

**INTRODUCTION TO GAME DESIGN**

**Course:** VA 2000/3000-001 – Intro to Game Design (34762/34767)

**Term:** Spring Semester, 2011

**Start/End Dates:** January 18 – May 12; No class March 26, 28 (Break); Substitutes Feb. 8

**Day/Times:** Monday and Wednesday afternoons, 1:40pm – 4:20pm

**Room Location:** COB 209

**Instructor:** Devin Monnens

**Office Hours:** MW 12:30-1:30, after class, or by appointment

**Office Number:** COB 2052

**Email:** dmonnens@gmail.com

**Texts Needed:** Brenda Brathwaite & Ian Schreiber. *Challenges for Game Designers*. Course Technology, 2009. Additional required readings are listed at the end and are accessible online.

**Supplies Needed:** The game design toolkit (see below).

**Course Description:** VA 2000/3000 – Intro to Game Design is an entry level game design course where we will work with **rapid iteration**, **prototyping**, and **analysis** of paper-based and digital games. Working with board games and card games will allow us to understand how the elements of a game operate and provide a low technical barrier to entry. In addition, we will explore how meaning is produced through games by designing **artistic and socially conscious games with experimental gameplay**. You will learn **game design techniques**, **produce a portfolio of multiple playable games** to show to potential employers, and develop a **game design toolkit** for future projects.

**Course Objectives:** To explore the nature of game design as a craft of **fun and expression**; to **produce games** both physical and digital; to **create a game development toolkit**; and to **build a game design portfolio**.

**Evaluative Criteria:** I will not be grading you on how 'fun' your games are to play. Game design is a tricky business, and even the greats make stinkers once in awhile. Instead, I will be grading your game designs based on **assignment completion** and **following instructions**, as well as **what and how much you accomplished in the design**. In addition, I will be looking for your **reflective abilities** at recording and analyzing your work as well as the work of others.

**About the Professor:** Devin Monnens has an MFA in Electronic Media Arts Design from the University of Denver. His game development experience includes online trading card game (TCG) design at Sony Online Entertainment Denver, game translation, and the development of socially conscious games, one of which, *Giant Tank*, is part of the international Values at Play Archive. He is also a board member of the IGDA Colorado Chapter and the IGDA Game Preservation SIG. His interests and expertise include a wide range of other fields such as machinima and medieval literature.

**Grading Scale**

90-100 = A

80-89 = B

70-79 = C

60-69 = D

59 and below = F

**Please Note:** UCCS applies plus and minus percentages to the above as well.

**Grading Procedures**

<b>Game Design Blog</b>	Mandatory
<b>Game Designs (7 + 6 revisions)</b>	50%
<b>Game Design Portfolio</b>	10%
<b>Blog Design Notes</b>	20% (15% for 3000-level)
<b>Player Feedback</b>	10%
<b>Postmortems and Presentations</b>	10% (15% for 3000-level)

**Game Design Blog:** You are **required** to have a blog on Wordpress or another location on which you will discuss your games and course readings. It is important that a game designer have a space in which to share and record thoughts and ideas. We will set up this blog on the first day of class.

**Game Designs:** We will be producing game designs or revising existing designs every week. **We will create seven (7) games** based on game design challenges through the course of the semester and **revise these 6 times**. **50% of your grade** is based on how well you complete these assignments. You will not be graded on how 'fun' the games are, but rather on their **degree of completion in accordance with the assignment requirements**.

**Game Design Portfolio:** For the final class, you will be asked to pick a selection of your best work to include in a game design portfolio that you would present to a potential employer, including **one well-polished game**.

**Blog Design Notes\*:** Design notes include two components: **game design notes** and **reading responses**. You will be required to set up a blog on which you will post notes for your game designs and your game design process. Blog entries will include: **your approach to the design, the game's rules, and player responses**. You must have **at least one blog entry for each game, including game revisions**. **20% of your grade** is based on the completion of this work (**15% for 3000-level**).

**Reading responses** essentially answer the question, **“What is a game design rule I learned this week?”** Pick one illuminating topic from each week's readings and explain it (no rules for the final week). By the end of the semester, you should have **15 rules** in your blog.

**Player Feedback\*:** In addition to blog entries about your own games, you are required to provide constructive feedback to the games of other students. Students taking this at **2000-level are required to make at least one blog response** for each design challenge; **3000-level students must make at least two**. **10% of your grade** will be based on these responses. Responses should include feedback such as what worked and what didn't, emotions felt, and suggestions.

**\*NOTE: All blog entries and responses are due by midnight on Saturday.**

**Postmortems:** Postmortems are reflective analyses of what went right and what went wrong with your game design process. Postmortems are roughly 10-15 minutes long. There are two (2) postmortems: one for midterms and one for finals.

**Presentations:** 3000-level students are also required to do **an additional 10-15 minute presentation** on a reading of their choice from the list provided. The presentation includes a detailed explanation of the contents of the article, as well as a handout and discussion prompt.

**Required Readings:** The game design process includes both **design** and **research**. Game designers improve their skills by reading the works of other designers to better understand their design processes. You are therefore required to **read** these selected texts **and write a design lesson learned** from the texts on your blog.

**Challenges for Game Designers:** Your textbook for this course is written by Brenda Brathwaite and Ian Schreiber, professional game designers and instructors of game design. Read assigned chapters to learn basics of game design. Use the challenges in this book for inspiration.

**Other Readings:** We will have other readings available online and as handouts. Note that some of your readings are games, too! It is recommended you save or print copies of the readings to produce your own library of material for ease of use and note-taking. The department cannot provide handouts for everything.

**Play Games:** Similarly, game designers should play games. We will play a variety of games in this class, beyond those you and your fellow students create. You should play a wide variety of games, and not just MMO's and FPS. Play sports games. Play action games. Play platformers. Play RPGs. Play sidescrolling action games and shooters. Play puzzle games. Play wacky titles like *Katamari Damacy* and *Loco Roco* that don't easily fit in a single genre. Play artistic games like *Ico* and *Braid*. Play classic arcade games like *Pac-Man* and *Donkey Kong*. Play top-sellers like *Grand Theft Auto* and *Angry Birds*, and find out why people are talking about them. Play the crappy games and mediocre games. And play board games like *Settlers of Catan* and *Diplomacy*.

When you play games, **remember to think about them** rather than just have a good time. You should create a game play journal that talks about the game experience and what you think about the games you play. Put these observations onto your blog. What makes the game fun? If the game sucks, what makes it suck? How does the game work? **What does the player do?** Why did the designers make it the way they did? Did you lose track of time while playing it? These are informative questions that will help you analyze how games work. Remember too that if all you do is play *World of Warcraft*, all you'll be able to create is *WoW* derivatives, and that won't make you a successful designer.

**Required Materials – The Game Design Toolkit:** Introduction to Game Design is a studio art class. As such, it requires the purchase of art materials. In a drawing or painting class, you must purchase pencils, pens, charcoal, paintbrushes, and many other products from which you will make art. Without an artist's toolkit, you cannot produce art, and you will not succeed in those classes. Introduction to Game Design is the same, and requires you to construct a Game Design Toolkit.

**The Game Design Toolkit** is a toolbox you will create and use throughout the semester to construct games. Building a toolkit is required, and you will have to invest some resources into its construction. Some of these parts you can buy from local hobby shops, and other parts you can get from Wal-Mart, Target, and Jo-Ann Fabrics. Some you may already have lying around your home. Cost of the kit will vary depending on your materials and whether or not you already have some on hand, but the kit should run somewhere in the range of \$35-\$60. **Note that VAPA students can get a 10% discount at Ace Hardware for use on school projects.**

### **Game Design Toolkit Components**

You will need:

*Dice* – Multiple 6-sided dice (D6) are standard for generating random numbers, but I suggest you also investigate a variety of other dice as well. You can find these at most hobby shops.

*Notecards and business cards* – Blank notecards and business cards for producing playing cards.

*Black-backed card sleeves* – Black-backed sleeves will obscure card backs and aid in shuffling.

*Tokens* – A large number of glass beads or colored tokens of at least two colors, as well as figural tokens such as plastic army men. You can also buy in bulk and split the cost with your friends.

*Timers* – You should have a few egg timers or alarm timers to allow you to create time-based games.

*Scissors* – It is recommended you have some sort of cutting implement for craftwork.

*Markers, pens, and pencils* – Drawing can be part of design and gameplay!

*The box itself* – Fishing, tackle, and sewing boxes work great as they have many storage compartments.

*Monopoly Money* – It's always good to have a pack of these on-hand, but not required.

*Miscellaneous doodads* – Keep your eyes open for any bits that might be fun to use in a game.

Things that probably won't fit into your toolkit, but additional tools you'll need:

*Blank paper and construction paper* – These allow you to create multi-colored tokens easily.

*Graph paper and hex sheets* – You should have a good supply of these and be ready to produce more.

Incompetech lets you generate built-to-spec sheets: <http://incompetech.com/graphpaper/>

*Computer with printer* – You will likely need to print materials out for your games. The computer lab has these if you don't have access to a computer or printer, but charges for each printing.

*A paper cutter* – This tool is useful for trimming paper.

**Game Design Challenges:** Roughly every week, you will be assigned a Game Design Challenge. Game Design Challenges are assigned and explained in detail the week before they are due. Challenges include formal and/or conceptual constraints, and you must design a game based around them. Formal constraints include restrictions on elements like rules and materials. Conceptual constraints restrict elements such as theme and message.

**Constraints are traction for imagination** because they provide you with a list of tools you have to work with, and your job is to create something using only those tools. The toolbox contains many tools. Not all projects will require a rotary saw, and sometimes you may have to improvise in order to solve a problem that requires a rotary saw when you don't have one on hand. As such, you will test your creativity and inventiveness.

**Game Testing:** For game testing, you will be divided into groups. Playtest all the games in your group. Because the designer is not present to help players when a game is purchased from the store:

- The designer is not allowed to play his or her game.
- The designer cannot use anything other than the rulesheet to explain how the game is played.
- The designer will only step in if players are at a complete impasse.
- The designer will take notes and observations of player reactions.
- Players will take notes of their reactions to the game and what they liked or did not like.

After the testing session, discuss the game with your other team members before moving on to the next one. How do the players react to your game? Do the players get stuck and have to resolve obscure rules? Are they compelled to continue playing your game? If you are the player, make observations about how the game plays. Can you identify any rhetorical messages? Would you play the game again or let recommend it to someone else? What observations and recommendations do you have?

### **How to Use the Schedule**

**Special Topics:** These are a series of lecture and discussion topics that will be discussed on the date announced. These often relate to the readings.

**Game Design Challenges Due:** On these dates, the challenge listed will be due. Have your game available for testing. On the following day, we will finish testing games that have not been played on the first day and playtest revised games based on player feedback. **If your game was tested on Monday, revise it for a second playtest for Wednesday.**

**Reading Discussions:** On these days, we will be discussing the readings listed. Have these read and be prepared to discuss in class.

**Substitute Dates:** I will be attending several conferences this semester and will be reporting on the course blog about them. However, we will still have class on these days through a substitute instructor.

**Course Schedule**

<b>Date</b>	<b>Special Topics</b>	<b>Game Design Challenge Due</b>	<b>Reading Discussions</b>
<b>January</b> Wed. 18	Introduction to course, Definition of Games	None! - Play <i>Fluxx</i> E-mail your blog address	
Mon. 23	User-centric design, playtesting, journals	<b>Challenge 1: Basic Board Game</b>	Brathwaite p. 1-4; Tyler Sigman (skim)
Wed. 25	Verbs, Atoms, Brainstorming	In-Class Exercise	Crawford; Brathwaite p. 6-11, 25-35
Mon. 30	Iteration, Subtractive Design	<b>Challenge 2: Board Game Mod</b>	Brathwaite p. 19-20, Ch. 14; David Sirlin
<b>February</b> Wed. 1	<b>Census Date</b> Chance	Revise	Brathwaite Ch. 5
Mon. 6	Skill	Revise [Presentation: Warren Robinett]	Brathwaite Ch. 6; <i>Adventure</i>
Wed. 8	SUBSTITUTE/Pac-Man Postmortem		<i>Pac-Man</i>
Mon. 13	Risk and Reward	<b>Challenge 3: Play Spaces</b>	
Wed. 15	Digital to Physical, Meaningful Play	Revise/In-Class Exercise [Presentation: Richard Rouse III]	Brathwaite p. 59-61; <i>Centipede</i>
Mon. 20	Meaningful Play	<b>Challenge 4: Digital to Physical</b>	Salen & Zimmerman
Wed. 22	Balance	Revise [Presentation: Richard Bartle]	Brathwaite Ch. 8
Mon. 27	Writing rules and Clarity	<b>Midterm: Polishing a Game</b>	Brett Spiel; Greg Aleknevicus
Wed. 29	Postmortems	Revise	McMillan & Refenes
<b>March</b> Mon. 5		<b>Postmortems</b>	
Wed. 7	Digital Tools, Game Feel	<b>Postmortems/Tutorial</b>	Steve Swink
Mon. 12	Game Feel	<b>Challenge 5: Digital</b>	
Wed. 14	Rapid Prototyping	Revise	Chaim Gingold
Mon. 19	Socially Conscious Games	Revise	Brathwaite - Train
Wed. 21	Procedural Rhetoric	Revise/Proposals Workshop [Presentation: Ian Bogost]	<i>McDonald's Game</i> ; <i>Super Chick Sisters</i>
Mon. 26	<b>SPRING BREAK</b>		
Mon. 28	<b>SPRING BREAK</b>		
<b>April</b> Mon. 2	Procedural Rhetoric Analysis	<b>Challenge 6: Socially Conscious Game</b>	
Wed. 4	Meaningful Play	Revise	<i>The Marriage</i>

<b>Date</b>	<b>Special Topics</b>	<b>Game Design Challenge Due</b>	<b>Reading Discussions</b>
Mon. 9	Games as Art	Revise [Presentation: Ernest Adams]	Brathwaite Ch. 17; <i>Passage</i>
Wed. 11	Games as Poetry	Revise/Proposals Workshop [Presentation: Tale of Tales]	<i>Today I Die;</i> <i>Samarost</i>
Mon. 16	Art Game Analysis	<b>Challenge 7: Art Game</b>	
Wed. 18	Art Game Analysis	Revise [Presentation: Jonathan Blow]	<i>Gravitation</i>
Mon. 23	Art Game Analysis	Revise	<i>Knytt Stories</i>
Wed. 25	Art Game Analysis	Revise [Presentation: Brian Moriarty]	<i>But That Was</i> <i>Yesterday</i>
Mon. 30		<b>Final Challenge - Revise</b>	
<b>May</b> Wed. 2	Portfolios	Revise	Brathwaite - Portfolio
Mon. 7	Venues	Revise	
Wed. 9	Finals/Mini-GDC	<b>Portfolios Due/Postmortems</b>	
FINALS			

### **Course Policies**

**University of Colorado-Colorado Springs Academic Honor Code:** Students are to submit only their own work for evaluation, to acknowledge the work and conclusions of others, and to do nothing that would provide an unfair advantage in their academic efforts. See also <http://www.uccs.edu/~dos/studentconduct/index.html>

**Students with Disabilities:** Students with disabilities are to provide a letter of accommodation within the first two weeks of class. Please contact the Disability Services Office, Main Hall 105, 262-3354, [dservice@uccs.edu](mailto:dservice@uccs.edu)

**Military Service:** If you are a military student with the potential of being called to military service/training, please notify me and review the Military Students website: <http://www.uccs.edu/~military/>

**Attendance Policy:** Attendance is an adult responsibility. If you are late to class or miss class, this is a disservice to your classmates and to yourself. You will lose a half letter grade for each class missed beyond the first, unless an emergency occurs (death in the family, illness, etc.) and you provide proof of emergency. **EXCEPTION:** Prior knowledge of medical, religious, military, or major work conflicts pre-coordinated with me for the impacted session(s).

Tardies and early departures are also disruptive to the class. If you must arrive late or leave early for schedule conflicts, let me know before the class session or contact me before or after class in the first two weeks.

**Changes to the Syllabus:** This syllabus may change at the instructor's discretion at any time during the semester to better accommodate the class.

**Cell Phones and Other Electronics:** Please turn your cell phones and electronic devices to silent mode so as not to disrupt other students. Please keep Facebook to an absolute minimum (tweeting about game design is ok).

**Readings:**

Aleknevicus, Greg (June, 2003) “Design Considerations”

<http://thegamesjournal.com/articles/DesignConsiderations.shtml>

Brathwaite, Brenda. 13.Nov.2007. “The Game Design Portfolio: Is There Such a Thing?” *Game Career Guide*.

[http://www.gamecareerguide.com/features/464/the\\_game\\_design\\_portfolio\\_is\\_php](http://www.gamecareerguide.com/features/464/the_game_design_portfolio_is_php)

Brathwaite, Brenda. Mar. 2010. “Train (or How I Dumped Electricity and Learned to Love Design).” Game

Developers Conference. *GDC Vault*. [http://www.gdcvault.com/play/1012259/Train-\(or-How-I-Dumped](http://www.gdcvault.com/play/1012259/Train-(or-How-I-Dumped)

Crawford, Chris. “The Two Faces of Reality.” *iDMAA Journal* 2.1. <http://web.archive.org/web/20060209002532/>

[http://www.idmaa.org/journal/pdf/iDMAA\\_Journal\\_Vol\\_2\\_No\\_1\\_screen.pdf](http://www.idmaa.org/journal/pdf/iDMAA_Journal_Vol_2_No_1_screen.pdf)

Gingold, Chaim. 2011. “Catastrophic Prototyping and Other Stories.” *Levity Lab*.

<http://www.levitylab.com/blog/2011/01/catastrophic-prototyping-and-other-stories/>

Iwatani, Toru. (March 2011). “Classic Game Post-Mortem: *Pac-Man*.” Game Developers Conference. *GDC*

*Vault*. <http://www.gdcvault.com/play/1014631/Classic-Game-Postmortem-PAC>

McMillen, Edmund & Tommy Refenes. (14 Apr. 2011). “Postmortem: Team Meat's *Super Meat Boy*.”

*Gamasutra*. [http://www.gamasutra.com/view/feature/6348/postmortem\\_team\\_meats\\_super\\_meat\\_php](http://www.gamasutra.com/view/feature/6348/postmortem_team_meats_super_meat_php)

Rohrer, Jason. Nov. 2007. “What I was Trying to do with *Passage*.” *HC Software*. 25.Nov.2008

<http://hcssoftware.sourceforge.net/passage/statement.html>

Salen, Katie & Eric Zimmerman. (2006) “Unit 1, Chapter 3: Meaningful Play.” *Rules of Play*. MIT Press:

Cambridge, MA. (30-37). [Handout]

Sigman, Tyler. 13.Sept.2005. “The Siren Song of the Paper Cutter: Tips and Tricks from the Trenches of Paper Prototyping.” *Gamasutra*. 28.Oct.2008

[http://www.gamasutra.com/view/feature/2403/the\\_siren\\_song\\_of\\_the\\_paper\\_php](http://www.gamasutra.com/view/feature/2403/the_siren_song_of_the_paper_php)

Sirlin, David. (Mar. 2009). “Subtractive Design.” *Game Developer*. (23-28). [Library]

Spiel, Brett. “The Price of Magic”

<http://www.brettspiel.co.uk/2009/09/game-design-101-price-of-magic.html>

Swink, Steve. (2008). “Prototyping for Game Feel.” *Game Design Workshop*. Ed. Tracy Fullerton. New

York: Elsevier. (224-226). [Handout]

Yu, Derek. (17 Sept. 2010). “Finishing a Game.” *Make Games*.

<http://makegames.tumblr.com/post/1136623767/finishing-a-game>

**Games:**

*Adventure*. <http://www.simmphonic.com/programming/adventure.htm>

*But That Was Yesterday*. <http://jayisgames.com/cgdc9/?gameID=11>

*Centipede*. <http://atari.com/arcade/arcade/centipede>

*Giant Tank*. [http://www.deserthat.com/html/game\\_design/digital/giant\\_tank.html](http://www.deserthat.com/html/game_design/digital/giant_tank.html)

*Knytt Stories*. <http://niffas.ni2.se/?page=Knytt+Stories>

*The Marriage*. <http://www.rodvik.com/rodgames/marriage.html>

*The McDonald's Game*. <http://www.mcvideogame.com/>

*Pac-Man*. <http://apps.facebook.com/pacmanoriginal/>

*Passage*. <http://hcsoftware.sourceforge.net/passage/>

*Samarost*. <http://amanita-design.net/samorost-1/>

*September 12<sup>th</sup>*. <http://www.newsgaming.com/games/index12.htm>

*Super Chick Sisters*: <http://www.kentuckyfriedcruelty.com/superchicksisters/index.asp>

*Today I Die* (2009). <http://www.ludomancy.com/games/today.php?lang=en>

More artgames: <http://www.newgrounds.com/collection/artgames.html>

### **Presentations:**

Adams, Ernest (2001). “Will Computer Games Ever Be A Legitimate Art Form?” Lecture, GDC. *Designer's Notebook*. <http://www.designersnotebook.com/Lectures/ArtForm/artform.htm>

Bartle, Richard (1996). “Hearts, Clubs, Diamonds, Spades: Players Who Suit MUDs.” *Entry Point. MUD.co.uk* <http://www.mud.co.uk/richard/hcds.htm>

Bogost, Ian (2008). “Chapter 6: The Rhetoric of Video Games.” *Persuasive Games*. MIT Press. <http://mitpress.mit.edu/books/chapters/0262294249chap6.pdf>

Blow, Jonathan (2008). “Conflicts in Game Design.” *Montreal Independent Games Summit*. Lecture. <http://www.youtube.com/watch?v=mGTV8qLbBWE>

Moriarty, Brian (2002). “The Secret of Psalm 46.” *Game Developers Conference*. <http://ludix.com/moriarty/psalm46.html>

Robinett, Warren. (2006). “Adventure as a Video Game.” *The Game Design Reader*. (690-713). Ed. Katie Salen & Eric Zimmerman. The MIT Press: Cambridge, MA. <http://liquidnarrative.csc.ncsu.edu/pubs/csc295/adventure.pdf>

Rouse, Richard III. (2006). “Game Analysis: Centipede.” *The Game Design Reader*. (460-473). Ed. Katie Salen & Eric Zimmerman. The MIT Press: Cambridge, MA. <http://classes.soe.ucsc.edu/cmeps080k/Winter06/lectures/centipede-rouse-2004.pdf>

Tale of Tales (2010). “Over Games.” Lecture. Art History of Games, Feb. 2010. [http://tale-of-  
tales.com/tales/OverGames.html](http://tale-of-tales.com/tales/OverGames.html) & <http://www.youtube.com/watch?v=nlep9kT1API>