Lighting Design

Level 3: Student explored previously; second pathway specific course

Pathway(s): Production and Managerial Arts

Description

Emphasizes theatrical lighting design and construction, including color theory, safety in electrical and equipment construction, and use of consoles and instruments. Students construct light plots, electrical schedules and design lighting for theatrical performance.

Student Learning Outcomes

Industry

1) Analyze how lighting design professionals interact with other professionals within and across industries.
2) Explore time management techniques used by professional, noting key habits and best practices.
3) Explain the impact of technology and industry trends on the careers of set design professionals, including the impact on technical work and business management.
4) Research postsecondary institutions in Colorado and other states that offer lighting design related programs.

Safety and Crew Responsibilities

5) Identify and practice safe work habits including the use of Personal Protective Equipment (PPE), as necessary.
6) Demonstrate the proper use of technical theatre equipment and supplies.
7) Demonstrate an awareness of safety protocol in a theatrical spaces.
8) Determine the various roles and responsibilities of members of a technical crew in setting up, executing, and tearing down a production.
   a. Designers
   b. Technical directors
   c. Stage management

Lighting Design

9) Learn basic lighting design.
10) Learn design and color theories.
11) Learn basic electrical theory and safe practice.
12) Construct lighting plots and CAD lighting visualizations.
13) Interpret lighting plots.
14) Identify lighting equipment needs.
   a. Types of instruments and their uses.
   b. Types of power and data cables, including DMX.
15) Hang, focus, color, and patch lighting equipment.
16) Program a lighting console.
17) Draw scale designs.
   c. Light Plot
   d. Electrical Schedule
   e. Instrument Hook-up Chart

18) Participate in the hang, focus, and programming of actual theatrical lighting design(s) based on studies of a specific script and design.

Set Design & Construction

19) Use technical drawings and plots to plan scenery, properties, and costumes
20) Construct scenery, properties, and/or costumes.
21) Develop scenic painting techniques.

Sound Design & Implementation

22) Interpret sound plots.
23) Identify sound equipment needs.
24) Patch in microphones, speakers, intercoms, and monitors.

Post-Production

25) Properly store equipment and set elements used in a production.
26) Properly dispose of set elements that will not be used in further productions.