

Las Positas College  
3000 Campus Hill Drive  
Livermore, CA 94551-7650  
(925) 424-1000  
(925) 443-0742 (Fax)

## Course Outline for THEA 50L

### INTRODUCTION TO STAGE LIGHTING

Effective: Fall 2015

#### I. CATALOG DESCRIPTION:

THEA 50L — INTRODUCTION TO STAGE LIGHTING — 3.00 units

This course involves the study and execution of stage lighting with emphasis on equipment, control, color and their relationship to design. Introduction to stage lighting design. Physics of light, color, electricity; components of basic lighting technology; comprehensive overview of the art of theater lighting design.

1.00 Units Lecture 2.00 Units Lab

#### **Strongly Recommended**

THEA 50 - Stagecraft  
with a minimum grade of C

#### **Grading Methods:**

Letter or P/NP

#### **Discipline:**

	<b>MIN</b>
<b>Lecture Hours:</b>	18.00
<b>Lab Hours:</b>	108.00
<b>Total Hours:</b>	126.00

#### II. NUMBER OF TIMES COURSE MAY BE TAKEN FOR CREDIT: 1

#### III. PREREQUISITE AND/OR ADVISORY SKILLS:

**Before entering this course, it is strongly recommended that the student should be able to:**

A. THEA50

#### IV. MEASURABLE OBJECTIVES:

**Upon completion of this course, the student should be able to:**

- A. Identify, define and describe terminology commonly associated with theatrical lighting design and execution.
- B. Identify the controllable qualities of theatrical lighting
- C. Identify the functions of theatrical lighting
- D. Recognize and explain the different types of drawings and paperwork commonly used in theatrical lighting design
- E. Calculate the capacity of electrical wire gage and safe current flow
- F. Employ an understanding of the function of various theatrical lighting instruments in various sketches and design choices
- G. Recall and practice safety information concerning electrical hazards
- H. Participate in the hanging, circuiting, focusing, and operation of theatrical lighting equipment
- I. Demonstrate an understanding of style, color, texture, angle and mood by completing theatrical lighting design assignments given in class
- J. Produce the paperwork necessary to implement a lighting design
- K. Apply basics of lighting design and graphic standards to create projects
- L. Demonstrate an understanding of basic electricity, and lighting and rigging safety by hanging and focusing from a specified light plot

#### V. CONTENT:

- A. Introduction to designing with light
- B. Electrical theory and practice
  1. Elements of electricity; electrical safety
- C. Lighting Equipment
  1. Traditional stage lighting instruments
  2. New innovations: moving heads, intelligent lights, LED, etc.
  3. Lighting equipment, hanging, cabling
  4. Circuiting and patching
  5. Rigging and ladder safety
  6. Lightboard patching, programming, and operation
- D. Lighting design paperwork
  1. Lighting design, design graphics

- 2. Organization, planning and routine
- E. Rehearsal and performance procedures
- F. Color theory
  - 1. Color in light / light mixing and layering.
  - 2. Natural and artificial light source
- G. Lighting angles
  - 1. Transmission, reflection, refraction, absorption
- H. Advanced and in depth theories of lighting design
  - 1. Dramas
  - 2. Comedies
  - 3. Musicals
  - 4. Dance concert lighting
- I. May include theoretical projects

#### VI. METHODS OF INSTRUCTION:

- A. **Lab** -
- B. **Audio-visual Activity** -
- C. **Demonstration** -
- D. **Projects** - Individual lighting design projects.
- E. **Field Trips** - USITT Convention; Lighting Dimensions Show
- F. **Critique** - College performances; professional shows.
- G. **Guest Lecturers** - Professional lighting designers and companies.
- H. **Observation and Demonstration** - Hands on participation in lighting labs and design; Crew for LPC events (load-in, run shows, strike/clean after event)

#### VII. TYPICAL ASSIGNMENTS:

- A. Assist in the supervision of stage crews
  - 1. Supervision of instrument and cable repair
  - 2. Supervision of hanging, focusing and circuiting of lighting equipment for departmental productions
- B. Practical applications of lighting design
  - 1. Organizing and performing the duties of Master Electrician for a departmental production
  - 2. Organizing and performing the duties of Assistant Lighting Designer for a Departmental production
  - 3. Designing the lighting for a departmental production
- C. Read the chapter on lighting instruments and be able to explain how an ellipsoidal instrument works and name it's function and parts.
- D. Read the chapter on light and angle for the actor and understand the placement of instruments.
- E. Draft to scale a lighting plot for performance on the LPC black box theater and the main stage.
- F. Patch and program the computer lighting system, and run the lighting cues.
- G. Hang, focus, color and circuit. according to a lighting plot.
- H. Evaluate other lighting designs outside LPC.

#### VIII. EVALUATION:

- A. **Methods**
  - 1. Exams/Tests
  - 2. Quizzes
  - 3. Portfolios
  - 4. Oral Presentation
  - 5. Projects
  - 6. Simulation
  - 7. Class Participation
  - 8. Home Work
  - 9. Lab Activities
  - 10. Other:
- B. **Frequency**
  - 1. Exams/Tests & Quizzes -- 2 quizzes and one final
  - 2. Portfolio -- one present at end of term
  - 3. Oral Presentation -- present portfolio orally at end of term
  - 4. Projects -- minimum 2 per term
  - 5. Simulation -- 2-5 per term
  - 6. Class Participation - daily
  - 7. Home Work - weekly
  - 8. Lab Activities -weekly
  - 9. Attendance and Classroom Participation -- daily

#### IX. TYPICAL TEXTS:

- 1. Shelley, Steven Louis *A Practical Guide to Stage Lighting*. 3 ed., New York: Focal Press, 2013.
- 2. Gillette, J. Michael, and Michael McNamara *Designing with Light*. 6 ed., McGraw-Hill, 2013.
- 3. "Lighting & Sound America." Lighting & Sound America 2013.

#### X. OTHER MATERIALS REQUIRED OF STUDENTS:

- A. Materials will be supplied to the students.