

# Syllabus for THTRE 393C

## Lighting Design

Spring 2020

Tuesday 12:40 pm – 2:00 pm

Thursday 12:40 pm – 2:00 pm

Instructor: Will Coeur

Room Number: Carver 338

Office: Carver 326

Office Hours: M/W/F 10:00 am – 12:00 pm

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## Course Goals

An introduction to the basic concepts and technologies involved in both stage electrics and theatrical lighting design. This course is designed to equip students with the knowledge and skills necessary to pursue a career in theatrical lighting design.

## Requirements

1. Attendance of all ISU Department Music and Theatre productions that occur within the term of the course.
2. Successful completion of all class exercises and projects.
3. Participation in all classroom discussions
4. Attendance to all class sessions.
  - a. More than one unexcused absence is grounds for a drop in your final letter grade.
  - b. More than three excused absences is grounds for a drop in your final letter grade.
    - i. An absence is excused when the instructor is notified a **MINIMUM** of two hours before the scheduled class by either email or phone message. All other absences are considered unexcused. Period.
    - ii. If your assignment is the subject of the day's class, your absence will be considered unexcused without at least 24 hour notice. Even with notification, status of such an absence will be determined on a case by case basis.
5. An active ISU email account.

## Grading and Major Assignments

|                     |     |
|---------------------|-----|
| Design Projects     | 45% |
| Production Analysis | 15% |
| Practical Projects  | 10% |
| Programming Project | 10% |
| Attendance          | 10% |
| Discussion          | 5%  |
| Quizzes             | 5%  |

### Undergraduate Students

|    |            |    |           |
|----|------------|----|-----------|
| A  | 93% - 100% | C  | 73% - 76% |
| A- | 90% - 92%  | C- | 70% - 72% |
| B+ | 87% - 89%  | D+ | 67% - 69% |
| B  | 83% - 86%  | D  | 63% - 66% |
| B- | 80% - 82%  | D- | 60% - 62% |
| C+ | 77% - 79%  | F  | 0% - 59%  |

### Practical Projects (10%)

Students will complete two practical electrics projects. The purpose of these projects is to prove an understanding of the base skills and safety practices expected of a theatrical electrician.

#### Project 1 – Hang and Focus (5%)

Students will complete an electrical obstacle course designed to simulate the minimum tasks expected at all lighting hangs and focuses. This project will be completed by each student individually and privately during a designated date.

#### Project 2 – Wiring (5%)

Students will be provided the materials to complete a take home wiring project that will demonstrate their ability to construct working electrical practicals.

### Programming Project (10%)

Students will produce a “cue to music” project using a provided virtual lighting rig. Students will choose a 2-3 minute piece of music (ideally instrumental only) and craft a light show that expresses the theme of the music. These projects will then be presented to the class with each designer executing their own show. These light shows should contain a minimum of 40 light cues and showcase the various skills and techniques taught in class.

## Design Projects (45%)

Students will complete three conceptual designs of different plays with increasingly complete paperwork packets. The purpose of these projects will be to demonstrate the student's understanding of common design and prep practices. As such, the use of non-conventional lighting instruments in all designs will be restricted on a project by project basis. All projects will be designed around provided scenic designs.

### Design Project 1 – Antigone (10%)

Students will have no conventional inventory or circuit limits in this project. LED and automated moving lights are not allowed to be used.

Paperwork Required: Light Plot, Channel Hookup, Instrument Schedule

### Design Project 2 – Circle Mirror Transformation (10%)

Students will choose any number of lights from a pre-approved list of fixtures but will be limited to a single universe (512) of addresses. LED and automated moving lights are allowed to be used. Conventional lights are not allowed to be used.

Paperwork Required: Light Plot, Channel Hookup, Instrument Schedule, Cue Sheet

### Design Project 3 – Rock of Ages (25%)

**This project will double as the student's final.** Students will be given a budget and a rental inventory listing the base price of each lighting instrument, accessory, and consumable item available to them. They may rent as many instruments as they can afford, with the exception that they may only rent a maximum of ten automated moving lights. In addition to drafting the lighting design, students must demonstrate the ability to work with provided scenic drawings by drafting their own version of the scenic model in 3D.

Paperwork Required: Full Packet (See details in "Note on Final Project" below)

### Fairy Tale Project

Students will be grouped and assigned a children's fable that they will need to express through found objects and light sources. Color filters and gobos may be incorporated, but no conventional lighting fixtures may be used. Creativity and collaboration will be key to a successful project.

## Production Analysis (15%)

Students will be expected to attend and critique all main season shows that are produced during the term. These critiques should be a minimum of three pages long and follow proper MLA format. Critiques should focus on the lighting design and how the other design elements interacted with the lighting.

## Quizzes (5%)

There will be five short online quizzes covering varying topics in both lighting design and electrics.

## Note on Programming Project Grading

This project is designed to increase your understanding of automated lighting programming concepts. You will be graded primarily on your ability to execute an action by any method necessary, with class time discussion being used to analyze your cue structure and ways to improve it. Emphasis will be put on creativity and a general desire to succeed.

## Note on Final Project

The final project requires a full lighting packet including the following paperwork:

Light Plot  
Center Line Section  
Channel Hookup  
Instrument Schedule  
Color Schedule  
Gobo Schedule  
Shop Order  
Magic Sheet  
Cue Sheet

Examples of all these types of paperwork will be available on Canvas.

## Texts

*Photometrics Handbook*

by Robert C. Mumm

Publisher: Broadway Press; 2<sup>nd</sup> Edition (October 15, 1997)

Language: English

ISBN-10: 0911747370

ISBN-13: 978-0911747379

## Required Software

**Please note that you are not required to purchase any of this software. There should be a free or free-for-student version available.**

Vectorworks 2020

Lightwright 6

Capture (Capture Sweden)

ETC Eos Nomad

Microsoft Office Excel or equivalent spreadsheet program

Adobe Photoshop or Gimp (Photoshop strongly preferred)

## Class Schedule

### Week 1

T 1/14 Go over syllabus, introductions, and expectations  
R 1/16 Softwares and technologies

### Week 2

T 1/21 Lighting Design Fundamentals  
R 1/23 Color Theory

### Week 3

T 1/28 2D Vectorworks Bootcamp Part 1  
**Due: Quiz 1 (Canvas)**  
R 1/30 2D Vectorworks Bootcamp Part 2

### Week 4

T 2/4 Introduction to Electrics and Fabrication of Practicals  
**Due: Quiz 2 (Canvas)**  
R 2/6 Stage Electrics Fundamentals (Meet at Fisher)  
**Due: EXTRA CREDIT Barjche Production Analysis (Canvas)**

### Week 5

T 2/11 3D Vectorworks Bootcamp Part 1  
**Due: Quiz 3 (Canvas)**  
R 2/13 3D Vectorworks Bootcamp Part 2

### Week 6

T 2/18 Types of Paperwork  
**Due: Quiz 4 (Canvas)**  
R 2/20 Laying Out Your Light Plot  
**Due: Discuss Antigone**

### Week 7

T 2/25 Group A Practical Exam (Meet at Fisher)  
**Due: Group B Practical Wiring Project**  
R 2/27 Group B Practical Exam (Meet at Fisher)  
**Due: Group A Practical Wiring Project**

### Week 8

T 3/3 Programming 101 Part 1  
R 3/5 Programming 101 Part 2  
**Due: Discuss Circle Mirror Transformation**

Week 9

T 3/10

Design Project 1 Work Day

**Due: Quiz 5 (Canvas) and Production Analysis 1 (Canvas)**

R 3/12

Design Project 1 Presentations

**Due: Design Project 1 (Canvas)**

Week 10

**Spring Break**

Week 11

T 3/24

Programing Project Work Day

R 3/26

Programming Project Presentations

Week 12

T 3/31

Design Project 2 Work Day

R 4/2

Design Project 2 Presentations

**Due: Design Project 2 (Canvas)**

Week 13

T 4/7

Final Project Preparation

**Due: Discuss Rock of Ages**

R 4/9

Budgets and Expenses in Lighting

Week 14

T 4/14

Assign Fairy Tale Project Groups

**Due: Production Analysis 2 (Canvas)**

R 4/16

Production Photos and How to Present Your Work

Week 15

T 4/21

Play with Photoshop

R 4/23

Fairy Tale Project Presentations

Week 16

T 4/28

Final Project Work Week

**Due: Production Analysis 3 (Canvas)**

R 4/30

Final Project Work Week

Final – Thursday, May 7 at 12:00 pm

R 5/7

**Final Design Project Presentations**

**Due: Final Design Project (Canvas)**

## Iowa State University Policies

The following policies are universal of all Iowa State University courses and must be abided by at all times.

### Academic Dishonesty

The class will follow Iowa State University's policy on academic dishonesty. Anyone suspected of academic dishonesty will be reported to the Dean of Students Office.

### Accessibility Statement

Iowa State University is committed to assuring that all educational activities are free from discrimination and harassment based on disability status. Students requesting accommodations for a documented disability are required to work directly with staff in Student Accessibility Services (SAS) to establish eligibility and learn about related processes before accommodations will be identified. After eligibility is established, SAS staff will create and issue a Notification Letter for each course listing approved reasonable accommodations. This document will be made available to the student and instructor either electronically or in hard-copy every semester. Students and instructors are encouraged to review contents of the Notification Letters as early in the semester as possible to identify a specific, timely plan to deliver/receive the indicated accommodations. Reasonable accommodations are not retroactive in nature and are not intended to be an unfair advantage.

### Dead Week

This class follows the Iowa State University Dead Week policy as noted in section 10.6.4 of the Faculty Handbook.

### Discrimination and Harassment

Iowa State University does not discriminate on the basis of race, color, age, ethnicity, religion, national origin, pregnancy, sexual orientation, gender identity, genetic information, sex, marital status, disability, or status as a U.S. Veteran.

### Religious Accommodation

Iowa State University welcomes diversity of religious beliefs and practices, recognizing the contributions differing experiences and viewpoints can bring to the community. There may be times when an academic requirement conflicts with religious observances and practices. If that happens, students may request the reasonable accommodation for religious practices. In all cases, you must put your request in writing. The instructor will review the situation in an effort to provide a reasonable accommodation when possible to do so without fundamentally altering a course. For students, you should first discuss the conflict and your requested accommodation with your professor at the earliest possible time.