



TPA 4020: LIGHTING DESIGN 2025 Fall

COURSE SYLLABUS

University of Florida
School of Theatre and Dance

COURSE INFORMATION

Course Days:	Monday & Wednesday Period 2 – 3
Course Time	8:30 AM - 10:25 AM
Course Location:	CON 217
Credit Hours:	3.00 Credits

INSTRUCTOR INFORMATION

Instructor:	Leo Lei
Office Location:	CON 209
Office Hours:	Monday & Wednesday 10:30AM – 12:30PM by Appointment
Phone:	(352) 273-0510
Email:	leiyu@ufl.edu

COURSE DESCRIPTION

This course introduces students to both the technical and artistic foundations of lighting design. Through a balance of technical exercises and creative projects, students will develop practical skills in electricity, instrumentation, and control principles while also building an analytical framework for understanding lighting as an art form. The course explores the production workflow, design considerations, paperwork, and research methods essential to the lighting designer's process. Students will examine aesthetics, styles, and the psychological and physiological impact of light, while also training their eyes to recognize and evaluate lighting in everyday life and in live productions. By the end of the course, students will integrate these skills to develop original lighting concepts and complete design packages.

PREREQUISITE KNOWLEDGE AND SKILLS

- An interest in production for live events. A willingness and desire to participate in the technical operation of productions at UF.
- TPA 4930 Practical Stage Lighting

LEARNING OBJECTIVES

By the end of this course, students will be able to:

1. **Demonstrate foundational knowledge of stage lighting** by applying the principles of electricity, circuits, and safe working practices.
2. **Identify, define, and describe terminology and functions** of lighting instruments, rigging, connectors, lamps, dimmers, control systems, consoles, and special effects devices.
3. **Distinguish types of circuits and calculate wattage, amperage, resistance, and voltage** as they apply to stage lighting systems.
4. **Understand and apply design concepts** by analyzing scripts, developing design ideas, and translating them into visual storytelling through light.
5. **Recognize the qualities and functions of light**—including direction, position, angle, intensity, movement, and color—and apply them in design work.
6. **Draft light plots and create supporting paperwork and data** necessary for implementing a lighting design.
7. **Execute a light plot in practice** by hanging, circuiting, and focusing equipment in a production setting.
8. **Participate effectively in the production workflow**, understanding the role and responsibilities of a lighting designer and collaborating with directors, designers, and technicians.
9. **Utilize available equipment and lab environments** to develop and test design solutions for stage lighting.

10. **Engage in the technical rehearsal process** by setting cues, levels, and refining design choices in response to artistic and technical needs.
11. **Analyze and evaluate lighting designs** from both professional productions and classroom projects, considering aesthetic, psychological, and physiological effects.
12. **Develop a comprehensive, creative approach to lighting design** that connects technical proficiency, artistic exploration, and contemporary live performance practices.
13. **Cultivate an artistic voice** by training the eye to observe and critique light in daily life, performances, and various cultural contexts.
14. **Engage in an open, collaborative learning environment** that encourages curiosity, individual interests, and creative risk-taking.

REQUIRED TEXTBOOK & MATERIALS

- *A Practical Guide to Stage Lighting* (3rd Edition) by Steven Louis Shelley (REQUIRED)
- *The Assistant Lighting Designer's Toolkit* (2nd Edition) by Anne E. McMills (Recommended)
- *Designing with Light* (6th Edition) by Michael Gillette and Michael McNamara (Recommended)
- 6" or 8" Adjustable (Crescent) Wrench
- Laptop Computer with internet connection, with a simple 2 or 3 button wired mouse with scroll wheel
- USB thumb drive or external Hard Drive Disk (32GB or more recommended)
- Cloud backup service, e.g. Google Drive, OneDrive, Dropbox, iCloud, etc.
- Vectorworks 2025 (or latest version) free educational download: <https://student.myvectorworks.net>
- Lightwright 6 free demo version: <https://www.lightwright.com/downloads>

COURSE FEES

Material and supply fees are assessed for certain courses to offset the cost of materials or supply items consumed in the course of instruction. A list of approved courses and fees is published in the Schedule of Courses each semester. (UF-3.0374 Regulations of the University of Florida). Material and supply and equipment use fee information is available from the academic departments or from the schedule of courses (Florida Statutes 1009.24). The course fee for this class is \$140.

ASSIGNMENTS/EXAMS

PROJECT DESCRIPTION

Lighting Observation

You are required to complete four observations of natural and artificial lighting for the course. Include **Interior Single Source Light, Exterior Industrial/Architectural Light, Sunset or Sunrise, Full Moon.**

Drafting Project

Students will be given a pdf version of the light plot that is found in Shelley. Students will then be required to demonstrate their Vectorworks skills by not only copying but updating the plot as seen fit. Students will be asked to update the lighting fixtures in the plot to resemble a more contemporary lighting layout. However, all of the lighting information such as channel and address should remain the same. Some important things to remember to pay attention to are:

- Title Block Layout
- Line Weights
- Fonts
- Label Legend Layouts
- Instrument Symbols

Music Analysis Project

Students will select a full, filmed music performance to analyze the lighting design. Analysis should include insightful comments on design intent, color choices, how well the design supports the music, how well the design supports the other show elements, and how the design affected you personally.

Students must deliver an insightful analysis of the performance, no less than 1000 words, in MLA format. Students must deliver a link to the recorded performance with their canvas submission.

Of Mice and Men Design process document projects

- Script and scene breakdown Assignment
- Research Assignment
- Design Concept Statement ACC Assignment
- Cue sheet Assignment
- Magic sheet Assignment

Music Programming Project

You will create a 3-5 minute lighting program in the light lab, or in ETC Augment3d, to a piece of music of your choice, using the moving and color-changing lights. Students will be graded on their programming, as well as their artistic vision of their piece.

The Final Project

Students will be asked to create a full design package for (Play of Your Choice). They will be required to analyze the play, research, create a design concept, choose a color palette, create paperwork, cue score, and magic sheet, as well as a full plot for the production. The students will be provided with a set and theatre for the set. During the final exam slot, each student will give a final design presentation, this is not the full design package, but instead an opportunity to demonstrate the ability to effectively communicate the artistic intent behind the design. Deliverables include:

- Presentation around 10 minutes long (To be presented on 12/6)
- A concept statement of around 250 words
- Research images
- A complete cue score.
- A magic sheet.
- Light Plot and Section
- All items should be submitted in a professional PDF package in addition to the base files.

Assignment	Points
Quizzes (5 x 20 points each)	100
Lighting Observations	100
Drafting Project	100
Music Analysis Project	100
Of Mice and Men Design process	100
Mid-Term Exam	100
Production Critique	100
Programming Project	100
Final Project: Light Plot and Paperwork	100
Class Participation	100
Total Points Possible	1000

GRADING SCALE

Grade	Points
A	1000-930
A-	929-900
B+	899-870
B	869-830
B-	829-800
C+	799-770
C	769-730
C-	729-700
D+	699-670
D	669-600
F	599 & Below

COURSE EXPECTATIONS/POLICIES

- Students are expected to participate in class discussion and critical feedback of peers' projects.
 - Students are expected to thoughtfully investigate critical feedback from instructor and peers.
 - Students are expected to come to class with homework finished and with the required textbook.
- Students are expected to be respectful of others at all times.

Attendance Policy

The success of this course is based on discussion and class participation. Attendance is vital. Only one (1) unexcused absence from class will be permitted without penalty. Each additional unexcused absence will lower your final grade by 5%. Two (2) late arrivals and/or early departures to/from class will count as one (1) absence. Three unexcused absences will result in a failing grade in this class. Excused absences are consistent with university policies in the undergraduate catalog and require appropriate documentation. (<https://catalog.ufl.edu/UGRD/academicregulations/attendance-policies/>)

Late Assignments/Make-Up Exams/Re-Submission of Work/Extra Credit

Assignments will not be accepted for full credit after 5pm on the date due. Assignments turned in late will be reduced by one letter grade (10% of the total points of the assignment) per day late. The instructor must approve all late assignments, make-up exams, and re-submission of work not later than one week after initial due date. The opportunity for extra credit may be given to the class near the end of the semester.

Making Appointments/Contacting the Instructor

Students may arrange appointments during office hours. Instructor is available during those office hours and by appointment. Questions related to grades, performance, attendance, and other individual concerns/issues are encouraged to be handled via a face-to-face appointment with the instructor.

Email Usage

Please use email as a form of communication with instructor to address appointment (instead of phone.) Email should be used to clarify assignment-related questions and to set appointments. Your instructor will use your UFL email address for all class communications. It is your responsibility to check that email address several times daily.

Use of Unauthorized Electronic Devices in the Classroom

Cell phones, MP3 players, and other personal communication or entertainment devices are to be silenced or turned off, and not used or displayed during the class period. Laptops cannot be used during class for anything other than class-related content. This will be strictly enforced. If the instructor is forced to make repeated attempts to any individual student or group of students to restrict usage of these devices for reasons unrelated to class content, these students class participation grade will be diminished.

UF POLICIES

University honesty Policy UF students are bound by The Honor Pledge that states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Honor Code (<https://www.dso.ufl.edu/sccr/process/studentconducthonor-code/>) specifies the number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor in this class.

PLAGIARISM

Plagiarism is a violation of the UF honor code. A student shall not represent as the student's own work all or any portion of the work of another. Plagiarism includes but is not limited to: 1. Quoting oral or written materials including but not limited to those found on the internet,

whether published or unpublished, without proper attribution. 2. Submitting a document or assignment, which in whole or in part is identical or substantially identical to a document or assignment not authored by the student. Students shall not use unauthorized materials or resources in an academic activity. Unauthorized materials or resources include any paper or project authored by the student (or another student) and presented by the student for the satisfaction of any academic requirement if the student previously submitted substantially the same paper or project to satisfy an academic requirement and did not receive express authorization to resubmit the paper or project.

Students Requiring Accommodations

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, www.dso.ufl.edu/drc/) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

Campus Resources

Health and Wellness

U Matter, We Care

If you or a friend is in distress, please contact umatter@ufl.edu or 352 392- 1575 so that a team member can reach out to the student. Counseling and Wellness Center <http://www.counseling.ufl.edu/cwc/Default.aspx>, 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies. Sexual Assault Recovery Services (SARS) Student Health Care Center, 392-1161.

<http://www.police.ufl.edu/>

Academic Resources

- E-learning technical support, 352-392-4357 (select option 2) or e-mail to Learning-support@ufl.edu. <https://lss.at.ufl.edu/help.shtml>.
- Career Resource Center, Reitz Union, 392-1601. Career assistance and counseling. <http://www.crc.ufl.edu/>
- Library Support, <http://cms.uflib.ufl.edu/ask>. Various ways to receive assistance with respect to using the libraries or finding resources.
- Teaching Center, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring. <http://teachingcenter.ufl.edu/>
- Writing Studio, 302 Tigert Hall, 846-1138. Help brainstorming, formatting, and writing papers. <http://writing.ufl.edu/writing-studio/>
- Student Complaints Campus: https://www.dso.ufl.edu/documents/UF_Complaints_policy.pdf
- On-Line Students Complaints: <http://www.distance.ufl.edu/student-complaint-process>

COURSE CALENDAR

Note: This calendar is an important guide and could be subject to change. All students are responsible for following the schedule and due dates of assignments outlined here, as well as any updates communicated in class or via email by instructor. Your instructor will use your UFL email address for all class communications. It is your responsibility to check that email address several times daily.

WEEK	TOPIC	ASSIGNMENT	DUE
Week 2 08/25 M	Course overview, role of a lighting designer, syllabus review, introduction to light as art and science.	Download Textbook Materials/Shelley Chapter 1	
Week 2 08/27 W	Review - Fundamentals of electricity - Lighting instruments - Rigging basics - Control & Systems - Theatre spaces, and personnel - Reading/design light plots	Lighting Observation 1, 4	
Week 3 09/01 M	LABOR DAY – NO CLASS		
Week 3 09/03 W	- History of stage lighting - The functions and objectives of lighting design - Controllable properties of light - Intro to Vectorworks 1	Read Shelley Chapter 6 Drafting Project – Shelley Plot Drafting Project	Chapter 1 Quiz
Week 4 09/08 M	- Lighting angles - Lighting keys - Vectorworks 2	Lighting Observation 2	Lighting Observation 1
Week 4 09/10 W	- Systems, Angle Color Concept (ACC) - Plot setup - Vectorworks 3		
Week 5 09/15 M	- Color Theory in light - LED vs Filter - Vectorworks 4	Shelley Chapter 5	Shelley Chapter 6 Quiz
Week 5 09/17 W	- Photometric of light - Lighting design in different spaces, proscenium, thrust, alley, theatre in the round - Vectorworks 5	Lighting Observation 3	Lighting Observation 2
Week 6 09/22 M	- Lighting Design Process - All Designer Document - Vectorworks 6	Read <i>Of Mice and Men</i>	Read Trifles/ Shelley Chapter 5 Quiz
Week 6 09/24 W	- Lighting Design Paperwork - Lightwright - Vectorworks 7		Drafting Project Due
Week 7 09/29 M	- <i>Of Mice and Men</i> discussion - Lighting Scene Exercise	Lighting Observation 4 Reminder <i>OMAM</i> Design Concept	Lighting Observation 3
Week 7 10/01 W	Midterm	Chapter 10	
Week 8 10/06 M	- Analyzing texts for lighting design - Scene Breakdown	Scene Breakdown Assignment	
Week 8 10/06 W	- Visual, historical, background research	Research Assignment	Scene Breakdown Assignment
Week 9 10/13 M	- Angle Color Concept	ACC Assignment	Research Presentation
Week 9 10/15 W	- Cue sheet creation	Cue Sheet Assignment	ACC Assignment <i>OMAM</i> Design Concept
Week 10 10/20 M	- Magic sheet	Magic sheet Assignment	Cue Sheet Assignment
Week 10 10/22 W	Lighting Focus		Chapter 10

Week 11 10/27 M	Lighting for Music – Video Analysis	Music Analysis Project	Music Analysis Due
Week 11 10/29 W	Lighting Programming		Song Choice Due (Canvas)
Week 12 11/03 M	Programming Studio		
Week 12 11/05 W	Programming Studio		
Week 13 11/10 M	Programming Studio		
Week 13 11/12 W	Music Project Presentations		Music Project Due
Week 14 11/17 M	Final Project Intro + Play Choice	Final Project	
Week 14 11/19 W	Studio Day		
Week 15	THANKSGIVING - NO CLASSES		
Week 16 12/01 M	Studio Day		
Week 16 12/03 W	Final Design/Plot Presentations		Lighting Observation 4
	FINAL PRESENTATION Final Exam: 12/11/2025 @ 7:30 AM - 9:30 AM		Final Project

DISCLAIMER: This syllabus represents the Instructor's current plans and objectives. As the semester progresses, those plans may need to change to enhance the class learning opportunity. Unexpected circumstances could cause class to be cancelled and the instructor will rework the syllabus as necessary. Such changes, communicated clearly, are not unusual and should be expected.