

Fall – Autumn - 2018
AET362C: Generative Media & Visuals – Unique #: 21050
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Office Hours: 9:30 – 11:30 PLAI LAB/DFA 4.132E (Or by appointment)

Tuesday & Thursday 12:30-2:00pm
PAC 3.204

OVERVIEW

This course offers a broad range of technical and critical skills for use in the creation of generative visual media, the playback and control systems of such experiences.

Students will leave with an advance understanding of the creation and manipulation of generative media, as well as industry standard software to control, playback and queue such media.

Using industry standard software and hardware integrations we will discuss, design and implement the creation, control and manipulation of our designs. Using methods such as projection mapping, show control and advanced programmatic image generation to create compelling immersive media experiences.

COURSE DESCRIPTION

This class is a lab based, exploratory learning exercise in the creation, manipulation and control of visual media.

This class is designed to provide the foundations and targeted instruction for students wanting to expand their research into the creation and generation of real-time visuals for live events.

By exploring the uses of selective visual media and accompanied interactivity for use in such areas as electronic dance music, interactive art, music concerts as well as dance performances. We will build an understanding of the power of generative media.

Students will utilize their existing digital and traditional skillsets to generate and manipulate imagery in real-time, introducing the use of hardware sensors, control protocols and projection mapping. Using industry standard software and hardware this course will take existing visual creation knowledge into a more practical performance-based avenue.

Student will be allowed to creatively answer a number of given briefs with the goal of producing real-time ready showcases and performances with the potential for displaying at UT sponsored events.

By the end of this course students will have a deeper understanding and practical skills for the complete media creation, manipulation and projection mapping pipeline.

LEARNING OUTCOMES

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

- Critically analyse and discuss interactive and generative art techniques;
- Practically demonstrate ability within industry standard VJ/visual software;
- Gain introductory-level experience to various advance industry techniques
- Design, create and implement show style controls and playback systems

COURSE REQUIREMENTS

- Participation (15%): Students should be prepared to raise ideas, critique designs and add to class discussions.
- Class challenges (25%): Technical challenges to aid in the learning of specific skills in media generation and supporting software. Each week will add new challenges with additional homework assignments to compound learning. This will leave students with key skills in a number of industry leading software packages. These challenges are given out from week 3 onwards, expected to be return the following Thursday (9 days per challenge). Each task is worth 4%, with an additional 1% for a creative or bonus addition. – Final submission due week 10 (11/01/18)
- Project 1 (15%): Drafting and Designing – Create a written design concept, show breakdown and visual overview document to outline a live show control setting/system. Students can draw on previous experiences and personal themes to direct this work
- Project 2 (30%): Integration and showcase – Combine technical learning and design method from previous milestones to create a complete real-time, interactive show. This will culminate all skills learned throughout this class into a single showcase. Project 2 will be demoed during the final week of class (week 15 12/04/18 &

12/06/18). Students that show strong desire or exemplar work may have the opportunity to showcase at UT sponsored events.

- Critical Evaluation (10%): Students will create a single page, double space critical evaluation of a selected media experience, as well as on a specific experience given in class
- Attendance (5%): Attendance is taken during every class

CLASS POLICIES

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>)

ATTENDANCE

Attendance and punctuality are professional attributes. This class is designed to provide students skills for a more practical and professional future career.

You are allowed three absences for illness or personal reasons; however, you will likely miss points for in-class assignments or activities as a result, and these generally cannot be made up. However, if a serious medical or personal crisis (hospitalization, death in the family, etc.) impacts your attendance, please inform me as soon as possible. In addition, see the exception below for religious holy days.

Arriving more than ten minutes late at the beginning of class or after a break, leaving class without permission, and leaving class prior to dismissal for the day all count as being tardy. Three tardies equals an absence. Four absences will lower your course grade by one letter grade. Additional absences may result in failure of the course.

Learning, research and development within the class all build on knowledge gained from previous lessons, you are responsible for making up for work missed during any absence. It is your responsibility to obtain any notes or assignments from one of your classmates.

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)

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.

CLASSROOM ETIQUETTE

1. Be on time at the start of class time and after any breaks
2. This class is a place for artistic discussion and critique, not texting on your phone – please turn them on silent
3. Discussion is good, distraction is bad – I reserve the right to reduce marks for that day's assigned work for repeat offenders
4. Consider bringing headphones/earphones for any periods of solo work, such as class work sessions

COURSE COMMUNITACTION

The syllabus and assignments will be posted on the course Canvas site. All communications outside class hours is via Canvas.

This class is designed around discussion and group learning, it will help everyone if you post questions in the discussion area wherever possible. I will post, comment and otherwise add to the discussion wherever relevant, or with topics to help steer general discussion in class.

I will attempt to respond to all private communications within 24 hours on weekdays.

I normally check emails twice per day, once in the afternoon, once in the evening.

- Always ask questions where there is doubt. Do not make assumptions.

ASSIGNMENTS

- All assignments will be given out and discussed during class time and available to view on Canvas.
- Technical assignments will be given out in class as we go through various software's and implementations, each will have a homework assignment for the following week to advance and develop on the work completed during class. Additional smaller assignments may be made throughout the semester as the need arises.
- You are responsible for making up for any class work missed – specifically technical challenges completed during class time as these, and the homework assignment contribute heavily to the final grade.
- It is your responsibility to ask and inquire if you are unclear about what is required or when.

ASSIGNMENTS DEADLINES

- It is vital that you do not get behind in this class as all work builds upon previous work.
- As a general rule all projects, reading, research and homework assignments must be completed before the beginning of each class period. However, many class assignments have a due date and time in the evening before class. This allows time for review and feedback, as well as discussion based upon the submitted work during the next lesson. Any work not submitted on time will still receive feedback but will not benefit from peer review in class time.
- All work is due as specified in the assignment listed on canvas. Work not completed before the canvas deadline will be considered late.
- Any work turned in late, without prior consent and valid reason will result in a single grade drop from the deserved reward (an A submission will reward a B etc).
- Technical challenges are given from week 3 onwards on the Tuesday session, expected to be returned on the following Thursday session. Each challenge is worth a maximum 5% of your total grade. Late or no submission will result in no grade for that challenge. The final challenge is due in week 10 (11/01/18).
- The project 1 & 2 will be developed during core class hours in designated lab time. Using skills discussed and developed weeks 1 through 9. Project 1 is due during week 10 (10/30/18), project 2 is due in the final week 15 (12/04/18 & 12/06/18)

CLASS SCHEDULE

Week	Days	Topics	Homework/assessments	
1				
	30-Aug	Class intro getting ready for class		
2	04-Sep	Introduction to image generation	Critical writing	
	06-Sep	Lab		
3	11-Sep	visual creation	Challenge 1	
	13-Sep	Lab		Critical writing due
4	18-Sep	Advanced visual creation	Challenge 2	
	20-Sep	Lab		Challenge 1
5	25-Sep	Visual manipulation	Challenge 3	
	27-Sep	Lab		Challenge 2
6	02-Oct	Advanced visual manipulation		
	04-Oct	Lab		Challenge 3

7	09-Oct	Presentation and projection	Project 1	
	11-Oct	Lab		
8	16-Oct	Further presentation and projection	Challenge 4	
	18-Oct	Lab		
9	23-Oct	Further presentation and projection 2	Challenge 5	
	25-Oct	Lab		Challenge 4
10	30-Oct	Student Focus	Project 2	Project 1 submission
	01-Nov	Lab		Challenge 5
11	06-Nov	Student Focus		
	08-Nov	Lab		
12	13-Nov	Student Focus		
	15-Nov	Lab		
13	20-Nov	Student Focus		
	22-Nov	No Class - Thanksgiving		
14	27-Nov	Student Focus		
	29-Nov	Lab		
15	04-Dec	Project 2 Presentations		Project 2 presentations
	06-Dec	Project 2 Presentations		Project 2 presentations
16	11-Dec	No Class		
	13-Dec	No Class		

EVALUATION & GRADING

Neatness, scholarship and presentation will all count towards your final grade:
Being able to visually communicate ideas is part of the process.

YOU WILL BE GRADED ON

- Reading, discussion, Participation (15%):
- Weekly class challenges and associated homework assignments (25%):
- Project 1: design brief for live, real time visual show (15%)
- Project 2: In class performance of real-time show (30%)
- Critical reflection (critical writing) (10%)
- Attendance (5%)

This course does not have a final exam.

GRADING SCHEME

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+. Thus, the conversion from percentage value to letter grade is as follows:

- A = 94+
- A- = 90 – 93.999...
- B+ = 87 – 89.999...
- B = 84 – 86.999...

- B- = 80 – 83.999...
- C+ = 77 – 79.999...
- C = 74 – 76.999...
- C- = 70 – 73.999...
- D+ = 67 – 69.999...
- D = 64 – 66.999...
- D- = 60 – 63.999...
- F = 0 – 59.999...

PRIVACY

This class is designed to be an open space for discussion, critique and learning. What is said about each other's work during this class should remain in the classroom. It will not be published in a blog or any other personal website, tweeted or posted on social networks.

MOBILE DEVICES

Mobile devices of any kind must be silenced and out of sight.

There may be times when using a mobile is appropriate, such as aiding in discussion – these times will be very obviously announced. Texting, talking or otherwise using a mobile device is never appropriate during class.

RESOURCES AND EQUIPMENT

This class will take part in the PLAI lab, with access to the software, hardware and computers required for the course.

We will access: <https://thebookofshaders.com> at points during class when discussing/looking at visual media creation. It is an online resource that you can create local copies of in certain situations.

Using your personal devices/laptops is permitted but would be expected to run everything to a satisfactory level. This is normally a laptop or desktop with a discrete GPU installed.

This class will utilise a number of software that have various commercial, free to-use, or educational licenses.

Students using their own devices should expect to require access to:

- Derivative Touchdesigner (free non-commercial use (some limitations) – educational license \$300)
- Resolume (free trial, offers education pricing)
- Potentially some Adobe CC or other video/image editing software