

**THEA 3332**  
**LIGHTING PROGRAMMING**  
**Wintermester 2025 (9am-Noon)**

**Instructor:** Hideaki Tsutsui  
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**Office Hours:** Right after class or by appointment

**Recommended Text:**  
Concert Lighting (THIRD EDITION)  
By James L. Moody

**Required Material:**  
1 x USB Flash Memory Drive (4G or higher)

\*Laptop computers are not required; however, it will be helpful for your projects.

**Course Objectives:**

From this class, students will learn and understand the basic knowledge of entertainment lighting programming.

Students will be trained in three to four different industry preferred lighting consoles.

Students will also learn different lighting technology and techniques.

Students will learn and understand lighting programming languages and protocol.

Students will discuss ideas and techniques for programming. There will be class presentations for those class projects.

**Attendance and Participation:**

Class attendance and participation are essential for success in this course. Students are required to attend the presentation day, during which they will showcase their projects. Absence from this session will result in a score of "0" for the project, with no opportunity for make-up.

Some classes are structured to provide individualized time for one-on-one instruction. Attendance will be taken daily. Poor attendance and subpar presentations will negatively impact the "Effort" portion of your grade.

Be sure to prioritize attendance and engagement to ensure the best possible outcome in the course.

**Student Conduct and Discipline:** The University of Texas at El Paso expects its students to maintain complete honesty and integrity in their academic pursuits. Students are responsible for understanding student conduct and discipline, which is contained in both print and web version of the Handbook of Operating Procedures: Students Affairs. These regulations and policies can be found online and in the “Catalog” of the University of Texas at El Paso.

### **Students with Disabilities Policy**

If you have or suspect a disability and need an accommodation, you should contact The Cass Office at 747-5148 or at [cass@utp.edu](mailto:cass@utp.edu) or go to Room 106 Union East Building.

### **UTEP Title IX Information**

The University is committed to providing reasonable accommodations and auxiliary services to students, staff, faculty, job applicants, applicants for admissions, and other beneficiaries of University programs, services and activities with documented disabilities in order to provide them with equal opportunities to participate in programs, services, and activities in compliance with sections 503 and 504 of the Rehabilitation Act of 1973, as amended, and the Americans with Disabilities Act (ADA) of 1990 and the Americans with Disabilities Act Amendments Act (ADAAA) of 2008. Students who become pregnant or have parenting responsibilities may also request reasonable accommodations. Reasonable accommodations will be made unless it is determined that doing so would cause undue hardship on the University. The UTEP Center for Accommodations and Support Services (CASS) will process requests for accommodations based on a disability, pregnancy, or parenting. Contact the Center for Accommodations and Support Services at 915-747-5148, email them at [cass@utep.edu](mailto:cass@utep.edu), or apply for accommodations online via the CASS portal.

\*For more information, please visit: <https://www.utep.edu/titleix/pregnancy-and-parenting.html>

### **Assignments:**

#### **Projects (*Subject to Change*):**

**Project #1:** Use ETC Ion console (**Prepare with offline software to Soft Patch**) to program cues (Looks). Please look at the assignment criteria below. You will use mix of fixtures (LEDs and Moving Light).

1. First set up the console and patch the board including moving lights & LEDs
2. Create 5 cues: Not in particular order – For example: Hot summer, cold winter, Street in NYC fall: Each cue must have an emotion and feel
3. Must have a follow cue from one cue to another
4. Must have split cue time
5. One cue to have separate fade time for a single channel or attribute
6. One cue must have an effect (Extra 10 pts)
7. Minimum 3 cues must incorporate movement and color changes of moving lights and LEDs
8. Have a look or channels recorded into sub-master
9. Putting “BLOCK CUE” into one of the cue
10. Last cue (cue #6 which is blackout) is Linked to Cue #1
11. On the presentation day, student will perform as a programmer. Students must be able to record and update cues as Tracking or Cue Only Mode

**\*NOTE: Be sure that moving light cues do not show the movement, color, or gobo changes between cues**

**Project #2:** Student will use their favorite song to design lighting show (concert) with Grand MA2. You can prepare using Grand MA 3D. Pick a song or section of a song that are 2 min or less. Grand MA is one of the most popular and sought after lighting consoles in the live event and concert industry. Student will first set up the console and create the design by using Grand MA2 3D.

Then, you will upload the cues into the Grand MA2 console have maximum of 15 minutes to adjust/ fix and present the work. This project can be creative and fun. Students will learn how to set up the console, patch the lighting rig, create presets and program cues.

**\*\*Please save after each programming session and clear the board for the next person.**

**Research:** YouTube is a great way to research how to program these consoles.

You should also go to below websites

**ETC:**

<http://www.etconnect.com/>

**Grand MA Software:**

<https://www.malighting.com/downloads/products/grandma2/>

Grand MA2 user guide

<https://help2.malighting.com/Page/grandMA2/grandma2/en/3.6>

Quick Start Guide MA2 on PC

[https://help2.malighting.com/Page/grandMA2/grandMA2\\_quick\\_manual\\_onPC\\_solutions/en/3.9](https://help2.malighting.com/Page/grandMA2/grandMA2_quick_manual_onPC_solutions/en/3.9)

MA Lighting

<http://www.ma-share.net/>

<http://www.malighting.com/>

**Lighting Gear: Please refer to the lighting plot.**

**Grading:**

Project #1	100
Project #2	200
(MA 3D: 20 pts, Programming with Music 160, Efforts: 20)	
Total Points	300 pts

A = 270+, B = 240+ , C = 210+, D =180+, F = 179 and below

**Important Professionalism Note:**

**Equipment:** You must respect the equipment. No Food or Drinks on the table. The last person to use the rig is responsible to cover the console, turn off the entire rig and double check all doors are locked. If any students violating these rules and show disrespect to the equipment resulting immediate dismissal from the class and the student will receive "F" as the final grade.

**Time and schedule:** Students must finish their projects with in the schedule time. Students are not allowed to come in unscheduled time to program.

**Equipment Research:** Students must download spec sheets on the equipment and be familiar with them before coming into program.

**\*If you are walking away, be sure to have moving light's shutters are open.**

**Syllabus**

*(Subject to Change)*

**Computer lab is open in the afternoons**

<b>Date</b>	<b>Class Work</b>	<b>Class</b>	<b>Notes</b>
1/6 (mon)	*Introduction to the course / Review Syllabus * <b>Set up lighting rig and console</b> *Let's talk about consoles / Basics of Lighting System & ETC Express: basic Cue only console vs Tracking / ETC Express and what is Offline? Homework: What is your 5 looks?		
1/7	Ion lecture class lecture: Patch, Pallets, and Cueing in class Tracking and Cue only <b>MA Lighting: Grand MA 2 Basics Homework: Pick a song, download 3D if possible</b>		
1/8	ETC Ion in class Programming (Half of Class)	6 students	<b>30min/student</b>
1/9	ETC Ion in class Programming (Half of class)	5 students	11:30-Noon if needed for students
1/10 (Fri)	<b>ETC Ion Project Presentations</b> <b>MA Lighting: Grand MA 2 Basics</b> <b><i>*Create Teammates</i></b>		
1/13(mon)	Grand MA 2: What is HTP and LTP? Studio then In Computer lab		
1/14	Grand MA 2 In Computer lab		
1/15	Grand MA 2 In Computer lab	As a team Studio if needed	
1/17	Grand MA 2 Upload to console day 15 min/student		
1/17(Fri)	<b>Grand MA 2 Final project presentations 15 min/student</b>		