THTR 303 Projection Design I
Spring 2021 – Mondays – 10am-12:50pm
3 Units

Location: https://usc.zoom.us/j/92109040335
Instructors: Hana S. Kim
Office: By appointment only
Office Hours: By appointment only
Contact Info: hanak@usc.edu

Course Description

This class will explore projection design and digital media production, specifically as it relates to theatre and live entertainment. Students will be trained on the holistic process from storyboarding to technical execution, and will be tasked with two hands-on projects. Course material will include an overview of the history, current landscape, and emerging technologies in projection/video design.

Learning Objectives

Students will drive their own design projects. They will be required to communicate their design concept and engineer a simple design system. They will also be able demonstrate basic working knowledge of projection systems, equipment and content creation upon completion of the course.

Prerequisite(s): THTR 131b, THTR 132a, THTR 132b
Co-Requisite (s): None
Concurrent Enrollment: None
Recommended Preparation: Have basic knowledge of Adobe Photoshop.

Course Notes

Grading is letter based. All handouts and slides will be accessible via Blackboard.

Required Readings and Supplementary Materials

Laptop
Adobe Creative Cloud
Cinema 4D (limited version installation with CC AfterEffects, full version available at www.maxon.net
- full version free for students)
The Routledge Companion to Scenography Chapter 4 (digitally available from USC library)

Grading Breakdown

Assessment Tool (assignments)	Points	% of Grade
Participation	10	10
Quiz	10	10
Homework Assignments	20	20

Content Project	30	30
Final Project	30	30
TOTAL	100	100

Grading Scale

Course final grades will be determined using the following scale

A   95-100
A-   90-94
B+   87-89
B   83-86
B-   80-82
C+   77-79
C   73-76
C-   70-72
D+   67-69
D   63-66
D-   60-62
F   59 and below

Assignment Submission Policy

Assignments are project based and are to be presented in class.

Grading Timeline

Feedback will be given directly upon presentation of the assignment, with grades and written feedback sent via email prior to the next class.

Course Schedule: A Weekly Breakdown

Week 1 (1/18)

Off for Martin Luther King, Jr. Day

Week 2 (1/25)

What is Projection/Video Design
- Overview of projection design history
- Workflow of typical project from storyboarding to execution
- **Watch before Week 3 Class**
  American Theater Wing video on 59 Productions
  Visit Manual Cinema
  (optional) You Are Here from LJP

Week 3 (2/1)

Eye vs Camera: Emergence of Virtual Live Performance Art
- Discuss the new genre of virtual live performances in 2020
- Projection/Video Design as new media art form in Theatre
- Photoshop Basics: smart object, layer masks, layer comps
- **Assignment (due 2/8)** short essay for Self Portrait (Project I) to present in the class

Week 4 (2/8)

Projection Technology and Hardware
- Projectors and Playback system basics
- Introduction to system engineering
- Analog and digital contents making
- **Assignment (due 2/22)** storyboard for Project I

Week 5 (2/15)

Off for President's Day

Week 6 (2/22)

After Effects Basics I
- Review students' storyboards
- After Effect Basics: workspace, animation, pre comps, expression
- Understanding of codecs
- **Assignment (due 3/1)** Week 5 Class Project rendered video, Start collecting assets for Project I

Week 7 (3/1)

After Effects Basics II
- After Effect Basics: workspace, animation, pre comps, expression (continued)
- Project based Q&A
- **Assignment (due 3/8)** Shoot contents for Project I

Week 8 (3/8)

After Effect Composition
- After Effect Intermediate Skills
- Masking for shot content
- Project based Q and A
- **Assignment (due 3/15)** Final composition and animation of Project I

Week 9 (3/15)

Presentations and Reviews of Project I

Week 10 (3/22)

Chemistry of Surface and Projection
- Projection mapping concept and tool overview (WatchOut, Disguise, MappingMatters etc)
- Different colored projection surfaces
- **Assignment (due 3/29)** Listen to Du Yun's "A Cockroach's Tarantella" (Project II)

Week 11 (3/29)

Introduction to Cinema4D I
- Cinema4D : workspace, navigation, cloner and deformers
- Discuss "A Cockroach's Tarantella" visual environments (which space around you can be used as a scenic environment?)
- **Assignment (due 4/5)** Pick one song from Project II

Week 12 (4/5)

Introduction to Cinema4D II
- Cinema4D : basic modeling, animation (with and without keyframe)
- **Assignment (due 4/12)** Storyboard for Project II

Week 13 (4/12)

World of XR (Extended Reality)
- Examples of XR
- BTS of Last Days of Judas Iscariot production
- Review Project II storyboards

Week 14 (4/19)

Interactive Art and Projection
- Examples of Interactive Art
- Q&A on tools for Project II rendering
- **Assignment (due 4/26)** make progress on Project II

Week 15 (4/26)

Lab Day

- Check in on progress of Project II

Week 16 (5/3)

Study day

Week 17 (5/10)

Final Project submission

Statement on Academic Conduct and Support Systems

Academic Conduct:

Plagiarism – presenting someone else's ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in SCampus in Part B, Section 11, "Behavior Violating University Standards" policy.usc.edu/scampus-part-b. Other forms of academic dishonesty are equally unacceptable. See additional information in SCampus and university policies on scientific misconduct, policy.usc.edu/scientific-misconduct.

Support Systems:

Counseling and Mental Health - (213) 740-9355 – 24/7 on call
studenthealth.usc.edu/counseling
Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention.

National Suicide Prevention Lifeline - 1 (800) 273-8255 – 24/7 on call
suicidepreventionlifeline.org
Free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week.

Relationship and Sexual Violence Prevention and Services (RSVP) - (213) 740-9355(WELL), press "0" after hours – 24/7 on call
studenthealth.usc.edu/sexual-assault
Free and confidential therapy services, workshops, and training for situations related to gender-based harm.

Office of Equity and Diversity (OED)- (213) 740-5086 | Title IX – (213) 821-8298
equity.usc.edu, titleix.usc.edu
Information about how to get help or help someone affected by harassment or discrimination, rights of protected classes, reporting options, and additional resources for students, faculty, staff, visitors, and applicants. The university prohibits discrimination or harassment based on the following protected characteristics: race, color, national origin, ancestry, religion, sex, gender, gender identity, gender expression, sexual orientation, age, physical disability, medical condition, mental disability, marital status, pregnancy, veteran status, genetic information, and any other characteristic which may be specified in applicable laws and governmental regulations. The university also prohibits sexual assault,

non-consensual sexual contact, sexual misconduct, intimate partner violence, stalking, malicious dissuasion, retaliation, and violation of interim measures.

Reporting Incidents of Bias or Harassment - (213) 740-5086 or (213) 821-8298
usc-advocate.symplicity.com/care_report
Avenue to report incidents of bias, hate crimes, and microaggressions to the Office of Equity and Diversity |Title IX for appropriate investigation, supportive measures, and response.

The Office of Disability Services and Programs - (213) 740-0776
dsp.usc.edu
Support and accommodations for students with disabilities. Services include assistance in providing readers/notetakers/interpreters, special accommodations for test taking needs, assistance with architectural barriers, assistive technology, and support for individual needs.

USC Support and Advocacy - (213) 821-4710
uscsa.usc.edu
Assists students and families in resolving complex personal, financial, and academic issues adversely affecting their success as a student.

Diversity at USC - (213) 740-2101
diversity.usc.edu
Information on events, programs and training, the Provost's Diversity and Inclusion Council, Diversity Liaisons for each academic school, chronology, participation, and various resources for students.

USC Emergency - UPC: (213) 740-4321, HSC: (323) 442-1000 – 24/7 on call
dps.usc.edu, emergency.usc.edu
Emergency assistance and avenue to report a crime. Latest updates regarding safety, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible.

USC Department of Public Safety - UPC: (213) 740-6000, HSC: (323) 442-120 – 24/7 on call
dps.usc.edu
Non-emergency assistance or information.