Intro GD Unit 1 - Mods and Intro

The first and shortest unit of game design for new students. Introduces the structure and concept of the class, gets started with a “yes, you can design a game!” low-pressure assignment to mod an existing game as a solo project, but playtested with one partner who’s modding a different game. Students should understand that this assignment is a fast process (~1 week) and not expected to be perfect, quite the opposite. The second short assignment is a short (~5 slides) pitch presentation of an original idea that students develop and communicate solo.

**Major Assignment I:** Game Modification (usually assigned first session of week 1, due first session of week 2)

**Major Assignment II:** Game Pitch (usually assigned first session of week 2, due first session of week 3)

### Educational Goals for Unit 1

- get comfortable with modding as a natural way to fork new game ideas
- giving and receiving feedback as a form of respect for creative process
- basics of the iterative process: create, get feedback, refine, repeat
- articulating and communicating ideas about games; what does your audience need to know?
- structure and format of the class
- basics of interactivity and systems (which can be questioned / made complex!): the choice-outcome atom, making outcomes discernible through feedback, making choices integrated to affect later states & choices
- (possibly) why this class starts with rules, then moves to play/experience, and then culture
- (possibly) what does a game designer do? and the essential qualities of communicating, collaborating and listening
- (possibly) how to be a good collaborator

### Class-by-Class Lesson Plan

Sample lesson plans by Eric with times for each activity in each class, both days of each week in this unit.

**Week 1, Class 1: First Session**

**Pre-Class Prep**

- print a copy of your syllabus for each student, plus yourself and TA
- print a set of rules for the moddable 2-player card games (four games, so one set per four students): [2-player card game rules.pdf](https://example.com) or [2-player card game rules.docx](https://example.com)
- prepare video of Objectified on a laptop hooked up to the classroom projector, cue to 5:23: [https://www.dropbox.com/s/tbjjwf55xrqnbtw/Objectified.zip](https://www.dropbox.com/s/tbjjwf55xrqnbtw/Objectified.zip)
- decide on readings (see bottom of page) and how you want to distribute them (print, Slack, download from a file repository, etc)

**Introductions** (15 minutes)

- introduce yourself, do preferred pronouns to model (see also our current Names and Pronouns best-practices document for adjuncts, Fall 2019)
- have students introduce themselves with name, preferred pronouns, and an icebreaker question (possibly “what interests you about game design?” or “what does a game designer do?” – at orientation they will usually have been asked “what’s the last game you played?” and “what is game design?”)
- discuss answers to the question; of various answers that may have come up about game design, most or all answers are probably correct?

**Watch and Discuss Objectified** (15 minutes)

- play Objectified from around 5:23 to 10:35 – discussion of designing peelers, shears, other tools for accessibility, affordance
- discuss what students noticed, what they thought was interesting
- how does this relate to game design, or what's different? (Commonalities: research, rapid prototyping, collaboration, designing for a context, thinking about extremes of users, making up your own process…)

**Exercise: Modify Rock-Paper-Scissors** (45 minutes) – See below

**Discuss the big ideas of this class** (20 minutes)

- this can and should be different for every instructor and may involve what brought you to game design and/or development, how you think about it
- the class is structure into three large parts: Rules, Play, and Culture. Why is this? Are rules the most important part of a game? (No, but one potential thing to discuss is why it’s easy to learn them first. They’re like a skeleton: not sufficient to describe an organism, but helpful for structure and getting started in hanging the fuller flesh on the dry bones.)
- why do we talk about games as design instead of or in addition to games as art?
- what does “formal” mean in the context of game design?
- what are rules, anyway? (this leads into the next exercise)
**Exercise: Modify Tic-Tac-Toe (45 minutes) – See below**

**Hand Out Syllabus (15 minutes)**

- Keep this brief! Discuss structure and description of the class
- **What it is:** non-digital, collaborative, project-based, with reading & writing
- **What is isn’t:** scholarship, history, theory
- Be sure to describe any expectations around quizzes, preparation for discussion of reading, and attendance/tardiness
- Answer any questions

**Major Assignment: Game Modification (10 minutes) – See below**

**Assign Readings for Next Class – See Readings section below**

---

**Week 1, Class 2: First Lab**

Recommended that instructor does not come to this very first lab, to allow students to be less self-conscious / observed and to struggle with each other. Also to set expectations that instructor isn’t present for all labs!

**Expectations for Students** (can tell them these at end of previous class but should also remind via e-mail, Slack or TA): Work in-class on your Game Modification assignment. Discuss with your playtest partner what is not working about your game and what your design is doing to fix it. Bring in some ideas for your design, try them out and evolve your game design.

**Instructions for TAs:** make sure all students have playtested their game with at least their original partner. Assist with discussing and analyzing games, troubleshooting.

---

**Week 2, Class 1: First Major Assignment Due (Game Mod)**

**Pre-Class Prep**

- Make sure students have been able to print their game rules. Suggestion: use Dropbox (file request or shared folder), Google Drive (shared folder) or Slack file uploads to collect everyone’s rules, then print them on the faculty printer before class. (This is currently unlocked, available for any adjunct or full-time faculty, and you should have received an e-mail with the IP address and link to drivers!)
- Prepare examples of pitch decks

**Discussion of Readings (30 minutes)**

- **Primer for Playtesting (Pozzi & Zimmerman)**
  - this is more for background at this point – to expose them to the ideas of playtesting for future projects, starting with Mechanics Game. "We’ll be coming back to the ideas here many times."
  - did the students see anything in the reading that helped with their process of making & revising the modification game? (To be clear, there’s no requirement to do a lot of playtesting, which is why you have a partner to work with!)
  - **BIG IDEA:** you should know why you are playtesting, have a main question you’re asking. Don’t just playtest for its own sake, have a purpose, something you want to find out.
  - Useful techniques: not speaking, just listening & waiting for player to talk more; answer a question with a question; collaborate with players, it’s OK to get ideas from them
  - **Advanced idea:** After you understand the benefits of playtesting, you can also realize playtesting is not universally good! Might not apply for intensely personal games; games for a very particular audience or based on expert information might not benefit from being playtested more widely; and sometimes existing expectations from cultures of play can conflict with creative goals!

- **Rules of Play Chapter 6: Interactivity (Salen & Zimmerman)**
  - In the first third of this class, we’re discussing games from a formal lens, or "Games as Systems."
  - What are the parts of a system? Some possible answers from the chapter:
    - elements (one part of a system)
    - attributes or qualities (distinguishing features of elements, including their position, current state, etc)
    - relationships (how elements are connected to or change each other’s qualities)
    - contexts (what elements or whole systems are situated in that helps create meaning, e.g. cultural context or expectations of play, etc.)
  - Other possible answers that might come up in brainstorming but aren’t as tied in with reading:
    - boundaries (limiting the edges or extents of what’s possible)
    - outcomes (at what point might the system resolve/conclude)
    - agents (players, actors, users, AIs or NPCs, etc)
    - processes (how elements and relationships change within a system)
    - resources (elements tracking a quantity of some sort that can change)
  - Example from Rock-Paper-Scissors. What are the elements? Players (also agents), the three symbols, the countdown (also a process). Attributes? What the symbols look like / related words. Relationships? Between symbols and players
(winner/loser/tie). Context? Related to the form, ideas of balance or “checks” on each other, circular balance. Or related to attributes, rock-scissors-paper or panther-person-porcupine? Also context as a kid’s game, a method of deciding things, etc.

- Interacting with systems can create meaning (but not just from structure, from context too!)
- **BIG IDEA:** choice-outcome atom, and how they can connect, with each choice adding up to influence later states and choices. One way (just one way!) of looking at games: a series of decisions that have outcomes.
  - Quick Exercise to demonstrate: Choices in a digital RPG. Ask the class why a player might choose a 2-handed battleaxe over a small dagger or vice versa. How many ways might this single decision have ramifications later on? It should be possible to brainstorm many different vectors: price, weight or inventory space, damage, speed, reach, how many hands are needed, player class or level limitations, appearance or visual style, narrative reasons, complimenting another player’s strategy, etc. Because a RPG has many upcoming situations (many battles) the ramifications of this choice will play out again and again.
  - Negative Example: Imagine playing a game where you’re piloting a spacecraft around a screen, firing a laser at various elements on the screen. Then you die suddenly... but you don't know why you died! Various possibilities could exist: an enemy shot hit you, or you fired too rapidly and overheated, flew into a hazardous, area of the screen, or died when time ran out. How would you know? Each of these possible systems needs different feedback (whether visual, audio, textual, etc) to complete the choice-outcome atom, which is only finished when the player understands it. (The “atom” exists as much or more in a player’s mind as in a CPU or on a game board!) Even with the same exact choices and outcomes, with poor feedback the atom can break down. Of course, designers may choose to break this idea on purpose, to create ambiguity, confusion, or misinformation — but evoking those feelings is more effective if you also understand how to foster clarity, understanding, and learning!

- Related ideas (from Rules of Play Chapter 6: Meaningful Play): how do you know if a choice is interesting, significant, working well for your game? One way is to look at whether the choice is both discernable (“what just happened, and how does it relate to my goals, etc?”) and integrated (“the result of the choice has not only immediate but longer-term effects that affect player later on”).
  - Chess has many integrated choices, because every piece you move is potentially related to all the other pieces and their positions. How the two players start out moving pieces affects what happens in the middle of the game, which leads towards the end.
  - Asteroids has discernible choices: when you fire, you see the direction of your shot and whether it hits (intersects with) an asteroid. The latter is very significantly discernable, as the asteroid will break up into smaller asteroids! Similarly the player knows if they were hit by an asteroid, as the ship will break apart. The integrated choices are here too: as you break up more asteroids, you have many more small, faster-moving targets to deal with and shoot or avoid.

**Major Assignment: Game Pitch** (10 minutes) – See below

**Assignment Due: Game Mods** (120 minutes)

- Before you start, talk about critique. “Thoughtful and supportive criticism is the highest form of respect that one designer can give another designer.”
- What to expect (emphasize these for students before / during critique!)
  - Definitely some of the games will not work.
  - They will be broken. Maybe even worse than the originals.
  - That is OK. That is why we are here. To learn from each other.
  - The “failures” are the most instructive. Maybe they were more ambitious.
  - A failed experiment is better than a safe but successful design.
- Explain how process will work (play each game for a short amount of time).
- Since it's one game from each student, with some time to discuss/critique and some time to “switch to the next game,” you will get through maybe half of the games today, half next class (lab). (However: all games are due at the same time, today! Rules are locked!)
- It might be best to play all of the games of one modification together (all of the memory mods, all of the War mods, etc). One way to save time: instead of doing feedback, comment and critique after each game, play a set of games (all 4 of the same type) and then do comparative discussion of all of them together.
- The students should have rules to look at... but don’t try to play game from rules. It will take too long to explain, especially if the rules are confusing or ambiguous. Have students explain how to play.
- As you are playing, other students can pair up and play with their own card decks!
- Discuss quickly what did and didn’t work
- Be sensitive to students not used to criticism. Critique can be difficult, and we're practicing it together as a form of respect.
- Probably: several games will just not have moments of meaningful choice. This is really useful, could be worth pausing to discuss.

**Assign Upcoming Readings** – See Readings section below and for next week see Reading section in Unit 2: Mechanics and Structure

**Remind Students: Elevator Pitch (30 seconds) for next class!**

**Week 2, Class 2: Elevator Pitch Lab**

Instructor *should* come to this lab for two reasons: you’ll almost certainly have to finish playing the game modifications from last class! Also, students will do their elevator pitches.

**Elevator Pitches** (20 minutes, 30 seconds per student + reaction)
Discuss the need for an elevator pitch. What is an elevator pitch? Well, it's a description of an idea, project, game etc. that you can tell someone quickly, when there's limited time or attention span to get across what it's all about. The added benefit is that it can help you sharpen your focus: what's the most important / useful / significant thing someone should know about your game? What do they need to know?

Each student gets 30 seconds to pitch, on a tight clock. Immediately after they finish, ask the group: what's missing? What questions do you have about something missing that isn't letting you fully understand the idea?

Talk about the content of the ideas, but briefly; emphasis should probably be on communication.

Share student pitch slides from previous projects if you didn't do that last class.

Answer any questions about final slideshow (4 slides!)

Discuss Reading (10-15 minutes)

Design is a Job (Monteiro)

- This reading is a little macho, frankly. It comes from advertising culture, where a lot of graphic & interface designers have to work! It's OK to admit & discuss that.
- Ask students what they found useful or interesting in this reading. Conversely, what they found off-putting or hard to understand?
- Some "tips" that might be worth discussing:
  - "It's not going to sell itself." The idea that you have to frame and present creative work, to orient an audience's expectations and understanding of your creative goals. How do commercial products do this without ever being presented? Pre-existing genre conventions, box artwork, advertising messages, etc. There's often some message "telling people what to think," and in a presentation it's part of what you can do, in person.
  - Why is it important to present your own creative work? Ideas of authenticity, and direct communication, rather than going through intermediaries. Be able to speak for yourself, and you're less likely to be misrepresented!
  - Have an agenda. Another way of putting this is "tell people what you're going to tell them" (before you tell them in detail). Sets expectations.
  - Confidence – not apologies or arrogance. Gain confidence by doing the research, putting time into your own work, and feeling happy with where you've gotten to.
  - Explain your goals clearly
  - Don't be afraid of criticism or being wrong – coming across as defensive seems much less confident than being open to discussing mistakes, criticisms or alternate views (within reason)
  - End on time (ideally with time for questions, reactions and discussion)

Finish playing and critiquing game modifications (120 minutes or however much is left – see previous class)

Use remaining time for students to work on their slideshows for next week. Answer questions / give feedback if necessary. They can rehearse their presentation with each other if they're ready. Best to emphasize tight focus (just choose a few most-important ideas to get across) and clear visuals (one or a few large images, not an incredibly complex slide with tons of sub-sections or bullet points).

Instructions for TAs: Keep time for pitches! Be available for feedback on slideshows; could take students aside privately if they're nervous about rehearsing.

Week 3 Class 1: Game Pitch Presentations

Half of this class is described in Unit 2: Mechanics and Structure since it's the end of this unit and beginning of that one!

Pre-Class Prep

- Make sure students have uploaded their presentations to a Google Drive shared folder, a Dropbox folder or file request, your Slack channel, etc. Presentations should all be one on machine, so that switching to the next one is easy! (Tip: if a TA's laptop is being used for presentations, you can use your own to take notes! Or you can do so on your phone, tablet, notebook, etc.)
- Things will go even quicker if you have a pre-determined order for presentations (random order, or however). Have your TA write it on the board.
- Print any materials for collaboration exercise (For the start of Unit 2: Mechanics and Structure)
- Print and cut Mechanics and Material Cards for Mechanics Game assignment (For the start of Unit 2: Mechanics and Structure)
- Familiarize yourself with the Mechanics Assignment Infosheet so you can answer questions about the cards. (For the start of Unit 2: Mechanics and Structure)

Pitch Presentations (half of class or more depending on how many students and time limit you gave them)

- Students present, one-by-one. Let students know who is "on deck" (going next) so they're ready.
- Give students a one-minute warning and cut them off when their time reaches zero. TA can keep time.
- To save time if necessary; have groups of 3-4 students present back-to-back, then discuss them as a group, making comparisons and contrasts as applicable.
- Comments shouldn't just focus on the idea; in addition, discussing basic speaking techniques is probably very useful!
  - make eye contact with someone friendly, look up so that your airway is open, don't forget to breathe!
  - if your voice is quiet, some basic tips include: be sure to take deep breaths all the way to the bottom of your lungs, which are larger than the top; get your whole chest involved in speaking, not just your throat; imagine that the space of your mouth is bigger so that your voice will become bigger – this relaxes your mouth muscles and accomplishes that; focus on articulating your words carefully. All these things can make you heard without your voice getting louder!
  - if you feel comfortable, you can also communicate with your hands, or move around a little bit to liven it up
  - confidence helps people pay attention to you, and the majority of confidence is just "pretending to be confident until
you're good at pretending that you're confident"

Brainstorming / Collaboration Exercise – see Unit 2: Mechanics and Structure

Major Assignment: Mechanics Game – see Unit 2: Mechanics and Structure

In-Class Exercises

Exercise: Modify Rock-Paper-Scissors (45 minutes)

This exercise involves embodied play, how structures can help create meaning, and modifications that aren't all about structure or logic.

1. Basic Version: Have 2 volunteers demonstrate vanilla Rock-Paper-Scissors 1 vs 1
2. Team Mod: Now try group vs. group, with equal size groups (can split class in half): the whole group must discuss secretly and decide what symbol to show
3. Flavor Mod: Add a theme: Panther-Person-Porcupine. Panthers beat people, obviously. Porcupines beat panthers because they'll get pricked in the nose. But people beat porcupines because people can wear boots or gloves to step on or handle the porcupine. (Yes, that's the sketchiest one, kind of like paper covering rock...) When picking a symbol, each group must also decide how to represent panther, or person, etc. (Person is usually pretty funny as a relative representation.)
4. Physical Mod: Add physical challenge. Mashing up is one way to mod, so let's mash up tag and rock-paper-scissors! When there's a tie, nothing happens. But if one side wins, then each player on the winning side (e.g. panthers winning over people) must physically tag the opponent across from them in order to win. Note that this does not have to be an extreme physical competition, and it may be good to set limits on speed.

Discuss how each of these mods changes the experience in a different way (social, thematic, embodied).

Exercise: Modify Tic-Tac-Toe (45 minutes)

This exercise involves analyzing and articulating rules, rapid modification via elements of game structure, writing rules, and playtesting.

1. Analyze Tic-Tac-Toe. As a class, list out the rules of Tic-Tac-Toe. Here's the instructor's cheat sheet, see if all these get covered:
   - play takes place on a 3x3 grid
   - 2 players take turns placing either an X (first player) or an O (second player) in an empty square on the grid
   - 3 in a row wins
   - if no player can place a mark, it's a tie
2. Split into groups of two to modify the rules of Tic-Tac-Toe to create a new game.
3. Brainstorm what groups might modify. Common possibilities: board shape or grid size; types of pieces or marks; number of players; where you're allowed to play; win conditions; special spaces; moving pieces around, etc.
4. Modify the game structure. Groups can only change up to 3 rules! They should think about what they're trying to affect with these changes.

If there's enough time (30 minutes left out of 45) you can do step 5 and 6, otherwise skip to 7:

5. Write out modified rules. Explain how to play your game as clearly as possible.
6. Playtest each others' games. At least one other group should play each game, there's probably not time for more.
7. Discuss. Don't have every single group share their game, just ask for a few examples. Could have everyone share what they changed very quickly, or look at a couple in depth. Ask for any that felt particularly successful, maybe from the point of view of playtesters! Ask for a failure too, to show how we learn from broken games and that a "failed experiment" is valuable too.
8. What's the most successful mod of Tic-Tac-Toe? Well, if you change three rules (larger grid up to 7x6, four in a row instead of three, and marks must be placed in the bottom unoccupied square) you get Connect Four, a mod designed by Howard Wexler and Ned Strongin in the mid-70s. The cool part of their design isn't exactly a rules mod: it's flipping the board to make it more usable and experientially fun, taking advantage of gravity to make the third rule change simple to remember and use!
9. Extended version. Probably not time unless other exercises aren't done, but the above process can be repeated with Connect Four. The challenge with modding Connect Four is that it becomes difficult to keep adding and changing elements without it becoming extremely complex; talk about successes and failures here, including the idea that you could mod by simplifying / subtracting elements.

Major Assignments

Major Assignment: Game Modification

- Give each student one of the four sheets in the 2-player card game rules document. The four games are Game of Pure Strategy (pure budding game), War (purely random), Memory (pure skill), and Uno (pure Uno).
  - PDF: 2-player card game rules.pdf
  - DOCX: 2-player card game rules.docx
- After this, assign students to test with each other. They should be paired with another student who is modding a different game. Students are each responsible for handing in their own completed assignment (it's a solo project) but work together in pairs for purposes
of joint playtesting, brainstorming, feedback. If there is an odd number of students, have one group of three.

- They should play and discuss each game in their group to try to analyze it: what's working? What's not working? What might be changed to make the game more compelling or interesting?
- If there's time, have them try changing one or two rules and playtesting. If not, then tell them they can do this, or continue doing it, by meeting outside of class or in the next class’s lab.
- No matter what they should be prepared to come to the next class session (lab) with rules changes they want to try, or better yet, a prototype that's ready to play.

**Major Assignment: Game Pitch**

- **Solo assignment:** a chance to consider and pitch your very own idea, no matter how idiosyncratic. (Helps you get to know students & their style/influences better.) The downside is that this means ~16 presentations. Possible to do in pairs (~8 presentations) if you feel really short on time, but then you will have less clarity into individual students.
- **Parameters of the assignment:** any kind of game you want, digital or non-digital. Must be something that could be created with present-day technology – no sci-fi gaming ideas. Each student will have X minutes to present Y slides (see last bullet point).
- **Presentations will be evaluated on two factors:**
  - Is this an original, innovative and/or interesting concept?
  - How well was the concept communicated for the audience to understand it?

**Readings for Unit 1 - Mods and Intro**

**Assigned Week 1 to be discussed in Week 2**

**Standard Readings** (These readings are referenced in the lesson plan, tend to relate to unit educational goals, and are often from Rules of Play, but can be supplemented / replaced!)

- *Rules of Play, Chapter 6: Interactivity* (14pg) (definitions of interactivity, designing interactivity, choice-outcome molecules, anatomy of a choice, communication & feedback, possibility space)
- *A Primer for Playtesting* by Nathalie Pozzi and Eric Zimmerman (7pg)

**Alternative Readings** (Someone's assigned one or more of these in the past! Feel free to sample.)

- *Rules of Play, Chapter 3: Meaningful Play* (6pg) (meaningful play via Huizinga, discernable and integrated actions)
- *Art of Game Design* by Jesse Schell, Chapter 1 (7pg) (about what a game designer does, skills of a game designer, importance of listening)
- *Rise of the Videogame Zinesters* by Anna Anthropy, Chapter 3 (13pg) (what are games good for, basic definitions, rules, folk and authored games, meaning)
- "On Being the Right Size," J.B.S. Haldane (4pg) (the importance of scale in biology and human institutions)
- "The Fascination of the miniature," Steven Millhauser (8pg) (scale, modeling and simulation)
- excerpt from *Understanding Comics*, Scott McCloud (8pg comic) (how comics deal with abstraction & representation of motion, time, sound)
- "Mister O," Lewis Trondheim (3pg comic) (great little example of wordless sequential art creating a narrative)
- "Catalogue of Obsolete Entertainments," Adam Pennyman (3pg) (meaning and interpretation in the experience of *Pac-Man*)

...and for playtesting...

- *Game Design Workshop, Chapter 9* by Tracy Fullerton and Chris Swain (a more concrete and detailed framework for designing playtests)
- *How Indies Playtest*, slides by Naomi Clark (a series of quotes from various independent designers and developers about playtesting, ranging from methodical to loose or situations not suitable for playtesting.

**Note:** from 2013; includes some potentially problematic figures

**Assigned Week 2 to be discussed in Week 2**
Standard Readings (These readings are referenced in the lesson plan, tend to relate to unit educational goals, and are often from Rules of Play, but can be supplemented / replaced!)

- Design is a Job, Chapter 7: Presenting Design by Mike Monteiro (presenting creative work to clients, with confidence, clarity and openness)

Assigned Week 2 to be discussed in Week 3 -- See Unit 2