Advanced Games Project Fall 2019

CTIN/CTCS 491
CTCS 529A
Units: 4
Fall Semester 2019: Thursdays from 2:00pm-5:30pm
Location: THE EGG Building, 746 West Adams, Los Angeles, CA 90089

Instructors:
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Additional Instructors:

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Course Description

Advanced Games Project comprises the core capstone class where undergraduates and graduates from Cinema and Viterbi collaborate on large games projects, working with students from departments all over USC, including Thorton, Marshall, Annenberg, and Roski.

Students bring their individual talents together in cross-disciplinary teams. Faculty, alumni and industry mentors are integrated into the process for guidance, and review. The full production course covers two semesters from Fall through Spring.

The selection of projects is made the year prior through a rigorous pitch process. These game productions are staffed by registered class members. Team Leads work closely with instructors and mentors to learn to manage their teams and contribute to a large project, while individual team members participate regularly in workshops to learn about their jobs and actively work on challenges they are facing in the development of their games.

Teams learn to work through sprints and defined goals to meet a larger schedule, regularly presenting their work in class for feedback from industry experts, instructors, and other students, while working in a professionally modeled production environment. The class culminates as the centerpiece of the annual USC Games Expo presentation at the end of the Spring semester, where students showcase and represent their work to a large community of industry professionals.

Teams will be given odd and even numbering so that we will review odds and evens on alternate weeks to allow enough time for quality feedback.

In addition the Game Directors will meet separately on Tuesday afternoons and the Game producers will meet on Thursdays at the outset of class.

Learning Objectives

The main course goal is to learn to work as a team, to develop a fully polished and playable game demo, ready for professional demonstration and evaluation. This demo will encompass a segment of the game which highlights its core design pillars, has polished art and animation, is fun, intuitive and fully playable.

Routine, focused feedback on both process and product from instructors reinforces the project based learning. Lectures and hands on guidance on project management, design and production set the students on the right path. Students working in specific areas will have focused sessions with instructors to learn the skills of their position, and trouble shoot problems in development. The class will teach all students a better understanding of roles on larger teams, what each individual does, and how to collaborate as part of a game development process.
**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.

**Key Milestones and Deliverables (minimum requirements)**

*First Semester Mid Term*- **First playable**, a hands on demonstration of the core mechanic.

*Fall Semester Final* - Roughly five minutes of gameplay featuring one of the distinct beats or movements of the game flow. This will serve as a tech demo for our December Engineering Recruitment Event.

*Alpha Build* - In week four of the second semester the teams will deliver their Alpha builds for review.

*Second Semester Late Mid Term*- **Beta build**. Feature complete, roughly 15 minutes of gameplay which should make up the entire progression of the full demo. This will occur near the end of the Spring semester.

*Spring Semester Final* - USC Games Expo. “Gold Master” Roughly 15 minutes of highly polished gameplay. Entire build should be distributable for publishing.

**Prerequisite(s):** CTIN 484, CTIN 489  
**Co-Requisite(s):** None  
**Concurrent Enrollment:** None  
**Recommended Preparation:** CTIN 458, CTIN 497

**Course Notes:** Letter Grade

**Description and Assessment of Assignments**

*Game and Narrative Design Documents*  
Game macro (due week 4)  
Game Design “Depository” of documents (due as needed by project, should be shared with team + instructors)

*Playable Game Level*  
Delivered as an executable or application  
Must show off and demonstrate the key features of the game  
The level must be working software - e.g. not a mockup
The level should include art assets appropriate for your project including: sound music, animation, HUD/GUI

**Zipped project on server**
We expect your game to be delivered in a zip file and posted on the Interactive server.

**Project Properly Organized on Server Directory**
We expect proper organization of your project using an online repository, such as Perforce, Git, or SVN

**Marketing Deliverables:**

**Game Poster**
We expect each team to produce a marketing-style game poster that tells the story and promotes the game

**10 Screenshots: Focusing on different stages or features**
Focusing on different stages or features Show off the key features of the game
These shots can be used for your website or personal portfolio.

**Gameplay Video - edited, 2-5 minutes in length**
We expect you to make a polished video showing off the game, usable to market to festivals, individuals, and others.

**Game Website**
We expect each team to create a marketing website for your game that incorporates all of the materials described above

*All teams must present and demo at USC Games Expo at the end of school year.*

**Grading Breakdown**

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Points</th>
<th>% of Grade</th>
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<tbody>
<tr>
<td>Weekly Deliverables</td>
<td>50</td>
<td></td>
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<tr>
<td>Midterm Deliverables</td>
<td>15</td>
<td></td>
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<tr>
<td>Final Project</td>
<td>25</td>
<td></td>
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<tr>
<td>Final Presentation</td>
<td>10</td>
<td></td>
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<tr>
<td>TOTAL</td>
<td>(100)</td>
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Midterm and Final Project/Presentation evaluation will be based on how well a project realizes the goals the team has set out for itself and the project. Ultimately, this course exists to empower students to bring their vision into the hands of players.

The Weekly Deliverables will be based on the sprint goals set by each team and its leads. The professors will evaluate both the amount of tasks fully completed on time and also the complexity of the tasks.

Because of the unique needs of each project, it is impossible to dictate a structure that applies to each so sternly that we have a mathematical category for attitude, help, efficacy of code, importance within the project, foresight, insight, honesty, friendliness and many other amorphous qualities that are crucial to working within a team but divorced from coding. Much like the professional world, the most important evaluator will be the quality of the experience you help build.

This class is where final-year students are exposed to working on teams needing both technical skill as well as the emotional maturity to work within a collaborative group. CTIN 491 intentionally models the world of professional game development— the post-graduate workplace we are preparing students for.

The most important feature of this class is that it empowers students to work as a team to execute on a collaborative creative vision and have fun in the process.

**Important:** The faculty of USC IMGD reserves the right to cancel any AGP production due to lack of team performance and reassign the team members to another project.

**Assignment Submission Policy**
During class, each team must be ready to present the current state of the game when called upon, and 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 area leads are responsible for assigning tasks to their team members as a part of the sprint.

Team members are expected to put in time in the advanced games laboratory 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 an 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 in order 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 unexcused absence from class, unless prior permission has been obtained from the instructor. The following guidelines are from the Interactive Media & Games Division handbook regarding absences and grading and apply to all students.

Guidelines for absences affecting grading

- Two unexcused absences: lowers grade one full grade point (for example, from A to B)
- Three unexcused absences: lowers grade two full grade points
- Four or more unexcused absences: request to withdraw from course (instructor’s discretion)

Excused absences are:

- Illness (with a doctor’s verification)
- Family or personal emergency (with verification)

Social media, including text messaging and internet messaging, are excluded from class unless explicitly permitted by the instructor. A 0.5% grade reduction will result from each occurrence of a student being found using them.

**Diversity**
In making games and interactive media in a professional and ethical way, it is important that you consider diversity. When looking at your projects, you should consider who is depicted and how this work will impact others. What kinds of individuals and communities are represented in your work? What point of view does your work express? This class may assist you in learning how to make work that includes diverse viewpoints, and may discuss racial, religious, gender and sexual orientation issues in the context of games and interactive media.

**Additional Policies**
Add any additional policies that students should be aware of: late assignments, missed classes, attendance expectations, use of technology in the classroom, etc.
Course Schedule: A Weekly Breakdown

Week 1 (8/29/2019) - Introduction
● Overview of the goals and format of the class
● Re-presentations on projects from each of the team leaders
  Include prototype and pre-production work done over the summer
  Current team list and any holes in the team
● Break up into placement discussions with teams/extra students for open positions

● Reading Assignment:
  - Contribution Agreement
● Assignment for next week:
  - Finalize teams

Week 2 (9/05/2019) - Understanding Intellectual Property
● Lecture on Intellectual Property, Copyright and Patents from Dan Nabel
● Questions about Contribution Agreement
● Assignment for next week:
  - Producers to organize all signed Contribution Agreements

Week 3 (9/12/2019) - Discipline Workshops
● Production: Scheduling and Scope
● Design: Game Macros
● Programming: The role of tech on a dev team (building a successful team dynamic), TDD &
  the big decisions (engine, platform(s), features), scheduling
  Configuration Management, Build Pipeline
● Art: Game Art and Communication
● Audio: The role of audio in the design process.
● Narrative: Defining the Narrative Center
● User Research: Usability testing. How to listen to users.
● Marketing: Creating an ownable position

● (See discipline schedules for assignments, readings and discussion topics.)

Week 4 (9/19/2019) - SCRUM
● Defining a sprint
● Removing obstacles to work
● Pulling together as a team
● Work with mentors to define this week’s sprint
● Assignment for next week:
  - Results of sprint

Week 5 (9/26/2019) - Sprint Results
● All teams present goals and results of their sprint to entire class
● Class feedback on progress and direction
● Assignments for next week:
  - Production Schedule
Week 6 (10/03/2019) - **Discipline Workshops**
- Production: Milestones – Internal and External
- Design: Feel of the Core Loop
- Programming: Debugging in Unity
- Art: Art Direction and Consistency
- Audio: Audio aesthetics: a general overview of aesthetic expression in game audio design.
- Narrative: Narrative Design Reviews
- User Research: How to make a usability plan.
- Marketing: Marketing scope for AGP

Week 7 (10/10/2019) - **Critique**
- External/Internal mentors give critique to all games
  - Assignment due for next week: First playable

Week 8 (10/24/2019) - **Midterm Presentations**
- Present first playables to class
- Class feedback on progress and direction

Week 9 (10/31/2019) - **Teambuilding**
- Are we making the same game?
- In-class exercises for team-building: Trick or Treat

Week 10 (11/07/2019)
- Road to the Fall final: Production review.

Week 11 (11/14/2019) - **Discipline Workshops**
- Production: Presentation practice
- Design: Responding to playtests
- Programming: Dealing with milestones
- Art: Fluidity in gameplay through art
- Audio: Oblique Strategies and creative tips & tricks.
- Narrative: Usability and Narrative Polish
- User Research: Alternative approaches to understanding users
- Marketing: Spring deliverables and demo day expectations.

Week 12 (11/21/2019) – **Peer Review**
- Playtesting of games in class
- Feedback formally given to all teams.

Week 13 (12/5/2019) – **Pre Final Walkthroughs**
- Playtesting of games in class
- Feedback formally given to teams.

Week 14 (12/12/2019)- **Final**

  **State of the Game Presentation**
  **Guest Professional Feedback**
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 Section 11, Behavior Violating University Standards. Other forms of academic dishonesty are equally unacceptable. See additional information in SCampus and university policies on scientific misconduct.

Discrimination, sexual assault, and harassment are not tolerated by the university. You are encouraged to report any incidents to the Office of Equity and Diversity or to the Department of Public Safety. This is important for the safety whole USC community. Another member of the university community – such as a friend, classmate, advisor, or faculty member – can help initiate the report, or can initiate the report on behalf of another person. The Center for Women and Men provides 24/7 confidential support, and the sexual assault resource center webpage describes reporting options and other resources.

Support Systems
A number of USC’s schools provide support for students who need help with scholarly writing. Check with your advisor or program staff to find out more. Students whose primary language is not English should check with the American Language Institute which sponsors courses and workshops specifically for international graduate students. The Office of Disability Services and Programs provides certification for students with disabilities and helps arrange the relevant accommodations. If an officially declared emergency makes travel to campus infeasible, USC Emergency Information will provide safety and other updates, including ways in which instruction will be continued by means of blackboard, teleconferencing, and other technology.

Disruptive Student Behavior:
Behavior that persistently or grossly interferes with classroom activities is considered disruptive behavior and may be subject to disciplinary action. Such behavior inhibits other students’ ability to learn and an instructor’s ability to teach. A student responsible for disruptive behavior may be required to leave class pending discussion and resolution of the problem and may be reported to the Office of Student Judicial Affairs for disciplinary action.

Safer Spaces:
In this class, we make a commitment to foster a welcoming and supportive environment where students of all identities and backgrounds can flourish. This means that we will issue
content warnings as appropriate, use preferred pronouns, and respect self-identifications. While debate and discussion are welcome, please remain aware of the implications of your words and the images that you include in your work. If the instructor or another student points out that something you have said or shared with the group might be offensive, avoid being defensive; this is a valuable opportunity for us to grow and learn together. If you have a concern about any aspect of the class, you are encouraged to speak with the instructor. If you feel uncomfortable speaking with the instructor, you are also welcome to speak with either the undergraduate or graduate advisor for the division, who can discuss the issue with you directly or point you toward other on- and off-campus resources for addressing your concern.

**Syllabus Updates:**
This syllabus is subject to change up to the beginning of class and possibly over the semester. Please check the posted syllabus regularly, and note all changes that are shared by the instructor in class.