Video Game Design and Aesthetics

Spring Semester 2013-2014

Prior to writing your application, please be sure to thoroughly read the Independent Study Information Packet available on the IS page of the CRC website

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Is this a GISP, ISP, Language (G)ISP, or Academic Internship (AI)?	GISP		
(G)ISP or AI **Title Entry** for Permanent Record:	Video Game Design and Aesthetics		
Is the course mandatory S/NC?	No	# Meeting Hours / Week:	4

Name of **Student Coordinator**:	Joseph DiZoglio jr	Email:	Joseph_dizoglio@brown.edu
Name of **Faculty Sponsor**:	Michael Littman	Department:	Computer Science
Email:	mlittman@cs.brown.edu	Campus Box:	1910

In alphabetical order by last name, list those **students intending to enroll** in the (G)ISP or AI.
No additional students will be admitted to the course after the proposal is submitted.

	Last Name	First Name	Sem.	Banner ID	Grade Option	Campus Box
1	Bhavsar	Paavan	7	B00522175	ABC	4882
2	DiZoglio	Joseph	5	B00589036	ABC	3411
3	Morrin	Cheyenne	5	B00687955	ABC	2132
4	Ramos	Jacob	7	B 00559562	ABC	3020
5	Trousdale	Geoff	7	B 00609984	ABC	7092

Independent Study | Proposal Outline

Before filling out this proposal, please consult the *Independent Study Information Packet*, schedule an appointment with the Independent Study Coordinators at the Curricular Resource Center (email independent_study@brown.edu), and look through the past (G)ISP and AI proposals on file at the CRC.

Writing competency statement. Every G(ISP) proposal is expected to meet College guidelines for writing competency (see http://brown.edu/Administration/Dean_of_the_College/curriculum/writing.php). G(ISP)s that fall below baseline standards for written communication will not be considered by the CCC sub-committee that reviews student proposals for independent study.

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1. **What** – *Provide an explanation and rationale for the proposed (G)ISP or AI*
   - Describe the goals of the study and the questions, topics, or issues the project will address (at least 1 page).
   - (G)ISPs and AIs are academic courses; be sure to highlight the broader scholarly context of the *study*.
   - **Note:** Especially if the course does not follow a traditional format, students should submit a separate cover letter including any additional information that will help the committee evaluate the proposal.

The goal of this GISP is to understand what emotions emerge from playing video games. We want to know what artistic design and aesthetic choices produce a video game that can create an emotional response from the player. Simultaneous with studying the design elements of video games, we will produce our own video game using the varied skill sets of our GISP's members. Each of the students in the GISP will complete the course with an understanding of the components that make an emotionally evocative video game, be able to use this critical framework to see the broader implications of games currently reaping success in the market, and understand the design process of video game production.

To understand how we as designers must meet the desires and needs of a player, we must examine existing video games both experientially and academically. Secondary source academic texts address the two dimensions of game design we are most concerned with: design and aesthetics. Design texts, which include both narrative theory and game mechanics, explore the holistic systems of compelling stories and rewarding player choices. Aesthetic texts explore the communicative tools game makers employ to achieve such effects in the player. We will create a

game that emotionally resonates with the player, engages their imagination and reasoning in novel ways, and invites them to play in our interactive world time and again.

The essential component of any game is the game mechanic. Our critical understanding begins with the game mechanic or the system of inputs and outputs available to a player that permits them to proceed through a game. The game mechanic is seemingly essential to all games as an interactive art form. *Game Feels* is a text that focuses on aspects of successful game mechanics and offers a language that applies to all video game mechanics.

The game we create will have a narrative, and in order to communicate our narrative along with play we must understand the theories of narrative in general. The foundation of narrative theory will come from Monika Fludernik's *An Introduction to Narratology*. By studying her work in the second week of class we will identify the building blocks of traditional narratives: time, space, focus, perspective, episodic construction. The key work to be done early on is to draft our own value system of narrative. Coinciding with the Fludernik reading we will examine Coleridge's poem "Kubla Khan" and identify the merits and disadvantages of using such an experimental narrative form. The following meeting will be dedicated to examining independent games titled: *Pleasure Drome of Kubla Khan* and *The Carp and the Sea Gull*. The former is a direct response to Coleridge and will be a key text to compare and contrast narrative structure in paper and digital mediums. "The Carp and the Sea Gull" will be a secondary exploration of narrative form within new media. These two studies will allow us to synthesize our own criteria for game narratives and understand how the theoretical terms of narratology express themselves in the actual products.

One type of plot structure we will further examine is hero's journey. Joseph Campbell posits this adventure as the central scaffold of all human myths. We will draw from Campbell's work, *Hero With a Thousand Faces,* to provide us with an abstract cultural structure of character narrative and progression. This text distills the "hero's journey" down to its most rudimentary components, nine phases which summarize the symbolic narrative present in classic hero texts (e.g. myths, fairytales, quests). Hero texts within video games are vastly different from the above mentioned *Pleasure Drome* and *The Carp and the Seagull* because they follow standard, borderline cliché presentation. As a result, the Hero text in video games has been a source of criticism regarding the inherent immaturity of video games. By comparing the differences between the urtext narrative and new media storytelling, we will see how storytelling evolves and identify what components successfully carry into the new generation. Such thoughts will allow us to know how game mechanics can align with the character development criteria of narrative requirements.

During week three, we consider the question of narrative dissonance and the effects of inharmonious design choices. This argument cuts to the heart of our GISP by questioning whether games can provide narrative experiences that match other media. Clint Hocking's article will be the lynch pin that bridges our theoretical narrative and design texts to actual execution of video games. His term, ludonarrative dissonance, addresses the question "can games actually support a narrative structure?" as well as considers how design elements may limit the player's ability to engage with the game's narrative. In addition, a work we will later examine is Peirce's "What Is A Sign", a theoretical text on the nature of affect through signs that a reader must interpret. We place it with architecture to help us understand how to code a space with cues that promote a player to reason differently. Through Hocking, Peirce, as well as Henry Jenkins, we address the question of video games as affective art capable of creating emotions.

Non-academic readings will focus on the actual steps of game creation. Other components such as game architecture, characters, and music are supporting branches of game design that we will study to show how these decisions support either the design principles or the aesthetic effect. The text *Level Up* will provide us a step by step understanding of how to create a game and at what step in design the supporting components be considered. As with any form of narrative, "show don't tell" is a mantra of succinct precision. The readings and discussions about these supplementary elements of video games will allow us to identify what aesthetic and design choices support the core of a game's aesthetic reaction and what choices are excessive or unnecessary to the central composition of the game.

To study video games, we will have discussion meetings structured around games we play each week. Readings in the larger texts mentioned above as well as shorter analytical pieces will be applied to the games we play. These discussions will teach us how to "close read" a video game and identify its game mechanic, its narrative arc, and the supporting design choices that enhance the game's aesthetics.

Paralleling the readings for each week, our team will be following a production schedule for developing the videogame. This schedule will help pace us throughout the semester, making sure not to rush any step in the creation process. This pacing will match the games and literature assigned throughout the semester, allowing us to effectively use them to inform the development of our creative product.

The first and most important step of the production process is to develop a solid core game mechanic. This will be the primary way that the player will interact with the world. As such, it will have the greatest impact on player experience and will guide the underlying themes of the game. After several weeks of individually developing game mechanics, the team will convene to select one and develop it further. After reaching a reasonable consensus, we will write up a Mechanics Draft, a document which will formalize the game mechanic and outline its specifications. This will reduce ambiguity and allow the software developers to fully understand its nuances.

Once we have decided on our game mechanic, we will move forward in determining the other creative elements of the game. The narrative, themes, and characters are all essential pieces to creating a game with a cohesive artistic vision. This development will culminate in the creation of a paper prototype: a crude physical paper version of the game that can be "played". Paper prototyping is an effective technique to help us playtest the game, in order to spot fundamental issues with the design before any serious programming is done. We will use successive paper prototypes to iterate on our design, until we decide on a version that we are confident will deliver a consistent, creatively cohesive experience. The team will then develop concept art to solidify the art direction of the game. This is different from creating art for use in the game itself; concept art consists of rough, sketched out artwork that will inform the "feel" of the game that we are striving for. The concept art will include depictions of the world, the characters, and scenes throughout the game. This will allow us to refine the pictorial elements of the game before creating the actual sprites.

At this point, the software developers will begin to work towards the alpha. The alpha is an early, unpolished version of the game with the core mechanic implemented and a basic world. Although visually lacking, the alpha represents a stage where most of the foundational work has been completed. Starting from scratch would be an unreasonable burden on the software developers and severely restrict the scope of the game, so the developers will be using the 3rd party game engine LibGDX. A game engine helps developers create products by providing a layer of abstraction with common code already written; this will allow the developers to focus on implementing the game rather dealing with tedious math and low-level design work. The other members of the team will provide artwork for the developers to use, such as images for various menu screens, the background of the playing spaces and the objects within the playing space. After creating the alpha, the team will produce iterations of the game moving towards a more refined finished product. The entire game world will be fleshed out for the final product including all artwork, music, and sounds that were left out in the alpha. This final product will represent the culmination of the GISP’s understanding of video

game design because each element will be coherently supporting the original game mechanic and its emotional experience with the player.

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2. **When** – *Provide a detailed course syllabus*

Expected Weekly Meeting Day(s) and Time(s): Two days per a week. Schedules as of yet unknown

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Meeting Structure:

For each “discussion meeting” in the semester, a designated leader will guide a critical inquiry into the themes presented in the assigned readings and games. The leader will draft

The “production meetings” have specific topics and structures depending on a week to week basis.

Week 1: Jan 27-31

Discussion Meetings 1 & 2:

The Video Game Mechanic. “What is a game mechanic, what is its function within games?” –Paavan Bhavsar & Joseph DiZoglio. Professor Littman, Faculty Leader Present this week.

Reading: 107 pages
Game Feel pp 1-60
“Gamasutra - Formal Abstract Design Tools”. Dough Church 7 pages
Level Up! pp 1-19, 23-36, 57-81

Gaming
Gravity bone
Donkey Kong
Tetris
Pacman
Galaga
Yar’s Revenge

Week 2: Feb 3-7

Discussion Meetings 3: Narrative Theory Introduction. “What are narratives?” “What are the components of narratives?” “What are the narrative elements of “Kubla Khan”? Discuss criteria for evaluating successful narratives. - Joseph DiZoglio

Readings: 51
Introduction to Narratology pp 1-52
“Kubla Khan”, Coleridge.

Discussion Meeting 4: Narrative Theory in Video Games. "What are the narrative elements of The Carp and the Seagull?" "What are the narrative elements of Pleasuredome"? "Can we map the difference in narrative presentation between Coleridge's Poem and Pleasure drome's interpretation?" - Jacob Ramos

readings: 68
"The Myth of Interactivity" Manovich. 4
"Games, the Lively New Art" Jenkins. 22
"Space, place, story" Marie-Laure Ryan. pp1-15
"From Narrative Games to Playable Stories" Marie-Laure Ryan pp 43-58

Gaming:
The carp and the seagull
Pleasure drome of Khubla Khan

Week 3: Feb 10-14

Discussion Meeting 5:

Complications and Expressions of the Game Narrative. What are methods of storytelling within a game" "What are indirect methods of expressing themes within a narrative?" "How does a video game texts express underlying themes?" "What is *Ludonarrative Dissonanc*e and its effect on video game narratives?" – Cheyenne Morrin.

Diagram and discuss the narrative models of the three games we played. What are their narrative similarities. Where do they diverge and to what success?

Reading: 86
"Ludology Meets Narratology" 14
"Audio Logs are Terrible: 4 Better Ways to Tell Stories". Mat Jones 4
Level Up! pp 37-56
Hero With A Thousand Faces. pp 1-44
"Ludonarrative Dissonance in Bioshock". Clint Hocking 9

Gaming
Dys4ia
Cyberqueen
Dear Ester

Production Meeting 1:

Each member presents a draft of a game mechanic. The group will discuss and select the most promising game mechanic idea as the kernel of the semester's game.

Week 4: Feb 19-21

Discussion Meeting 6:

Complexities of Game Mechanics. "How do multiple game mechanics support one another in a game?" "What forms of synergy enhance game mechanics?" "What are

engaging game mechanics?" "How do the game mechanics reflect the narrative?"– Geoffrey Trousdale

Reading: 113
Hero With A Thousand Faces. pp 291-329
Game Feel. pp 61-100
"Feedback Loop: Games Aren't Fun". Greg Saw. 3
"What WarioWare can teach us about Game Design". Chaim Gingold. 9
"Playing and Gaming: Reflections and Classifications". Bo Kampmann Walther 12
"Living in Synergy", Mark Rosewater. 12

Gaming
Atom Zombie Smasher
Thomas Was Alone

Production Meeting 2:
Each member will present a variation on the selected mechanic from the previous week. Each draft will also contain a possible narrative that emerges from the game mechanic. The group will discuss the nuances of possible narratives from the game mechanic drafts. Drawing from the presented drafts, they will create an official first draft mechanic to guide them in the design process.

Week 5: Feb 24-28

Production Meeting 3:
The group will present their mechanics draft to Professor Littman and discuss the accompanying narrative.

Discussion Meeting 8:
The Player Avatar and Emotions. "What does the role of the player's avatar have on the game narrative and mechanics?" "What emotions are video games capable of creating in an audience?" "How does interaction with a video game affect the player's emotions?" – Paavan Bhavsar

Reading: 100
Level Up! pp 83-118, 281-329
Hero With A Thousand Faces. pp. 337-358
"Damsel in Distress (Part 1) Tropes vs Women". Anita Sarkeesian. 23 minute video
"Here are some emotions invented by videogames". Andrew Vanden Bossche. 7

Gaming
Freedom Bridge
Braid

Week 6: Mar 3-7

Discussion Meeting 9:
Interacting with the Game: "How does a player interact with the game's world?" "How does a player interact with non-playable components of a game?" "What

design aspects keep a player engaged in a game?" – Joseph DiZoglio

Reading: 92
Level Up! pp 155-196, 355-378,
The Myth of the Ergodic Videogame". James Newman. 11
"Caring for Polygons: NPC Bonding and Attachment". Emily Payton 4
"On Romances in Games". David Geider 2
"The Road Fast Travelled: How Fast Travel Can Affect an Open-World". Chris Waldron. 5

Gaming
Thirty Flights of Loving

Production Meeting 4:
The two programmers of the group will present their preliminary iteration of the game mechanic. The group will critique and comment on the draft mechanic. The three non-programmers will present ideas for the game's narrative as extensions of the game mechanic. The group will discuss these ideas and discuss a preliminary narrative arch that they want to further expand on in future drafts.

Week 7: Mar 10-14
Midterm Due at Production Meeting 5!

Discussion Meeting 10:
Game Architecture: "What are the elements of digital space?" "How to create digital space?" "How does one successfully design spaces for a player to navigate?" – Jacob Ramos

Reading: 82
Level Up! pp 197-242
"Learning From the Masters: Level Design In *The Legend of Zelda".* Mike Stout. 8
"A Framework for Analysis of 2D Platformer Levels". Gillian Smith, Mee Cha, Jim Whitehead.7
"The Importance of Architecture in Video Games and Virtual Worlds" 15
"The Role of Architecture in Video Games". Ernest Adams, 7
Charles Sanders Peirce. "What is a sign" 9

Gaming
Slave of God
Super Mario Bros Worlds 1-1,1-2,1-3,1-4.

Production Meeting 5:
The two programmers of the group will present their second iteration of the game mechanic. The group will critique the game mechanic. The group will then begin collaborating on a paper prototype that employs the current iteration of the game mechanic within the draft narrative frame work.

Week 8: Mar 17-21

Note: This week will be dedicated to the generation of a paper prototype of the game. The reading requirement is deliberately smaller to allow the group to focus on the tasks of production. The readings will be discussed in the context of the two productions meetings but will not have a designated discussion of their own.

Reading: 70

"Making Quests Playable" Anne Sullivan, et. al. 8
"Beyond Myth and Metaphor- The Case of Narrative in Digital Media". Marie-Laure Ryan. 17
"Games Telling Stories?". Jesper Juul. 6
"On Narrative Design". David Gaider 15
"Expressive Gameplay". Aaron Biddlecom. 2
"Violence, Dissonance and Uncharted 2". Daniel Starkey. 5
"A Grave Situation: Player Death and Agency". Daniel O'Connor 5
"How our perception of space in games changes depending on our maps". Line Hollis 6
"What can we consider 'negative space' in games?". Matthew Schanuel. 6

Production Meeting 6:

The group will finish the paper prototype of the game draft.

Production Meeting 7:

The group will meet with Professor Littman to present the paper prototype as well as the current iteration of the game mechanic. They will then engage the Professor in critique of the status of their work.

Week 9: Spring Break.

Game Feels 151-186

Assignment: Programmers work on transforming the paper prototype into a playable game, the artists will create content for the game.

Week 10: Mar 31- Apr 4

Discussion Meeting 11:

Close Reading the Game Mechanic. "How can layering simple game mechanics produce complex outputs?" "How can the game educate the player to understand its game mechanic?" – Cheyenne Morrin

Reading: 101

Game Feels. pp 101-150
"Untold Riches: The brilliance of Half-Life's barnacles". Hamish Todd 18
"Finding The Fun Medusa Heads In Castlevania". Hamish Todd 9
"Why *Left 4 Dead* Works". Paul Goodman, Adams Greenwood-Ericksen. 7
"'Unlocks' and the gamification of gaming". Dylan Holmes 6
"The Campfire: a nightmare in Hyrule". Alois Wittwer. 8
"After Pressing Start: Silent Hill". Daryl Heard.4

Gaming

Fish so sage

Proteus
CoD of Duty

Production Meeting 8:
Drawing from the paper prototype, the team will organize the production design toward the goal of making an alpha version of the game. We will discuss what kind of concept art and other creative work is necessary to produce for the game. The three non-programmers will receive assignments to fulfill the game's needs.

Week 11: Apr 7-11

Discussion Meeting 12:

Game Music. "How can music signal game mechanics?" "What ways can music become an element in the game mechanic?" "How does music enhance game narratives?" – Geoffrey Trousdale.

Reading: 103
Level Up! pp 393-406
"Soundscapes- The Future of Music". Peter Hasselström 7
"What Music does to us: non-diegetic songs in Red Dead Redemption and Far Cry 3". Ben Meakin. 4
"Play Along- An Approach to Videogame Music". Zach Whalen. 35
"Music in *The Legend of Zelda: Ocarina of Time*". Dan Bruno. 30
"Soundscapes- Music Can Ruin Everything". Peter Hasselström. 4

Gaming
Anodyne

Production Meeting 9:
The team's artists will submit their concept art. The team will creative the creative art and writing produced for the game. They will examine the game's current build as presented by the programmers.

Week 12: Apr 14-18

Assignments outside of production meetings:
Game Feels 187-228
Legend of Zelda, dungeons 1 and 2

*****(Note, *Legend of Zelda* is the longest game on the syllabus, requiring around 10 hours of game play. It is essential that we take the time to study one "long form" video game to observe the contrasts in how game mechanics and narratives can be delivered over extended periods of play)**

Production Meeting 10:
The team will work to finalize their alpha version of the game. They will critique and make adjustments to the core game mechanic.

Production Meeting 11:

The team will meet with Professor Michael Littman to present the alpha version of the game. He will offer critique and opinions on the design so far.

Week 13: Apr 21-25

Discussion Meeting 13:

Case Study. "What are the game mechanics of *Legend of Zelda*?" "What ways to the game mechanics support the narrative of the game?" "What ways do the game mechanics support the Hero's Journey template?" "How does game length affect the execution of game mechanics?"– Cheyenne

Reading

Game Feels, 229-276

Gaming

Legend of Zelda, dungeons 3 and 4

Production Meeting 12:

The team will further "fill in" the artwork templates made in the alpha. Discussion will focus on aesthetic choices and finalization of written text in the game.

Week 14: Apr 28- May 2

Production Meeting 10:

The team will continue to fine tune game mechanic problems as well as finalize artwork for the game's aesthetics.

Production Meeting 11:

The team will take the time to put the game out into the field and have other players play test it. They will record responses from playtesters and devote this production meeting to addressing critiques and problems found by the volunteer playtesters

Week 15: May 6-11

Production Meeting 12:

The Team will finalize their video game, having made adjustments from the play testing phase.

Discussion Meeting 14: Closing Discussion. Summary of what we have learned. Discussion on how to further expand the topics studied in the course – No leader

Reading: 36

"The Philosophy of The Wind Waker". Dan Vernon Merrill. 23

"Immortal childhood". Dan Vernon Merrill. 13

Gaming:

Legend of Zelda, dungeons *5-8*

Week 16: May 14-16

Production Meeting 13:

The Team will present their completed work to Professor Littman and give a presentation on the challenges of game design.

Final papers will be turned in at this time.

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3. **How** – *Provide a well-researched bibliography including all of the materials from the syllabus*

- Use standard bibliographic formatting (APA, MLA, etc.)
- Annotate each item in bibliography, explaining its relevance to the course

Ludography:

Analgesic Productions. *Anodyne*. Analgesic Productions. 2013. This top-down adventure game supplements its critique on escapism with a thematic soundtrack.

Anthropy, Anna. *Dys4ia*. Newgrounds. 2012. http://www.newgrounds.com/portal/view/591565. As a short series of mini-games, this narrative transforms the creator's hormone replacement therapy into simple yet powerful game mechanics that emphasize her difficult struggle.

Atari, Inc. *Yar's Revenge*. Atari, Inc. 1982. [Atari 2600 original]. http://my.ign.com/atari/yars-revenge. An early, abstract combat game represents asymmetrical game design.

Bithell, Mike. *Thomas Was Alone*. 2012. This platformer demonstrates the power of narrative, by transforming what would otherwise be a mediocre Flash game into a story with deep characters and gripping plot.

Blendo Games. *Atom Zombie Smasher*. 2011. This strategy game employs a unique reward mechanic that allows previous successes to compound and lead to greater rewards.

Blendo Games. *Gravity Bone*. 2008. This first-person thriller subverts the player's expectations in favor of a stronger, more visceral narrative.

Blendo Games. *Thirty Flights of Loving*. 2012. This fast-paced thriller uses a cinematic style of storytelling and strong imagery to captivate the player.

Boehm, Evan. *The Carp and the Seagull*. The Creators Project. 2013. http://thecarpandtheseagull.thecreatorsproject.com/. This project blurs the lines between cinema and new media. It will be a key piece to consider the transition of cinematic narrative to new medium narrative possibilities.

Increpare Games. *Slave of God.* 2012. http://www.increpare.com/2012/12/slave-of-god/. The mind-numbing architecture of a nightclub portrayed in this game becomes part of the game mechanic as the player tries to remain engaged in an environment that seeks to overload the senses.

Key, Ed. Kanaga, David. *Proteus*. 2013. This open world game invites the player to explore an island, using art style and soundscapes to evoke a feeling of childlike wonder.

Magnuson, Jordan. *Freedom Bridge*. 2011. http://www.necessarygames.com/my-games/freedom-bridge/flash. A micro linear narrative that represent minimal but fundamental interaction to reach an end state.

Magnuson, Jordan. *Loneliness*. 2011.
http://www.necessarygames.com/my-games/loneliness/flash. Another minimal game that uses game mechanics to recreate the human experience of feeling lonely and unsocial.
Namco. *Galaga*. Namco. 1981. [arcade original]. http://www.galagagame.net/galaga.php. A shoot-em-up that requires appreciation of cues and signals from the game itself to master.
Namco. *Pacman*. Namco. 1980. [arcade original]. http://originalpacman.com/. This labyrinth of hunger and ghosts will provide a introductory understanding of how a singular game mechanic defines a game.
Nintendo. *Donkey Kong*. Nintendo. 1981. [arcade original]. http://www.freekong.org/. An introductory exploration into how simple mechanics can expand into a whole game.
Nintendo EAD. *Super Mario Bros*. Nintendo. 1985. [NES original]. http://nesbox.com/game/super-mario-bros/rom/147547c8229257f7e2c46e575f375ee6. The two-dimensional architecture will act as a case study in game flow.
Nintendo R&D4. *The Legend of Zelda.* Nintendo. 1986. [NES original]. The classic adventure game that will complement the Hero's Journey readings.
Number None, Inc. *Braid*. Number None, Inc. 2008. This independent puzzle game considers time as it affects both narrative of human relations and as a game mechanic. Each portion of the game corresponds to problems romantic relationships confront as time progresses.
Pajitnov, Alexey. *Tetris*. Nintendo. 1989. [NES original]. http://www.nesfiles.com/NES/Play/Tetris. The game of pure, abstract mechanics only possible in a virtual space.
Porpentine. *Cyberqueen*. 2012. http://aliendovecote.com/uploads/twine/LD25/CYBERQUEEN.html. a TWINE game that prefers narrative to visual display.
Ryan Makes Games. *CoD of Duty*. 2013. http://rjevans.net/post/41629208761/cod-of-duty-the-premier-first-person-shooting-fish-in. A satirical game that responds to the simplicity of the Call of Duty franchise
Simatten. *Fish So Sage*. 2013. http://simattoon0138.wix.com/fishsosage. The simple game contains a layered game mechanic that makes the player's choice valuable and rewarding during every moment of game play.
thecatamites. *The Pleasure Drome of Kubla Khan*. 2012. http://www.freeindiegam.es/2012/09/pleasuredromes-of-kubla-khan-thecatamites/. This absurdist response to Coleridge's famed poem will offer a direct exploration of how space and time along with other narrative properties differ from traditional paper texts and video games.
The Chinese Room. *Dear Esther*. Steam. 2012. This first person adventure game tells a story through a series of recordings, and leaves it to the player to work out what happened.

Bibliography:

Adams, Ernest. "The Role of Architecture in Video Games." *The Role of Architecture in Video Games*. Gamasutura, 9 Oct. 2002. Web. 19 Apr. 2013. <http://www.designersnotebook.com/Columns/047_The_Role_of_Architecture/body_047_the_role_of_architecture.htm>. This essay examines the functional role of virtual architecture in the context of physical design and architectural decisions and styles.
Biddlecom, Aaron. "Expressive Gameplay." *Extra Credits*. Extra Credits, 9 Jan. 2012. Web. 20 Apr. 2013. <http://extra-credits.net/articles/expressive-gameplay/>. This short essay gives an introductory examination of the mediums ability to move a player through emotional choices in a game.

Bossche, Andrew Vanden. "Here Are Some Emotions Invented by Videogames." Weblog post. *Nightmare Mode*. Wordpress, 5 Nov. 2012. Web. 19 Apr. 2013. <http://nightmaremode.net/2012/11/here-are-some-emotions-invented-by-videogames-22915/ >.This piece addressess a new layers of aesthetic response unique to the medium of video games.

Bruno, Dan. "Music in "The Legend of Zelda: Ocarina of Time"" *Cruise Elroy*. Dan Bruno, 6 Apr. 2008. Web. 20 Apr. 2013. <http://cruiseelroy.net/2008/04/ocarina-music-1/>. This website devotes itself to a case study of the musical intricacies present in the game *The Legend of Zelda: Ocarina of Time*. This case study will provide an understanding of how music can embellish the emotions of the the hero's journey narrative.

Campbell, Joseph. *The Hero with a Thousand Faces.* Princeton, NJ: Princeton UP, 1968. Print. This key text will provide both a cultural and theoretical understanding for the common game narrative arc know as the hero's journey. We believe Campbell's text has incredible importance for a medium that often provides the player an avatar that strengthens over the course of the game.

Church, Doug. "Gamasutra - Formal Abstract Design Tools." *Gamasutra Article*. N.p., 16 July 1999. Web. 28 Sept. 2013. <http://www.gamasutra.com/view/feature/3357/formal_abstract_design_tools.php>. This document derives from a game developer's view on game design and provides specific vocabulary and metrics for discussing a game's features and value.

Coleridge, Samuel Taylor. "Kubla Khan." *Poets.org*. Academy of American Poets, n.d. Web. 06 Jan. 2014. This text will be the example that allows us to consider Fludernik's principles of narratology before moving on to new media texts.

Cutler, Brett. "Urban Flight." *Extra Credits*. Extra Credits, 9 Jan. 2012. Web. 19 Apr. 2013. <http://extra-credits.net/articles/urban-flight/>. This article is a case study of a characteristic common in the RPG genre of video games, the first steps outside the avatar's home. Such a piece will align with our reading of Campbell's text to understand how a the steps of a video game's narrative correspond to the empowerment of the player.

Fludernik, Monika. *An Introduction to Narratology*. London: Routledge, 2009. 1-52. http://elsru.ir/wp-content/uploads/2013/09/Monika-Fludernik-An-Introduction-to-Narratology-2009.pdf. This is the textbook introduction to principles of narrative theory and will give us a foundation for considering narrative in video games.

Gaider, David. "The Bittersweetest Thing." *The Bittersweetest Thing*. Tumblr, 2013. Web. 20 Apr. 2013. <http://dgaider.tumblr.com/post/36331574543/on-narrative-design-part-1>. This personal blog discusses the problems of game narrative creation in a corporate setting. It will provide us with a more personalized, and at times cynical understanding of the steps a video game's design process.

Gaider, David. "On Romances in Games." Weblog post. *The Bittersweetest Thing*. Tumblr, 19 Jan. 2013. Web. 19 Apr. 2013. <http://dgaider.tumblr.com/post/40361886357/on-romances-in-games>. Another personalized viewpoint at the creation of video game narrative, specifically romantic interactions, from an actual video game writer.

Gingold, Chaim. "What WarioWare Can Teach Us about Game Design." *Game Studies* 5.1 (2005): n. pag.*Game Studies*. Oct. 2005. Web. 20 Apr. 2013. <http://www.gamestudies.org/0501/gingold/>. This case study about a game series that revolves around the microgame provides an alternative understanding of game mechanics as

not something mastered but something learned instantaneously for immediate goal completion. As a meta-video game, such an analysis will broaden our definition of the game mechanic.

Goodman, Paul, and Adams Greenwood-Ericksen. "Whey Left 4 Dead Works." *Gamasutra*. UBM Techweb, 2 Dec. 2010. Web. 19 Apr. 2013. <http://www.gamasutra.com/view/feature/6235/why_left_4_dead_works.php?print=1>. This essay is a case study analysis of the popular cooperative zombie shooter game, *Left 4 Dead*. In it, the authors assess the synergistic effects of game mechanics and how simple concerns layer on top of one another to create a challenge for the player.

Hasselström, Peter. "Soundscapes – Music Can Ruin Everything." *Nightmare Mode*. Wordpress, 22 Apr. 2012. Web. 20 Apr. 2013. <http://nightmaremode.net/2012/04/soundscapes-music-can-ruin-everything-18315/>. This essay examines texts within the gaming industry popular canon that failed to implement music in a productive way to the pre-existing game mechanics.

Hasselström, Peter. "Soundscapes- The Future of Music." Weblog post. *Nighmare Mode*. Wordpress, 20 June 2012. Web. <http://nightmaremode.net/2012/06/soundscapes-the-future-of-music-20355/>. In contrast to the essay above, Hasselstrom here addresses the alternative use of music in a game to amplify the player's experience.

Heard, Daryl. "After Pressing Start: Silent Hill." *Nightmare Mode*. Wordpress, 11 May 2012. Web. 20 Apr. 2013. <http://nightmaremode.net/2012/05/after-pressing-start-silent-hill-18822/>. This case study addresses the emotional impact of limited options within the game mechanics of the horror genre.

Hocking, Clint. "Ludonarrative Dissonance in Bioshock." *'Click Nothing'* N.p., 7 Oct. 2007. Web. 20 Apr. 2013. <http://clicknothing.typepad.com/click_nothing/2007/10/ludonarrative-d.html>. A concise yet landmark text in the contemporary videogame discourse. Hocking addresses the conflict between narrative and mechanic with a game medium.

Hollis, Line. "How Our Perception of Space in Games Changes Depending on Our Maps." Weblog post.*Nightmare Mode*. Wordpress, 14 Nov. 2012. Web. 19 Apr. 2013. <http://nightmaremode.net/2012/11/how-our-perception-of-space-in-games-changes-depending-on-our-maps-23229/>. This essay addresses the emotional facet of "exploration" within video game mechanics and how mental and physical representation of the virtual space affects our perception of a game.

Holmes, Dylan. ""Unlocks" and the Gamification of Gaming." *Nightmare Mode*. Wordpress, 8 May 2012. Web. 20 Apr. 2013. <http://nightmaremode.net/2012/05/unlocks-and-the-gamification-of-gaming-18717/>. This essay examines the concept of gamification and how reward mechanics replace aesthetic or narrative pleasure from a video game.

"The Importance of Architecture in Video Games and Virtual Worlds | ARCH Virtual." *ARCH Virtual RSS2*. ARCH Virtual, 9 Feb. 2013. Web. 19 Apr. 2013. <http://archvirtual.com/2013/02/09/the-importance-of-architecture-in-video-games-and-virtual-worlds/>. This summary text offers connection between physical and virtual design and control of space. It uses specific comparisons between existing real life architecture and the possible expanded meaning of fictional design in a digital space.

Jenkins, Henry. “Games, The Lively New Art”. MIT Press. Web. 6 Jan. 2014. https://wiki.brown.edu/confluence/download/attachments/7143524/jenkins.games.pdf. This piece explores exactly how video games attempt to take up the mantle of art.

Jones, Mat. "Audio Logs Are Terrible: 4 Better Ways To Tell Stories." *The Average Gamer*. Rock Base Projects, n.d. Web. 19 Apr. 2013. <http://www.theaveragegamer.com/2012/11/14/audio-logs-are-terrible-4-better-ways-to-tell-stories/>. This satirical essay critiques the flawed narrative decision to produce expository text through audio files in a game world. It speaks to the importance of implicating seamless world building into a game’s system of mechanics and progression.

Lane, Rick. "How Realistic Is Video Game Sword-Fighting?" *IGN*. IGN Entertainment, Inc., 11 Dec. 2012. Web. 19 Apr. 2013. <http://www.ign.com/articles/2012/12/11/how-realistic-is-video-game-sword-fighting>.

Liesegang, Shane. "Impressionist Gameplay." *Bamboo Cyberdream*. Octopress, 21 Feb. 2013. Web. 20 Apr. 2013. <http://blog.shaneliesegang.com/2013/02/impressionist-gameplay/>. This essay is a case study on the game mechanic of sword fighting often found in fantasy games. It will offer a comparison of how a single ludic system can be interpreted in a multitude of ways.

Manovich, Lev. *The Language of New Media*. Cambridge, MA: MIT, 2002. 70-74. http://www.manovich.net/LNM/Manovich.pdf. This short piece is a useful devil’s advocate that questions whether video games are truly unique regarding interactivity. It is an opposing side of the debate for video game’s artistic values.

Meakin, Ben. "What Music Does to Us: Non-diegetic Songs in Red Dead Redemption and Far Cry 3." *Gamer Theories*. Wordpress, 25 Feb. 2013. Web. 19 Apr. 2013. <http://gamertheories.wordpress.com/2013/02/25/music-in-red-dead-redemption-and-far-cry-3/>. This essay examines two routes of embellishing a video game with a musical score.

Merrill, Dan Vernon. "Immortal Childhood." *Dan Vernon Merrill*. N.p., 14 June 2009. Web. 20 Apr. 2013. <http://www.zeldauniverse.net/articles/immortal-childhood/>. This essay represents how one would begin to analyze a video game under a traditional literary lens. It compiles the aesthetic of the famed video game series *Legend of Zelda* to explore the variations on a single theme of youth and adventure.

Merrill, Dan Vernon. "The Philosophy of The Wind Waker." *Dan Vernon Merrill*. N.p., 4 Apr. 2010. Web. 19 Apr. 2013. <http://www.zeldauniverse.net/articles/the-philosophy-of-the-wind-waker-part-one/>. In comparison to the above essay, here Merrill examines a single game and unpacks its narrative elements with the larger system of the game world.

Newman, James. "Lecturer at Edgehill College, UK. The Myth of the Ergodic Videogame Some Thoughts on Player-character Relationships in Videogames." *Game Studies* 2.1 (2002): n. pag. *Game Studies*. Web. 20 Apr. 2013. <http://www.gamestudies.org/0102/newman/>. A polemic paper that argues against a longstanding tenant of the video game medium, that games contain interaction and choice with a variable progression. By challenging “interactivity” this essay puts into question how a player relates to a game system.

O'Connor, Daniel. "A Grave Situation: Player Death and Agency." *ScreenShaped Eyes*. Wordpress, 4 Apr. 2013. Web. 20 Apr. 2013. <http://screenshapedeyes.com/2013/04/04/a-grave-situation-player-death-and-agency/>. This essay explores the idea of avatar death and how the player accepts the (repeated) death of their avatar while progressing in a game.

Payton, Emily. "Caring for Polygons: NPC Bonding and Attachment." Weblog post. *Nightmare Mode*. Wordpress, 13 June 2012. Web. 19 Apr. 2013. <http://nightmaremode.net/2012/06/caring-for-polygons-npc-bonding-and-attachment-19721/> . How are video game characters similar to characters of other mediums? What amount of connection between characters and the audience are unique to video games? This essay explores bonds between the virtual and the player.

Peirce, Charles Sanders. “What is a Sign”. *How to Reason: A Critick of Arguments.* This short excerpt categorizes all signs into an index, icon or symbol. Understanding Peirce's foundational sign-theory will help us understand how to populate a digital landscape with signs that effectively cue the player into the rules of our game world.

Rosewater, Mark. "Living in Synergy : Daily MTG : Magic: The Gathering." *Living in Synergy : Daily MTG : Magic: The Gathering*. Wizards of the Coast, 25 Feb. 2013. Web. 19 Apr. 2013. <http://www.wizards.com/Magic/Magazine/Article.aspx?x=mtg/daily/mm/236>.

Ryan, Marie-Laure. "Beyond Myth and Metaphor- The Case of Narrative in Digital Media." *Game Studies* 1.1 (2001): n. pag. *Game Stuides*. Jan. 2001. Web. 20 Apr. 2013. <http://www.gamestudies.org/0101/ryan/>.

Ryan, Marie-Laure. “Space, Place and Story”. Web. 6 Jan. 2014. http://users.frii.com/mlryan/spaceplace.pdf. This essay takes narrative theory terms of space and applies them to video games to see how narrative structure can be told through video games.

Sarkeesian, Anita. "Feminist Frequency." *Feminist Frequency*. Feminist Frequency, 7 Mar. 2013. Web. 20 Apr. 2013. <http://www.feministfrequency.com/>. This revolutionary work of feminist game criticism makes a comprehensive examination of the negative use of women within video game narratives

Saw, Greg. "Feedback Loop: Games Aren't Fun." Web log post. *Nightmare Mode*. Wordpress, 23 Mar. 2012. Web. 19 Apr. 2013. <http://nightmaremode.net/2012/05/feedback-loop-games-arent-fun-19013/>. This micoessay addresses the problematic between fun and victory within games.

Schanuel, Matthew. "What Can We Consider ‘negative Space’ in Games?" Weblog post. *Nightmare Mode*. Wordpress, 3 Dec. 2012. Web. 19 Apr. 2013. <http://nightmaremode.net/2012/12/what-can-we-consider-negative-space-in-games-23874/>. As the art theory of videogames develops, this author seeks to ask the question of negative space in video games and proposes how such a theory may be applied to a video game system.

Smith, Gillian, Cha, Mee, Whitehead, Jim. “A Framework for Analysis of 2D Platformer Levels”. *Sandbox ‘08: Proceedings of the 2008 ACM SIGGRAPH symposium on Video Games*. New York, NY, USA, ACM, pp. 75-80. 2008. Games and Playable Media, UC Santa Cruz. 19 Oct. 2013. <http://games.soe.ucsc.edu/sites/default/files/smith-sandbox-08.pdf> This is a formal, scholarly analysis of how two dimensional architecture controls game movement in the genre known as “platformers”.

"Soundscapes- The Future of Sound." Weblog post. *Nightmare Mode*. Wordpress, 17 June 2012. Web. 19 Apr. 2013. <http://nightmaremode.net/2012/06/soundscapes-the-future-of-sound-20132/>. This essay provides a technologic and historic understanding of sound in virtual space.

Starkey, Daniel. "Violence, Dissonance and Uncharted 2." *Extra Credits*. Extra Credits, 28 Jan. 2013. Web. 20 Apr. 2013.

<http://extra-credits.net/articles/violence-dissonance-and-uncharted-2/>. Analyzing a blockbuster game, this essay applies Clint Hocking's term of ludonarrative dissonance to *Uncharted 2*'s protagonist and avatar to understand the influence of violence in the game.

Stern, Craig. "Unpredictability and Control in Turn-based Combat: An Examination." *SinisterDesign.net*. Sinister Design, 7 Nov. 2012. Web. 19 Apr. 2013. <http://sinisterdesign.net/unpredictability-and-control-in-turn-based-combat-an-examination/>. This indepth game mechanics theory essay addresses ideas of randomness and control in the genre of strategy games. It allows us to understand the spectrum of possibilities in game mechanic design

Stout, Mike. "Learning From the Masters: Level Design in "The Legend of Zelda"" *Gamasutra*. UBM Tecweb, 3 Jan. 2012. Web. 19 Apr. 2013. <http://www.gamasutra.com/view/feature/134949/learning_from_the_masters_level_.php?print=1>. This essay is a close reading of level design and architecture in the first *Legend of Zelda* game. It will offer information on how adventure games structure space to make challenges and progression understandable to the player.

Stuart, Keith. "Is Frustration an Essential Part of Game Design?" *The Guardian*. Guardian News and Media, 12 May 0050. Web. 19 Apr. 2013. <http://www.guardian.co.uk/technology/gamesblog/2013/feb/14/frustration-in-game-design>. This important essay speaks to ideas of difficulty with game systems and if difficulty is necessary to the game experience and aesthetic of play.

Sullivan, Anne, Michael Mateas, and Noah Wardrip. "Making Quests Playable." *Leonardo Electronic Almanac*17.2 (n.d.): 140-52. Web. 28 Sept. 2013. <http://games.soe.ucsc.edu/sites/default/files/0011_sullivan.pdf> This reserach essay offers ideas that video game quests are inherently flawed because they lack elements of choice that a paper-based board game holds essential. It offers ideas on how to make the quest of a computer game more interactive for a player.

Swink, Steve. *Game Feel: A Game Designer's Guide to Virtual Sensation*. Amsterdam: Morgan Kaufmann/Elsevier, 2009. Print. This text will be a core source of information to understand and finesse the game mechanic we develop. Game mechanics are the core element of any game and therefore this text is a necessary foundational piece to understanding what is "fun" and rewarding about an effective mechanic.

Todd, Hamish. "Finding The Fun Medusa Heads In Castlevania." *Kotaku Australia*. Allure Media, 27 Feb. 2012. Web. 19 Apr. 2013. <http://www.kotaku.com.au/2012/02/finding-the-fun-medusa-heads-in-castlevania/>. This essay is a close examination of the bouncing head enemies in the Castlevania game and how such a simple sinusoidal enemy pattern creates complex challenges for the player.

Todd, Hamish. "Untold Riches: The Brilliance of Half-Life's Barnacles - Destructoid." *Destructoid*. Destructoid, 27 Dec. 2012. Web. 19 Apr. 2013. <http://www.destructoid.com/untold-riches-the-brilliance-of-half-life-s-barnacles-233589.phtml>. Similar to the above essay on "Medusa Heads" this articles is a close reading of the creativity of the enemy known as "barnacles" in the Half-Life game series and how the enemy's design and attack mechanic demands the player assess their virtual tool kit and space to overcome this stationary obstacle.

Waldron, Chris. "The Road Fast Travelled: How Fast Travel Can Affect an Open-World." *Nightmare Mode*. Wordpress, 22 June 2012. Web. 20 Apr. 2013. <http://nightmaremode.net/2012/06/the-road-fast-travelled-how-fast-travel-can-affect-an-open-

world-20395/>. This essay examines game worlds and how the element of fast travel works to destroy distance barriers within a game's virtual space at the cost of losing game immersion and aesthetics of travel.

Walther, Bo K. "Playing and Gaming: Reflections and Classifications." *Game Studies* 3.1 (2003): n. pag. *Game Studies*. May 2003. Web. 20 Apr. 2013. <http://www.gamestudies.org/0301/walther/>. This theoretical essay explores the difference between "playing" and "gaming" and will be used to consider on what mindset a game engages with its audience.

Whalen, Zach. "Play Along- An Approach to Videogame Music." *Game Studies* 4.1 (2004): n. pag. *Game Studies* -. Nov. 2004. Web. 20 Apr. 2013. <http://www.gamestudies.org/0401/whalen/>. This summary text is an introduction to understanding the effect of music within a video game and how music can amplify both narrative and mechanic elements.

Wilson, Mark. "Monopoly Redesigned, And Stripped To Its Very Core." *Co.Design*. N.p., n.d. Web. 19 Apr. 2013. <http://www.fastcodesign.com/1671435/monopoly-redesigned-and-stripped-to-its-very-core>. Although actually about a board game and not a video game, this essay considers the game mechanic at its purest and makes one consider the absolute minimal necessities of interactions and economies of a game system.

Wittwer, Alois. "The Campfire: A Nightmare in Hyrule." *Nightmare Mode*. Wordpress, 14 June 2012. Web. 20 Apr. 2013. <http://nightmaremode.net/2012/06/the-campfire-a-nightmare-in-hyrule-19998/>. This personal narrative addresses emotions present in *The Legend of Zelda: Ocarina of Time* and how fear exists in a game space.

Zatkin, Geoffrey. "Reward Mechanics… (Part 1)." *Extra Credits*. Extra Credits, 19 Jan. 2012. Web. 20 Apr. 2013. <http://extra-credits.net/articles/reward-mechanics-part-1/>. This essay looks at the commercial aspect of game mechanics and how psychology encourages a player to return to a video game system.

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4. **Evaluation** – *Describe the plan for student assessment and grading*

- Each student enrolled in a (G)ISP or AI must submit an **individual** mid-term AND final paper/project/exam to the Faculty Sponsor for evaluation, even if the GISP includes a joint project in which all members participate.
- In 1-2 paragraphs, describe the work to be submitted by each student for evaluation. Indicate the proposed nature, length, and the evaluation questions and criteria for the work.
- At the end of each (G)ISP or AI, a joint student-faculty evaluation report of the accomplishments of the project must be submitted to the academic dean who oversees the (G)ISP program.

1) Weekly Discussions

For every meeting, the GISP will select a discussion leader to bring conversation prompts drawn from the week's syllabus readings. The selection of the discussion leader will coincide with the topic of discussion allowing them to give their expertise in their individual fields in order

to further the GISP goals. (i.e. Week 3: Game Narratives will most adequately be addressed by a Lead Discussant with a particular background and interest in screenwriting or literary dialogue). In order to ensure equal workload distribution, each member of the GISP team will lead the same number of Weekly Discussions. The leader will produce a page-long personal response to that week's readings as well as draft questions to guide the discussion.

Regarding design process meetings which will focus on the group's joint game creation, the meetings will take a more equaled, "think tank" approach. Each member will present their contributions for that stage of the game design process. The group will then take those ideas and work to integrate it into the game design process.

2) Design Assignments

As can be seen in the weekly meeting outline, there will be production assignments throughout the semester that vary along the production schedule. Each member of the team will keep a log of the work they produce for each production meeting. Initially, these assignments will take the form of brain-storming think tank ideas. Such ideas will be drafted as homework and read out to the group during the discussion. Later on in the design process, each team member will be assigned skill specific assignments. These creations varying from programing code to concept art will be implemented into the game's drafts at each production meeting.

3) Midterm Paper

GISP team members will each submit a 4-5 page Mid-Term paper on a video game highlighted in the GISP syllabus. This paper will be a "close reading" of one specific game and should analyze a synergistic or dissonant relationship between said game's narrative and its game mechanics. At least one primary text and two additional sources from the syllabus will be required to aid Mid-Term Paper arguments, and research beyond the syllabus is expected.

4) Final Paper

The GISP team will produce a collaborative product in the form of a partially (if not fully) rendered game. The finished product will display evidence of clear attention to the game elements addressed in the GISP syllabus (game mechanics, narratives, avatar personalities, etc.). In addition to the collaborative product, each GISP member will be required to present his/her contribution to the final product in an **Individual Final Paper**

Individual Final Papers will highlight each member's field of expertise, how his/her study has informed GISP game production, and, in turn, how the production of the game has informed his/her individual field of study. Papers should include a description of the individual's creative process, a discussion of inspirational sources from the GISP syllabus, and how his/her individual contribution addresses the theories of game design proposed by the GISP mission. Papers will also be 4-5 pages in length.

5. **Planning Process** – *Describe the (G)ISP or AI planning process*

- Describe what *each participant* contributed to the course planning (i.e. syllabus, structure, bibliography).
- Explain why the Faculty Sponsor was chosen and what they contributed in the planning of the (G)ISP or AI.
- Name additional Brown faculty and other people consulted.

The GISP coordinator, Joseph DiZoglio, constructed the reading syllabus and contributed most of the shorter articles drawn from his personal interest in gaming scholarship. He also organized the syllabus's weekly readings design process with input from the group. Cheyenne Morrin, with advise from Angela Ferraiola, professor of intermediate screenwriting, selected the longer texts, *Hero With a Thousand Faces*, *Level Up!,* and *Game Feel* as the "textbooks" of the course. Paavan Bhavsar and Joseph DiZoglio worked in collaboration to construct the ludography. The chosen games draw somewhat from the early arcade and Nintendo era of the 1980s but mostly rely on independent game developers of the millennial era. Paavan Bhavsar also wrote an explanation of the video game's production process. Jacob Ramos, in conversation with other GISP members wrote the GISP Evaluation criteria. Geoffrey Trousdale, having taken the video game design courses the CS department offers, produced an explanation on how our GISP differs from the current Brown Curriculum.

Joseph DiZoglio and Cheyenne Morrin made the CRC's recommended edits.

6. **Technical Details** – *Statements regarding finances and (G)ISPs duplicating regular courses*

- (G)ISPs must not duplicate previous (G)ISPs or regular course offerings. If your project appears similar to another (G)ISP or a regular Brown course, please explain how it differs substantively from the course.
- No (G)ISPS or AIs will be approved that require the payment of funds for instruction. Have you or anyone else made financial commitments to the sponsor or assisting instructor?
- Please see IS Information Packet for details on potential funding opportunities for course enhancement, such as non-essential lab materials or field trips. Please do not presume that funding will be provided for core course elements.

The Brown CS department offers two game-related courses to students: CS195n (2D Game Engines) and CS195u (Topics in 3D Game Engines). These courses teach how to make a physics

engine with which one can write a computer game. Students are then given some freedom to build a small game on top of each of the engines they create. What the course does not teach is the underlying theories, techniques, and mechanics involved in making a game that is fun or interesting to play. The courses teach students how to engineer the technical foundations for game's software framework. This GISP will study the elements of "play" present at a higher level in game design. While coding and computer graphics knowledge are required to create a computer game, those skills cannot stand alone if one hopes to make a successful game.

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7. **Faculty Sponsor Statement(s) + Optional Instructor Co-Sponsor Statement**
   - The Faculty Sponsor and optional Instructor Co-Sponsor statement forms can be found on the CRC website.
   - The Faculty Sponsor statement must be included with any (G)ISP or AI proposal.

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8. **Supplements** – *Additional supplements are required for Language GISPs and AIs*
   - The **Language GISP Supplement** form can be found on the CRC website.
   - The **AI Supplement** form can be found on the CRC website. Note that the Agency Sponsor Form (included in the AI Supplement) is mandatory for AIs.
   - Please submit a **Field Trip Waiver** if required.
   - These supplements should be submitted along with this application.

   See Cover Letter

(Please delete this section before submitting)

A note from the student coordinators:
Make this worthwhile! Sure, you can try to submit a proposal that will get you credit for an easy class, but this is your experience. You are investing a lot of money and energy to be here. Take advantage of it. Don't waste it. While you are planning the (G)ISP or AI, think about what you want to learn while you are at Brown, what you want to get out of your experience and your time here – then make it happen. Think about independent study as a way to pursue your passions, to work more closely with professors, and to be creative. *The **New Curriculum** **was proposed by students in a GISP**; that's a big legacy to live up to. Let's show what we can do when we are in control of our own education.*

Submission Instructions:
Include the following in a **single email** to independent_study@brown.edu:
- This completed proposal form saved as a .docx or .doc file with an abbreviated title as the file name
- The Faculty Sponsor Statement(s), signed and scanned, as a .pdf file
- (Depending on the project) The optional Instructor Co-Sponsor or Agency Sponsor Statement

Please visit the Curricular Resource Center's website to find the application deadlines.

Feedback

We're interested in your ideas for improving the Independent Study program, including the application and review process. Please visit the CRC or email us to share your suggestions or to get help with any problems you encounter.