



## TPA 3227C: PRACTICAL STAGE LIGHT 2025 Spring

### COURSE SYLLABUS

University of Florida  
School of Theatre and Dance

#### COURSE INFORMATION

|                  |                                     |
|------------------|-------------------------------------|
| Course Days:     | Tuesdays & Thursdays   Period 6 – 7 |
| Course Time      | 12:50 PM - 2:45 PM                  |
| Course Location: | CON 218                             |
| Credit Hours:    | 3.00 Credits                        |

#### INSTRUCTOR INFORMATION

|                  |                                                         |
|------------------|---------------------------------------------------------|
| Instructor:      | Leo Lei                                                 |
| Office Location: | CON 209                                                 |
| Office Hours:    | Tuesdays and Thursdays 10:30AM – 12:30PM by Appointment |
| Phone:           | (352) 273-0510                                          |
| Email:           | <a href="mailto:leiyu@ufl.edu">leiyu@ufl.edu</a>        |

#### REQUIRED TEXTBOOK & MATERIALS

- There is no required textbook, handouts will be given out throughout the semester, please also see a list of recommended textbooks below.
- 6” or 8” Adjustable (Crescent) Wrench
- Vectorworks 2025 (or latest version) free educational download: <https://student.myvectorworks.net>
- Lightwright 6 free demo version: <https://www.lightwright.com/downloads>

#### **Recommended Reference:**

- **(Suggested) *Designing with Light***, Michael Gillette and Michael McNamara, 6th Ed
- ***The Backstage Handbook***, Paul Carter 3rd Ed.
- ***Photometric Handbook***, Robert C. Mumm, 2nd Ed

#### COURSE DESCRIPTION

Introduction to the basics of electricity, instrumentation, control principles, design considerations and applications. Includes practical production applications. 10 electric shop hours.

#### LEARNING OBJECTIVES

At the conclusion of this course, the student should be able to:

1. Demonstrate an understanding of the fundamentals of stage lighting, and the basic concepts of electricity, and lighting design for the theater.
2. Demonstrate an understanding of the function of various lighting instruments, rigging, control systems, and technical plots.
3. Distinguish types of circuits and compute wattage, amperage, resistance, and voltage as appropriate to stage lighting systems.
4. Evaluate the responsibilities of a theatrical lighting designer and recognize the designer's collaboration with other production personnel and areas.
5. Identify, define, and describe terminology commonly used in lighting design and execution, including lighting instruments, connectors, lamps, dimmers, consoles, and special effects devices.
6. Identify the qualities and function of light in a theatrical design.

7. Assess and apply the specifics of a light plot in order to hang, circuit, and focus the lighting equipment for a production.

## **ASSIGNMENTS/EXAMS**

### **PROJECT DESCRIPTION**

#### **Project #1: Everyday light**

Choose a portable light source from home (i.e. Desk lamp, Flashlight, etc.) Find out its lamp type and wattage. Present and discuss qualities of the light with the class.

#### **Project #2: Light and Shadow**

Using found objects and a single incandescent light source, create a shadow sculpture and present to class.

#### **Project #3: Color**

Choose a piece of fabric. Pick one lighting gel from supplied selection that enhances the fabric and one gel that distorts the fabric's natural color. Present to the class.

#### **Project #4: Angle (Partner Exercise)**

Choose 2 production photos, research and analysis the use of lighting include intensity, angle, color, and texture, to recreate the same lighting look.

#### **Drafting Light Plot Project**

Draft the light plot for the Light Lab by using Vectorworks, and Lightwright

#### **Photometric Project**

Use Vectorworks to solve some light plotting problems, related to photometric calculation.

#### **10 Electric Hours**

Attend 10 hours of light hang or light focus for the main stage productions, with minimum 2 hours of each category.

#### **Lighting Strike**

Attend one of the main stage production lighting strikes.

**Quizzes, and Midterm are based on the reading and lectures of the previous weeks.**

**The Final Project is a Light Plot and Paperwork project based on materials covered over the semester.**

| <b>Assignment</b>                       | <b>Points</b> |
|-----------------------------------------|---------------|
| Quizzes (5 x 20 points each)            | 100           |
| Project #1: Everyday light              | 25            |
| Project #2: Light and Shadow            | 50            |
| Project #3: Color                       | 50            |
| Project #4: Angle                       | 100           |
| Mid-Term Exam                           | 100           |
| Drafting Light Plot                     | 100           |
| Photometric Project                     | 100           |
| Final Project: Light Plot and Paperwork | 100           |
| 10 Electric Hours                       | 100           |
| Lighting Strike                         | 25            |
| Class Participation                     | 150           |
| <b>Total Points Possible</b>            | <b>1000</b>   |

## **GRADING SCALE**

| <b>Grade</b> | <b>Points</b> |
|--------------|---------------|
| 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**

Class attendance is required and is critically important to faculty and your peers. Commitment and punctuality are essential to demonstrating professionalism. Whether present or absent, students are responsible for all material covered in class. Tardiness is unacceptable and will result in a lowering of your final grade. Students who arrive to class more than five minutes late must be invited by the instructor to participate. Two late arrivals are equivalent to one absence. A commitment to regular attendance and full participation at all classes is expected from the students. The success or failure of the learning process depends on the personal energy and cooperation of all involved. Creative collaboration is at the core of all theatrical work.

Acceptable reasons for absence from or failure to engage in class include illness; Title IX-related situations; serious accidents or emergencies affecting the student, their roommates, or their family; special curricular requirements (e.g., judging trips, field trips, professional conferences); military obligation; severe weather conditions that prevent class participation; religious holidays; participation in official university activities (e.g., music performances, athletic competition, debate); and court-imposed legal obligations (e.g., jury duty or subpoena). Other reasons (e.g., a job interview or club activity) may be deemed acceptable if approved by the instructor.

For all planned absences, a student in a situation that allows an excused absence from a class, or any required class activity must inform the instructor as early as possible prior to the class. For all unplanned absences because of accidents or emergency situations, students should contact their instructor as soon as conditions permit. Students will be permitted a reasonable amount of time to make up the material or activities covered during absence from class or inability to engage in class activities because of the reasons outlined above.

Absences (this applies to both unexcused absences):

Absence 1 = free

Absence 2 = lose 10% of overall grade, resulting in a maximum final grade of 90%

Absence 3 = lose 20% of overall grade, resulting in maximum final grade of 80%

Absence 4 = lose 30% of overall grade, resulting in maximum final grade of 70%

Absence 5 = lose 40% of overall grade, resulting in maximum final grade of 60%

Two Tardies = 1 absence

Students who accumulate 5 absences will be asked to withdraw from the class immediately. If this withdrawal is registered by institutional withdrawal deadline, the grade will be a "W"; if after deadline, the grade will be an "F".

**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.

**Emergency Class Cancellation**

If an emergency arises in which class must be cancelled, a note will be posted on the classroom door informing students of the cancellation and related information. If a cancellation notice is not posted, students are expected to remain in the classroom until dismissed by a college representative. In the event of severe weather, students should listen to local radio/television announcements for information or check the Santa Fe University website: <http://santafeuniversity.edu>. If the college is open, students are expected to attend class.

**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/](http://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](mailto: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](mailto: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](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                         | TUESDAY                                                         | THURSDAY                                                           | ASSIGNMENT                               | DUE                               |
|------------------------------|-----------------------------------------------------------------|--------------------------------------------------------------------|------------------------------------------|-----------------------------------|
| Week 1<br>1/14, 1/16         | Introductions, Syllabus Overview, Required Materials.           | Tour with Grads in theatre, blackbox, and light lab.               | <b>Assign Project #1: Everyday Light</b> |                                   |
| Week 2<br>1/21, 1/23         | Lighting fixtures: reflection & reflectors                      | Project 1 Presentation, Project #2: Light and Shadow work in class | Project #2: Light and Shadow             | <b>Project #1: Everyday Light</b> |
| Week 3<br>1/28, 1/30         | Conventional fixture, color, gobo, hang & focus                 | Intelligent Fixtures & Lighting Control                            |                                          | Project #2: Light and Shadow      |
| Week 4<br>2/4, 2/6           | Electrical theory and practice                                  | - Cable and connectors<br>- Lighting angles & photometrics         |                                          |                                   |
| Week 5<br>2/11, 2/13         | - Color and effects<br><b>Project #3: Color</b>                 | In Class <b>Project #3: Color</b>                                  | <b>Project #3: Color</b>                 |                                   |
| Week 6<br>2/18, 2/20         | Dimmer, channel, circuit                                        | Reading Light Plot                                                 |                                          | <b>Project #3: Color</b>          |
| Week 7<br>2/25, 2/27         | Midterm Review                                                  | Midterm                                                            |                                          |                                   |
| Week 8<br>3/4, 3/6           | Drafting and paperwork, introduce to Vectorworks                | Basic Drafting in Vectorworks                                      | <b>Project #4: Angle</b>                 |                                   |
| Week 9<br>3/11, 3/13         | Basic Drafting in Vectorworks Intro to Lightwright              | Magicsheet, Instrument Key and Title Block                         |                                          |                                   |
| <b>Fall Break NO CLASSES</b> |                                                                 |                                                                    |                                          |                                   |
| Week 10<br>3/25, 3/27        | Photometric Project                                             | Photometric Project                                                |                                          | <b>Project #4: Angle</b>          |
| Week 11<br>4/1, 4/3          | Dance and concert lighting                                      | Ion training: intro, patching Assign Final Project                 |                                          |                                   |
| Week 12<br>4/8, 4/10         | Ion training: presets, lighting cues                            | Ion training: basic effects, templates, step based, absolute       |                                          |                                   |
| Week 13<br>4/15, 4/17        | Work on final project                                           | Work on final project                                              |                                          |                                   |
| Week 14<br>4/22              | Work on final project                                           | READING DAY-NO CLASS                                               |                                          |                                   |
|                              | FINAL PRESENTATION<br>Final Exam: 4/28/2025 @ 3:00 PM - 5:00 PM |                                                                    |                                          |                                   |

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.