

Mt. San Jacinto College
Integrated Course Outline of Record

Form B

Submitted by:	Shezwae Powell	Date:	10/10/2019
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Department	Subject	Course Number	Title
Theater Arts	Theater Arts THA	120	Stage Lighting

Units/Hours

Each lecture unit requires 1 hour per week of class time, and 2 hours per week of study outside of class.
Each laboratory unit requires 3 hours per week of class time.
Each activity unit requires 2 hours per week of class time and 1 hour per week of study outside of class.

Lecture Units	Lab Units	Total Units
2.00	1.00	3.00
Lecture Contact Hours	Lab Contact Hours	Total Contact Hours
32.00 - 36.00	48.00 - 54.00	80.00 - 90.00
Lecture Homework Hours	Lab Homework Hours	
64.00 - 72.00	0	

Stand Alone:

Program Applicable

AA/AS Degree General Ed Breadth Area(s):

-none-

General Education Justification:

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Maximum Enrollment:
Maximum Enrollment
Justification:

32
Course has safety or compliance factors which influence the enrollment cap – check all that apply: * Course has safety or health reasons that the class should have a non-standard enrollment cap. Justification: THA 120 Stage Lighting includes the study and operation of lighting equipment and control systems, many of which can be dangerous if handled incorrectly. A lower class size is necessary to ensure

Grading Method:
TOP code:

the instructor is able to teach proper and safe handling, and supervise the students.
Letter Grade or P/NP
1006.00*

Can be Taken

1

time(s) for credit (max 4)

- | | |
|--|---|
| | - Visual or Performing Arts course that is required to meet major requirements for UC/CSU |
| | - Intercollegiate athletics course |
| | - Academic/vocational competition course |

Catalog Description:

(Please do not refer to transferability or degree, certificate, or employment concentration applicability. Please only describe the course).
(75 words or less in gray box below).

This course introduces students to the fundamentals of theatrical lighting. Study includes the operation of lighting equipment and control systems, theory of lighting design, color media, rigging and planning, light plots, and technical rehearsal and performance procedures.
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Schedule Description:

(Please do not refer to transferability or degree, certificate, or employment concentration applicability. Please only describe the course).
(25 words or less in gray box below).

This course introduces students to the fundamentals of theatrical lighting which are needed to create the appropriate illumination of a stage production.

Need for the course:

This course is a requirement for the AS and Certificate in Technical Theater, and provides practical experience to the Theater Arts student hoping to transfer to a four year institution, or pursue work in the technical theater field.

Prerequisite(s):

Prerequisites go through a separate approval process. See Forms E1-E6 for details.
(For further clarification, contact the Prerequisite Subcommittee)

-none-

Corequisite(s):

Corequisites go through a separate approval process. See Forms E1-E6 for details.

-none-

Recommend Preparation:

Recommended Preparation goes through a separate approval process. See Forms E1-E6 for details.

-none-

Other Enrollment Criteria:

-none-

Learning Objectives:

(please number each objective and express in behavioral terms)

Upon the completion of the course the student will be able to do the following:

1. Differentiate terminology commonly associated with theatrical lighting design and execution.
 2. Distinguish and explain the controllable qualities of theatrical lighting.
 3. Distinguish and explain the functions of theatrical lighting.
 4. Assess different types of drawings and paperwork commonly used in theatrical lighting.
 5. Judge the capacity of electrical wire gage and safe current flow.
 6. Demonstrate safety practices concerning electrical hazards.
 7. Illustrate the functions of various theatrical lighting instruments.
 8. Practice the hanging, circuiting, focusing and operation of theatrical lighting equipment.
 9. Demonstrate an understanding of style, color, texture, angle and mood as they relate to theatrical lighting design.
 10. Analyze a play, design, and draw a basic lighting plot with appropriate cue sheets and electrical schedule as used in theatrical production.

Course Content:

(please number the outline of main topics and subtopics)

1. Course overview and expectations
 1. Tour of building and discuss behavior in the theatre, scene shop, costume area and properties loft
 2. Identify location of exit doors and fire extinguishers
 3. Designate outside staging area in case of emergency egress
 2. Introduction to Designing with light
 1. Qualities of Light
 1. Distribution
 2. Intensity
 3. Movement
 4. Color
 2. Functions of Light
 1. Visibility
 2. Selective focs
 3. Modeling
 4. Mood
 3. Lighting Production Team
 1. The Lighting Designer
 1. Job description
 2. Duties and responsibilities
 3. The assistant Lighting Designer
 1. Job description
 2. Duties and responsibilities
 4. The Master Electrician
 1. Job description
 2. Duties and responsibilities
 5. The Electricians
 1. Job description
 2. Duties and responsibilities
 4. Electrical Theory and Practice
 1. Basic electricity
 1. Wattage
 2. Voltage
 3. Amperage
 4. Electrical equations
 1. Watts = Volts X Amps
 2. Ohms law
 5. Electrical safety

- 1. Circuit breakers
 - 2. Fuses
 - 6. Electrical wiring
 - 1. Hot
 - 2. Neutral
 - 3. Ground
- 5. Projections
 - 1. Projectors
 - 2. Linnebach projectors
 - 3. Slide projectors
 - 4. Video projectors
 - 5. Projection Surfaces
 - 6. Front Projection
 - 7. Rear Projection
- 6. Practicals and Effects
 - 1. Use of practical lighting fixtures
 - 2. Mood
 - 3. Atmosphere
 - 4. Time of day
- 7. Effects
 - 1. Lightning
 - 2. Fire
 - 3. Stars
 - 4. Water
 - 5. Smoke
 - 6. Fog
 - 7. Haze
- 8. Color
 - 1. Color terminology
 - 2. Hue
 - 3. Saturation
 - 4. Value
 - 5. Tint
 - 6. Shade
 - 7. Tone
 - 8. Primary colors of light
 - 9. Secondary colors of light
 - 10. Additive color mixing
 - 11. Warm and cool colors
 - 12. Making a new color
 - 13. Subtractive color mixing
 - 14. Warm and cool colors
 - 15. Removing unwanted color
 - 16. Meaning of color
 - 17. Reaction to color
 - 18. Color use
 - 19. Direction of the color
 - 20. Complimentary tint theory
 - 21. Related tint theory
 - 22. Single tint theory
 - 23. The Design Process
 - 24. Script analysis
 - 25. Production meetings
- 9. The Image of Light

- 1. Front light
 - 2. Back light
 - 3. High angle side light
 - 4. Low angle side light
 - 5. Down light
 - 6. Uplight
- 10. The Lighting Key
 - 1. Development
 - 2. Angles
 - 3. Color
 - 4. Area lighting
 - 5. Toning and blending areas
- 11. Using the Lighting Key to Draw the Plot
 - 1. Instrumentation
- 12. Applying script analysis
 - 1. Drafting for Lighting Design
 - 2. The light plot
 - 3. The channel hook up
 - 4. The instrument schedule
 - 5. The magic sheet
- 13. Design Examples
 - 1. Lighting for proscenium theatres
 - 2. Lighting for thrust theatres
 - 3. Lighting for arena theatres
 - 4. Lighting for theatrical forms
 - 5. The Dance
 - 6. The Drama
 - 7. The Musical
 - 8. The Industrial
 - 9. The Concert

Lab Content:

(please number the outline of main topics and subtopics)

- 1. Introduction to Lens, Lamps and Lighting Instruments
 - 1. Plano convex lenses
 - 2. Fresnel lenses
 - 3. Stepped lenses
 - 4. Ellipsoidal reflectors
 - 5. Spherical reflectors
 - 6. Parabolic reflectors
 - 7. Ellipsoidal reflector spotlights
 - 1. Lekolites (Strand)
 - 2. Source Fours (ETC)
 - 8. Fresnel spotlights
 - 1. Fresnelites
 - 9. PAR cans
 - 1. PAR 64's
 - 2. PAR 38's
 - 10. ParNels
 - 11. Cyc and strip lights
 - 1. MR 16 Mini strips
 - 2. Ianiro cyc lights
 - 3. Scoops

- 4. R 40 strip lights
 - 5. X-Rays and border lights
 - 12. Followspots
 - 13. Moving lights
 - 1. Moving head fixtures
 - 2. Vari-Lights
 - 3. Moving mirror fixtures
 - 4. Techno beams
- 2. Cables and Connectors
 - 1. Conductors
 - 2. Solid wire
 - 3. Stranded wire
 - 4. Copper
 - 5. Insulators
 - 1. Rubber
 - 2. Plastic
- 3. Connectors
 - 1. Stage pin
 - 2. Edison
 - 3. Twist lock
- 4. Intensity Control
 - 1. Dimmers
 - 2. Resistance Dimmers
 - 3. Auto Transformer Dimmers
 - 4. SCR Dimmers
 - 5. Digital multiplexing (DMX)
- 5. Control Systems
 - 1. Manual control systems
 - 2. Master/submaster
 - 3. Preset control
 - 4. Computer control systems
 - 5. Obsession control boards
 - 6. EOS control boards
 - 7. Hog control boards
- 6. Color media
 - 1. Gel
 - 2. Glass
 - 3. Plastic
 - 4. Dichroic
- 7. Advanced Technology Instruments
 - 1. Moving head fixtures
 - 2. Moving mirror fixtures
 - 3. Color faders
 - 4. Sea changers
- 8. Rehearsal and Performance Procedures
 - 1. Hanging, circuiting and coloring the light plot
 - 2. Focusing the light plot
 - 3. Building the light cues
 - 4. Technical rehearsals
 - 5. Lighting notes
 - 6. Dress rehearsals
 - 7. Preview performances
 - 8. Opening performance
 - 9. Closing performance

10. Strike of the performance

Methods of Instruction:

Methods of instruction may include, but are not limited to the following:

- **Method:** Lecture
Integration: The Instructor will lecture on theatrical terminology, production staff, and production planning.
- **Method:** Film/video Viewing and Discussion
Integration: The Instructor will present in-class video presentations on specific topics pertinent to lighting design and practicum, followed by instructor-guided discussion.
- **Method:** Observation and Demonstration
Integration: The Instructor will demonstrate the proper hanging, focusing, and operating of lighting instruments using an industry light plot for students to observe.
- **Method:** Directed Study
Integration: The Instructor will provide directed study of safety procedures and proper operation of tools and equipment found in a theatrical venue.
- **Method:** Activity
Integration: The Instructor will guide students through the practical application of lighting design theory by analyzing a theatrical text and constructing a light plot.

Methods of Evaluation:

A student's grade shall be determined by the instructor using multiple measures of performance related to the course objectives. Methods of evaluation may include but are not limited to the following:

- **Method:** Class Performance
Integration: Students will be evaluated on their ability to demonstrate safe operation of lighting instruments, such as Source Four ERS and PAR cans, and identify the proper equipment needed for a specific job in relation to the lighting design.
- **Method:** Class Work
Integration: Students will be evaluated on their ability to analyze the various aspects of a light plot, such as scale, focus, position, and color, and implement a lighting design from these documents.
- **Method:** Quizzes
Integration: Students will be evaluated on their ability to demonstrate and employ theater terminology in quizzes throughout the semester. Question format may include true/false, multiple choice, and short answer.
- **Method:** Class Participation
Integration: Students will be evaluated on their in-class participation through the hanging, focus, and safe operation of instruments for an MSJC production, assisting our Theater Technicians/Technical Directors for both campuses.

Examples of Assignments:

Students will be expected to understand and critique college level texts or the equivalent. Reading and writing, as well as out of class assignments are required. These assignments may include but are not limited to the following:

1. Read the play “Equus” by Peter Shaffer and analyze the play for the lighting components. Then do the following: identify the type and amount of instruments to be used, calculate the amount of circuits and dimmers in accordance with instrument wattage, and hang and focus instruments for one scene in the play.
2. Using an architect's ruler, draft a ¼” scale lightplot for a theatrical lighting design to include: a page layout with the scenic elements, the center and plaster line, and a light hanging plot.
3. Using theatrical terminology, create a flowchart detailing the hierarchy of Production Staff.
4. Attend a live theatrical production and write a critique of the lighting design.

Textbooks:

- Jacques, D (2017). *Introduction to the Musical Art of Stage Lighting Design: Fourth Edition* CreateSpace Independent Publishing Platform. ISBN: 978-1542691512
- Dunham, Richard E. (2018). *Stage Lighting Second Edition: The Fundamentals 2nd Edition* Routledge. ISBN: 13: 978-1138672178
- Dunham, Richard E (2018). *Stage Lighting: Design Applications and More* Routledge. ISBN: 13: 978-1138671379

Other Resources:

- Macluskie, Steve. Vectorworks for Theatre. Entertainment Technology Press Ltd , 05-27-2015.

Minimum Qualification

- Drama/Theater Arts (Masters Required) **or**
- Stagecraft