THTR 409 ADVANCED DRAFTING: VECTORWORKS
Fall 2020—Wednesday—2:00-4:50pm
Location: SCD & Online

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
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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 2020 (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) **We are also working to get lab licenses allocated to students free of charge, so please speak to me before buying LW.**
> Vectorworks training videos from LRADesigns.com ($50 for Student license)
> Architect's scale ruler
> Protractor

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)

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 50 and 100 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 5% of their overall points (1/2 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%	Aug. 26
Doorway Elevation	50	5%	Sep. 2
Doorway Groundplan and Section	50	5%	Sep. 9
Theater Groundplan and Section	100	10%	Sep. 16
Theater Set	100	10%	Sep. 23
Scenic Package	100	10%	Sep. 30
3d Doorway	50	5%	Oct. 7
Doorway Project Package	50	5%	Oct. 14
Small Light Plot	100	10%	Oct. 21
Lighting Package	100	10%	Oct. 28
Lighting Worksheet	25	2.5%	Nov. 4
LW and Data Exchange	25	2.5%	Nov. 11
Final Drafting Project	200	20%	Nov. 20

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.**

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 log into class **on time** and prepared to discuss the current assignments and ready to present your work when applicable. Although it is not required, I would strongly prefer that you keep your camera on during class whenever possible. If you are unable to keep your camera on during the synchronous Zoom sessions, please contact me prior to class to discuss expectations and accommodations.

All synchronous sessions will be recorded and provided to students asynchronously. Please be aware that USC has a policy that prohibits sharing any synchronous and asynchronous course content outside of the learning environment.

Course Schedule: A Weekly Breakdown

WEEK 1:
    Aug. 19   **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:
    Aug. 26   **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. 2   **Discussion:** Groundplans and Sections. You will learn how to organize and draw both groundplans and sections.
                         Assignment: Doorway Groundplan and Section Project; Watch the LRA Design tutorials listed in Blackboard.

WEEK 4:
    Sep. 9   **Lecture/Discussion:** Setting Up Your Drawings. You will learn templates, saved views, sheet layers, viewports, importing PDFs, annotations, dimensions and resource browser setup, etc.
                         Assignment: Theater Groundplan and Section Project; Watch the LRA Design tutorials listed in Blackboard.

WEEK 5:
    Sep. 16   **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; Watch the LRA Design tutorials listed in Blackboard.

WEEK 6:
    Sep. 23   **Discussion:** Finished Drawings. You will learn about titleblocks, annotations, exporting and printing, etc.
                         Assignment: Scenic Package Project; Watch the design tutorials listed in Blackboard.

WEEK 7:
    Sep. 30   **Discussion:** 3d Drafting. You will learn the basics about planes, extruding, sweeping, deforming/editing basic geometry, NURBS curves, views, etc. Evan Alexander will be our guest speaker.
                         Assignment: 3d Doorway Project; Watch the design tutorials listed in Blackboard.

WEEK 8:
   Oct. 7   **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 9:
   Oct. 14   **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: Small Light Plot Project; Watch the LRA Design tutorials listed in Blackboard.

WEEK 10:
   Oct. 21   **Discussion:** Light Plots (part 2). You will learn about additional lighting drawings like sections and detail drawings, lighting titleblocks/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 11:
   Oct. 28   **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. Lonnie Alcaraz will be our guest speaker.
                           Assignment: Lighting Worksheet Project; Watch the LRA Design tutorials listed in Blackboard.

WEEK 12:
   Nov. 4   **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 13:
   Nov. 11   **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 Date: Friday, November 20 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, LW) or you can turn in a complete scenic package (Groundplan, 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 November 20**.** We will meet at 2 pm that day to share final thoughts.

Statement on Academic Conduct and Support Systems

Extra-curricular commitments and ISPS
Should you choose to participate in any extra-curricular project, such as an Independent Student Production, the SDA administration and faculty will not make allowances or exceptions for absences in class, missed or delayed assignments, home work that is required as preparation for class, or lack of participation in class resulting from your extra-curricular involvement.

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.

USC Technology Support Links
Zoom information for students
Blackboard help for students
Software available to USC Campus

Support Systems:

Student Counseling Services (SCS) – (213) 740-7711 – 24/7 on call
Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention. engemannshc.usc.edu/counseling

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

Relationship and Sexual Violence Prevention Services (RSVP) – (213) 740-4900 – 24/7 on call

Free and confidential therapy services, workshops, and training for situations related to gender-based harm. engemannshc.usc.edu/rsvp

Sexual Assault Resource Center
For more information about how to get help or help a survivor, rights, reporting options, and additional resources, visit the website: sarc.usc.edu

Office of Equity and Diversity (OED)/Title IX Compliance – (213) 740-5086
Works with faculty, staff, visitors, applicants, and students around issues of protected class.
equity.usc.edu

Bias Assessment Response and Support
Incidents of bias, hate crimes and microaggressions need to be reported allowing for appropriate investigation and response. studentaffairs.usc.edu/bias-assessment-response-support

The Office of Disability Services and Programs
Provides certification for students with disabilities and helps arrange relevant accommodations.
dsp.usc.edu

Student Support and Advocacy – (213) 821-4710
Assists students and families in resolving complex issues adversely affecting their success as a student EX: personal, financial, and academic. studentaffairs.usc.edu/ssa

Diversity at USC
Information on events, programs and training, the Diversity Task Force (including representatives for each school), chronology, participation, and various resources for students. diversity.usc.edu

USC Emergency Information
Provides safety and other updates, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible. emergency.usc.edu

USC Department of Public Safety – UPC: (213) 740-4321 – HSC: (323) 442-1000 – 24-hour emergency or to report a crime.
Provides overall safety to USC community. dps.usc.edu