**SYLLABUS: GAM 395: Game Design and Production Capstone, Winter 2018**

**Class Meeting Time & Location**

Tue &Thur: 10:10am – 11:40am

14 EAS, 505 Loop

**Instructor**

Doris C. Rusch

Office: Daley Building, 200G

Office hours: Tue & Thur 8:30-10:00am

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**COURSE DESCRIPTION**

Students will be guided through a full production cycle of game development from brainstorming a cool game concept to playtesting and polishing a complete, short but awesome game. The primary purpose of this course is for students to gain experience working intensely as a team or “game studio”. Students will learn how to work successfully with people that have diverse skill sets, backgrounds, and interests. Teams will be formed by students (with instructor approval) or by the instructor. Once teams are formed they can’t be changed and will last both Winter and Spring quarters.

PREREQUISITE(S): GAM 394

**LEARNING GOALS:**

* To experience a full game development production cycle (from concept to asset production) within a collaborative context
* To learn how to “scope” a game design idea based on available time, resources and expertise
* To gain experience working in cross-functional teams
* To gain practice in evaluating game design ideas, game prototypes, and demos in order to improve their quality.

**Main Deliverable Related to Course Learning Goals**

* The main deliverable of the two-quarter course is to design and develop an original, engaging, indie game or game 4 change. Capstone I (winter quarter) will deliver an alpha build of a game defined as a demo that articulates the core gameplay, art, animation and audio concept; Capstone II (spring quarter) a demo build, defined as 5 minutes of engaging / purposeful gameplay which includes exemplary art, animation, writing and audio.

**Learning Domain Description**

GAM 395 is included in the Liberal Studies program as a course with credit in the Senior Year Capstone domain. The Senior Capstone experience allows students to explore substantive areas of scholarship and creative works within their major. Students are given the opportunity to create knowledge within the context of the ideas, perspectives, and research of others in the discipline. The Capstone further provides students the opportunity to integrate and compare knowledge gained from their major with that which was learned in the domain area and core courses of the Liberal Studies Program.  In this culminating experience, students create, under the mentorship of a faculty member, a final project of their own design.

**Learning Outcomes**

Students will be able to:

* Draw selectively on the wide range of different Liberal Studies courses they have taken, in ways that will illuminate what they have learned in their major programs.
* Pull together the work of their major.
* Combine the work of their major with other Liberal Studies courses and concepts.
* Apply one or more theories or concepts from courses within their major to an analysis of a particular issue relevant to the major.
* Discuss an idea, method or concept from a discipline outside their major field of study to an analysis of a particular issue relevant to their major field of study.
  + Identify perspectives and/or values of the major field, and compare them with those of one or more disciplines outside the major.

**How Learning Outcomes Will Be Met:**

* Students are required to produce at least 10 pages of written work that address one or more of the above-mentioned Liberal Studies Learning Goals. See "playtesting reports" description for details.

**Grading Criteria for Capstone II – Winter 2018**

* **Social: 25% of grade**

Goodwill and Participation in Class: 15%

Goodwill and Participation with Team: 15%

* **Productive: 55% of grade**

Game Development Sequence: 15%

Polished Art, UI, and Audio Slice Demos: 15%

Beta Build: 25%

* **Reflective: 20% of grade**

Reality Check: 5%

Beta Build Production Plan: 5%

Final Sprint Plan 5%

Post Mortem Presentation 5%

**Extra credit:** Going above and beyond helping other students. 1-10% at discretion of instructor. The student who was helped needs to e-mail the instructor and summarize the help that was provided.

**Feedback**

Feedback on your progress and performance in the course will be based on the following items:

* Communication and Critical Thinking: how well are you able to express your ideas, verbally, through your design, and in written form? Is critical thinking evident in your design work?
* Design Process: what are the strengths and weaknesses of your game design process? Are you able to evaluate the work at different points in the process and to identify areas for future development?
* Collaboration: are you able to leverage the strengths of your teammates in ways that are both productive and generous?

You will be given verbal and written feedback throughout the quarter so you know where you stand. We are also going to coordinate times to meet with each team or at least large parts of each team to check in outside of class, playtest and give feedback.

**Promises**

**Two promises to be made:**

1. To your faculty and your peers: that you will respect our time and efforts with your own; that you will work your hardest, and seek to be a better designer, programmer and artist through trial and error, offering enthusiastic, constructive criticism and accepting it in order to improve on your ideas.
2. To yourself: to push yourself beyond the bounds of your comfort zone, and to be brave, adventurous and surprising. If you had a slow start in Winter quarter, Spring quarter is the time to make up for it. Your efforts will not go unnoticed!

**REQUIRED MATERIALS:**

No required textbook.

Useful books and other resources will be suggested throughout the course. Complementary reading and other supportive materials will also be posted on D2L under contents.

**D2L**

We are using D2L (http://d2l.depaul.edu) as the supporting learning platform for this course. All course materials including weekly lecture slides and class info (i.e. syllabus, lesson plan, assignment descriptions etc.) are available through D2L under “contents”.

Assignments are submitted to its dedicated folder on Dropbox on D2L. This is also where you will get written feedback to your assignments from me.

**POLICIES**

* **Attendance**: You are expected to attend all classes and participate in class activities as scheduled. If you miss a class for any reason, you are expected to follow up with the instructor and your team, find out what was missed and make up any work. 1/3 of a letter grade will be docked from your final grade in the course for each absence beyond two (2). For example, if you end the class with an A-, but have missed 4 classes in total, your final grade would be a B. Think of the two “free” absences as sick days or emergency days. If you use them for other reasons early in the term, you may find yourself in a bind if you get sick later on, or need to miss class for a family emergency. Because it is impossible for me to determine fairly what constitutes a compelling reason to miss class, ***there are no excused absences beyond these two.***

**Tardiness:** please arrive to class on time! Tardiness under any circumstances is disruptive to the class as a whole. Habitual lateness, however, is a sure sign of disrespect to your classmates. As such, it will be factored into your participation grade as the instructor sees fit. If for some reason you have a class schedule that makes it physically impossible for you to arrive by the course starting time, please let me know by the end of the first week of classes so that we can make the appropriate arrangements. Otherwise, all students are expected to be ready to begin class at start time.

* **Late assignments**: will only be accepted within 3 days of the due date. Each day the assignment is late will decrease the possible point value by 10%.
* **External Expert Advisors:** Each studio team is expected to work with an External Expert Advisor, defined as an expert in some aspect of game development (art, audio, design, programming, etc.) that is not on staff or faculty at CDM and have at least more than 2 years of experience making games (recent college graduates don’t count, although that doesn’t mean you can’t also pick their brains). The role of the advisor is to provide additional support and perspective. Studio teams are expected to get input from their advisors at key milestones during the development process, laid out in the Milestones document. Capstone faculty will help teams to identify advisors, if needed. It is the responsibility of the teams, though, to let capstone faculty know if they are having trouble finding an expert advisor. If teams don’t reach out, the assumption is that they have no problems finding their expert advisors on their own.
* **Writing:** All documents delivered in this class are expected to be clear, spell-checked, and demonstrate a high proficiency in written English. The Writing Center offers free one-on-one professional advice from published writers about all types of academic, creative, and professional writing and oral presentations. Go to <http://condor.depaul.edu/writing/> for more information and to set up appointments.
* **Email:** Email is the preferred means of communication between faculty and students enrolled in this course outside of class time. My email is drusch1@cdm.depaul.edu.
* **Plagiarism**: It is your professional responsibility to ensure that all submitted work is your own. Please read DePaul's policy on plagiarism and other academic integrity violations at: <http://academicintegrity.depaul.edu/ContributionFolder/Resources/Students/ViolationDefinitions.html#aiPlagarism>
* **Student rights:** You have rights as a student. To learn about these rights please read DePaul's policies for students regarding student rights, located here <http://sr.depaul.edu/catalog/catalogfiles/current/undergraduate%20student%20handbook/pg51.html>
* **Incomplete**: An incomplete grade is given only for an exceptional reason such as a death in the family, a serious illness, etc. Any such reason must be documented. Any incomplete request must be made at least two weeks before the final and approved by the Dean of the School of Computing and Digital Media. Any consequences resulting from a poor grade for the course will not be considered as valid reasons for such a request.
* **Students with Disabilities**: Students who feel they may need an accommodation based on the impact of a disability should contact me privately to discuss their specific needs. All discussion will remain confidential. To ensure that you receive the most reasonable accommodation based on your needs, contact me as early as possible in the quarter (preferably within the first week of the course) and be sure to contact the following office for support and additional services:

Center for Students with Disabilities (CSD) Lewis Center 1420, 25 East Jackson Blvd.   
Phone number: (312)362-8002  
Fax: (312)362-6544   
TTY: (773)325.7296

[www.studentaffairs.depaul.edu/csd](http://www.studentaffairs.depaul.edu/csd)

[csd@depaul.edu](mailto:csd@depaul.edu)

**Important Dates WQ 2018**

Jan. 2nd: Begin WQ2018 All Classes

Jan 15th: Last day to drop classes with no penalty

Feb. 19th: Last day to withdraw from WQ2018 classes

March 13th: Begin WQ2018 Day & Evening classes final exams

March 19th: End WQ2018 Day & Evening final exams

March 20th: Begin Spring Break

March 23rd: End Spring Break

March 26th: Grades Due: Winter 2018

**ORGANIZATION**

**Team Studio Culture**

Each student game studio will be able to determine its own group culture and develop a set of unique strategies that helps that culture flourish. Based on your team’s group identity, you’ll determine together how you will communicate, meet and collaborate in the ways that best serve your development process.

Communication is key to fostering and maintaining a healthy team dynamic. For example, some teams will thrive making instant messaging a core component, other teams will do better using Skype, scheduling more face-to-face time, etc.

**Slack:** all teams are required to use slack for communication in addition to any other means of their choosing.

**Spreadsheets:** All teams are required to use spreadsheets for project planning. If you really love **Trello**, you can use that, too, but I want you to make your backlogs in the form of a spreadsheet nevertheless for ease of accessibility and overview.

**Version Control:** all teams are required to use a version control tool, preferably Perforce. If a team has experience with Git hub and wants to use that instead, they may do so. Other version control tools are not recommended.

**Team Member Roles:**

1. **Designer**

Designers will write and maintain game design documents, develop and program prototypes, devise and implement level design in code, and strategically structure playtests to solicit the most meaningful feedback. A close working relationship with the programmer will be key to designing a game that will work well in the game engine.

1. **Programmer**

Programmers will work with the designer to develop the game mechanics and implement the game levels, and will work with the artists to develop the GUI and HUD. Programmers, with the help of designers, will prototype game concepts in order to test their technical feasibility, playability and fun. NOTE: Messy code that works imperfectly is infinitely better than beautiful code that takes a long time to write, holding out the empty promise of working perfectly.

1. **Artist**

Artists will work in 2D, creating icons, buttons, model textures, and game screens as well as in 3D, creating models, UV mapping, rigging, and animating.

1. **Sound Designer and Music Composer**

Sound designers / composers will work with the game designers to create sound effects and music that serves the narrative and theme of the game design. Downloading sound effects from the internet and remixing them into new sound effects is encouraged. You can also work with sound designers outside of your capstone team.

**Producer**

Each team will designate a person to serve as their Producer. The producer must have a dual-role designation and be “designer and producer”, or “artist and producer”, or “programmer and producer”. In addition to their other responsibilities, the producer will be responsible for project scheduling, organizing meetings, and always ensuring that the big picture is being served. (The big picture is to actually complete a game that achieves its purpose, e.g. 5min of awesome gameplay, communicating an impactful message etc.)

**Remixing is OK:**

All original IP for the game designs belong to the students of the class. Students are allowed to download any asset they wish and use them in their game: 3D models, music, images, etc. Teams do not need to ask permission to use whatever they want. The only caveat is that at the end of each quarter, each student must provide a list of the assets that they created and the things they did for their studio.

Passing off existing IPs as your own, even in the context of this class, counts as plagiarism. Declare openly where you are using somebody else’s ideas.

**Resources**

All teams must use slack for communication

<https://slack.com/>

All teams should use Perforce as their version control

www.perforce.com

All teams are invited to use PBworks to create and organize their game documents

<http://www.pbworks.com/>

All teams are invited to use google sites to make their project website

<https://sites.google.com/>

All teams should use Unity as their game engine

<http://unity3d.com/>

This link leads to some great Unity resources:

<http://gamemodworkshop.com/resources/index.html>

All teams should use spreadsheets for project planning.

**Overview of Milestones, WQ 2018**

**Milestone 1: Reality Check (week 1, Jan 9th) - 5% of grade**

* At this point, all teams need to know what they are doing. How big is the game? Is this really doable within the remaining 11 weeks? Take a long, cold, hard look at your design, prioritize rigorously and cut what needs to be cut. Err on the side of caution. It is much better to have a small, polished game than a sprawling, buggy monster. If the design still has holes in it, now is the time to patch them up. For good. Finalize that GDD and make it watertight. Spell things out in detail. Divide and conquer. Don't try to design the whole game as a group. It doesn't work. Assign specific areas of the design to specific team members (they can overlap) and work individually. Meet to compare notes and decide between very concrete options.

**Milestone 2: Present Plans for Beta Build (week 2, Jan 18th) - 5%**

* Teams briefly present current state of game
* Teams present plan for final Beta Build and solicit feedback / criticism from class
* Define vision for outputs by various team members: what exactly will get done in terms of level design, programming, art, sound, and UI?
  + NOTE: I understand you want to work and might not always see the value in presenting progress or status quo to class. However, having to do so tends to create some urgency and to structure your progress. The goal is for you to make things very concrete. If you need to tell us, you need to know it for yourself.

**Milestone 3: Game Development Sequence (weeks 2-4; Jan 18th – Feb. 8th) -15%**

**Minimum 3 rounds; 1 round with outside experts (ideally)**

* game prototype sequence (digital)
* Prototype playtesting feedback reports (minimum 3)
* Another technology test/tech demo (if appropriate)
* Another reality check – what needs to get cut from game?
  + I'd suggest you make any scope considerations part of your playtesting reports. No need to submit an extra document.

**Self Assessment 1 and Peer Evaluations 1 due: Feb. 15th**

**Milestone 4: Final Sprint Plan (by week 7, Feb. 22nd) - 5%**

* List and prioritize all tasks, features, and content of the game that still need to get done
  + Put this on whatever team software you use and check off tasks as you go. This list should get considerably shorter day by day. Make sure tasks are clearly assigned to the person who is supposed to do them.

**Milestone 5: Polished Art, UI and Audio Slice Demos (week 5-7, Feb. 15th - Feb. 22nd) - 15%**

* Polished UI (such as score, health bar etc.)
* Polished start, instruction, level end, and replay, screens
* Polished vertical slice of final art in game level
* Final game audio demo

**Milestone 6: Beta Build (by week 10, March 8th) -25%**

* Deliver polished gameplay of vertical slice or small, self-contained game
* Screen-capture / video documenting one minute of awesome gameplay
* Promo video (you need these two types of videos for festival submissions

**Self Assessment 2 and Peer Evaluations 2 due: March 8th**

**Milestone 7: In-Class Showcase and Internal Post Mortem (week 11, March 15th 8:30-11:45am) -5%**

* Prepare a 15min presentation in which you reflect on your development experiences. Things that went wrong, things that went right. You know the drill. Maybe a special note on what it was like to make a "deep game". Because that's really not easy. What have you learnt? What are you taking away from the experience overall.
* Be ready to show your games to your classmates. The final, polished things.

**WHERE ARE THE PUBLIC AND PRIVATE SHOWCASES FOR US?????**

NOTE: We will join the private and public showcase of the capstones that finish at the end of Spring quarter. That way, you can be part of the BIG SHOW and get a much better turnout then when we try to to our own little thing at the end of winter quarter, which is always hectic and still cold and...ugh. Let's end on a high note. It's worth the wait, I'm sure. Stay tuned for details in Spring quarter.