Advanced Game Projects Syllabus
Fall 2013

USC School of Cinematic Arts, CTIN 491L
USC Viterbi School of Engineering, CSCI 491a
USC Viterbi School of Engineering, CSCI 529a

Outline

Class Motto:
We few, we happy few, we band of USC gamers

Alternate Motto:
Just do it

Professors & TAs

advancedgamesintructors@googlegroups.com
To communicate with the professors and TAs

Professors:

Laird Malamed
USC School of Cinematic Arts
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(213) 821-6471 USC office (SCI 201C)
(949) 502-2073 Oculus office

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(310) 351-7509 (SAL 240)

Mike Zyda
USC Viterbi School of Engineering
zyda@usc.edu
(310) 463 5774 (RTH 303)

Office hours vary by instructor. Please email to set up meetings.

Teaching/Student Assistants:

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(213) 342-7985

Course Outline

Meeting Information:

What: Lecture/Lab (all students attend):
When: Thursdays 3:30-6:50 pm
Where: First Meeting SCI 108 (School of Cinematic Arts - Bldg. F)
Thereafter: Assigned team labs and SCI 108 as communicated

SCI L103
     Miralab
     Social Clues
     Tree of Life
SAL 103
     Maestro
     Rhea
RTH 321
     Cole
     Fat Loot

Course Description:

CTIN 491L and CSCI 491a and CSCI 529a comprise the first semester of the two-semester advanced game project class administered collaboratively by the USC School of Cinematic Arts and the USC Viterbi School of Engineering - the main schools of the USC Games program. Students from Music, Animation, Communications, Business and various other programs also participate.

Students bring their individual talents as designers, programmers, artists, writers, composers, producers, etc. together in cross-disciplinary teams. Mentors from industry and the faculty are integrated into the process from the start. Teams that need 3D art assets have access to additional student resources such as the CSCI 281 Pipelines for Games class.

The deliverables created during the Fall semester are the foundation for materials to be polished in the Spring semester (e.g. 493/491b/529b).

Projects List

Seven projects have been chosen by a rigorous selection process to be produce in this class. For 2013 - 2014, these seven projects are:

1. Cole
2. Maestros
3. Miralab
4. Rhea
5. Sneak to Slim (now Fat Loot)
6. Social Clues
7. Tree of Life

The main course goal is to learn to work and develop projects as a team. This is demonstrating by developing a playable level demonstration of the core design and the approved scoped features for the game. This game should be installable, intuitive and functional so that a player can pick up and play.

Deliverables are:

● Game Design Document (at the midterm class)
● Final Playable Game level executable or application
● Zipped project on server
● Installer (if applicable)
● Project Properly Organized on Server Directory
● Game Poster
● 10 Screenshots: Focusing on different stages or features
● Gameplay Video - edited, 1-3 minutes in length
● Marketing website
● Demo at USC Games Demo Day

Stretch goals are:

● Marketing trailer
● In-game cinematics/story telling elements

Professors Malamed, Easley, and Zyda will each be available for assistance with all projects.

Quality of Work / Scope of Work Expectations

- Final Playable Game level executable for proper platform(s)
  - We expect a playable game level that shows off the 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
  - The focus should be on gameplay and not just game mechanics.
- Zipped project on server
  - We expect your game to be delivered in a zip file and posted on the Gamepipe server.
- Installer
  - If needed, we expect your game to come with an installer
- Project Properly Organized on Server Directory
  - We expect proper organization of your project using an online repository, such as Perforce, Git, or SVN
- Game Poster
  - We expect each team to produce a marketing-style game poster that tells the story and promotes the game
  - You are encouraged to hang the completed posters in SAL, RTH, or SCI lab.
- 10 Screenshots
  - 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
  - we expect you to make a polished video showing off the game.
  - The video will be used for marketing your game to festivals and for USC's prestigious First Look program
  - The videos should be a minimum of 2 minutes long and a maximum of 5 minutes long
  - You can submit additional, longer video. These will be posted on Youtube..
  - Here is a breakdown of various ways to capture gameplay video: http://www.pixelprospector.com/2010/08/how-to-record-and-edit-gameplay-videos/
- Marketing website
  - We expect each team to create a marketing website for your game that incorporates all of the materials described above
  - The site can be used to market your game and yourselves.

Class Structure
During class, each individual on the team must be prepared to discuss his/her work from the previous week. The team leaders and producers are responsible for assigning each student (including themselves) a new individualized assignment for the coming week. All assignments must be posted in writing on the project spreadsheet found on the course website. The producer on each team has write permissions on the document and is required to have updated the document by <u>Wednesday at noon</u> by canvassing the team leads for status updates. Students should use this class time to ensure they agree with the assignments, as performance on the goals is a key component of the final grade (see evaluation section below). Assignments will come from the team leadership with assistance and approval from the professors.

The order of the team visits with the professors will be determined randomly each week. Teams must be prepared to present at the beginning of each class regardless of the schedule for the week. Before/after visits by the instructors the teams will have group work sessions and the professors/TAs will be available to circulate and advise each project on specific issues.

Class Workflow
Here's the typical class workflow each week:
1. Instructor team goes to scheduled team's room
2. Game team is ready with all deliverables on their presentation machine and plugs it into the TV or projector in the room
   ○ Summary and Agenda sheet is open
   ○ Task sheet is open
   ○ Game build is ready to run or running
   ○ Any other relevant materials – art, design docs, wiki, etc.
3. Instructor team and the producer start by talking off the points in the Summary and Agenda sheet

Producers should ensure that the deliverables are set up on the presentation machine before class begins and then proceed with your activities for the day. All teams must make sure to be ready at the start of class and just switch the connection to the team's presentation machine when called.

Class Attendance
<u>Class attendance is mandatory.</u>

This time is invaluable for teams to meet together and work on their projects production. Failure to attend the entire class will impact the class grade (see attendance policy below). We cannot stress enough the importance of being in class and part of your team for the entire class session.

If you must miss a class (illness, band trip, religious observance, etc.), you must notify the instructors and your team producer *prior* to missing class. Failure to do so will be counted as an

absence, and your producer will mark a red on the weekly task spreadsheet. When in doubt, overly communicate! That is part of being a team member!

Final Goal

Completed student work from the this course will be promoted via coordinated effort by the University. The big picture goal of this class is simple:

USC strives to create the best ~~student~~ games in the world.

Important Links

[Advanced Game Projects Fall 2013 Recruit Info](#)

We will use this to distribute information about the games. **Keep this updated**

[Advanced Game Projects Fall 2013 Weekly Summary and Agenda](#)

Update every Wednesday

[Advanced Game Projects Fall 2013 Weekly Tasks](#)

Update every Wednesday. Only producers have access.

[Advanced Game Projects Fall 2013 Roster](#)

List of all people involved in the project. **Keep this updated**

Important Mailing Lists and Groups

agpstudents2013@googlegroups.com

Anyone registered in the class or DR. Volunteers or outside students can join at their own discretion. **Make sure everyone sign up.**

advancedgamesintructors@googlegroups.com

To communicate with the professors and TAs. **No s in intructor.**

teamleadsfall2013@googlegroups.com

For the team leads on each team. **Make sure all/new leads sign up.**

Misc Links

[Facebook Group: Forum for USC Games Improvement](#)

Suggestions for the course? Discuss with fellow classmates

[Welcome Slides](#)

[Youtube Channel - USC Games](#)

Or whatever Powen records..

[Advanced Game Project Fall 2013 Syllabus (inception)](#)

For Art Liaison:
[Art Liasion & Schools](#)
[Facebook Group: Art Liaison](#)

For Leads:
[Mentor List](#)

Course content (summarized by class meeting)

Recurring Weekly Assignments
      Individual Progress Submit
      Team Progress Submit (Summary & Agenda, Tasks, Stable Build)

      In class: Team Work Sessions

Week 1 (8/29): Introduction/Overview
      Presentation/Discussion:
            Overview of the course format and assignments. Presentations from each of the
            team leaders

      Team Assignment 1 - Industry Mentors:
            Teams will be responsible for recruiting volunteer mentors from industry. Each
            team must recruit at least one technical mentor who is a hands-on coder. Teams
            may recruit other mentors at their discretion. It is recommended that the team
            has a mentor for each lead in each discipline (programming, art, production,
            design, etc)
      Team Assignment 2 - Team Integration:
            Team rosters completed
            Repository & Project setup

Week 2 (9/5): Achieving First Playable, Part 1
      Presentation/Discussion:
            Efficient game productions are built by iterating on early playable prototypes.
            Teams will work in the early weeks of the course to achieve a first playable in
            whatever form best suits their project. Playtests for each game will be scheduled
            regularly - starting in Week 3.
            Playtest notes need to be shared with the professors.
      Online Reading:
            Robin Hunicke, Marc LeBlanc, Robert Zubek - MDA: A Formal Approach to Game
            Design and Game Research - http://www.cs.northwestern.edu/~hunicke/MDA.pdf

Week 3 (9/12): Achieving First Playable, Part 2
      Presentation/Discussion:
            Prototyping and playtesting are core competencies of game developers.
      Online Reading:
            Postmortem: Schizoid -
            http://www.gamasutra.com/view/feature/3796/postmortem_torpex_games_schiz
            oid.php

Week 4 (9/19): The Power of a Diverse Group

    Presentation/Discussion:

        Groups that include diverse talents can achieve power far greater than that of any individual.

    Online Reading:

        Malcolm Gladwell - In the Air - Who Says Big Ideas Are Rare?
        http://www.newyorker.com/reporting/2008/05/12/080512fa_fact_gladwell

Week 5 (9/26): Why You Should Submit Your Game to Festivals

    Presentation/Discussion:

        Discussion of leading venues for submitting student projects. Examples include: Independent Games Festival, Indiecade, Penny Arcade Expo and other venues.

    Online Reading:

        http://en.wikipedia.org/wiki/Independent_Games_Festival
        http://latimesblogs.latimes.com/technology/2009/08/indiecade-festival-los-angeles.html

Week 6 (10/3): Narrative Architecture

    Presentation/Discussion:

        Does your game tell a story? There are many ways to think about story in games.

    Online Reading:

        Henry Jenkins - Game Design as Narrative Architecture -
        http://web.mit.edu/cms/People/henry3/games&narrative.html

Week 7 (10/10): Team Building

    Presentation/Discussion:

        Discussion of the week's topic and online reading.

    Online Reading:

        Postmortem: Bioshock -
        http://www.gamasutra.com/view/feature/3774/postmortem_2k_boston2k_.php

Week 8 (10/17): A Higher Standard

    Presentation/Discussion:

        Pushing boundaries with game design.

    Online Reading:

        "A Higher Standard" — Game Designer Jonathan Blow Challenges Super Mario's Gold Coins, "Unethical" MMO Design And Everything Else You May Hold Dear About Video Games -

Week 9 (10/24): Midterm Deliverable and Class Evaluation
        Presentation/Discussion:
                Class discussion on how to make the class more efficient.

Midterm Deliverable Due
- Final Game Design Document
- Playable Game level exe
- Game Poster, v1
- 10 Screenshots: Focusing on different stages or features, v1

        Optional
- Gameplay Video - edited, v1
- Marketing website, v1

        Midterm Class Evaluation

        Online Reading:
                http://www.latimes.com/features/home/lat-10-things-you-dont-have-to-do-anymore-20110610,0,990965.htmlstory

Week 10 (10/31): Usability and Measuring Fun
        Presentation/Discussion:
                How do you know if your game is accessible? Fun? The answer is: user testing.
        Online Reading:
                Ben Cousins - Measurement Techniques for Game Design -
                http://www.gamasutra.com/features/20050512/cousins_01.shtml

Week 11 (11/7): Test Test Test
        Presentation/Discussion:
                Putting the player at the center of the design process: Playcentric design.
        Online Reading:
                Postmortem: American McGee's Grimm -
                http://www.gamasutra.com/view/feature/3910/postmortem_american_mcgees_grimm.php

Week 12 (11/14): Leveling and Game Design Psychology
        Presentation/Discussion:
                Building levels from your core mechanic Team Work Session
        Online Reading:
                Postmortem: MadStone -
                http://www.gamasutra.com/view/feature/3903/postmortem_riverman_medias_.php

Week 13 (11/21): Managing Chaos
        Presentation/Discussion:
                Discussion of the week's topic and online reading.. Team work session
        Online Reading:
                Postmortem: Uncharted Drake's Fortune -
                http://www.gamasutra.com/view/feature/3809/postmortem_naughty_dogs_.php

Week 14 (11/28): Thanksgiving Holiday
        Thanksgiving Holiday - NO CLASS MEETING

        The instructors will be available for individual meetings during the first part of the week.

Week 15 (12/5): Student Project Presentations - Rehearsal for Demo Day

        Due: Final Deliverables Due
        Wrap-up and course evaluation

Week 16 - Demo Day (12/11/2013)
        All students are required to present their work at the Gamepipe Demo Day event.
        The date for Demo Day is **Wednesday, December 11, 2013.**

Evaluation of student performance:

Individual Weekly Deliverables	50%
Midterm Deliverables	15%
Final Project	25%
Final Presentation	10%
Student Personal Projects (Extra Credit)	5%
Total	105%

Midterm and Final Project/Presentation evaluation will be based on how will 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 onto the screen. The more you put into the project, the closer it will be to what was envisioned.

For the Weekly Deliverables, the results of the Task sheet mentioned above will be a key input. The professors will evaluate both the amount of tasks fully completed on time and also the complexity of the tasks.

CTIN 491a/CSCI 491a-529a Advanced Games has been graded for the last several years the same way: As a team of students working together to finish a custom video game project. This teaches self-reliance and gives students a much-needed exposure to working within a team. The student leader (or leaders) are the ones doling out specific weekly assignments to their team-mates, who in turn are responsible to ensure the fairness of their given assignment. This endeavors to simulate a real-world working environment of problem-solving and teamwork.

Our class grading rubric is:
a) Online color-coded schedule sheet: blue = 1.5, green = 1, yellow = 0.5, red = 0.
The total is divided by the number of weeks. Strictly:
      90%+ = A
      80+=B
      70+=C
      60+=D
      Lesser numbers are an F.
b) Then the grade is affected by the following non-quantifiable criteria, in order of importance:
-- green-colored task difficulty and completion quality
-- final product quality per milestone descriptions
-- code quality
-- perceived effort

This system was planned as a series of checks and balances: The Team Leader decides the direction and assignments (in tandem with the Producer if there is one) to each team member. However each team member is also personally responsible to scrutinize their assignments as fair, as well as if the current color-grading of the online schedule is reflective of their work. It is emphasized throughout class that individual team members will have explicitly agreed to their weekly assignments before the end of each class -- whether agreeing outright, or working with the Lead/Producer to have them modified during class.

This online scheduling sheet was devised so no one feels surprised by his or her grade -- anyone can view its progress throughout the semester.

Team Leaders can receive a bump in their grade as is commensurate to the added pressure of leading a team; this does not divorce them of the responsibility of doing their job well for a good grade.

Because of the custom setup for 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. This same issue works within any team-project oriented classes, such as CSCI 526 Advanced Mobile Devices and Game Consoles class, CSCI 486 Serious Game Projects class, and CTIN 491 Cinema Game Projects class.

The most important feature of this class is that it empowers the students. This class is where final-year students are exposed to working on teams with each other, and saddled with needing both technical skill as well as the emotional maturity to work within that group and accept responsibility for their actions -- as is much more the case within the post-graduate workplace we are preparing students for.

Administrative Content

Attendance Policy:
Attendance in class is mandatory. We will take roll each week. Two unexcused absences lowers your grade one full point. Three unexcused absences lowers your grade two full points. Four unexcused absences - request to withdraw from the course (instructor's discretion).
Excused absences are for: Illness (with doctor's verification), Family emergency, personal emergency (unavoidable car breakdown, etc.)

Incompletes:
The only acceptable excuses for taking an incomplete in the course are personal illness or a family emergency. Students must inform the professor before the final project is due and present verifiable evidence in order for a make-up to be scheduled. Students who wish to take incompletes must also present documentation of the problem to the instructor or teaching assistant before final grades are due.

Note for students with disabilities:
Any student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to us as early in the semester as possible. DSP is located in STU 301, and is open 8:30am-5:00pm Monday through Friday. The phone number for DSP is (213) 740-0776.

Academic Integrity:
The School of Cinematic Arts and the Viterbi School of Engineering expect the highest standards of academic excellence and ethical performance from USC students. It is particularly important that you are aware of and avoid plagiarism, cheating on exams, submitting a paper to more than one instructor, or submitting a paper authored by anyone other than yourself. Violations of this policy will result in a failing grade band be reported to the Office of Student Judicial Affairs. If you have any doubts or questions about these policies, consult SCAMPUS and/or confer with the instructor.

Resources

Art Resource - Pipelines Class
The Gamepipe Pipelines class will build assets for the 491 teams provided the teams are in need of 3D assets and follow some basic requirements. Here is an ideal schedule for integrating with the Pipelines class (note that this schedule may be adjusted slightly to fit the needs of the teams)
()

	Advanced Games	**Pipelines**
First Semester Week 1-7	Project Game Designs Learn OAC Approved Core Idea/Game Doc Approved Engine Approved Level Design	Maya Skills Learn OAC
Week 8-15	Core Idea Implemented Engine Running (At least) One fully playable level	Building Levels Building Props
Second Semester Week 1-7	Proposed Future Levels Interactive Stats Sheet Feature Lock	Main Characters modeled Expanded Levels Placeholder
Week 8-15	Expanded Mechanics Playable Expanded Levels Playable	Expanded Levels fully built Main Characters Textured

Art Assistance - Art Schools
LCAD
Gnomon
Atalantic College of Puerto Rico
OTIS

Art Resource - Websites
http://www.11secondclub.com/
        for animation
http://www.animationmentor.com/
http://www.polycount.com/

https://docs.google.com/spreadsheet/ccc?key=0ArcRKy6gO551dHZ1ckN5SUU3WEhUSER2NX

k3c2FCVEE&usp=drive_web#gid=0

Art Resources - Online
http://www.cgtextures.com/
http://www.cgxtras.com/

Usability Lab
Each team has access to the School of Cinematic Arts Usability Lab. It is a facility with a one way mirror for testing users and is located in SCI.

You must reserve the room ahead of time through Heather Desurvire. You must be approved to use the lab by taking the class.

Sound Library
Each team has access to the School of Cinematic Arts Sound Library for sound effects and other audio needs.

Lab Policy

ENGLISH for all software language settings.

CLEAN UP after yourselves.

REPORT any problems by email to one of the TA's or PhD students

If a lead isn't on the mailing list, have them join by requesting on the following link:

https://groups.google.com/forum/#!members/teamleadsfall2013

BELOW ARE INFORMATION THAT NEEDS TO BE INTEGRATED
Useful Roles to have on team
       Community Manager
       Webmaster
       Usability
       Art Liaison

BELOW ARE NOTES THAT NEED TO BE INTEGRATED FROM MEETING

=Discussion=
Seminar Session
       Integrating it to the syllabus
       3 sessions, 30 minutes, beginning of class
       dates undecided

Ask Laird to shared to PPT

Requirement:
       Version Control
       Documentation
       Bug Tracking

Blue System is good
       How often? How many can the team hand out
       decided by the leads?
       Boost Score

Bonus Extra Credit
       Presentation or small paper
       no penalty if you miss
       extra credit to be decided by September
       extra credit should be midterm
       producer+professor+TA

Attendance
       if you dont show up for class you get red
       producer should check

Ask producer to let us know who is who

1. LP sends "adendum" to laird on tuesday
1 min agoDavid Landau
2. Profs come in on Thursday, talk to LP, LP updates them if anything has changed
1 min agoDavid Landau
3. LP gives presentation or forwards profs to whoever will be

Peer Review
        After the 3rd weeks
        Every 3 weeks, 3, 6, 9, 12

        //

Post Mortem
        first week of spring semester

Weekly Progress Summary
        Wednesday

Grade Sheet
Weekly Build
        Last Check in on Sunday
        Build on Tuesday
        Release on Wednesday

New stuff

Akira's comment on what AGp students can use
XML, YML, & ZML are most appropriate and their schedules can be found here:

http://interactive.usc.edu/calendars/

To book a time email requests to usc_interactive@cinema.usc.edu after checking the calendar to see if the room is free of course.