Creating Games ART & CS 107 Spring 2013 Schedule

Revised April 24, 2013; the schedule adapts to your interests and ideas throughout the semester.

Morning:	TR	8:30 - 9:45 am	Hyperlinks are underlined. Chapter
Afternoon:	Thu.	$1-4 \mathrm{pm}$	reading is in McGuire and Jenkins,
Office hours: (TCL 308)	By appointment		$\underline{Creating \ Games}$, A K Peters 2008 +
(I'm generally accessible–let me know when is best for you)			errata
TA hours:	See website		

"Homework" is independent work due at the beginning of the following class session. I encourage you to discuss ideas with other students but your work product should solely be your own. When a written response is appropriate, note that scholarly writing includes citations to primary sources, terse style, appropriate vocabulary and tone, and proper English style. The writing center and my office hours are great resources to improve your writing.

"Read" and "Play" material has no specific deadline, but should be done close to that day so that we have a common base for discussion. For games, spend at least two hours in actual gameplay, and try to play with other students in the class. Having played a game (i.e., a social and intellectual activity) with someone will help you to know if you can work together effectively on a project. Unless explicitly noted, you are welcome to play a game on a different (equivalent) platform or with your own copy instead of using the library resource. If you make a reasonable attempt to play a game and it is not available, then you can substitute a different game listed on the course web page. Reading, games, and films in parentheses are recommended if you want to learn more about a topic but are not required. These may elevate the quality and insight of your work.

"Projects" are for teams, all members of which will receive the same grade. Working together effectively is one of our educational goals. Remember to step back and ensure that you and your peers are learning that as well as producing a physical artifact during the project. Bring me and the TAs into the process of managing your team and making decisions.

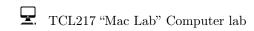
All written work must be typed (tip: save your files–I may ask you to revise them). For fairness to your peers, all non-programming work is due in hardcopy at the beginning of the class session in which it is due. There are no extensions-late work will not be accepted.

Two kinds of assignments are not listed on the schedule explicitly. The first kind includes in-class activities for which you will submit some artifact for a grade at the end of class. This is in lieu of having an equivalent assignment as homework and is intended to reduce your out-of-class workload. The second kind of assignment is a 3-minute independent presentation on a researched topic of your choice, which everyone in the class must give once. I will post a link to an online signup sheet and the TAs will give sample presentations at the beginning of the semester. Plan to spend about six hours researching your topic. Any of the recommended reading or games would be great topics. Be sure to speak to me at least a week ahead of time about your topic, before you begin significant preparation, so that I can provide feedback and suggest resources.

This course uses four rooms, plus office hours in TCL308 and appointments in the Graphics lab. This gives us the best facility for each topic. Icons on the schedule tell you where to go each day:



The Rose Gallery at WCMA



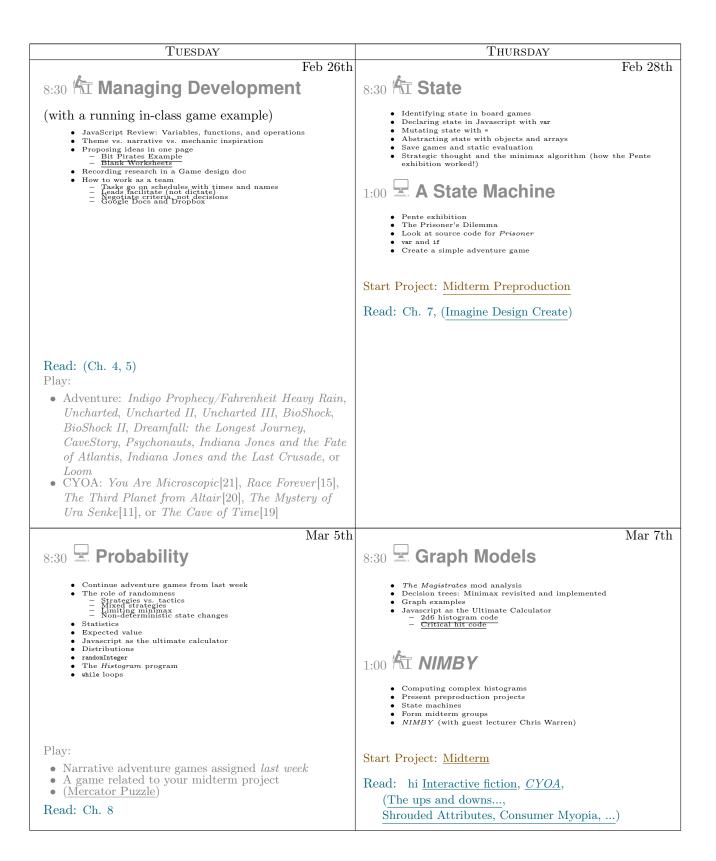
TCL206 Classroom

SS The Science Shop in Bronfman

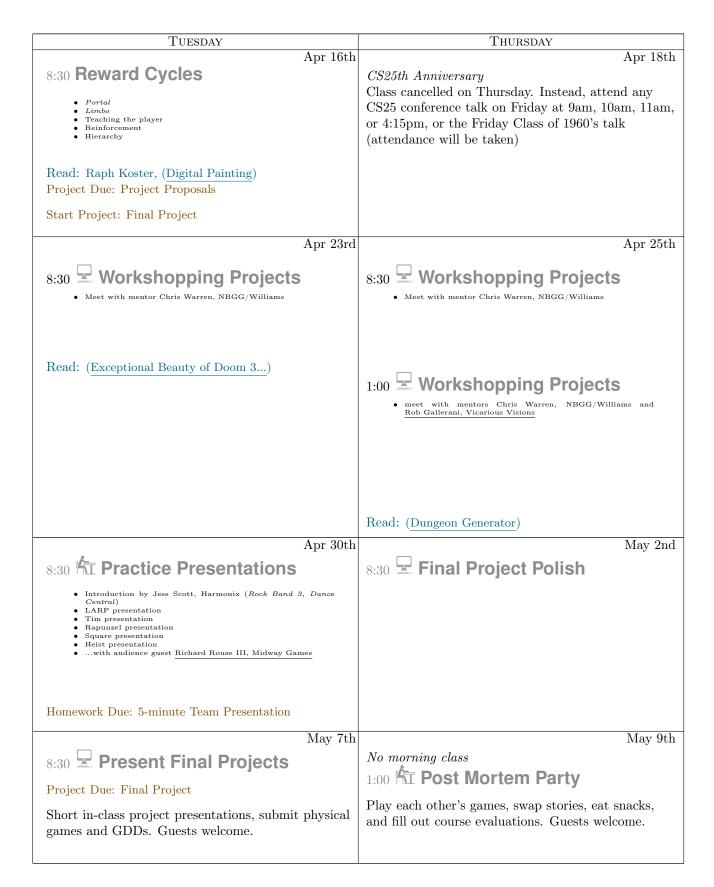
To foster effective discussions, I split the class into "red" and "black" sections of 12 students each. Only attend the sessions with your section color. Everyone should attend sessions with gray titles and icons. You can switch sections at any time.

TUESDAY	THURSDAY
	Jan 31st
	(Class meets Wed. Jan 30)
	8:30 AT Settlers of Catan
	 Every creator has 1024 bad creations in him or her An aperture on games
	 Content, mechanics, and technology State and rules Objective aestificies Brt is communication Frocess vs. product / Taste vs. skill
	Settlers of Catan 27
	 How do you make decisions? What are the elements of the game? How was this manufactured? Final projects from last year
	 Structure of the course Responsible for your own learning Activity and project focused; some projects include pre-
	senting – Iterative structure – Mini-lectures, ment Team projects, individual homework, 3- – minuta solo presentations.
	 minute solo presentation Most reading is recommended, not required C = Below expectation; B = Satisfies assignment; A = Exceptional insight (≠ effort)
	1:00 Review Braid and XCOM
	 Braid[2] and XCOM[10] demos Bookmark the course and codeheart.js websites Download Paddle Change the colors Deploy on web and iPad Change the controls Make the ball move slower 3:30pm: View INNOVATE W'13 game jam results
	(Optional: 3D printer talk in TCL 206 3:30pm Fri.) Read: Preface, Schedule, Website Syllabus, <u>CS Honor Code</u>
	Start Project: <u>Content Mod</u>
	 Play: The Settlers of Catan[27]; if you're very familiar with it, then play Puerto Rico[23] or Power Grid[9]
Feb 5th	Feb 7th
8:30 🛱 Synthesize a Board Game	8:30 T Indie Game: The Movie
 Design a board game Design a game under constraints What is a game? Description design 	 iPads available from ELC for this class, some games (including yours) on iOS Screen selection of <i>Indie Game</i> [26]
• Documenting design	1:00 Analyze a Game
Read: (Ch. 1)	 (cont. from Tuesday: game proposal form) Analyze Settlers
Project Due: Content Mod	 State (nouns) and rules (verbs) Variables and functions Commodity flow
Play:	Mathematics Logic
 Physical puzzles: RushHour[32, 28], Safari RushHour[30], or TipOver[29] [library] Constraint puzzles: Minesweeper, Picross, 	2:30 - Photoshop and Pages
Mastermind, Sudoku, or KenKen [online/paper]	• Sample presentation by Erica
• (optional video puzzle games: Portal, Portal 2, Quantum Conundrum, Limbo, or Braid [by appointment])	 Design language Font, color, aspect, justification, alignment Exactly reproduce a page from a game's instruction manual (You can download Office, iWork, and Photoshop for free for your own computer from OIT!)
	Read: Ch. 2 Homework: Complete the 1-page reproduction
	Start Project: Create something related to games: e.g., modified video or board game, new game, picture, analysis, interactive play or story, essay. Any team size. Have fun!

TUESDAY	THURSDAY
Feb 12th	
8:30 Composition	8:30 T Puzzles
Bring PENCIL and something hard to write and draw against as we walk through the galleries. Gallery tour Free sketching exercise in Picture Literature Gallery Review 2D composition tools — Araming and the rule of thirds — Propertion and visual lines — Aspace — Aspace — Sketching Ranch House, Santa Fe Works used in this lesson	 Guest lecturer: Duane Bailey Mechanical puzzles Crossword puzzles Sudoku Tentaizu and Hitori River Crossing Red/black suit assignments Theseus & That Pesky Minotaur Programming 1:00
Read: (Ch. 12, <u>My First New Yorker Cover</u> , <u>Disney Goes Retro</u> , <u>https://fbcdn-sphotos-a-a.akamaihd.net/hphotos-ak-as</u> <u>How many tweets?</u>) Homework: Sketch	 Add a feature to Pong prototype: e.g., 2nd player, blocks, win/lose condition, 2nd ball Create a splash screen in Photoshop Add sounds by mimicking other games and reading documentation 2:30 SS The Science Shop h4/287299 563556910323351 1872533864 o.jpg, Mate a specific custom die in a team of four using a 3D printer, milling machine, or laser cutter
 Play: Video games: Mirror's Edge[7], Uncharted[16], Uncharted 2[17], Uncharted 3[18], Bastion[25], Okami[5, 6], LittleBigPlanet[13], LittleBigPlanet 2[14], Fable III[12], or BioShock 2[1] Board games: Shadows Over Camelot, Through the Desert, or RoboRally (clickmazes) 	 1:00 SS The Science Shop 2:30 Programming Project Due: Create Something Start Project: <u>Puzzle Game Level</u> (N.B. Honor Code) Read: (Ch. 3, Autodesk Moldflow 2010 [video])
Feb 19th	Feb 21st
8:30 Font & Palette	8:30 Tominion
 In static media Examples on game boxes, instructions, video games, etc. In board and video games Color theory EM spectrum Color constancy Analyzing paletters w/ Photoshop Morks used in this lesson 8:30 Constancy Morks used in this lesson 8:30 Constancy Morks used in this lesson 8:30 Constancy Morks used in this lesson 8:30 Constancy Morks used in this lesson 8:30 Constancy Morks used in this lesson 8:30 Constancy Minimax games: Citadels[8], YINSH[4], or Flash Duel[24] Worker placement: Carcassonne[31], Stone Age[3], Puerto Rico[23], or Agricola[22] (Hero Academy)	 8:30 Solve Font & Palette 1:00 Control Cont



TUESDAY	THURSDAY
Mar 12th	Mar 14th
 8:30 Tic-Tac-Toe Review Javascript: - var declares state - ir makes conditional rules - ir makes conditional rules - Anays group rules Implement Tic-Tac-Toe (Naughts and Crosses) in Javascript 	 8:30 Expression & Violence 8:30 Tic-Tac-Toe • Implement Tic-Tac-Toe (Naughts and Crosses) in Javascript
8:30 Expression & Violence	
 Limbo TRAUMA God of War Dead Space Artwork discussed in class Read: (Ch. 11, <u>Touching the Cord</u>)	1:00 Abstraction • Present midterm projects • Abstract state into objects • Abstract rules into functions • Define terms in English • Model complex systems in mechanics • Reduce details to make art easier to read • Minimax: recursion, abstraction, scope. Generic game player, not tic-tac-toe heuristics Read: (Complex dynamics in learning complicated games)
Spring Break	Spring Break
Spring Break	Spring Break
Apr 2nd	Apr 4th
 8:30 Carcassonne & Mods Play: Osmos (free iOS demo recommended), Dungeons & Dragons (any tabletop version), XCOM: Enemy Unknown (full game, or free demo on Steam or Xbox live), Munchkin (any version), Robo Rally – none of these are in the library Shadows Over Camelot, Battlestar Galactica, Lord of the Rings, Space Alert, Pandemic, or Space Hulk Read: Ch. 9, (Who Controls the World?, Pixel art tutorial, Alvin Roth and Lloyd Shapely) 	8:30 ARPG • "ARPG" genre • Lock and key mechanics • Modeling State and Computation • Example: Inventory • Example: Treasure Chest Read: Ch. 10 Homework: <u>ARPG Design</u>
Apr 9th	Apr 11th
8:30 Sex, Gender, & Perspective	 8:30 Sex, Gender, & Perspective Catherine Bayonetta Tomb Raider Mass Effect 3 Occlusion Perspective; orthographic, isometric, linear, multiple, geometry Fez Megakiure
8:30 도 ARPG Implementation	8:30 🗷 ARPG Implementation
 Read: (Leigh Alexander Keynote [video], <u>MoMA Video Games Collection</u>, <u>Games are art</u>) Play: FlirtOff Portal 2, Super Meat Boy, Limbo, or Super Mario Galaxy 	1:00 Continue Adventure Games • Philippe & Erica in Lab
Dominion	Start Project: <u>Final Project</u>



References

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- [23] A. Seyfarth and Ravensburger Spieleverlag. Puerto Rico. Rio Grande Games, 2002. board game, 12+, 90-150 minutes, 3-5 players.
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- [29] ThinkFun. TipOver. ThinkFun, circa 2006. puzzle.
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