

GAM 341/499 Intro to Level Design

Winter 2022

Instructor: Allen Turner (He/Him)

Office: Daley 200E Hours: T/Th 1:00 – 2:30

Contact: You may contact me at aturner8@cdm.depaul.edu. I'm teaching a lot of classes and engaged in a bunch of projects so please allow for up to 24 hours to get a response.

Classroom Safety and Support

I fully support everyone being seen and getting their needs met. If you have specific needs related to accessibility, gender/identity, race/color/creed that would help you to feel safe and effective in this class please let me know. No hate language of any sort is tolerated in this classroom. Offenders will be asked to leave the classroom and dealt with privately.

Course Description

Level design is the art of creating believable environments, stages and missions for video games. This course explores topics including architecture, flow, pacing and puzzles. Using a 3D level editor, students will investigate technical design issues including the construction, texturing, lighting and scripting of modern game levels. The roles, duties and challenges of the level designer will also be discussed.

We will be using D2L to share projects and information.

If you need to drop this class please refer to the calendar that shows when drop options are available at <https://academics.depaul.edu/calendar/Pages/default.aspx>

GAM 341 focuses on learning to build levels using the Unreal 4 game engine tools. Students begin making basic spaces, move on into interaction design, and end with the development of a polished space with a narrative flow to it.

The class is project based with weekly deliverables and a focus on learning and building skill with the toolset. Levels we create will be rough block-outs as we're not focusing on highly polished art/environment pieces.

There is a lot of work and students should expect to set aside copious amounts of time to learn the tool set, create and test their creations before coming to class.

Learning Outcomes

Working from a layout document, students will be able to use the BSP tools of UE4 to block out the space so that it can be handed off to a studio artist for aesthetic refinement.

- Students will be able to layout a map with notation of play flow, interactions, and art needs.
- Students will be able to decide between various Blueprint types and where they are practically used.
- Students will be able to create a complete playable level including bsp, static meshes, materials, lighting, and blueprint interactions.

Class Schedule.

Week 1: Unreal Interface and basic process for building out an environment. (Create an environment using a collection of premade meshes)

Week 2: Mapping, Introduction to brushes. Static Meshes, Materials and Lighting techniques. Proximity interaction with triggers. (Create Paper Map, Create blockouts from paper map)

Week 3: Collecting and communicating. Basic object animations (Timelines and Variables).

Week 4: Basic Audio. Line trace and Pressing buttons with (First pass of space polish with materials due)

Week 5: Creating Sequences

Week 6: Managing the information for your player. Introduction to UI and feedback. (Polished Platformer with sequences and functioning interactions due. Should be playable from beginning to a completable end with closing sequence).

Week 7: Creating a narrative with space and play. Begin narrative and polish phase of level. (Create a new paper map with detailed breakdown of events and interactions)

Week 8: (Refined maps and asset lists due for Narrative Projects)

Week 9: Work on narrative (Blockout and Simple Nav meshes in project due)

Week 10: Work on Narrative project (First polish pass with all interactions in due, and world populated with static meshes and preview lights.)

Week 11: Polish and Ship (Final polish pass due. Lighting, Materials, Audio, Full play, Cinematics and sequences)

Deliverables:

Drawn maps will be detailed PNGs or Jpegs posted in the discussion groups. Notes for those maps will also be submitted in the forums. Level WIP's will be posted weekly in your own level thread, these include images from the project, and a narrated video showing your progress in action.

Grading

Projects: We'll be taking it slow with two projects which will be composed of multiple little steps. These little steps will be multiple checkpoints marked by posting weekly in the forums. Every week students

are expected to post in the discussion forums on D2L to show their progress. **Each week is worth 10 points.** Failing to check in and post means you don't get those points. You can't save up and then post ton of posts. It is weekly so we can watch, give feedback, and help you to course correct. If you miss a post or two it's no big deal. But if you do none, then it will substantially affect your grade. We will talk about the expected quality of posts and what's expected for each as we move through the weeks and projects.

Each project is worth 50 points as well. Doing everything I ask results in a C grade. Getting a B or an A is a function of time, effort and polish put into your work.

Time Spent: The reality of level design is that it is tedious work. At the end of the day, how well your level looks and plays is a function of how much time and energy you put into it. You need to put time and research into developing this skillset. How much effort you put in will show in your work. If you do basic work you will get a basic result and grade. If you dig in deep and research ways of really showcasing your ideas your work will shine and so will your grade.

Course Policies

Changes to Syllabus

This syllabus is subject to change as necessary during the quarter. If a change occurs, it will be thoroughly addressed during class, posted under Announcements in D2L and sent via email.

Online Course Evaluations

Evaluations are a way for students to provide valuable feedback regarding their instructor and the course. Detailed feedback will enable the instructor to continuously tailor teaching methods and course content to meet the learning goals of the course and the academic needs of the students. They are a requirement of the course and are key to continue to provide you with the highest quality of teaching. The evaluations are anonymous; the instructor and administration do not track who entered what responses. A program is used to check if the student completed the evaluations, but the evaluation is completely separate from the student's identity. Since 100% participation is our goal, students are sent periodic reminders over three weeks. Students do not receive reminders once they complete the evaluation. Please see <https://resources.depaul.edu/teaching-commons/teaching/Pages/online-teaching-evaluations.aspx> for additional information.

Academic Integrity and Plagiarism

This course will be subject to the university's academic integrity policy. More information can be found at <https://resources.depaul.edu/teaching-commons/teaching/academic-integrity/Pages/default.aspx>.

Academic Policies

All students are required to manage their class schedules each term in accordance with the deadlines for enrolling and withdrawing as indicated in the [University Academic Calendar](#). Information on enrollment,

withdrawal, grading and incompletes can be found at:

<http://www.cdm.depaul.edu/Current%20Students/Pages/PoliciesandProcedures.aspx>

Incomplete Grades

An incomplete grade is a special, temporary grade that may be assigned by an instructor when unforeseeable circumstances prevent a student from completing course requirements by the end of the term and when otherwise the student had a record of satisfactory progress in the course. All incomplete requests must be approved by the instructor of the course and a CDM Associate Dean. Only exceptions cases will receive such approval. Information about the Incomplete Grades policy can be found at

<http://www.cdm.depaul.edu/Current%20Students/Pages/Grading-Policies.aspx>

Students with Disabilities

Students seeking disability-related accommodations are required to register with DePaul's Center for Students with Disabilities (CSD) enabling them to access accommodations and support services to assist with their success. There are two office locations:

- Loop Campus – Lewis Center #1420 – (312) 362-8002
- Lincoln Park Campus – Student Center #370 – (773) 325-1677

Students who register with the Center for Students with Disabilities are also invited to contact Dr. Gergory Moorhead, Director of the Center, privately to discuss how he may assist in facilitating the accommodations to be used in a course. This is best done early in the term. The conversation will remain confidential to the extent possible.

Please see <https://offices.depaul.edu/student-affairs/about/departments/Pages/csd.aspx> for Services and Contact Information.

Attendance: Students are expected to attend each class and to remain for the duration. Coming 15 minutes late or leaving 15 minutes early constitutes an absence for the student. The overall grade for participation drops one-third after any absence. Three absences for any reason, whether excused or not, may constitute failure for the course. If during a lab period, you are on social media instead of attending to the current project, to a level that you must be asked to cease the social media, it may be considered an absence as you are not actually present in the class work.

Class Discussion: Student participation in class discussions will be measured in two ways. First, students are highly encouraged to ask questions and offer comments relevant to the day's topic. Participation allows the instructor to "hear" the student's voice when grading papers. Secondly, students will be called upon by the instructor to offer comments related to the reading assignments. Students must keep up with the reading to participate in class discussion.

Attitude: A professional and academic attitude is expected throughout this course. Measurable examples of non-academic or unprofessional attitude include but are not limited to: talking to others

when the instructor is speaking, mocking another's opinion, cell phones ringing, emailing, texting or using the internet whether on a phone or computer. If any issues arise a student may be asked to leave the classroom. The professor will work with the Dean of Students Office to navigate such student issues.

Civil Discourse: DePaul University is a community that thrives on open discourse that challenges students, both intellectually and personally, to be [Socially Responsible Leaders](#). It is the expectation that all dialogue in this course is civil and respectful of the dignity of each student. Any instances of disrespect or hostility can jeopardize a student's ability to be successful in the course. The professor will partner with the Dean of Students Office to assist in managing such issues.

Cell Phones/On Call: If you bring a cell phone to class, it must be off or set to a silent mode. Should you need to answer a call during class, students must leave the room in an undistruptive manner. Out of respect to fellow students and the professor, texting is never allowable in class. If you are required to be on call as part of your job, please advise me at the start of the course.