth/>

Inclusion Statement

It is my intention that students from all backgrounds and perspectives be well served by this course, and that the diversity that students bring to this class be viewed as an asset. I welcome individuals of all ages, backgrounds, beliefs, ethnicities, genders, gender identities, gender expressions, national origins, religious affiliations, sexual orientations, socioeconomic background, family education level, ability – and other visible and nonvisible differences. All members of this class are expected to contribute to a respectful, welcoming and inclusive environment for every other member of the class. Your suggestions are encouraged and appreciated.

Laptop/Cell Phone/Technology Policy

This class is, in part, about technology and learning. And we will use technology in many ways throughout the course. It is important for you to bring a laptop and cell phone to class with you. If you do not have a laptop, that is OK. Just let your team leader know so that we can make accommodations when necessary.

HOWEVER – there will be NO laptops or cell phone during lectures unless otherwise noted. Notes must be taken on paper. All lecture slides will be made available (on Canvas) after the lecture, so you do not need to worry about writing down exactly what is presented, and there is no need to photograph any slides. Use of laptops or cell phones (etc.) during lecture times may result in your attendance grade for the day being reduced to “Not All There.”

This policy is based on good research about the negative effects of laptops during lecture not just on your learning, but on the learning of those around you. For more information, please see a summary of this research here:

<https://www.nytimes.com/2017/11/22/business/laptops-not-during-lecture-or-meeting.html>
or <https://nyti.ms/2jNTRdS>

If you have a particular learning need that requires you to use a laptop to take notes, please speak with the professor.

Rules of the Class

- You get *out* of class what you put *in* to class.
- *All* ideas are worth consideration.
- Everyone is responsible for *their own* learning.
- Everyone is responsible for *everyone else's* learning.
- Only *YOU* are responsible for the quality of your work.
- There is no such thing as “Fight Club.”

Pay Attention!

I reserve the right to change this syllabus at any time and will notify the class of changes when they occur. These may include additions or changes to the readings or assignments. Please pay attention to class announcements, both in class and on-line, to learn about any updates or changes!

Acknowledgements

Special thanks to Caitlin Holman, who leads the design of GradeCraft and the grading system for this class, plus many other graduate students who have helped support this class through the years. Thanks also to Joe Blatt and Chris Dede (Harvard), Eric Klopfer (MIT), Alice Robison (ASU) and Mika Lavaque-Manty (Michigan) for their feedback on the design of this course. Special thanks to the many students who have taken previous versions of this course and offered invaluable feedback to guide my continual efforts to improve it.

EDUC/DIGITAL 333: Video Games & Learning

2020 COURSE SCHEDULE*

Week 1 – What is this Course? How are we allowed to study video games?

Readings for Week

There are no readings for the first week of class. Get started on the Week 2 readings!

Thursday, January 9th

- Make sure to sign in to class (both registered and wait list students).
- Introduction to class and overview of syllabus, assignments, and grading scheme.
- Instructions for quick online team survey (necessary for team formation).

DUE by Friday, January 10th at 4pm

Complete the survey for team assignments – look for the survey in your email (check your spam folders and the promotions tab in Gmail). It'll take 3 minutes or less to complete. Just do it!

Week 2 – Gee, I never realized video games were so involved...

Readings for Week

Gee, J. P. (2005). Learning by design: Good video games as learning machines. *E-Learning*, 2(1), 5–16.

Read Gee's 36 learning principles at <http://edurate.wikidot.com/the-36-learning-principles>

(These are taken from Gee, J. P. (2003). *What video games have to teach us about learning and literacy*. New York: Palgrave Macmillan.)

Groff, J., Clarke-Midura, J., Owen, V. E., Rosenheck, L., & Beall, M. (2015). *Better learning in games: A balanced design lens for a new generation of learning games*. Cambridge, MA: Learning Games Network and MIT Education Arcade. Retrieved from <http://education.mit.edu/wp-content/uploads/2015/07/BalancedDesignGuide2015.pdf>

Fishman, et al. (in progress). *Guide to Being Scholarly in EDUC 333*.

DUE on Monday, January 13th at 11:59pm

Your first reading quiz, about the Gee and Groff et al. readings and the *Guide to Being Scholarly in EDUC 333*. Be on the lookout for an email from Qualtrics on Sunday evening – we use Qualtrics surveys for reading quizzes. The survey quiz will open on Sundays at 8pm and close at 11:59 pm on Monday nights.

Tuesday, January 14th

- Lecture: What are games and what makes games good learning environments?

Thursday, January 16th

- Lecture: The balanced design model and its roots.
- Meet your team. Come up with a team name and start designing a banner.
- Explore and critique games for balanced design.

DUE on Thursday, January 16th

Game play selection paper. Submit to GradeCraft by 4pm.

***Schedule and readings are subject to change.
Pay attention and always check GradeCraft for the latest!**

Week 3 – What is Learning? I Have a Theory About That.

Readings for Week

Bransford, J. D., Brown, A. L., & Cocking, R. R. (Eds.). (2000). *How people learn: Brain, mind, experience, and school* (Expanded ed.). Washington, D.C.: National Academy Press.

Read Chapter 1 – “Learning: From Speculation to Science”

Read Chapter 2 – “How Experts Differ from Novices”

Read Chapter 3 – “Learning and Transfer”

Selwyn, N. (2011). *Education and technology: Key issues and debates*. London: Continuum.

Read Chapter 4.

DUE on Monday, January 20th at 11:59pm

Reading quiz – watch for the email from Qualtrics on Sunday evening.

Tuesday, January 21st

- Sit with your team starting today!
- Lecture: Learning theories.

DUE on Wednesday, January 22nd at 4pm

Quiz on the Grading System. Distributed via Qualtrics. Must be completed by 4pm.

Thursday, January 23rd

- Reminder: Sit with your team!
- Lecture: Expertise and Transfer.
- Scavenger Hunt launches.

Week 4 – What is Engagement and Motivation? Why should you care?

Readings for Week

Csikszentmihalyi, M. (2008). *Flow: The psychology of optimal experience* (P.S. Edition). New York: Harper Perennial. Read pp. 1-5 and 71-77.

Malone, T. W., & Lepper, M. R. (1987). Making learning fun: A taxonomy of intrinsic motivations for learning. In R. E. Snow & M. J. Farr (Eds.), *Aptitude, learning, and instruction: Cognitive and affective process analysis* (Vol. 3, pp. 223-253). Hillsdale, NJ: Erlbaum.

DUE on Monday, January 27th at 11:59pm

Reading quiz.

Tuesday, January 28th

- First poster session.
- Get psyched up for a lecture on motivation!

Thursday, January 30th

- No formal class meeting today (but attendance points are still given).
- Your team will meet in a pre-arranged location.
- Use this time to finish up your team’s Scavenger Hunt Activities
- The Scavenger Hunt closes at 12 noon TODAY!

Week 5 – More Motivation! More Engagement!

Readings for Week

Rigby, S., & Ryan, R. M. (2011). *Glued to games: How video games draw us in and hold us spellbound*. Santa Barbara, CA: Praeger. (Read Chapters 2-4)

Roy, R. van, & Zaman, B. (2017). Why Gamification Fails in Education and How to Make It Successful: Introducing Nine Gamification Heuristics Based on Self-Determination Theory. In M. Ma & A. Oikonomou (Eds.), *Serious Games and Edutainment Applications* (pp. 485–509).
https://doi.org/10.1007/978-3-319-51645-5_22

DUE on Monday, February 3rd at 11:59pm

Reading quiz.

Tuesday, February 4th

- Second poster session.
- Lecture: Self-Determination Theory (the key).

Thursday, February 6th

- Team Time: Discussion of motivation, exploration of games for motivation design(s)

DUE on Friday, February 7th at 4pm – First Learning Game Review paper

The first “learning game review” paper is due today by 4pm on GradeCraft, if you choose this assignment option. Remember, you can choose to write one of these up to 3 times, but you can only do all three if they are spaced according to the posted due dates.

Week 6 – School is a Terrible Game... Could we make it a better one?

Readings for Week

Salen, K., Torres, R., Wolozin, L., Rufo-Tepper, R., & Shapiro, A. (2011). *Quest to Learn: Developing the school for digital kids*. Cambridge, MA: MIT Press. (Excerpts posted on Canvas – please read all.)

Toppo, G. (2015). *The game believes in you: How digital play can make our kids smarter*. New York: St. Martin’s Press. (Read Chapters 4, 6, and 7)

Darvasi, P. (2016). The Ward Game: How McMurphy, McLuhan, and MacGyver might free us from McEducation. In C. Williams-Pierce (Ed.), *Teacher pioneers: Visions from the edge of the map* (pp. 70–105). Pittsburgh, PA.

DUE on Monday, February 10th at 11:59pm

Reading quiz.

Tuesday, February 11th

- Guest Speaker: Paul Darvasi, Royal St. George’s College, Toronto.

Thursday, February 13th

- Third poster session.
- Lecture: Some thoughts on school.
- Team Time: Redesign something from your school experience.

Week 7 – Serious Games: This Class May Save A Life. Or A Job.

Readings for Week

BioMojo. (2019). *Virtual Patient Experience*. NIH SBIR Phase 1 Grant Proposal. Morrisville, NC.

Kelly, H., Howell, K., Glinert, E., Holdin, L., Swain, C., Burrowbridge, A., & Roper, M. (2007). How to build serious games. *Communications of the ACM*, 50(7), 45-49.

Annetta, L. A. (2010). The “I’s” have it: A framework for serious educational game design. *Review of General Psychology*, 14(2), 105–112.

DUE on Monday, February 17th at 11:59pm

Reading quiz.

Tuesday, February 18th

- Fourth poster session.
- Team time.
- First Round of Jeopardy! Tournament

Thursday, February 20th

- Guest Speaker: Jerry Heneghan, BioMojo and UNC School of Pharmacy

DUE on Thursday, February 20th at 4pm – First Individual Project Proposals

First Individual Project Proposal Forms – get the form from Canvas, fill it out, and upload the form to GradeCraft.

Week 8 – Research, Evaluation, & Assessment – How Do You Know?

Readings for Week

Clark, R. E. (2007, May-June). Learning from serious games? Arguments, evidence, and research suggestions. *Educational Technology*, 56-59.

Fishman, B., Riconscente, M., Snider, R., Tsai, T., & Plass, J. (2015). *Empowering Educators: Supporting Student Progress in the Classroom with Digital Games (Part 2: Case Studies of Game Features Used to Support Formative Assessment Practices)*. Ann Arbor: University of Michigan.
<http://gamesandlearning.umich.edu/agames>

Shute, V., Kim, Y.J., & Razzouk, R. (n.d.) Evidence Centered Design (ECD) for Dummies. Retrieved from <http://myweb.fsu.edu/vshute/ECD.pdf>.

DUE on Monday, February 24th at 11:59pm

Reading quiz.

Tuesday, February 25th

- Fifth poster session. (LAST poster session of round 1!)
- Guest Speaker: Seyedahmad Rahimi, Florida State University

Thursday, February 27th

- Lecture: How to know what you know (Social Science research methods).
- Jeopardy! Tournament Finals.

DUE on Thursday, February 27th at 4pm – Second Learning Game Review Paper

Another “learning game review paper” is due today by 4pm on GradeCraft, if you choose this assignment option. This is the second of three due dates for a “learning game review” paper. Remember, you can choose to write one of these up to 3 times, but you can only do all three if they are spaced according to the posted due dates.

Week 9 – “Spring” Break (No Class Meetings)

Take a break! (Why not play a game to relax?)

You might also want to get a head start on reading *Ender’s Game* while you’re on the “beach.”

Week 10 – Ender’s Game

Readings for Week

Card, O. S. (1977). *Ender’s Game*. New York: Starscape.

DUE on Monday, March 9th at 11:59pm

Reading quiz.

Tuesday, March 10th

- Review of the first half of the term.
- Overview of the rest of the term.
- Team time – Models of Education in *Ender’s Game*.

Thursday, March 12th

- Guest Speaker: Kelly Yuen, Nearpod.
- Team time – What do you know? What do you want to know?
- Team time – Start working on Augmented Reality Games

DUE on Thursday, March 12th at 4pm – First Individual Project

First individual paper/project (if you are doing one), by 4pm on GradeCraft.

Week 11 – Gender, Identity, & Gaming

Readings for Week

Subrahmanyam, K., & Greenfield, P. M. (1998). Computer games for girls: What makes them play? In *From Barbie to Mortal Kombat: gender and computer games* (pp. 46–71). Cambridge: MIT Press.

Lien, T. (2013, December 2). No girls allowed. *Polygon*. Retrieved December 8, 2013, from <http://www.polygon.com/features/2013/12/2/5143856/no-girls-allowed>

DUE on Monday, March 16th at 11:59pm

Reading quiz.

Tuesday, March 17th

- Sixth poster session (Start of second round poster sessions – but only if you have done a first poster!)
- Lecture on gender and games. The Bechdel Test for games.

Thursday, March 19th

- Team time.

Week 12 – Computational Thinking and the Culture of Learning

Readings for Week

Brennan, K., & Resnick, M. (2013). Imagining, creating, playing, sharing, reflecting: How online community supports young people as designers of interactive media. In C. Mouza & N. Lavigne (Eds.), *Emerging Technologies for the Classroom* (pp. 253–268). New York: Springer.

Resnick, M. (2017). *Lifelong Kindergarten*. Cambridge, MA: MIT Press. (Read Chapters 1, 5, & 6)

Ito, M., Gutierrez, K., Livingstone, S., Penuel, W. R., Rhodes, J., Salen, K., ... Watkins, S. C. (2013). *Connected learning: An agenda for research and design*. Irvine, CA: Digital Media and Learning Research Hub.

DUE on Monday, March 23rd at 11:59pm

Reading quiz.

Tuesday, March 24th

- Seventh poster session.
- Lecture on Badges and other forms of credentials for learning.

Thursday, March 26th

- Guest Speaker: Dr. Karen Brennan, Harvard University.
- Team time - Scratch.

DUE on Thursday, March 26th at 4pm – Declare ALL Final Projects! **(BOTH group and individual)**

If you are planning to do a group game design project, form your team and topic for approval on GradeCraft! If you haven't formed a team and named a topic by this date, you're going to have a bad time!

If you are planning to do a second individual project, please also submit a proposal for approval by your team leader by today!

Week 13 – Extended Reality: MMOs, ARGs, & Minecraft

Readings for Week

Barnett, J., & Coulson, M. (2010). Virtually real: A psychological perspective on massively multiplayer online games. *Review of General Psychology, 14*(2), 167-179.

Brown, J. S., & Thomas, D. (2006). You play *World of Warcraft*? You're hired! *Wired, 14*.

Schifter, C. C., Cipollone, M., & Moffat, F. (2013). Piaget, Inhelder and “*Minecraft*.” *International Association for the Development of the Information Society*. Fort Worth, TX. Retrieved from <https://eric.ed.gov/?id=ED562248>

Checa-Romero, M., & Gómez, I. P. (2018). *Minecraft* and machinima in action: Development of creativity in the classroom. *Technology, Pedagogy and Education, 27*(5), 625–637. <https://doi.org/10.1080/1475939X.2018.1537933>

DUE on Monday, March 30th at 11:59pm

Reading quiz.

Tuesday, March 31st

- Team time – ARG design and testing.

Thursday, April 2nd

- Eighth poster session.
- Lecture: Virtual Worlds, Augmented Reality, and Virtual Realities.
- Team Time – Continued ARG design and testing

DUE on Thursday, April 2nd at 4pm – Group Game Design Learning Goals & Overview

If you are working on a Group Game Design project, submit a brief overview of your game and its learning goals. Describe the *learning goals* for your game. What will players learn? Describe the setting, gameplay, mechanics, content area, etc. Tell us what your game is about. (This is *optional* but strongly encouraged)

Week 14 – Hulk Angry! (Violence & Cheating in Video Games)

Readings for Week

Gee, J. P. (2007). *Good video games + good learning*. New York: Peter Lang. (Read Chapter 2: Video games, violence, and effects: Good and bad, pp.13-17)

Ferguson, C. J. (2010). Blazing Angels or Resident Evil? Can violent video games be a force for good? *Review of General Psychology*, 14(2), 68-81.

Consalvo, M. (2005). Cheating can be good for you: Educational games and multiple play styles. *On the horizon*, 13(2).

DUE on Monday, April 6th at 11:59pm

Reading quiz.

Tuesday, April 7th

- Lecture on violence, cheating, and video games
- Team Time for discussion, violence, and cheating.

Thursday, April 9th

- Ninth poster session. Last chance dance – make sure you are signed up!
- TaleBlazer Competition on the Diag! (Weather permitting, fingers crossed.)

DUE on Thursday, April 9th at 4pm – Group Game Design Assessment & Logic Model

If you are working on a Group Game Design project, tell us how you plan to assess player learning in your game. Present a draft *logic model* depicting how interaction with your game leads to desired outcomes. See the Research Methods lecture for examples. (This is *optional* but strongly encouraged.)

DUE on Friday, April 10th at 4pm – Learning Game Review Paper (Third and Final Chance)

A final “learning game review paper” is due today by 4pm on GradeCraft, if you choose this assignment option. This is the *last* opportunity to write a “learning game review” paper.

Week 15 – The End?

No Readings for Week

Tuesday, April 14th

- This date is held for topics that interest us as a group, but which we haven't gotten to yet!
- Consultations with professor and team leaders about final projects.
- (Rain date for TaleBlazer competition.)

Thursday, April 16th – Last class Meeting

- Poster presentations for Group Game Design Projects.
- Wrap-up lecture (one for the road).

DUE on Friday, April 17th at 4pm – Final Game Play Reflection Paper

Final game play reflection paper due! See GradeCraft for rubric. Must be posted to GradeCraft by 4 pm.

Week 16 – Post-Credits Scene

Tuesday, April 21st — No Class Meeting

DUE on Tuesday, April 21st at 4pm – Final Group & Individual Projects

All final group and second individual projects are due! Must be posted to GradeCraft by 4 pm.

*Don't forget to provide course feedback with your online evaluation!
Your feedback is crucial to improve this class for future players.*

