

Spring 2-1-2017

THTR 264.01: Master Electrician

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THTR 264-01 – SPRING 2017
Master Electrician for the Stage
M/W 1:00-1:50pm
PARTV 131

Instructor: Mark Andrews
School of Theatre and Dance
PARTV 131 Office hours: M/W 11a to 12p, T/R 10a to 11a or by appointment
Phone: (479) 502-6815 Email: mra2631@yahoo.com

Required Texts:
Robert Mumm; *Photometrics Handbook*
Cadena, Richard: *Electricity for the Entertainment Electrician & Technician*

Suggested Texts:
Paul Carter: *Backstage Handbook*

- Class Objectives:**
- To give the student practical knowledge and experience as a theatre electrician and Master Electrician for theatre.
 - To make sure the students know how read and maintain a plot and generate Lightwright paperwork.
 - To ensure that the students know the safety precautions and dangers in working with electricity.
 - To be able to clearly define and explain why certain electrical practices are used.
 - To provide the students with an effective method to troubleshoot problems.

Course Description:

Training for the position of master electrician. Practical application of production planning, lighting paperwork, overseeing lighting crews, advanced electrical theory, power distribution, and creative problem solving. Students will explore and be exposed to the applications of moving lights, color scrollers, rigging and the fly system, wireless DMX, LEDs and much more. Students will work on major departmental productions. **Attendance is required at all classes and crew calls for which you have been assigned.** Students **cannot** make up missed assignments unless the instructor has previously excused such absences.

Grading:

Based on attendance, class participation and completion of assigned projects in the following percentages:

Attendance and class participation 30%	Projects 70%
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Grading for the course and all elements within the course will use the ABCDF system with the following percentages applying:

92% and above=A

84%-91%=B

76%-83%=C

68%-75%=D

Below 68%=F

Term Schedule A:

Date	Class Topic
Mon, Jan. 23	Introduction to syllabus
Wed, Jan. 25	Define the job responsibilities of an electrician and master electrician
Mon, Jan, 30	Electricity and its applications
Wed, Feb. 1	Light Board Operation/Circuiting and Patching (Thespians Board Op)
Mon, Feb. 6	How to approach Light Plots and Paperwork
Wed, Feb. 8	Hanging a Plot
Mon, Feb. 13	Troubleshooting
Wed, Feb. 15	Knot tying and applications
Mon, Feb. 20	NO CLASSES: Presidents' Day Holiday!
Wed, Feb. 22	Introduction to Vectorworks
Mon, Feb. 27	Communicating between Vectorworks and Lightwrightt
Wed, Mar. 1	Vectorworks Continued
Mon, Mar. 6	USITT - TBD
Wed, Mar. 8	USITT - TBD
Mon, Mar. 13	Bench focus and factory reset
Wed, Mar. 15	Bench focus continued
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Mon, Mar. 20	NO CLASSES: Spring Break!
Wed, Mar. 22	NO CLASSES: Spring Break!
Mon, Mar. 27	Edison/Twist-lok/Stage Pin wiring
Wed, Mar. 29	Edison/Twist-lok/Stage Pin wiring continued
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Mon, Apr. 3	Rigging: The systems; ours and theirs (Possible visit to UT)
Wed, Apr. 5	Rigging: Using it; weight calc and practice
Mon, Apr. 10	Foggers, and other effects. Demonstration.
Wed, Apr. 12	Scrollers: definition, how to... Setup, maintain and fix
Mon, Apr. 17	LEDs: definition, how to... Setup, maintain and fix
Wed, Apr. 19	LED Exercises
Mon, Apr. 24	Moving Lights: Definition, how to... Setup, maintain and fix
Wed, Apr. 26	Moving light exercises
Mon, May 1	Cumulative Technology exercises, review
Wed, May 3	Cumulative Technology exercises, review

Brief Project Descriptions:

- **Project #1: Basic Wiring/Practicals (50 pts)**
Students will demonstrate their knowledge of basic wiring principles by adapting a conventional electric device into a working, stage practical.
- **Thespians (50 pts)**
Students are asked to serve as light board operator for certain shifts of the annual Thespian Conference held in the Montana theatre. Students will be exposed to computerized light board technology and gain further insight into running a show in the position of a light board operator.
- **Project #2: Hang a Plot (100pts)**
Students will assume the role of assistant master electrician in the execution of hanging a light plot during the semester. During this hang emphasis will be placed on proper execution of the plot and proper safety procedures more than how quickly it is completed.
- **Project #3: Troubleshooting (100 pts)**
Within a predetermined time frame, students will be asked to troubleshoot and isolate the issue within a conventional lighting fixture and correct it so that the fixture is in working order. Students will exhibit an understanding of the inner workings of conventional instrumentation and how to safely and properly troubleshoot
- **Project #4: Converting a Plot (100pts)**
Students will be converting a plot from a larger space to a smaller space with limited instrumentation using Vectorworks.
- **Project #5: Scenarios (100pts)**
Students are challenged to think analytically and problem-solve hypothetical scenarios in the role of master electrician.

Additional Projects: You will also be expected to be an Assistant Master Electrician to various productions throughout the semester. In addition you will be expected to attend all lighting Hangs, Focus, and Strikes. Here is an attached schedule.

Term Schedule B: Spring 2017

***Disclaimer: All dates, times and locations are subject to change. Please contact the instructor should you have any questions or concerns.**

<u>Date</u>	<u>Production</u>	<u>Task</u>	<u>Theatre</u>	<u>Call Time</u>	<u>Who</u>
Sun. Feb. 5	<i>Thinner Than Water</i>	Hang	Masquer	8:45a - Finish	ALL
Sat. Feb. 11	<i>Thinner Than Water</i>	Focus	Masquer	8:45a - Finish	ALL
M-F Feb. 13-17	<i>DIC 2017</i>	Hang	Montana	In Shop	
T-F Feb. 21-24	<i>DIC 2017</i>	Focus	Montana	In Shop	

Sun. Mar. 5	<i>Thinner Than Water</i>	Strike	Masquer	approx. 3:30p	ALL
TBD	<i>Odyssey 2016</i>		Dennison	TBD	TBD
Sat. Mar. 11	<i>DIC 2017</i>	Strike	Montana	approx. 9:30p	ALL
M-F Mar. 27-31	<i>Madwoman...</i>	TBD	Masquer	In Shop	TBD
Sat. Apr. 1	<i>Noises Off</i>	Hang	Montana	8:45a - Finish	ALL
Sat. Apr. 16	<i>Noises Off</i>	Focus	Montana	8:45a - Finish	ALL
Sun. Apr. 2	<i>Noises Off</i>	Strike	Montana	approx. 3:30p	ALL
TBD	<i>DNW</i>	TBD	Open Space	TBD	XC

Academic Misconduct, Student Conduct Code and other Policies

All students must practice academic honesty. Academic misconduct is subject to an academic penalty by the course instructor and/or disciplinary sanction by the University. All students need to be familiar with the Student Conduct Code. The Code is available for review online at http://life.umt.edu/vpsa/student_conduct.php.

All Theatre & Dance students must have an in-depth knowledge of the practices and procedures outlined in the School of Theatre & Dance *Student Handbook*. The *Handbook* is available online at <http://www.umt.edu/theatredance/about/handbook>.

Light Shop Protocol

There is inherent risk involved in many Theatre & Dance classes as they are very physical in nature. Please proceed through class, shop time or rehearsal with caution. Always be mindful of your personal safety and the safety of others. Students participating in class/shop/rehearsal/performance do so at their own risk.

Due to safety considerations, at **no** point during a student's time spent in class or serving on a production (in any capacity) should non-enrolled persons be guests of that student **without my consent**. Presence of such unauthorized persons in a class, shop or any backstage/off-stage area will negatively affect a student's grade.

As stated before, attendance in class, assigned hangs, focuses and strikes is mandatory. If you have to be absent for any reason, you must notify the instructor ***in writing*** (i.e. email) before the absence. **NOTIFYING A CLASSMATE TO TELL ME YOU WILL BE ABSENT IS NOT ACCEPTABLE** and will result in an unexcused absence.

Because part of being a theatre technician is being aware of your surroundings at all times, the use of ear buds, headphones, etc. is **STRICTLY PROHIBITED**. Zoning out while listening to music is potentially dangerous because if you are not paying attention to what is going on around you, the chance of injury is greatly increased. If, when there are times that listening is music is deemed safe, any student must have explicit permission from the Shop Manager.

Punctuality:

It is important to be on time for class. However, since the light shop is also an office and holds other classes, please do not arrive any earlier than 10 minutes before the class' scheduled start time and please leave as soon as class is dismissed.