

## Elements of Game Development

**Fall 2021: CS 329E # 52755**

Class Meeting Time: M/W 3:00 – 4:00 pm; F 11:00 am – 12:00 pm  
(Internet: Discord and Zoom)

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Office Hours: email for an appointment

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Office Hours: email for an appointment



### Course Overview

This course provides students with the fundamentals of how to be a software developer creating a digital game. The course focuses on three areas: (1) learning html5, CSS, and JavaScript using the Phaser game engine to develop a game, (2) general principals of game design and software engineering processes, and (3) how to work in a team. This course is focused on learning how to create 2D games in small teams. **This is an authentic, experiential learning course, and not your typical lecture and testing course. The learning happens by doing.** Topics covered are game ideation, prototyping, testing, and iterating. Teams use the agile/scrum development methodology as the framework for completing their games. Learning team dynamics, as well as development best practices, is core for creating games and the class. In addition, there is an emphasis on connecting the work performed in class to outside of class. Students leave prepared to work within a studio environment. In the end, teams make awesome games to show prospective employers and the public!

**Prerequisite:** Computer Science 313E, 314, or 314H with a grade of at least C-.

### Learning Outcomes

The learning goals for this class are based on the projected skills necessary to be successful in the 21st century (see <https://education-reimagined.org/resources/partnership-for-21st-century-learning/> for more details). My class is about enduring learning that will serve you for the rest of your life, hopefully. So, here is what you will learn in class.

- Creativity: Brainstorm, design, produce, and present a 2D game
- Critical thinking: Critique work on other teams, and reflect on weekly production and the total production experience
- Collaboration: Act and become an entry-level professional in a team-based environment, including developing good team dynamics skills
- Communication:
  - Develop and execute presentations
  - Create documentation and plans for action
  - Communicate intra- and inter-team using industry standard tools
- Computing literacy:
  - Apply industry best development practices
  - Execute to the agile development methodology
  - Create a game using an html5 game engine
- Career: Learn about career planning, opportunities, and how to get a job

## Course Requirements

### Textbooks, Web Materials, Software, Hardware

*Software:* Phaser 2.X/CE

*Hardware:* Bringing a laptop to class is highly recommended when meeting in-person

### Grading and Assessment

	Points
HTML/CSS/JS	10
Phaser Demo	10
Game PreProduction	10
Game Milestones/Reports	20
Final Game Release	10
Game Trailer	5
Presentation	10
Team Evals	5
Course Reflection	5
Professionalism	<u>15</u>
<b>TOTAL</b>	100

#### !!! Important!!!

Things may change but  
whatever happens, we won't  
have a FINAL EXAM! Yeehaw!

All instructions, assignments, readings, rubrics and essential information will be on the Canvas website at <https://utexas.instructure.com>. Check this site regularly and use it to ask questions about the course schedule.

Course schedule is shown in a separate document.

Changes to the schedule may be made at my discretion and if circumstances require. It is your responsibility to note these changes when announced (although I will do my best to ensure that you receive the changes with as much advanced notice as possible).

### Course Policies

#### *Statement on Learning Success*

Your success in this class is important to me. We will all need accommodations because we all learn differently. If there are aspects of this course that prevent you from learning or exclude you, please let me know as soon as possible. Together we'll develop strategies to meet both your needs and the requirements of the course. I also encourage you to reach out to the student resources available through UT. Many are listed on this syllabus, but I am happy to connect you with a person or Center if you would like.

#### *Attendance Policy*

Attendance and participation in all classes is expected, but if you cannot make it to class, there are consequences. Being consistently late to class is not cool and it will have a negative impact on your grade. Also, assignments are due at the beginning of class and there are consequences for turning in assignments after this time.

Days Absent	Consequence	Cumulative
1 - 5	Free	Free
6	-1 point	-1 point
7	-2 points	-3 points
8	-4 points	-7 points
9	-16 points	-31 points
(on the 10 <sup>th</sup> absence, you automatically fail)		

#### *Late Work Policy*

Hours Late	Consequence	Cumulative
1	-2 points	-2 points
2	-4 points	-6 points
3	-8 points	-14 points
4	-16 points	-30 points
5	-20 points	-50 points

#### **Other Course Policies**

##### *Computer Policy*

Mobile phones are not to be used in class. If there is an emergency, please leave the class.

##### *Professionalism*

This course is a preparation for employment in a studio. Therefore, we expect you to act in class as you would in the workplace. While studios are often informal, they still require everyone to be respectful of others. Furthermore, attendance both for the class and when your team meets are critical. How your teammates view the quality and quantity of your work, as well as your team skills are important. Finally, how much work you produced, as recorded in Trello, may be considered.

If you are absent or unable to participate on the day that your team meets, you are responsible for providing your team with the necessary information to compensate for your absence. *It is crucial to keep in communication with your team members; you are responsible for letting both us and your team know if you cannot make it to a class.*

**Excused Absence:** The only absences that will be considered excused are for religious holidays or extenuating circumstances due to an emergency. If you plan to miss class due to observance of a religious holiday, please let us know at least two weeks in advance. You will not be penalized for this absence, although you will still be responsible for any work you will miss on that day if applicable. Check with us for details or arrangements.

*If you have to be absent, use your resources wisely.* Ask your team and other classmates to get a run-down and notes on any lessons you miss. If you find there are topics that we covered while you were gone that raise questions, you may come by during office hours or schedule a meeting to discuss. Email specific questions you have in advance so that we can make the most of our time. "What did I miss?" is not specific enough.

## Final Grade Scale

Percent	Letter Grade	Description
94-100	A	Excellent scholarship
90-93	A-	Excellent scholarship
87-89	B+	Good scholarship
84-86	B	Good scholarship
80-83	B-	Good scholarship
77-79	C+	Fair scholarship
74-76	C	Fair scholarship
70-73	C-	Fair scholarship
60-69	D	Poor scholarship
Less than 60	F	Failure

**Critical Dates (see UT Calendar for details):** <http://registrar.utexas.edu/calendars>

## Classroom Safety and COVID-19

To help preserve our learning environment, the University recommends the following:

- Wear a [mask](#). Masks are strongly recommended, though not required, inside university buildings, except when alone in a private office or cubicle.
- Get [vaccinated](#) if you are able to do so. [Vaccinations are widely available](#), free, and not billed to health insurance. The vaccine will help protect against the transmission of the virus to others and reduce serious symptoms among those who are already vaccinated.
- Get [tested](#). [Proactive Community Testing](#) is an important part of the university's efforts to protect our community. Tests are fast and free. All students coming to campus for the fall semester must receive a viral COVID-19 test in their local community within 72 hours prior to arrival in Austin. Students who already reside in Austin must test within 72 hours of moving into the residence where they will reside for the academic semester. Students who are already living in the residence in Austin where they will reside during the semester must test within 72 hours prior to the start of fall classes.
- Use the [Protect Texas Together](#) app each day prior to coming to campus.
- If you develop COVID-19 symptoms or feel sick, stay home and contact the [University Health Services'](#) Nurse Advice Line at 512-475-6877. If you need to be absent from class, contact [Student Emergency Services](#) and they will notify your professors.
- If you test positive for COVID-19, contact either the [Behavior Concerns and COVID-19 Advice Line](#) (BCCAL) or, if tested off campus, [University Health Services](#).
- If you have been had close contact with someone who tested positive for COVID-19, follow [this guidance from University Health Services](#).
- Visit [Protect Texas Together](#) for more information.
- If you have questions or concerns about COVID-19, visit [BCCAL](#).

## **Academic Integrity**

All materials in this course are protected by copyright. Uploading copyrighted materials to course sharing websites such as CourseHero, GradeBuddy, etc. is not only an academic integrity issue, it is also against the law. All such actions will be reported to Student Judicial Services, and may result in both academic and legal penalties. The *minimum* academic penalty is a full course grade reduction, e.g. from B- to C-. The legal penalty for copyright infringement is a minimum of \$200 per document, plus all attorney fees and court costs related to the case.

I have no tolerance for acts of scholastic dishonesty. Each student in this course is expected to abide by the University of Texas Honor Code: "As a student of The University of Texas at Austin, I shall abide by the core values of the University and uphold academic integrity." Plagiarism is taken very seriously at UT. Therefore, if you use words or ideas that are not your own (or that you have used in previous class), you must cite your sources. Otherwise you will be guilty of plagiarism and subject to academic disciplinary action, including failure of the course. You are responsible for understanding UT's Academic Honesty and the University Honor Code which can be found at the following web address:

<https://deanofstudents.utexas.edu/conduct/standardsconduct.php>.

Students who violate University rules on scholastic dishonesty are subject to disciplinary penalties, including the possibility of failure in the course and/or dismissal from the University. Since dishonesty harms the individual, all students, and the integrity of the University, policies on scholastic dishonesty will be strictly enforced. Refer to the [Student Judicial Services website](#) or the General Information Catalog to access the official University policies and procedures on scholastic dishonesty as well as further elaboration on what constitutes scholastic dishonesty.

## **Diversity and Inclusion**

It is my intent that students from all diverse backgrounds and perspectives be well served by this course, that students' learning needs be addressed and that the diversity that students bring to this class can be comfortably expressed and be viewed as a resource, strength and benefit to all students. Please come to me at any time with any concerns.

## **Religious Holy Days**

Many religious and cultural holidays take place during the semester. Be sure to submit your homework early to avoid any conflicts. By University policy, you must notify me of your pending absence at least fourteen days prior to the date of observance of a religious holy day. If you must miss a class, an examination, a work assignment, or a project in order to observe a religious holy day, and you have provided proper advance notice, you will be given an opportunity to complete the missed work within a reasonable time before or after the absence.

## Students with Disabilities

Students with disabilities may request appropriate academic accommodations from the Division of Diversity and Community Engagement, Services for Students with Disabilities (SSD), 512-471-6259, <http://diversity.utexas.edu/disability/>. If you are eligible for academic accommodations, you must present your SSD letter at least two weeks before you wish to employ the accommodation.

## Title IX Reporting

Title IX is a federal law that protects against sex and gender-based discrimination, sexual harassment, sexual assault, sexual misconduct, dating/domestic violence and stalking at federally funded educational institutions. The University of Texas at Austin is committed to fostering a learning and working environment free from discrimination in all its forms. When sexual misconduct occurs in our community, the university can:

1. Intervene to prevent harmful behavior from continuing or escalating.
2. Provide support and remedies to students and employees who have experienced harm or have become involved in a Title IX investigation.
3. Investigate and discipline violations of the university's [relevant policies](#).

Beginning January 1, 2020, Texas Senate Bill 212 requires all employees of Texas universities, including faculty, report any information to the Title IX Office regarding sexual harassment, sexual assault, dating violence and stalking that is disclosed to them. Texas law requires that all employees who witness or receive any information of this type (including, but not limited to, writing assignments, class discussions, or one-on-one conversations) must be reported. I am a Responsible Employee and must report any Title IX related incidents that are disclosed in writing, discussion, or one-on-one. Before talking with me, or with any faculty or staff member about a Title IX related incident, be sure to ask whether they are a responsible employee. If you would like to speak with someone who can provide support or remedies without making an official report to the university, please email [advocate@austin.utexas.edu](mailto:advocate@austin.utexas.edu). For more information about reporting options and resources, visit <http://www.titleix.utexas.edu/>, contact the Title IX Office via email at [titleix@austin.utexas.edu](mailto:titleix@austin.utexas.edu), or call 512-471-0419.

Although graduate teaching and research assistants are not subject to Texas Senate Bill 212, they are still mandatory reporters under Federal Title IX laws and are required to report a wide range of behaviors we refer to as sexual misconduct, including the types of sexual misconduct covered under Texas Senate Bill 212. The Title IX office has developed supportive ways to respond to a survivor and compiled campus resources to support survivors.