

AET 304: Foundations of Art and Entertainment Technologies

Course Sections

Instructor	TAs	UID	Meeting Times	Room
David (D.S.) Cohen	Kyle Henkel Megan Holden Michael Bruner Anmol Khandeparkar	20370	Tues-Thurs 8-9:30am	RLP 0.130 (Patton Hall)

Abstract

An introduction to the Arts and Entertainment Technology program, which includes the four areas of focus: Digital Imaging & Visualization, Game Development and Design, PLAI, and Music & Sound.

Objective

By the end of the semester, students should be able to:

- Recognize the four emphases of Arts and Entertainment Technology
- Apply the principles of user experience, aesthetics, narrative, and interactivity
- Articulate the tools and roles in the development and execution in technology based arts
- Create and implement original design ideas

Assessment/Grading

This course is participation and project based. There will be no exams. Grading is based on successful completion of project objectives, participation in forum discussion posts, team collaboration, professionalism, and attendance. Projects are worth 40% of your grade, Discussion Posts are worth 20%, Peer Reviews are 20%, and the remaining 20% is based on Professionalism.

No late work will be accepted. No incompletes will be given. If you feel you will not be able to complete all work on time, you should ask the instructor for a grade of Q or drop before the deadline for doing so passes.

Final grades will be determined on the basis of the following rubric. Please note: to ensure fairness, all numbers are absolute, and will not be rounded up or down at any stage. Thus a B- will be inclusive of all scores of 80.000 through 83.999. The University does not recognize the grade of A+.

Letter grade equivalents:

A = 94-100
A- = 90-93
B+ = 87-89
B = 84-86
B- = 80-83

C+ = 77-79
C = 74-76
C- = 70-73

D+ = 67-69
D = 64-66
D- = 60-63
F = 0-60

Attendance/Absences

ATTENDANCE IS MANDATORY - Regular attendance is necessary for successful completion of the class.

For each unexcused absence after your first three, your final grade will be lowered by one letter grade.

Seven unexcused absences constitute an automatic F in the class.

Please be on time for class. Arriving more than ten minutes late at the beginning of class, leaving class without permission, and leaving class prior to dismissal for the day all count as being tardy.

Every two instances you are tardy will be counted as one time absent.

If you need to miss class for legitimate reasons it is your responsibility to contact your TA directly. Sending a message by way of another student of an impending absence does not constitute a legitimate notification.

Note: If you catch the flu, have a family emergency, or otherwise cannot attend class, please send an email to your TA and submit any class work as needed. Excused absences do not qualify for an extension in the assignment.

Religious Holidays

Section 51.911 of the Texas Education Code states that a student shall be excused from attending classes or other required activities, including examinations, for the observance of a religious holy day, including travel for that purpose. A student whose absence is excused under this subsection may not be penalized for that absence and shall be allowed to take an examination or complete an assignment from which the student is excused within a reasonable time after the absence. University policy requires students to notify each of their instructors at least fourteen days prior to the date they will be absent from scheduled classes to observe a religious holy day. (from http://www.utexas.edu/provost/policies/religious_holidays/1555_001.pdf)

Q Drop Policy

The State of Texas has enacted a law that limits the number of course drops for academic reasons to six (6). As stated in Senate Bill 1231: "Beginning with the fall 2007 academic term, an institution of higher education may not permit an undergraduate student a total of more than six dropped courses, including any course a transfer student has dropped at another institution of higher education, unless the student shows good cause for dropping more than that number."

REQUIRED File Naming Convention:

When submitting a file, you must follow the file naming convention as listed below. Assignments that do not follow the proper file naming convention will have points deducted.

If an individual assignment...

FirstInitialLastName_AssignmentName_NumericDateSubmitted

Example: dcohen_Project1_07042019

If a team assignment...

TeamName_AssignmentName_NumericDateSubmitted

Example: TeamAsteroid_Project2_07042019

IMPORTANT: Do not use slashes (/) in the date, as the system will not accept it and it may not read correctly.

REQUIRED File Format:

See individual assignment for required file format.

Classroom Policy

Devices

- Must be kept in silent mode unless an emergency notification is expected (please discuss this with me prior to class).
- Can be used for research and class note taking, but not for social media (unless related to class activities)
- Do not take a call, chat, or respond to emails during class time.

Food/Drink

- Food is not allowed in class, unless for medical reasons. If for medical reasons you must provide an accommodation letter from Services for Students with Disabilities (512-471-6259, ssd@austin.utexas.edu, <http://ddce.utexas.edu/disability/>, or videophone 512-471-6644).
- Drinks in closed containers are permitted but must be kept on the floor or out of sight when not in use. You spill it, you clean it up.

Required Equipment and Software

Hardware:

All students MUST have access to a portable computer capable of running the required software for the course.

Software:

- Adobe Creative Cloud.
 - Students can obtain a significant discount on an Adobe Creative Cloud license through UT's Campus Computer Store.
<https://finearts.utexas.edu/feature/news/new-discounted-student-price-available-adobe-creative-cloud>
- Audacity (Free software)
<https://www.audacityteam.org/>
- Maya (Free Student License)
<https://www.autodesk.com/education/free-software/maya>
- Presentation software, such as Powerpoint, Google Slides, or Keynote only.

Professionalism

Please observe the following rules during class as a courtesy to fellow students and the instructor. These will have an impact on your professionalism grade, so it is important that you follow these guidelines...

1) Be on time at the beginning of class. If you must come in late at the beginning of class, please enter the room and seat yourself as quietly and unobtrusively as possible.

If you have a class beforehand that is on the other side of campus, you must inform your TA on the first day of class so adjustments can be made.

2) Turn your cell phone off or on silent, and put it away. Looking at your cell phone during lectures, exercises and discussions is not acceptable. Use your computer for taking notes, not your cell phone.

3) Don't distract other students. Everyone benefits from a classroom free of distracting sights, sounds, and smells. If you would like to update your Facebook page, talk to your friends, listen to loud music, polish your nails, doodle with Sharpies, Sleep etc., please do so outside of the classroom, not during class time.

4) Headphones and sunglasses are not allowed to be worn during lectures, exercises or discussions. Even if your headphones are not playing music, they should never be in your ears during these times.

5) Arrive to class prepared, with your required equipment (IE: Computer), assignments completed, and reading/tutorials reviewed and ready to discuss.

6) Be prepared and willing to participate in class discussions and present your work (in progress or completed) when called upon.

7) Be polite and considerate to others. Insults, bullying behavior, and discrimination will not be tolerated.

8) Do not fall asleep in class.

Academic Integrity

The University's Honor Code states that "As a student of The University of Texas at Austin, I shall abide by the core values of the University and uphold academic integrity." You are expected to maintain absolute integrity and a high standard of individual honor in scholastic work undertaken at the University. At a minimum, you should complete any assignments, exams, and other scholastic endeavors with the utmost honesty, which requires you to:

- acknowledge the contributions of other sources to your scholastic efforts;
- complete your assignments independently unless expressly authorized to seek or obtain assistance in preparing them;
- follow instructions for assignments and exams, and observe the standards of your academic discipline; and
- avoid engaging in any form of academic dishonesty on behalf of yourself or another student.

(adapted from http://deanofstudents.utexas.edu/sjs/acint_student.php)

Academic Dishonesty

- In promoting a high standard of academic integrity, the University broadly defines academic dishonesty as including any act designed to give an unfair or undeserved academic advantage, such as:
 - Cheating
 - Plagiarism
 - Unauthorized Collaboration / Collusion
 - Falsifying Academic Records
 - Misrepresenting Facts (e.g., providing false information to postpone an exam, obtain an extended deadline for an assignment, or even gain an unearned financial benefit)
 - Multiple submissions (submitting essentially the same written assignment for two courses without authorization to do so)
 - Any other acts (or attempted acts) that violate the basic standard of academic integrity (adapted from http://deanofstudents.utexas.edu/sjs/acadint_whatish.php)
 - Students who violate University rules on academic dishonesty are subject to disciplinary penalties, including the possibility of failure in the course and/or dismissal from the University.
(from http://deanofstudents.utexas.edu/sjs/acint_faculty_syllabus.php)

Plagiarism

“Plagiarism” includes, but is not limited to, the appropriation of, buying, receiving as a gift, or obtaining by any means material that is attributable in whole or in part to another source, including words, ideas, illustrations, structure, computer code, and other expression or media, and presenting that material as one’s own academic work being offered for credit or in conjunction with a program course requirement (from Sec. 11-402, <http://catalog.utexas.edu/general-information/appendices/appendix-c/student-discipline-and-conduct/>).

Copyright and Fair Use

Understanding the basic principles of copyright and fair use is of critical importance to designers. Many of the uses we will make of texts, images, and videos this semester will be covered by the doctrine of fair use. However, as creators, you need to be aware of your own and other copyright holders’ legal rights, and to properly identify and license your own and others’ works. We will discuss these issues during the semester as needed, but when you have questions about whether or when you can appropriate someone else’s work, a useful resource is Georgia K. Harper’s Copyright Crash Course, available at <http://copyright.lib.utexas.edu/>.

Services for Students with Disabilities (SSD)

The University of Texas at Austin provides upon request appropriate academic accommodations for qualified students with disabilities. For more information, contact Services for Students with Disabilities (512-471-6259, ssd@austin.utexas.edu, <http://ddce.utexas.edu/disability/>, or videophone 512-471-6644).

Please provide documentation of your needs during the first week of class, if possible, so that I can make the necessary accommodations promptly.

Student Support Services

There are numerous free and/or low-cost support services available to students at UT. They include (but are not limited to) the following:

Fine Arts Career Services (512-232-7333, utexas.edu/finearts/careers) provides a full range of services and resources to support students and alumni.

The Undergraduate Writing Center

(512-471-6222, uwc.utexas.edu) helps students with every phase of writing assignments for their courses.

The Sanger Learning Center (512-471-3614, utexas.edu/ugs/slc) provides study skills, time-management, and note-taking courses.

University Health Services (512-471-4955, healthyhorns.utexas.edu) provides medical and health promotion services for currently enrolled students and some non-students who are officially enrolled in certain University programs.

The Counseling and Mental Health Center (512-471-3515, cmhc.utexas.edu) helps students with their personal concerns so that they can meet the daily challenges of student life.

UT Electronic Mail Notification Policy

Electronic mail (e-mail) is a mechanism for official University and instructor communication to students. Students are expected to check e-mail on a frequent and regular basis in order to stay current with University- and course-related communications, recognizing that certain communications may be time-critical. It is recommended that e-mail be checked daily, but at a minimum, twice per week.

It is the responsibility of every student to keep the University and instructor informed of changes in his or her official e-mail address (do so at https://utdirect.utexas.edu/utdirect/bio/address_change.WBX).

Consequently, e-mail returned to the University with "User Unknown" is not an acceptable excuse for missed communication. Similarly, undeliverable messages returned because of a full inbox or use of a spam filter will be considered delivered without further action required of the University or instructor. (see <http://www.utexas.edu/cio/policies/university-electronic-mail-student-notification-policy>)

Use of Class Materials

The materials used in this class, including, but not limited to, exams, quizzes, and homework assignments are copyright protected works. Any unauthorized copying of the class materials is a violation of federal law and may result in disciplinary actions being taken against the student. Additionally, the sharing of class materials without the specific, express approval of the instructor may be a violation of the University's Student Honor Code and an act of academic dishonesty, which could result in further disciplinary action. This includes, among other things, uploading class materials to websites for the purpose of sharing those materials with other current or future students. (from <https://wikis.utexas.edu/display/coursematerials/Sample+Use+Statement+for+Syllabus>)

Behavior Concerns Advice Line (BCAL)

If you are worried about someone who is acting differently, you may use the Behavior Concerns Advice Line to discuss by phone your concerns about another individual's behavior. This service is provided through a partnership among the Office of the Dean of Students, the Counseling and Mental Health Center (CMHC), the Employee Assistance Program (EAP), and The University of Texas Police Department (UTPD). Call 512-232-5050 or visit <http://www.utexas.edu/safety/bcal>.

Emergency Procedures

Mass e-mails (in addition to sirens and fire alarms, when appropriate) will be used to provide students, faculty, and staff with information regarding potential threats to the safety and security of the campus community. E-mails will also be used as a way to notify students, faculty, and staff of emergency situations and keep them updated on the situation. Emergency officials also have the ability to disseminate important information via text message directly to the cell phones of users subscribed to the service. Please consider subscribing to this service at <https://utdirect.utexas.edu/apps/csas/text/main/>.

(adapted from

<http://www.utexas.edu/safety/preparedness/plans/EmergencyManagementPlan2013a.pdf>

Overview of Schedule

Please be aware that on occasion the order and timing of the course schedule may need to be altered to accommodate UT closures, instructor illness, student needs/interests, and design program workshop opportunities and lectures. Any significant alterations to the schedule will be announced via Canvas.

Reading assignments and an agenda for each day of class will be posted to Canvas.

Calendar

Note – This schedule, assignments, and reading are subject to change by the instructor, without notification in certain cases.

Week 1 Class Thurs: 8/29	<ul style="list-style-type: none"> ● Course Intro ● What is AET? ● History of AET ● Saving to the Cloud (UT Box, Dropbox, Google Drive) REQUIRED ● Claim your UT Gmail <p>HW:</p> <ul style="list-style-type: none"> ● Download and Install Required Software 	<p><u>Assignment:</u> Photoshop Tutorial Photoshop CC 2019 Essential Training: The Basics</p> <p><u>Discussion Post:</u> Post reflection of what you've learned about Photoshop in the discussion board.</p>
Digital Images and Visualization		
Week 2 Tues: 9/3	<ul style="list-style-type: none"> ● Introduction to Digital Images and Visualization ● Guest: Neal Daugherty 	
Thurs: 9/5	<ul style="list-style-type: none"> ● Aesthetics ● Guest: Honoria Starbuck 	

Week 3 Tues: 9/10	<ul style="list-style-type: none"> • 3D Modeling and Texturing • Guest: Isacc Oster 	<u>Project 1:</u> (Individual assignment) Create a 3D model of a Barrel in Maya
Thurs: 9/12	<ul style="list-style-type: none"> • Digital Images/Visualization Exploration Part 1 • Guest: Dax Norman 	
Week 4 Tues: 9/17	<ul style="list-style-type: none"> • 2D/3D Animation • Guest: Luc Dimick 	<u>Project 2:</u> (Individual assignment) Create an animated GIF.
Thurs: 9/19	<ul style="list-style-type: none"> • Digital Images/Visualization Exploration Part 2 • Guest: Yuliya Lanina 	
Week 5 Tues: 9/24	<ul style="list-style-type: none"> • User Experience 	<u>Discussion Post:</u> Find an interactive device or tool that is lacking in intuitive design. Explain how you would redesign it for better user experience.
Game Design and Development (3 Weeks)		
Thurs: 9/26	<ul style="list-style-type: none"> • Introduction to game development • Disciplines/The development team • Tools in game development 	<u>Discussion Post:</u> Take a game and break it down by the elements used to create it. Due Sunday <u>Assignment:</u> Review Scratch Tutorials
Week 6 Tues: 10/1	<ul style="list-style-type: none"> • Concept Brainstorming • Prototyping • Iteration 	<u>Project 3</u> (Team Project): Design a game to be built in Scratch Part 1: Review Scratch Tutorials Part 2: Brainstorm Part 3: Paper Prototype Part 5: Build Game in Scratch
Thurs: 10/3	<ul style="list-style-type: none"> • Game Design/Design Docs 	
Week 7 Tues 10/8	<ul style="list-style-type: none"> • Game Art 	
Thurs 10/10	<ul style="list-style-type: none"> • Game Tech 	
Week 8 Tues 10/15	<ul style="list-style-type: none"> • Game Writing/Narrative Design • Narratology, Ludology 	
Thurs 10/17	<ul style="list-style-type: none"> • VR/AR • Guest: MJ Johns 	
Music & Sound		
Week 9 Tues 10/22	Introduction to Music & Sound Technology Music & Sound Theory	<u>Assignment:</u> Review Audio Recording/Editing software Tutorial (To be provided)
Thurs 10/24	Tools and Technology for music and sound	

Week 10 Tues 10/29	Sound Design	<u>Project 4</u> (Team Project) Create a podcast. Write a podcast proposal Identify audio needs Record and edit podcast Publish podcast
Thurs 10/31	Audio Editing/Mixing	
Week 11 Tues 11/5	Game Audio	
Thurs 11/7	Performing with technology, voice over, live performances, exhibitions.	
PLAI (Projection, Lighting and Interactivity)		
Week 12 Tues 11/12	Introduction to PLAI	<u>Discussion Post:</u> Review a live event (to be assigned) and pick it apart, what lighting is involved, what projection is involved, what roles and careers are involved.
Thurs 11/14	<ul style="list-style-type: none"> • Designing lights for an audience 	<u>Project 5</u> (Team Project) Propose a redesign of a non interactive museum exhibit, public exhibition, stage production or installation art. Make a full proposal with presentation on redesigning it as an audience interactive experience.
Week 13 Tues 11/19	<ul style="list-style-type: none"> • Narrative and Interactivity in PLAI 	
Thurs 11/21	<ul style="list-style-type: none"> • PLAI at exhibitions and events 	
Week 14 Tues 11/26	<ul style="list-style-type: none"> • Escape Room Project 	
Thurs 11/28	<ul style="list-style-type: none"> • No Class - Thanksgiving 	
Week 15 Tues 12/3	<ul style="list-style-type: none"> • PLAI in theater/stage performances 	
Thurs 12/5	<ul style="list-style-type: none"> • Final Class: <ul style="list-style-type: none"> • Where do we go from here? • Guest Speakers: <ul style="list-style-type: none"> • Doreen Lorenzo, Assistant Dean, School of Design and Creative Technology • Michael Baker: Acting Chair, Arts and Entertainment Technology 	

Units of Study

- 1. Digital Imaging and Visualization:** Digital visual content that focuses on digital art, which includes digital drawing, 3D modeling, 2D & 3D Animations, VR/AR, plus the tools and career paths involved.
- 2. Game Development and Design:** The creation of a digital game from concept to completion, exploring the disciplines of game art, tech, design, sound, and production, and how they work in collaboration on a professional development team.
- 3. Music & Sound:** Using technology in the creation of music arrangements and sound design to produce performances, compositions, soundscapes, and voice over. Will explore how sound and music technology can also enhance other forms of media such as games, films, and animation.
- 4. PLAI (Projection, Lighting, and Interactivity):** Converge of lighting, projection, digital media and imagery, projecting, and interactive systems to enable the design and development of new performances as well as live and immersive experiences.

Process

Team Focused Projects and Discussions

For all discussion posts and Projects 3 - 5 students will be assigned teams for collaboration and reflection. Grading will be based not on the outcomes of the projects and quality of reflection in discussion post, as well as contribution and teamwork as reflected in peer reviews.

Projects

The following is a summary of project assignments for the course. For full details, requirements and the grading rubric, please refer to the assignment posting in Canvas.

Project 1: (Individual Assignment)

Following a provided tutorial, students will create a 3D model of a barrel. In addition to including PNG files showing the final barrel model from multiple different angles, students must submit their original maya file.

Project 2 (Individual Assignment)

Students will use tools and techniques discussed in class to create an original animated GIF (Graphics Interchange Format). In addition to submitting the GIF file, you must provide the original files/images used in creating the final work.

Project 3 (Team Assignment)

In assigned teams, students will brainstorm, conceive, develop and execute a digital game built using Scratch. Final submission will include the game build, a game design document following provided template, files of all assets used, and a breakdown discussion of each team members contribution.

Project 4 (Team Assignment)

In teams students will conceive, compose, record, edit and finalize a podcast using approved recording and editing software. Podcast topics/genre will be selected from a provided list. Final podcast must be both submitted and published live.

Project 5 (Team Project)

In teams, students will review a non-interactive museum exhibit, public exhibition, stage production or installation art, then create a fully realized proposal with presentation on how to redesign it as an interactive experience. Presentations must include both the redesign as well as the technology and roles involved in the development and execution.

Discussion Posts

Discussions are designed to allow students to articulate what they have learned, engage interaction with other students in the course, and provide constant, helpful feedback. Discussion posts and responses should be courteous, thoughtful, and carefully written.

Details and requirements for each discussion post and response will be outlined for each topic in the Discussions section of Canvas.

Peer Review

On Team based Projects, students within each team will provide a reflection of each of their fellow team members based on collaboration and contribution to the project. This will be based on a provided review and will result in an individual grade for each team member. Reflections and feedback must be accurate, courteous, and professional.