



# SANTA ANA COLLEGE

## COURSE OUTLINE OF RECORD

### CATALOG ENTRY

|  |                          |
|--|--------------------------|
| <b>Discipline</b>                      | Theatre Arts             |
| <b>Course Number</b>                   | 166                      |
| <b>Course Title</b>                    | Intermediate Programming |
| <b>Former Title</b>                    | Program & Design Pr      |
| <b>Units</b>                           | 1                        |
| <b>Lecture Hours</b>                   | 16                       |
| <b>Scheduled Laboratory Hours</b>      | None                     |
| <b>Arranged Laboratory Hours (TBA)</b> | None                     |
| <b>Total Semester Contact Hours</b>    | 16                       |

### COURSE IDENTIFICATION NUMBER(S) (C-ID)

### REQUISITES

**Prerequisite**

None

**Corequisite**

THEA 166L

**Recommended Preparation**

None

### CATALOG DESCRIPTION

Further development of the control and programming skills used in the entertainment lighting industry. Multiple control consoles will be introduced.

|                            |                             |
|----------------------------|-----------------------------|
| <b>Classification Code</b> | Y                           |
| <b>Transfer Code</b>       | B-Transferable to CSU only  |
| <b>SAM Priority Code</b>   | C - Occupational            |
| <b>Repeatability</b>       | NR - Non-Repeatable         |
| <b>TOPS Code</b>           | 1006.00 - Technical Theater |
| <b>Topics Course</b>       | No                          |
| <b>Open Entry/Exit</b>     | No                          |
| <b>Grading Options</b>     | Letter Grade or P/NP        |

Department Chair Approval Date: 09/23/14 by:Valinda Tivenan

Divison Chair Approval Date: 09/25/14 by:Valinda Tivenan

Curriculum and Instruction Council Chair Approval Date: 11/17/2014 by:Monica Porter

Last Revision Date: 08/26/2014

## COURSE OBJECTIVES

1. Learn and apply intermediate and advanced programming techniques for automated lighting systems
2. Evaluate the programming options available to determine the most effective process for creating lighting looks, cues, and shows
3. Become efficient automated lighting programmers
4. Preparation for employment in the entertainment lighting industry

---

---

## COURSE CONTENT

(Include major topics of the course, time required, and what the student is expected to learn.)

### **1. Lighting control consoles for automated fixtures: Methods and procedures for controlling the setup of a show and varied automated lighting fixtures. 4 lec**

Intermediate and advanced programming techniques and skills using the Whole Hog III control console:

Fixture libraries, patching, addressing, assigning user numbers, assigning universes and DP's, creating and efficient desk top for control, for a light rig that includes conventionals, color changes, and fully automated luminaries.

Introduction to multiple control consoles as used in the industry. These controllers will vary as technology and manufacturers evolve and dissolve.

### **2. Problem solving the unexpected occurrences that can arise while programming and controlling fixtures/shows. 2 lec**

Trouble shooting- methods and techniques to remedy technical difficulties that occur due to fixture and/or console quirks, inadequacies, or failures.

### **3. Programming and Design criteria for utilizing automated lighting fixtures for specific design projects within specified time limits. 4 lec**

Lighting design fundamentals as they relate to the world of automated lighting. Manipulating moving light fixtures/programming techniques to make them either visible or invisible as required by the artistic demands. Develop a sensitivity to the artistry of moving lights as they relate to the rhythm, beats, and mood of varied musical selections.

#### 4. Specific intermediate programming skills to develop: 6 lec

- Multiple Point Fixture Patching
- Comment Macro Protocols
- Advanced Cue List Linking and Execution
- Effect building using multiple cue lists
- Customizing Effects – redefining parameters
- Advanced Palette Layout
- Custom Scenes and Views usage
- Assigning reassigning cue lists to different faders
- Cue list Management
- Fixture Patch Modification – Theory and Practice
- Complex show cueing
- Introduction to design elements
- How to break down music selections into sections for programming
- Pre planning cueing

---

#### COURSE MATERIALS

Required texts and/or materials.(Include price and date of publication.)

**Required:**Cadena, R.. *Automated Lighting*, 2 ed. Burlington: Focal Press, 2010, ISBN: 0240812220. \$49.95

**Required:** High End Sytems. Whole Hog III user manual, High End Systems , 02-10-2010

#### Recommended readings and/or materials:

None

**Other:**

None

---

#### WHAT METHODS WILL BE EMPLOYED TO HELP STUDENTS LEARN?

Class Discussions

Directed Learning Activities

Electronic Delivery

Field Trips

Group Study & Exercises

Guest Speakers

Handouts  
Instructor Demonstrations  
Lecture  
Reading Assignments  
Visual Aids  
Writing Projects & Reports

---

---

**WHAT LEARNING ACTIVITIES OR ASSIGNMENTS ARE REQUIRED OUTSIDE OF CLASS?**  
List activities and hours for each. (Must include reading and writing activities.)

|                              |          |
|------------------------------|----------|
| Preparation for written Exam | 4 hours  |
| Reading of text book         | 24 hours |
| Reading of Equipment Manuals | 4 hours  |
| Total 32 hours               |          |

---

---

**STANDARDS OF ACHIEVEMENT**  
List graded activities.

|                 |     |
|-----------------|-----|
| Written Quizzes | 30% |
| Examination     | 70% |
| Total 100%      |     |

**GRADING SCALE**

100-90% = A  
80-89% = B  
70-79% = C  
60-69% = D  
59-0% = F

---

---

**How will student learning be assessed? (Multiple measures must be used.)**

Quizzes and an examination over the terms, concepts and equipment covered in lectures that will be reviewed in class and assessed by the instructor.

(Additional measures will be incorporated into the lab portion of this 2 part course (THEA 166L) in which programming and practicum assignments will be assessed by the instructor that also include peer evaluations as part of the assessment process.)

| Supplemental Forms  |
|---|
| Supplemental Forms Last Saved   |
| Approval Dates  |
| Curriculum and Instruction Council Chair: 11/17/2014<br>Department Chair: 09/23/2014<br>Division Dean: 09/26/2014 |