

School of Engineering Information Technology Program ITP 393 Video Game Project Management Units: 4 Semester: Spring 2024 When: Wednesdays 3 PM to 6:20 PM Where: EGG 108 (746 W. Adams)

Instructor: Kyle Ackerman Office: EGG 208 Office Hours: See Blackboard Contact: <u>kyleacke@usc.edu</u> please include "ITP 393" in subject line.

Teaching Assistant: TBD **Contact:** TBD - *cc instructor when emailing TA*

IT Help: Viterbi IT Hours of Service: Monday – Friday, 8:30 a.m. – 5:00 p.m. Contact Info: DRB 205 (213) 740-0517 engrhelp@usc.edu

Catalogue Description

Production and project management of video games from concept to release and beyond.

Course Description

In this course, students engage in a semester-limited development process of a video game, from concept through pre-production to production, release, and ongoing content support, conducted through lectures, discussions, and practical team-based development. Throughout the course of the semester, details of the job of the video game producer, and the realities of working in a game company, are explored and revealed through working on an illustrative project. Students learn many of the necessary "soft skills" of a video game producer (project manager).

Students will explore, from a production perspective, the skills needed to launch and manage a Games as a Service ("GaaS") project and its associated Live Operations ("Live Ops"). Coordinating with students from other disciplines, the class will emulate the launch and operation of a live, consumer-facing, Live Ops gaming ecosystem. Unlike games with a discrete release, this living game will be constantly supported and updated, with a real-world footprint and a goal to grow the player base.

A significant portion of the class time will be laboratory exercises, with a focus on both planning and practical implementation. The class will empower students to work as a team on real-life products with which consumers will engage, execute a collaborative creative vision, and work through production processes, consistently resulting in quality output that is competitive with existing commercial games.

Learning Objectives

This course is focused on the production of Live Operations, ending the semester with a build in a development environment that implements new features that the team of faculty and students have vetted and developed together, polished enough and stable/bug-free enough to deploy to consumers as a game

update. Future semesters of students will be responsible for managing and tracking the implementation of work from prior semesters of students, as well as developing new work to be implemented in later semesters.

The course will allow student producers to get hands-on experience with a live game and potential credit on a game that is commercially available and continuously supported. The class will operate like a game publisher with studio elements, with oversight into the 3rd party development and engagement with all aspects of the game's creation and deployment. The product can be used as a powerful portfolio piece for job seekers.

Focused feedback on both process and product from instructors provides a solid foundation to facilitate project-based learning. Lectures and hands-on guidance on project management, design, production, art/animation, and publishing give students a taste of the "real world" that they'll experience as they embark on their careers as professional game creators. Students will have the opportunity to work under the guidance of instructors to practice production skills and troubleshoot the inevitable problems that arise during development. The class will teach all students a better understanding of their roles on larger teams, the functions of each role, and how to collaborate as part of a game development team working from concept to release.

Students will:

- Recognize the fundamental elements of successfully operating multiplayer interactive entertainment that relies on Live Operations
- Understand the nature of Live Operations and be able to identify the various core functions of a live game that is continuously evolving and supported game with regular events.
- Be able to break down individual responsibilities required to introduce regular events and support ongoing Operations of interactive entertainment with Live Operations.
- Understand the necessity and utility of "Data-Driven Design" informing the operation and evolution of interactive entertainment with Live Operations.
- Learn to hypothesize successful commercial strategies to implement features and events in interactive entertainment with Live Operations and use robust data to test those hypotheses according to the scientific method.
- Understand how to integrate scientific analysis and data-driven analysis to develop features for an ongoing, live creative endeavor by developing and maintaining Live Operations in a work of interactive entertainment.

Prerequisite(s): ITP-180

Co-Requisite(s): n/a

Concurrent Enrollment: n/a

In Partnership with Concurrent Classes: CTIN 499 (Games as a Service and Live Ops) and ITP 181 (Video Game QA Management)

Recommended Preparation: Students should be fluent in the use of Microsoft Word, Excel, PowerPoint, email, and Internet.

Working Hours

The standard formula of two hours of work outside class per unit per week is the minimum expectation for hours put into an AGP project. Students are expected to perform at the high levels needed to build quality interactive experiences. Dedication to the team and its shared goals is expected.

Course Notes

Lecture slides and course content, including homework, will be posted to a shared drive or the course Blackboard page. Course announcements will be posted as an announcement to Blackboard or emailed directly to your USC emails.

Technological Proficiency and Hardware/Software Required

Students are expected to be able to perform the following tasks before the course begins:

- Create a ZIP file that contains one or more files
- UnZIP a file that contains one or more files
- Submit files through Blackboard's submission page
- Download files from Blackboard
- Basic familiarity with Google Slides or PowerPoint

Readings and Supplementary Materials

Optional Materials

- Introduction To Game Development, edited by Steve Rabin; Charles River Media; Second Edition, -13: 978-1-58450-679-9; ISBN-10: 1-58450-679-2
- The Game Production Handbook, by Heather Chandler; Charles River Media; ISBN 1-58450-416-1
- Secrets of the Game Business, edited by François Dominic Laramée; Charles River Media; ISBN 1-58450-282-7
- *Game Design Workshop*, by Tracy Fullerton; Morgan Kaufmann Publishers; Second Edition, ISBN 978-0-240-80974-8

Grading Breakdown

Assignment	% of Grade
Homework Assignments	10
GDD Brief and Demo	20
Prototype Alpha	15
Prototype Beta	15
Launch Candidate	40
TOTAL	100

As in a professional industry environment, performance will be measured by a mix of 1) overall project development and deliverables, 2) functional group-specific deliverables, and 3) individual contribution. Evaluation will be based on how well a project realizes the goals the team has defined for itself and the project. Ultimately, this course exists to empower students to work collectively to put an engaging, unique experience into the hands of players.

Homework Assignments are made through the Blackboard learning content management system to prepare students for the challenges of developing and releasing the launch candidate. Assignments are primarily graded on thoughtfulness and completeness.

GDD Brief and Demo are due at the semester mid-term and involve a brief proposal of content to be developed for the semester's contribution and are evaluated based on creativity, completeness, clarity, and detail.

Key Milestone Deliverables, including Prototype Alpha, Prototype Beta, and Launch Candidate are outlined in an earlier section. For each Key Milestone Deliverable, a grade will be provided to the project team, with individual variation to account for effort and contributions. Each stage will involve

a build of the game within UEFN that will be evaluated based on functionality, creativity, completeness, detail, and engagement.

Because of the unique needs of the project each semester, it is impossible to dictate a structure that applies to each so exactly that we have a mathematical category for attitude, help, efficacy of code, importance within the project, foresight, insight, honesty, collaborative spirit, and many other amorphous qualities that are crucial to working within a team but divorced from coding. Nonetheless, those are invaluable traits that will directly contribute to the success of your project.

Assignment Submission Policy

During class, each student will be instructed on how to, and must learn how to, push changes into the class's UEFN build. Individuals on each team must be prepared to discuss his/her work from the previous week. Some weeks, there will be presentations, which require the teams to be ready to present the game or an aspect of the game or its production process to the class and instructors.

Other assignments are the sprints teams determine for themselves, and individual faculty are responsible for assigning tasks to their student functional teams as a part of the sprint.

Team members are expected to put in time in the EGG as needed to work on their tasks for each sprint.

Team members and leaders are expected to bring the results of sprints and active development problems to the workshop meetings with instructors.

Missing an Assignment Deadline, Incompletes

The only acceptable excuses for missing a Key Assignment deadline or taking an incomplete in the course are personal illness or a family emergency. Students must inform the instructor before the assignment due date and present verifiable evidence for a deadline extension to be granted. Students who wish to take incompletes must also present documentation of the problem to the instructor or student assistant before final grades are due.

For assignments turned in after the assignment deadline without prior permission from the instructor, a penalty will be imposed equal to 10% of the total available points for the assignment, for each day or part of a day that the assignment is late, up to a maximum of seven days.

Attendance Policy

Punctual attendance at all classes is mandatory. Students arriving more than five minutes late to three classes, more than ten minutes late to a single class, or leaving early, will be marked as having an absence from class.

Guidelines for absences affecting grading

- Two absences: lower grade one full grade point (for example, from A to B)
- Three absences: lower grade two full grade points
- Four absences: request to withdraw from a course (instructor's discretion)

Social media, including text messaging and internet messaging, are not allowed to be used during class unless explicitly permitted by the instructor. A half point will be deducted from a student's semester long individual grade for each occurrence of a student being found using them up to 15 total points.

Course Schedule: A Weekly Breakdown

Precise content of class lectures and assignments subject to update, guest speaker availability, or other unforeseen circumstances. Draft subject to change based on revised course materials.

	Topics/Daily Activities	Homework Assigned	Homework Due
Week 1	 Review of Syllabus Class and GAAS Overview - Lecture Game Analytics (Part 1) - Lecture Current State of the Game - Presentation 	 Report on competitive game impressions, including whats working/not working + opportunities for improvement 	
Week 2	 Game Analytics (Part 2) - Lecture Free to Play Design Fundamentals - Lecture including pillars of FTP: Events Content Creation Economy Sales Discipline Workshops 	 Design and Art Concepts for next semester's activities Technical Audit of existing game tech stack 	 Report on competitive game impressions, including whats working/not working + opportunities for improvement
Week 3	 Mechanics, Dynamics, Aesthetics (MDA) - Lecture Usability Testing - Lecture Bi-Weekly Milestone Review 	 Usability Testing Plan 	
Week 4	 Building and Managing Art Pipelines - Lecture Discipline Workshops 	 Art Pipeline Plan Game Production Plan 	 Design and Art Concepts for next semester's activities ("Final") - Presentation Technical Audit of the existing game tech stack
Week 5	 Economy Design (Part 1) - Lecture Bi-Weekly Milestone Review 	 Technical Design Document (TDD) Addressing Design and Art Concepts 	 Usability Testing Plan Game Economy Competitive/Our Game Analysis - Presentation
Week 6	 Economy Design (Part 2) - Lecture User Interface Design - Lecture Game Events Brainstorm Discipline Workshops 	 UI Concepts Game Events Proposals Game Economy Competitive/Our Game Analysis 	 Art Pipeline Plan - Presentation Game Production Plan
Week 7	 In-Game Social Engagement + Retention - Lecture Bi-Weekly Milestone Review 	 Social "Hooks" Audit & Best Practices 	 Technical Design Document (TDD) Addressing Design and Art Concepts - Presentation UI Concepts - Presentation

			 Social "Hooks" Audit & Best Practices
Week 8	• <u>GAME ALPHA</u> <u>PRESENTATION</u>	• <u>GAME ALPHA</u> <u>PRESENTATION</u>	• <u>GAME ALPHA</u> <u>PRESENTATION</u>
Week 9	 Quality Assurance - Lecture Game Alpha - Faculty Feedback Discipline Workshops 	 Game Alpha Feedback Response & Path to Beta 	 Usability Testing Results to Date - Presentation Game Economy Competitive/Thorpe Analysis
Week 10	• SPRING BREAK - NO CLASS	• SPRING BREAK - NO CLASS	• SPRING BREAK - NO CLASS
Week 11	 Marketing and The Funnel - Lecture Bi-Weekly Milestone Review 		 QA Testing Plan - Presentation Game Alpha Feedback Response & Path to Beta - Presentation
Week 12	 User Acquisition - Lecture User Acquisition - Brainstorm Discipline Workshops 	 User Acquisition Concepts 	
Week 13	• Bi-Weekly Milestone Review		 User Acquisition Concepts - Presentation
Week 14	• <u>GAME BETA PRESENTATION</u>	• GAME BETA PRESENTATION	• GAME BETA PRESENTATION
Week 15	• Discipline Workshops		 Usability Testing Results to Date - Presentation
FINAL	 <u>SEMESTER KEY LEARNING</u> <u>RELEASE CANDIDATE DUE</u> <u>AND DEPLOYED TO</u> <u>STUDIO/LIVE</u> 	 <u>SEMESTER KEY LEARNING</u> <u>RELEASE CANDIDATE DUE</u> <u>AND DEPLOYED TO</u> <u>STUDIO/LIVE</u> 	 <u>SEMESTER KEY LEARNING</u> <u>RELEASE CANDIDATE DUE</u> <u>AND DEPLOYED TO</u> <u>STUDIO/LIVE</u>

Statement on Academic Conduct and Support Systems

Academic Conduct:

Plagiarism – presenting someone else's ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in SCampus in Part B, Section 11, "Behavior Violating University Standards" policy.usc.edu/scampus-part-b. Other forms of academic dishonesty are equally unacceptable. See additional information in SCampus and university policies on <u>Research and Scholarship Misconduct</u>.

Students and Disability Accommodations:

USC welcomes students with disabilities into all of the University's educational programs. The Office of Student Accessibility Services (OSAS) is responsible for the determination of appropriate accommodations for students who encounter disability-related barriers. Once a student has completed the OSAS process (registration, initial appointment, and submitted documentation) and accommodations are determined to be reasonable and appropriate, a Letter of Accommodation (LOA) will be available to generate for each course. The LOA must be given to each course instructor by the student and followed up with a discussion. This should be done as early in the semester as possible as accommodations are not retroactive. More information can be found at <u>osas.usc.edu</u>. You may contact OSAS at (213) 740-0776 or via email at <u>osasfrontdesk@usc.edu</u>.

Support Systems:

Counseling and Mental Health - (213) 740-9355 – 24/7 on call studenthealth.usc.edu/counseling

Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention.

National Suicide Prevention Lifeline - 1 (800) 273-8255 – 24/7 on call suicidepreventionlifeline.org

Free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week.

Relationship and Sexual Violence Prevention Services (RSVP) - (213) 740-9355(WELL), press "0" after hours – 24/7 on call

studenthealth.usc.edu/sexual-assault

Free and confidential therapy services, workshops, and training for situations related to gender-based harm.

Office for Equity, Equal Opportunity, and Title IX (EEO-TIX) - (213) 740-5086 <u>eeotix.usc.edu</u>

Information about how to get help or help someone affected by harassment or discrimination, rights of protected classes, reporting options, and additional resources for students, faculty, staff, visitors, and applicants.

Reporting Incidents of Bias or Harassment - (213) 740-5086 or (213) 821-8298 usc-advocate.symplicity.com/care_report

Avenue to report incidents of bias, hate crimes, and microaggressions to the Office for Equity, Equal Opportunity, and Title for appropriate investigation, supportive measures, and response.

The Office of Student Accessibility Services (OSAS) - (213) 740-0776 osas.usc.edu OSAS ensures equal access for students with disabilities through providing academic accommodations and auxiliary aids in accordance with federal laws and university policy.

USC Campus Support and Intervention - (213) 821-4710

campussupport.usc.edu

Assists students and families in resolving complex personal, financial, and academic issues adversely affecting their success as a student.

Diversity, Equity and Inclusion - (213) 740-2101 diversity.usc.edu

Information on events, programs and training, the Provost's Diversity and Inclusion Council, Diversity Liaisons for each academic school, chronology, participation, and various resources for students.

USC Emergency - UPC: (213) 740-4321, HSC: (323) 442-1000 – 24/7 on call dps.usc.edu, emergency.usc.edu

Emergency assistance and avenue to report a crime. Latest updates regarding safety, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible.

USC Department of Public Safety - UPC: (213) 740-6000, HSC: (323) 442-120 – 24/7 on call <u>dps.usc.edu</u>

Non-emergency assistance or information.

Office of the Ombuds - (213) 821-9556 (UPC) / (323-442-0382 (HSC) <u>ombuds.usc.edu</u>

A safe and confidential place to share your USC-related issues with a University Ombuds who will work with you to explore options or paths to manage your concern.

Occupational Therapy Faculty Practice - (323) 442-3340 or <u>otfp@med.usc.edu</u> chan.usc.edu/otfp

Confidential Lifestyle Redesign services for USC students to support health promoting habits and routines that enhance quality of life and academic performance.