

THTR 409 ADVANCED DRAFTING: VECTORWORKS

Fall 2021—Wednesday—2:00-4:50pm

Location: SCD

Instructor: Josh Epstein

Office: By appointment

Office Hours: Monday, 10:00am-12:00pm

Thursday, 10:00am-12:00pm

Additional hours available

Please make an appointment for all meetings

Contact Info: (917) 673-5298, joshuae@usc.edu

Course Description and Overview

Advanced Drafting: Vectorworks uses a combination of discussions, in-class lab time and multi-week projects to explore the various 2D and 3D tools in Vectorworks. These tools will be used to communicate design ideas and collaborate. The class places an emphasis on using the Vectorworks tools created specifically for the lighting and scenic industries and on Vectorworks' interface with Lightwright to create complete drafting and paperwork packages. This course will not be an exhaustive examination of Vectorworks but will give you the skills necessary to start your work as a designer or assistant.

Learning Objectives

By the end of this class, students will be able to use Vectorworks software to create and document designs in 2D and 3D.

- Students will develop a system of working that facilitates collaboration in an organized and structured way.
- Students will learn and apply graphic design best practices to all drawings
- Students will use their learned skills to generate scenic drawings from existing rough plans and sketches
- Students will assemble a lighting plot and the industry-standard accompanying paperwork

Prerequisite(s): THTR 130, THTR 131a and 131b

Co-Requisite (s): None

Concurrent Enrollment: None

Recommended Preparation: None

Required Readings and Materials

Vectorworks 2021 (installed in the design lab or free at <https://student.myvectorworks.net>)

Lightwright 6 (installed in the design lab or \$135 at <http://www.mckernon.com/lightwrightmenu/lw6purchasing.html>)

Vectorworks training videos from LRADesigns.com (\$50 for Student license)

Architect's scale ruler

Supplementary Materials (strongly encouraged)

Vectorworks for Entertainment Design 2020 edition by Kevin Lee Allen (available on Amazon)
Savvy Subscription Series (\$29/year at <https://www.benghiatlighting.com/software/products>)
Protractor

Technology

Due to Covid-19, you will need a computer and a webcam to participate in our zoom classes. USC realizes that attending classes online and completing coursework remotely requires access to technology that not all students possess. If you need resources to successfully participate in your classes, such as a laptop or internet hotspot, you may be eligible for the university's equipment rental program. To apply, please [submit an application](#). The Student Basic Needs team will contact all applicants in early August and distribute equipment to eligible applicants prior to the start of the fall semester.

Description of Grading Criteria and Assessment of Assignments

All projects (with the exception of the final) are worth between 25 and 150 points and will be graded based on creativity, appropriate use of principles of design, technical skill, craftsmanship, completeness, and effort as applicable. Class participation will be graded based on the student's attendance, willingness to ask questions and offering respectful and incisive critiques.

The final course grade is based on the following point scale:

- A = 100-94%, A- = 93-90%
- B+ = 89-86%, B = 85-84%, B- = 83-80%
- C+ = 79-76%, C = 75-74%, C- = 73-70%
- D = 69-56%
- F = 55% or below

Late assignments will lose 2.5% of their overall points (1/4 letter grade) per day until they are submitted. Requests for extensions and questions about assignments must be discussed with the instructor prior to the due date. Some assignments may offer extra credit points for additional work. **These extra points are only available if the assignment is turned in on time.**

Grading Scale for SDA: **A** indicates work of excellent quality; **B** of good quality; **C** of average quality; **D** of below average quality; and **F** indicates inadequate work.

Grading Breakdown

Due to the importance of synchronous class discussions and critiques, unexcused absences are strongly discouraged. Missed classes will always be available as asynchronous recordings of the Zoom lectures. But, more than 1 unexcused absences per semester will negatively reflect on your overall class grade. To request an excused absence, contact me by email a minimum of 24 hours prior to class or provide a doctor's note. If you have an issue regularly attending class in a synchronous way, please reach out to me so that we can discuss.

- Attendance will be taken at the top of every class.
- Students arriving online between 5 and 30 minutes late without prior notification will be considered tardy.
- Three tardy arrivals constitute an unexcused absence.
- Students arriving online more than 30 minutes late will be considered absent.
- All work must be completed regardless of absences.

Grading Timeline

I will make every attempt to return the previous assignment within one week of receiving it.

Assignment	Points	% of Grade	Due Date
Attendance	25	2.5%	N/A
Cartoon Cat	25	2.5%	Sep. 1
Doorway Elevation	50	5%	Sep. 8
Doorway Groundplan and Section	50	5%	Sep. 22
Title Block Project	50	5%	Sep. 29
Theater Set	0	0%	Oct. 6
Scenic Package	150	15%	Oct. 13
3d Doorway	50	5%	Oct.20
Doorway Project Package	100	10%	Oct. 27
Light Plot Project	0	0%	Nov. 3
Lighting Package	150	15%	Nov. 10
Lighting Worksheet	75	7.5%	Dec. 1
LW and Data Exchange	25	2.5%	Dec. 1
Final Drafting Project	250	25%	Dec. 10

Assignment Submission Policy

Detailed instructions for all assignments can be found in the weekly modules on Blackboard. All assignments are to be turned in online prior to beginning of class on the assigned due date. If you are absent (excused or unexcused), all work must be handed in on the original due date. Failure to do this will mean the assignment will be marked late and subject to the usual penalty per day the assignment is late. Some assignments may offer extra credit points for additional work. These extra points are only available if the assignment is turned in on time. **As a final note, assignments often build on each other from week to week. So, if you fail to turn in a weekly project you will still be graded on the completeness of the subsequent work regardless of whether you chose to turn in the initial assignment for a grade or not.**

Sharing of course materials outside of the learning environment

USC policy prohibits sharing of any synchronous and asynchronous course content outside of the learning environment.

SCampus Section 11.12(B)

Distribution or use of notes or recordings based on university classes or lectures without the express permission of the instructor for purposes other than individual or group study is a violation of the USC Student Conduct Code. This includes, but is not limited to, providing materials for distribution by services publishing class notes. This restriction on unauthorized use also applies to all information, which had been distributed to students or in any way had been displayed for use in relationship to the class, whether obtained in class, via email, on the Internet or via any other media. (See Section C.1 Class Notes Policy).

Course evaluation

Course evaluation occurs at the end of the semester university-wide. It is an important review of students' experience in the class. You should expect to receive an email update once the system has launched to provide your feedback on this course. In addition, you are always welcome to connect with with me as the instructor to offer any feedback on the course.

Additional Policies

All assignments, tutorials and additional reading will be available through Blackboard in the Modules Tab on a week-by-week basis. The subsequent week's modules will be available immediately after our Wednesday class and it will be expected that you have completed the material prior to our next class.

I expect that you will arrive to class **on time** and prepared to discuss the current assignments and ready to present your work when applicable.

We will make every attempt to record the in-person lecture portion of the class and provided it to students asynchronously. Please see above for the USC policy prohibiting the sharing of any synchronous and asynchronous course content outside of the learning environment.

Course Schedule: A Weekly Breakdown

WEEK 1:

Aug. 25

Discussion: The Basics. We will start by getting an understanding of the basic rules of drafting. You then will start getting setup on Vectorworks: learning user interface, workspace organization, settings, palettes, simple drawings tools, etc.

Assignment: Cartoon Cat Project; Watch the LRA Design tutorials listed in Blackboard.

WEEK 2:

Sep. 1

Discussion: The Basics (part 2). You will gain an understanding of layers, classes, scale, views as well as advanced drawing tools.

Assignment: Doorway Elevation Project; Watch the LRA Design tutorials listed in Blackboard.

WEEK 3:

Sep. 8

Discussion: Ground plans and Sections. You will learn how to organize and draw both ground plans and sections.

Assignment: Doorway Ground plan and Section Project; Watch the LRA Design tutorials listed in Blackboard.

WEEK 4:

Sep. 15

No Class on this day. Instead there will be an EDI@SDA Community Day: All SDA students are welcome to join an interactive community building experience that explores how we integrate core values of equity, diversity, and inclusion into our educational and artistic journey at SDA. Competencies that will be covered will include, but not limited to, Anti-Racism as Everyday Practice; Equity-Mindedness (w/colleagues from USC Race & Equity Center); and Building Cultures of Consent. More details will follow. NOTE: All School of Dramatic Arts classes will be cancelled this day to support involvement in this effort. All other USC classes will remain in session. We encourage all to participate.

WEEK 5:

Sep. 22

Lecture/Discussion: Setting Up Your Drawings. You will learn title blocks, templates, saved views, sheet layers, viewports, importing PDFs, annotations, dimensions and resource browser setup, etc.

Assignment: Create your own title block and begin to add theater architecture; Watch the LRA Design tutorials listed in Blackboard.

WEEK 6:

Sep. 29

Discussion: Scenic Drawings. You will learn what is required for an effective scenic design package to be delivered to collaborators. This includes plans, sections, elevations and detail drawings. You will learn lineset schedules, symbol creation, record formats, etc.

Assignment: Theater Set Project (won't be turned in for a grade - just presented in class on Oct. 6); Watch the LRA Design tutorials listed in Blackboard.

WEEK 7:

Oct. 6

Discussion: Scenic Drawings (part 2). You will learn about finished drawing requirements, dimensions, annotations, exporting and printing, etc.

Assignment: Scenic Package Project; Watch the design tutorials listed in Blackboard.

WEEK 8:

Oct. 13

Discussion: 3d Drafting. You will learn the basics about planes, extruding, sweeping, deforming/editing basic geometry, NURBS curves, views, etc.

Assignment: 3d Doorway Project; Watch the design tutorials listed in Blackboard.

WEEK 9:

Oct. 20

Discussion: 3d Drafting (part 2). You will learn more advanced techniques in 3d drafting. You will also learn how to lay out a page of drafting incorporating your 3d work. Evan Alexander will be our guest speaker.

Assignment: Use the Doorway Project to create a sheet of drafting; Watch the LRA Design tutorials listed in Blackboard.

WEEK 10:

Oct. 27

Discussion: Light Plots. You will learn the basics of light plots, position creation, lighting instrument creation, placing lights, label legends, accessories, numbering, user origin, etc.

Assignment: Light Plot Project (won't be turned in for a grade - just presented in class on Nov. 3); Watch the LRA Design tutorials listed in Blackboard.

WEEK 11:

Nov. 3

Discussion: Light Plots (part 2). You will learn about additional lighting drawings like sections and detail drawings, lighting title blocks/keys and how to organize your drawings in order to create a complete lighting package.

Assignment: Lighting Package Project; Watch the LRA Design tutorials listed in Blackboard.

WEEK 12:

Nov. 10

Discussion: Lighting Worksheets. You will learn about doing lighting worksheets in 2d and 3d. We will look at creating focus points, getting your plot in the Z plane, etc.

Assignment: Lighting Worksheet Project (due Dec. 1 with LW project; Watch the LRA Design tutorials listed in Blackboard.

WEEK 13:

Nov. 17

Discussion: Lightwright and Data Exchange. You will learn about Lightwright and how data exchange works.

Assignment: Lightwright and Data Exchange project; Start the final project.

WEEK 14:

Dec. 1

No Class due to Thanksgiving Break

Assignment: Food

WEEK 15:

Dec. 1

Discussion: Magic Sheets and Assisting. You will learn about creating magic sheets and working as a lighting assistant.

Assignment: Work on the final project

Final Project Due Date: Friday, December 10 at 2 pm.

You will be given two options for a final project. You can either turn in a complete Lighting Package (Plot, Section, Detail Drawings, LightWrite) or you can turn in a complete scenic package (Ground plan, Section, Detail Drawings). In either case, you will be given a rough design from which to work and the assignment will closely emulate your potential experience as a professional studio assistant. The final project must be turned in digitally no later than the beginning of our class period on Friday, December 10. We will meet at 2 pm that day to share final thoughts.

Statement on Academic Conduct and Support Systems

SDA Production, ISPS, and Extracurricular Activities

SDA productions, ISPs and Extracurricular Activities* will not excuse you from any class work. There will be no exceptions made for absences in class, missed or delayed assignments, homework or lack of class participation resulting from your involvement in any of the above. Your grade will reflect your work in this class, independent from work in any other class or activity.

*Activities that have been officially sanctioned by the larger university (such as marching band, song girls, or varsity sports) are exempt. You must submit official documentation to your professor regarding your participation in an event prior to your absence.

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 Section 11, Behavior Violating University Standards <https://scampus.usc.edu/1100-behavior-violating-university-standards-and-appropriate-sanctions/>. Other forms of academic dishonesty are equally unacceptable. See additional information in *SCampus* and university policies on scientific misconduct, <http://policy.usc.edu/scientific-misconduct/>.

Discrimination, sexual assault, and harassment are not tolerated by the university. You are encouraged to report any incidents to the *Office of Equity and Diversity* <http://equity.usc.edu/> or to the *Department of Public Safety* <http://capsnet.usc.edu/department/department-public-safety/online-forms/contact-us>. This is important for the safety whole USC community. Another member of the university community – such as a friend, classmate, advisor, or faculty member – can help initiate the report, or can initiate the report on behalf of another person. *The Center for Women and Men* <http://www.usc.edu/student-affairs/cwm/> provides 24/7 confidential support, and the sexual assault resource center webpage sarc@usc.edu describes reporting options and other resources.

Statement for Students with Disabilities

Any student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to me (or to TA) as early in the semester as possible. DSP is located in STU 301 and is open 8:30 a.m.–5:00 p.m., Monday through Friday. Website for DSP and contact information: (213) 740-0776 (Phone), (213) 740-6948 (TDD only), (213) 740-8216 (FAX) ability@usc.edu.

Emergency Preparedness/Course Continuity in a Crisis

In case of a declared emergency if travel to campus is not feasible, USC executive leadership will announce an electronic way for instructors to teach students in their residence halls or homes using a combination of Blackboard, teleconferencing, and other technologies. See the university’s site on Campus Safety and Emergency Preparedness.

Health and Participation in Class

You are expected to complete your Trojan Check screener daily and, as your instructor, I may ask you to show your daily screening in class. Your health and safety, and the health and safety of your peers, are my top priorities. If you are experiencing any symptoms of COVID-19, or if you discover that you have been in close contact with others who have symptoms or who have tested positive, you must follow the instructions on Trojan Check. My hope is that if you are feeling ill or if you have been exposed to someone with the virus, you will stay home to protect others. I will ensure that you can continue to participate in class remotely so that your education is not disrupted.

To reduce the spread of COVID-19, USC requires that face coverings (masks) be worn indoors including in classrooms. Face coverings must cover your nose and mouth and be worn throughout the class session. A mask with a valve is not considered an adequate face covering and should not be used, as it can expel exhaled air, increasing the risk to others. Eating or drinking during class is prohibited because of the risk posed by removing your mask for these activities. Failure to comply with these requirements will result in your being asked to leave the classroom immediately. Requests for accommodations related to the face covering and eating/drinking policies should be directed to the Office for Student Accessibility Services (<https://osas.usc.edu/>).

SDA Student Support & Reporting Form

To facilitate a supportive environment of accountability, SDA has created an internal system of reporting for students to address issues/concerns and to offer feedback or suggestions for improvement. This mechanism provides a pathway for reporting and offering feedback without fear of retaliation or judgment. Any submission filed through this form will be reviewed and processed accordingly through SDA Office of Equity, Diversity, and Inclusion.

To file a report, please visit: <http://bit.ly/sdasupport>

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 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.

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 micro-aggressions to the Office of Equity and Diversity | Title IX for appropriate investigation, supportive measures, and response.

The Office of Student Accessibility Services - (213) 740-0776

<https://osas.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 Campus Support and Intervention - (213) 821-4710

campussupport.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.