Prefix and Course Number: DRMA 245
Course Title: Lighting Design and Technology

Course Learning Outcomes

Upon successful completion of the course, the student will be able to:

1. Identify and understand the use of theatrical and cinematic lighting equipment and the unique tools associated with design.
2. Practically apply the skills learned in a completed conceptual lighting plot.
3. Demonstrate understanding of theatrical and cinematic lighting and projection techniques by collaborating in the practical application of theatrical and cinematic designs.
4. Understand, demonstrate, and practice the responsible use of theatrical and cinematic equipment in accordance with industry safety guidelines.
5. Research and demonstrate business skills for the profession including creating a design portfolio, a rendering and process presentation, and an understanding of the function of unions, designer contracts, and producing organizations.

Course Outline:

Responsible Use of Lighting Equipment: Examining Industry Safety Procedures (approximately two weeks)
- Review of safety procedures.
- Review of lighting specific tools and equipment
- Demonstration of safe operation of tools and equipment
- Demonstration of basic maintenance and repair of lighting equipment

Practical Application of Lighting Design: Understanding Lighting Technology (approximately four weeks)
- Introduction to basic design and lighting techniques for theatre and cinema, including: McCandless Method, Key Lighting, Jewel Box Method, Area Lighting, Blending & Sculpting, Vectorworks, etc.
- Review of the purpose and usage of various lighting instruments and design elements.
- Introduction to moving lights and special effect lighting systems (moving head lights, black lights, fire effects, smoke and diffusion, etc)
- Hands-on work with theatrical and cinematic lighting technologies and design software.

Practical Application of Projection Design: Understanding Projection Technology (approximately three weeks)
- Introduction to basic stage projection techniques and styles, including: Arena Projection, Proscenium Projection, Thrust Projection, TV Projection techniques, Scenic Replacement/Manipulation, Design Control Systems, etc.
- Introduction to projection mapping and image manipulation.
- Hands-on work with theatrical projection technologies (Short-Throw Projectors, High Intensity Lumen Projectors, QLab, HDMI Cabling and Control Management, etc).

Production Lighting Design & Professional Opportunities (approximately two weeks)
- Creation of lighting plots and digital design
- Script text analysis and research strategies for lighting and projection designers.
- Creation of a practical lighting plot for a specific design.