

CTPR 573 Developing & Producing the Advanced Production (Virtual Production)

Section 18710D

Units: 2

Spring 2025 — Wednesday 9:00 am - 12:50 pm

Location: SCA: 245

INSTRUCTORS:

Scott Kroopf

Habib Zargarpour

STUDENT ASSISTANT:

Jesse Werkman

Class Description

This course is designed to assist students in crafting their scripts and production plans for their Virtual Production Group Workshop Project. The challenges of Virtual Production projects require another level of preparation beyond the basic film production. Using a Real-Time Engine for set extensions with LED Volume or to animate an all-CG project (as well as other VFX techniques) needs to be carefully conceived and planned in conjunction with your story development. This class will allow you to balance your creative goals with virtual production's technical and practical demands to enhance your filmmaking opportunities. In a small workshop environment, students will benefit from in-depth feedback from instructors and peers during this development phase to bring their stories to life.

Learning Objectives

CTPR 573 is an intensive, immersive pre-production class. Over these fifteen weeks, you will engage in story development, virtual production planning, scheduling, budgeting, and envisioning your thesis films. As the project's initiator, you will develop and produce a creative, fiscal, and physical road map for the cinematic story you wish to pursue. You will learn the following skills:

- Improve your scripts to align with your creative objectives and production resources to take advantage of virtual production's unique cinematic possibilities.
- Understand the appropriate use of virtual production techniques.
- Learn to break down your project's virtual production assets and elements to optimize your project's available time and financial resources.
- Use your previs to develop and enhance your story and prepare technically for virtual

production shooting and post-production.

- Build a virtual production plan that is realistic and executable while staying true to your creative objectives and aspirations.
- Leverage a new way of filmmaking and storytelling possibilities that are unique to the digital environment.

Assignments and Final Package

This class is based on an iterative process to develop and plan your virtual production projects. While working on various drafts of your script, you will generate and refine the following documents and visual materials, which will be assembled into a Final Package that you will pitch at the end of the semester to determine whether you can proceed to CTPR 587.

- A Shooting Script
- A Director's Pitch Deck that articulates the project's creative and stylistic vision (you will also use elements of this as part of your Financial Plan).
- Fundraising plan with any pitchvis, a letter, and a list of names
- A Previs for the entire film.
- An Asset List with information about each asset's source, cost, and delivery timeline.
- Production Schedule of both live-action, LED Volume, and Mocap, if applicable.
- Post-production Schedule
- Budget

The details of these assignments are in the **Week-by-Week Course Schedule** on Page 4 and in the **Assignment Schedule Grid** [HERE](#).

Grading

You will be evaluated based on the timely submission of all script revisions and virtual production material assignments, the final script, location photos, schedules, budgets, fundraising materials, and class participation. Missed classes, tardiness, failure to meet deadlines, failure to review classmates' work, and failure to participate in the in-class notes process will result in lower grades.

The following rubric will determine grades in CTPR 573:

Script and Revisions	20%
Previs	20%
Assignments (pitch decks, breakdowns, lists, budget & schedules)	20%
Fundraising plan (Pitchvis, letters & list)	10%
Class Participation	10%
Final Package	20%

Unless otherwise explicitly stated below, assignments are due via email by **6 pm on Monday before each Wednesday class**. Please email PDFs to Scott, Habib, and Jesse and upload them to

our class Shared Google Drive.

Grading 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

Suggested Reading

The VES Handbook of Virtual Production—1st Edition, Edited by Susan Zwerman and Jeff Okun for the Visual Effects Society, Focal Press

The VES Handbook of Visual Effects— 3rd Edition, Edited by Susan Zwerman and Jeff Okun for the Visual Effects Society, Focal Press

Made to Stick: Why Some Ideas Survive, and Others Die by Chip Heath & Dan Heath, Random House

The Art of Immersion: How the Digital Generation is Remaking Hollywood, Madison Avenue, and the Way We Tell Stories by Frank Rose, W.W. Norton & Company

File Naming Convention

All scripts must be **submitted with a title page** that includes the title, the writer's name, the director's name (if the writer is not the director), the date of the draft, the draft number, and the author's email address. In addition, please submit all as a PDF, labeled as follows:

CourseNumber_FirstName_LastName_Catagory_Year-Month-Day_Version#_ProjectTitle

(Example: 573_Jesse_Werkman_Script_25-01-14_v01_My Brilliant Film)

Submit all work-in-progress visual material (PitchVis, Previs, TechVis) as h.264 mp4 video files or Presentation slides (Google slides, Cava, Keynote), labeled as follows:

CourseNumber_FirstName_LastName_AssetName_Year-Month-Day_Version#_ProjectTitle

(Example: 573_Jane_Bridges_Previs_25-01-14_v01_BestFilmEver)

Please submit the final film as Apple ProRes 4444 Quicktime video files at UHD 3840x 2160, labeled as follows:

CourseNumber_FirstName_LastName_ProjectName_AssetName_Year-Month-Day_Version#_ProjectTitle

(Example: 573_Jane_Bridges_FinalFilm_25-01-14_v01_BestFilmEver)

Attendance

We expect students to arrive on time and be prepared for each class. The attendance policy is as follows: One absence may lower a student's grade by one notch (e.g., an A becomes an A-). Two absences may lower a student's grade by two notches (e.g., an A- becomes a B). A third absence can result in a full point drop in the grade (e.g., a B becomes a C). For each additional absence beyond three, grades may lower by one full point.

TARDINESS: A student is late if they arrive more than 10 minutes after the class starts. One late arrival will not impact your grade. Two late arrivals will count as one absence (e.g., an A becomes an A-). Three late arrivals may result in a two-notch grade drop (e.g., an A- becomes a B). Four late arrivals may lead to a three-notch grade drop (e.g., a B becomes a C). Arriving more than 30 minutes late will count as an absence.

Timely attendance is mandatory, and failure to attend the entire class may affect your grade.

Exemptions may be granted on a case-by-case basis and must be supported by a written accommodation request from the USC Office of Student Accessibility Services (OSAS). Students who become ill and need to self-isolate will be supported in maintaining their coursework and assignments. Faculty are not required to offer a Zoom option for classes but may choose to do so at their discretion to help students stay on track.

If students need to miss a class for any reason, they must contact the professor or student assistant at least 24 hours before class begins.

NOTE: You have been accepted into this class based on your submitted screenplay. If you would like to change the essence of your story concept, those changes need to happen as soon as possible so that the professors can best guide you and the assignments will apply to the correct version of your story.

Week-by-Week Course Schedule

We may add additional reading, viewing of tutorials, and test footage as needed.

Week 1 – January 15th

Welcome and Orientation

Scott and Habib will give an overview of the class and production guidelines.

Script Read-thru:

We will do a Read-Through of each project. The director should cast the read-through using students in the class and bring in script readers if necessary. Each project will be allotted approximately 30 minutes for the Read-Through and comments. [***Please be prepared to briefly explain why it is important to you to tell this story now.***]

- ⇒ *SHORT CIRCUIT*
- ⇒ *PRESSURE SYSTEM*
- ⇒ *LAST NIGHT*
- ⇒ *Y VIRUS*

ASSIGNMENT:

- 1) Each writer/director will assemble a Director's Pitch Deck outlining their film's creative intentions, visual & audio references, basic production plan, and virtual and physical production challenges. Be prepared to pitch it in our next class on January 22nd.

Week 2 – January 22nd

Virtual Production Breakdown

Habib will talk about how to do a Virtual Production breakdown.

Review 1st Director's Pitch Deck.

We will review and discuss all of the Director's Pitch Decks. [The project order will be included in the weekly e-blast.]

ASSIGNMENT:

- 1) Each student will prepare notes for their classmates' script, which will be discussed in class on January 29th.

Week 3 – January 29th

Lecture on Previs & Assets

Review 1st Script Revision Notes

We will review and discuss all of the 1st Script Revisions. [The project order will be included in the weekly e-blast.]

ASSIGNMENT:

- 1) Each student will prepare a 1st Asset List and share their research regarding sourcing these Assets.

Week 4 – February 5th

587 Guidelines and Greenlight Process

We will read through and discuss the 587 Guidelines and Greenlight Process.

Review of 1st Asset List & Sourcing for Assets

We will review and discuss your 1st Asset List & Sourcing for Assets. [The project order will be included in the weekly e-blast.]

ASSIGNMENT:

- 1) Prepare to present your 1st VFX Breakdown on February 12th.
- 2) Begin Work In Progress (WIP) Previs and 2nd Asset List to present on February 26th.

Week 5 – February 12th

Financing Plan

We will discuss creating and marketing a Financing Plan for your 587.

Review 1st Pass of VP/VFX Breakdown

We will review and discuss your 1st Pass VFX Breakdown. [The project order will be included in the weekly e-blast.]

ASSIGNMENT:

- 1) Prepare to present your 2nd Director's Pitch Deck and Financing Plan in class on February 19th.
- 2) Continue Work In Progress (WIP) Previs and 2nd Asset List to present on February 26th.

Week 6 – February 19th

Casting & Crewing up for Virtual Production

We will discuss the importance of casting actors and your crew in the virtual production process, particularly ensuring sufficient support in prep and post-production.

Review 2nd Director's Pitch Deck and 1st Financing Plan

We will review all of the 2nd Director's Pitch Deck and Financing Plans and discuss how to

incorporate marketing elements that can be used for financing. [*The project order will be included in the weekly e-blast.*]

ASSIGNMENT:

- 1) Each student will prepare notes for their classmates' script, which will be discussed in class on February 26th.
- 2) Continue Work In Progress (WIP) Previs and 2nd Asset List to present on February 26th.

Week 7 – February 26th

NOTE: THE STORY MUST BE LOCKED BY THIS DATE. After this date, no further changes to the story concept will be approved.

Review WIP Previs/ 2nd Asset List and 2nd Script Revision Notes

We will review and discuss all of the 2nd Script Revisions. [*The project order will be included in the weekly e-blast.*]

Production Scheduling & Budget for Virtual Production

We will discuss your production scheduling and budget breakdown of a script with a quick refresher on Movie Magic if necessary.

ASSIGNMENT:

- 1) Do Character Breakdowns for your script and have a list of possible crew candidates for all key department heads (Casting, Production Designer, Cinematographer, VFX Supervisor, Costume Designer, Editor, Sound Designer, Colorist, etc.) to review in class on March 5th.
- 2) Commence your Script Breakdowns so you can create your Production Schedule and budget. Your budget must be itemized to match your Script Breakdown, where applicable.

Week 8 – March 5th

Post-Production Scheduling for Virtual Production

We will discuss creating a Post-Production Schedule for Virtual Production that allows enough time for iterations and timely delivery with limited VFX resources.

Review Casting Breakdowns & Key Crew List

We will review and discuss your Casting Breakdowns & Key Crew List. [*The project order will be included in the weekly e-blast.*]

ASSIGNMENT:

- 1) Each student should prepare to present the first Pass of their Production Schedule, Budget, and Post-Production Schedule in class on March 12th.

Week 9 – March 12th

Review 1st Production & Post Schedule, 2nd Pass VFX Breakdown, and Budget

Students will present their *1st Production & Post Schedule, 2nd Pass VFX Breakdown, and Budget*. [*The project order will be included in the weekly e-blast.*]

ASSIGNMENT:

- 1) Prepare to present your 3rd Director's Pitch Deck & Financing Plan on March 26th.
- 2) Commence 2nd Production Schedule & Budget and Post-Production Schedule.

SPRING BREAK – March 16th to March 23rd

Week 10 – March 26th

Tentative 587 Student/Alumni Panel

A panel of students and alumni who have worked on 587 and other VFX-heavy films will share their experiences and answer your questions.

Review 3rd Director's Pitch Deck & 2nd Financing Plan

Individual meeting with Scott. [*The project order will be included in the weekly e-blast.*]

ASSIGNMENT:

- 1) Continue preparation of your 2nd Production Schedule & Budget and Post-Production Schedule to present in class to Scott on April 9th.
- 2) Prepare your 2nd Previs & 3rd Asset List to present to Habib on April 2nd in class.

Week 11 – April 2nd

NOTE: Jesse will schedule these individual review sessions on a rotating basis. The time and place for your individual session will be included in the weekly e-blast.

Review WIP Previs 2 & 3rd Asset List

Individual meeting with Habib. [*The project order will be included in the weekly e-blast.*]

Review 3rd Script Revision Notes

Individual meeting with Scott. [*The project order will be included in the weekly e-blast.*]

ASSIGNMENT:

- 1) Prepare your 2nd Production Schedule, Budget, and Post-Production Schedule to present to Scott and Habib in class on April 9th.

Week 12 – April 9th

Review 2nd Production Schedule & Budget and Post-Production Schedule

Individual meeting with Scott & Habib. [*The project order will be included in the weekly e-blast.*]

ASSIGNMENT:

- 1) Prepare your Final VP/VFX Breakdown to present to Scott and Habib in class on April 9th.

Week 13 – April 16th

Review Final VP/VFX Breakdown

All students will present their Final VP/VFX Breakdown to Scott & Habib. [*The project order will be included in the weekly e-blast.*]

ASSIGNMENT:

- 1) Prepare to pitch your Final Director's Pitch, including your Financing Plan, on April 23rd.
- 2) Prepare to deliver the Final Draft of the script, which will be discussed in class on April 23rd with Scott, Habib, and your classmates.

Week 14 – April 23rd

Review the Final Script and the Final Director's Pitch Deck with the Financing Plan

All students will present their Final Director's Pitch Deck & Financing Plan to Scott & Habib and

your classmates. [The project order will be included in the weekly e-blast.]

ASSIGNMENT:

- 1) Each student will prepare to show their Final Previs and pitch their Final Production Schedule & Budget and Post-Production on April 30th for final comments from Scott and Habib.

Week 15 – April 30th

Show Final Previs & Pitch Final Production Schedule & Budget and Post-Production Schedule

Individual meetings with Scott & Habib.[The project order will be included in the weekly e-blast.]

ASSIGNMENT:

- 1) Prepare your pitch of the Final Package for the May 7th class

Week 16 – May 7th (Final)

Final Pitches

Each Filmmaker will pitch their Final Package to a panel of Virtual Production Faculty. Order TBD.

Artificial Intelligence (AI) Policy:

In this course, you can use artificial intelligence (AI)--powered programs to help you with assignments that indicate the permitted use of AI. You should also be aware that AI text generation tools may present incorrect information, biased responses, and incomplete analyses; thus, they are not yet prepared to produce text that meets the standards of this course. To adhere to our university values, you must cite any AI-generated material (e.g., text, images, etc.) included or referenced in your work and provide the prompts used to generate the content. Using an AI tool to generate content without proper attribution will be treated as plagiarism and reported to the Office of Academic Integrity. Please review the instructions in each assignment for more details on how and when to use AI Generators for your submissions.

SCA Policy & Services

Diversity and Inclusion are foundational to the SCA community. We are committed to fostering a welcoming and supportive environment where students of all identities and backgrounds can flourish. The classroom should be a space for open discussion of ideas and self-expression; however, SCA will not tolerate verbal or written abuse, threats, harassment, intimidation, or violence against persons or property. If students are concerned about these matters in the classroom setting, they are encouraged to contact their SCA Diversity and Inclusion Liaison, <http://cinema.usc.edu/about/diversity.cfm>; e-mail diversity@cinema.usc.edu or anonymously submit a report on SCA Community: <https://scacommunity.usc.edu/secure/diversityEquity/>

You can also read more about how to report discrimination based on a protected class here: <https://eotix.usc.edu/get-help/what-are-my-choices-text/>

SCA Office of Student Services

213-740-8358 or StudentAffairs@cinema.usc.edu

SCA Embedded Therapists

Students enrolled in an SCA major program can schedule an appointment with an embedded

therapist for the School of Cinematic Arts through the student health portal [MySHR](#).

SCA Community

For additional SCA resources, please visit scacommunity.usc.edu

Creative Technology and Support

Phone: (213) 821-4571

Email: creativetech@cinema.usc.edu

Location: SCA 128

Support Hours: Monday - Friday, 8:30 AM - 8:30 PM

<https://knowledgebase.sca.usc.edu/>

<https://workstations.sca.usc.edu/>

Physical Production Office

The Physical Production Office assists students and faculty with production-related matters, including production numbers, locations, permits, insurance, gear and equipment vendors, safety issues, and crew and actor policies. More information can be found by visiting the online [Production Procedures and Safety Handbook](#). The Physical Production Office is located at SCA 304 and is open every weekday from 9 am-5 pm (Fridays 9 am-1 pm). You can also reach the Office by calling 213-740-1298 or by email at spo@cinema.usc.edu.

Office of Industry Relations

Phone: (213) 740-4432

Email: ir@cinema.usc.edu

Location: SCA 235

Cinematic Arts Library Research Guide

<https://libguides.usc.edu/cinema>

STATEMENT ON ACADEMIC CONDUCT AND SUPPORT SYSTEMS

Academic Integrity:

The University of Southern California is a learning community committed to developing successful scholars and researchers dedicated to the pursuit of knowledge and the dissemination of ideas. Academic misconduct, which includes any act of dishonesty in the production or submission of academic work, compromises the integrity of the person who commits the act and can impugn the perceived integrity of the entire university community. It stands in opposition to the university's mission to research, educate, and contribute productively to our community and the world.

All students are expected to submit assignments that represent their own original work, and that have been prepared specifically for the course or section for which they have been submitted. You may not submit work written by others or "recycle" work prepared for other courses without obtaining written permission from the instructor(s).

Other violations of academic integrity include but are not limited to, cheating, plagiarism, fabrication (e.g., falsifying data), collusion, knowingly assisting others in acts of academic dishonesty, and any act that gains or is intended to gain an unfair academic advantage.

The impact of academic dishonesty is far-reaching and is considered a serious offense against the university. All incidences of academic misconduct will be reported to the Office of Academic Integrity and could result in outcomes such as failure on the assignment, failure in the course, suspension, or even expulsion from the university.

For more information about academic integrity see [the student handbook](#) or the and university policies on [Research and Scholarship Misconduct](#).

Please ask your instructor if you are unsure what constitutes unauthorized assistance on an exam or assignment, or what information requires citation and/or attribution.

Students and Disability Accommodations:

USC welcomes students with disabilities into all of the University's educational programs. The Office of Student Accessibility Services (OSAS) is responsible for the determination of appropriate accommodations for students who encounter disability-related barriers. Once a student has completed the OSAS process (registration, initial appointment, and submitted documentation) and accommodations are determined to be reasonable and appropriate, a Letter of Accommodation (LOA) will be available to generate for each course. The LOA must be given to each course instructor by the student and followed up with a discussion. This should be done as early in the semester as possible as accommodation is not retroactive. More information can be found at osas.usc.edu. You may contact OSAS at (213) 740-0776 or via email at osasfrontdesk@usc.edu.

SUPPORT SYSTEMS

COVID-19 Resource Center - <https://coronavirus.usc.edu/what-should-i-do/>

Counseling and Mental Health - (213) 740-9355 – 24/7 on call

Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention.

988 Suicide and Crisis Lifeline - 988 for both calls and text messages – 24/7 on-call

The 988 Suicide and Crisis Lifeline (formerly known as the National Suicide Prevention Lifeline) provides free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week, across the United States. The Lifeline is comprised of a national network of over 200 local crisis centers, combining custom local care and resources with national standards and best practices. The new, shorter phone number makes it easier for people to remember and access mental health crisis services (though the previous 1 (800) 273-8255 number will continue to function indefinitely) and represents a continued commitment to those in crisis.

Relationship and Sexual Violence Prevention Services (RSVP) - (213) 740-9355(WELL) or 24/7 on-call

Free and confidential therapy services, workshops, and training for situations related to gender- and power-based harm (including sexual assault, intimate partner violence, and stalking).

Office for Equity, Equal Opportunity, and Title IX (EEO-TIX) - (213) 740-5086

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.

[Reporting Incidents of Bias or Harassment](#) - (213) 740-5086 or (213) 821-8298

Avenue to report incidents of bias, hate crimes, and microaggressions to the Office for Equity, Equal Opportunity, and Title for appropriate investigation, supportive measures, and response.

[The Office of Student Accessibility Services \(OSAS\)](#) - (213) 740-0776

OSAS ensures equal access for students with disabilities through providing academic accommodations and auxiliary aids in accordance with federal laws and university policy.

[USC Campus Support and Intervention](#) - (213) 740-0411

Assists students and families in resolving complex personal, financial, and academic issues adversely affecting their success as a student.

[Diversity, Equity and Inclusion](#) - (213) 740-2101

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

Emergency assistance and avenues 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) 442-1200 – 24/7 on-call

Non-emergency assistance or information.

[Office of the Ombuds](#) - (213) 821-9556 (UPC) / (323-442-0382 (HSC)

A safe and confidential place to share your USC-related issues with a University ombudsperson who will work with you to explore options or paths to manage your concerns.

[Occupational Therapy Faculty Practice](#) - (323) 442-2850 or otfp@med.usc.edu

Confidential Lifestyle Redesign services for USC students to support health-promoting habits and routines that enhance quality of life and academic performance.

PLEASE NOTE:

FOOD AND DRINKS (OTHER THAN WATER) ARE NOT PERMITTED IN ANY INSTRUCTIONAL SPACES IN THE CINEMATIC ARTS COMPLEX