THEA 1030

Lighting & Sound I

Fall 2026

Course Meeting Information

Credit Hours:	3 Credits
Meeting Times:	Tuesday & Thursday 9:30 – 10:50, 11:00-11:50
Location:	University Theatre (RTFP 110)
Instructor:	Adam Chamberlin Adam.chamberlin@unt.edu RTFP 212 940.369.7592
Office Hours:	Tuesday and Thursday, 1:00pm to 2:00pm, or by appointment Theatre is about communication, so I want to make myself accessible as possible. You can always email me any questions or concerns you have and I will do my best to respond within 24 hours. Take advantage, there is no such thing as a stupid question.

Course Description

Introduction to basic terminology, equipment, personnel and procedures for lighting and sound production in performing arts. Topics include introductions to lighting equipment, basic electricity, optics, color in light, sound equipment, acoustics, sound recording and playback, music and sound effects and safety considerations. Lecture and discussion. Application of concepts through practical exercises and lab hours. (from catalog)

This course provides a comprehensive technical and aesthetic foundation in theatrical lighting and sound design. Students will develop hands-on proficiency with industry-standard equipment and software while building conceptual design skills grounded in dramatic analysis. Approximately two-thirds of the course is devoted to lighting and one-third to sound, with a consistent emphasis on technical craft throughout. Students will leave prepared to work as stagehands, board operators, or electrics crews in professional and academic theatre settings.

Student Learning Outcomes

Upon successful completion of this course, students will be able to:

Lighting

- Identify and safely operate conventional theatrical lighting instruments, LED, and moving light fixtures
- Hang, circuit, and focus instruments from a light plot
- Program and run cues on an ETC Eos-family console
- Read and draft a basic light plot using Vectorworks or other drafting software
- Explain DMX signal flow, dimmer architecture, and power distribution
- Explain simple LAN network for use in a lighting system
- Analyze a script and develop a lighting concept document

Sound

- Identify and safely operate microphones, amplifiers, sound consoles and peripherals
- Apply principles of acoustics to theatre venue analysis

- Select and place microphones appropriate to the production
- Set up signal flow and maintain proper gain structure
- Mix a live production on a digital audio console
- Build and execute a QLab show file with SFX and music cues
- Develop a sound design concept from script to cue list

Stage Electrics

- Understand electricity used in Theatrical lighting and sound
- wiring of components
- basic soldering
- Explain simple LAN network for use in a lighting system

Recommended Texts

- Gillette, J. Michael. Theatrical Design and Production (current edition). McGraw-Hill.
- Leonard, John A. Theatre Sound. Routledge.

Required Materials

- Access to Audacity (free download) or other sound editing software
- Access to ETC Eos Offline Editor (free download)
- Access to QLab if using a MAC, SFX6 if using PC (free mode sufficient for assignments)
- USB flash drive (minimum 16 GB) for console programming backups
- Vectorworks student license (free)

Grading

Assignment	Weight
Lab Participation & Other assignments	20%
Lighting Console Programming Project (Eos cue stack)	10%
Light Plot Drafting Assignment (Vectorworks)	10%
Sound System Setup	10%
QLab Show File Project (SFX + music cue build)	10%
Midterm Written Exam (Weeks 1–7 — Lighting)	10%
Sound Design Concept Document (script analysis + cue list)	10%
Final Practical Exam (console skills assessment)	15%
Final Portfolio Presentation (design concept + documentation)	5%

A: 90–100%	B: 80–89%	C: 70–79%	D: 60–69%	F: Below 60%

Turnaround Time

I strive to return assignments within 1 week of the due date. If that becomes unlikely, I will let you know when it can be expected.

Lab

As part of the hands-on training in this class, you will participate in a lighting installation and a lighting focus for one of the departments productions this semester. These occur 1pm-6pm during the week, you will be required to log 15 hours. Lab meeting days will be adjusted to accommodate the time required. During the second class, you will be able to submit your preferences. Every effort will be made to honor your choices.

Course Policies

Attendance

Treat this class as a production you are going to: show up and be on time.

3 Lates (1-15 minutes after the start of class) will count as an absence
2 Really Lates (15-30 minutes after the start of class) will count as an absence
After 30 minutes, lateness will be counted as an absence
After 3 absences, final grade will be lowered by a full letter grade for each additional absence

Life happens to us all. If there is a lateness or absence for a reason other than University approved activities, religious observances, medical emergencies of a close relative or yourself (documentation required), let's work towards a remedy together.

Late Work

Assignments submitted late are penalized 10% per calendar day unless a written extension is arranged before the due date. No work accepted after final exam week begins.

Collaboration & Academic Integrity

Collaboration on lab exercises is encouraged and expected. All written deliverables (concept documents, reflections, assignments) must be original work. Show files and VW drawings must be your own — submitting a classmate's file as your own constitutes academic dishonesty.

Generative Artificial Intelligence

Not allowed without prior consent from instructor

Software Access

All required software is available as a free student license. Installation guides and license links are on Canvas. If you encounter a licensing problem, contact the instructor before the session in which you need the software — "my software wasn't working" is not accepted as a reason for missed deliverables if the instructor was not notified in advance.

Classroom Environment

This course involves collaborative critique. Feedback should be constructive and respectful. Critique the design choices — not the designer.

Cellphones and outside communication can be a distraction to the speaker, to other students, and to yourself. Please silence and limit the use of your phones, smart watches, tablets, and computers unless being directly used for educational purposes. If there is an extraordinary need to have access, please speak to the instructor prior to the start of class.

Be kind to your colleagues. We will be having open discussions about design and technology, helping each other to understand techniques and processes.

On workdays, please dress appropriate to the task. Closed toed shoes and clothes you are ok getting dirty.

Our classroom is the theatre. There are no drinks or food allowed except for water that may be sealed.

All students are expected to contribute to a welcoming, professional environment consistent with industry expectations.

Topical Outline by Unit

Unit 1 — Lighting Fundamentals (Weeks 1–5)

Coverage: Physics of light, lamp and fixture technology, electrical safety, power distribution, DMX protocol, and hands-on hang and focus lab. Emphasis is entirely technical — students build equipment literacy before approaching design.

Unit 2 — Lighting Control & Programming (Weeks 5–7)

Coverage: ETC Eos console operation, cue building, effects, palette programming, magic sheet creation, and introduction to Vectorworks for light plot drafting. Students complete a full console programming project during this unit.

Unit 3 — Lighting Design (Week 6, integrated)

Coverage: Design principles, script analysis for lighting, mood and motivation, rendering concepts, and portfolio documentation. Students complete a midterm exam at the end of Week 7 covering all lighting content.

Unit 4 — Sound Fundamentals (Weeks 8–9)

Coverage: Acoustics, frequency response, microphone types and polar patterns, loudspeaker systems and coverage, signal flow, gain structure, and patch bays. Students complete a system setup lab and written line check report.

Unit 5 — Sound Control & Programming (Weeks 10–12)

Coverage: Digital console operation (DiGiCo/Yamaha), EQ, compression, reverb, VCA grouping, RF coordination, QLab architecture, cue building, matrix routing, and a full QLab show file project.

Unit 6 — Sound Design & Integration (Weeks 12–13)

Coverage: Sound design concept development, source acquisition and editing, live mixing workflow, calling conventions, and show-running. Students submit a complete sound design concept document.

Unit 7 — Integration, Industry & Finals (Weeks 13–16)

Coverage: Shared show control (OSC/MIDI integration), tech week protocols, union structures, career pathways, portfolio presentations, and practical finals assessing console programming and mixing skills.

Academic Integrity Standards and Consequences
According to UNT Policy 06.003, Student Academic Integrity, academic dishonesty occurs when students engage in behaviors including, but not limited to cheating, fabrication, facilitating academic dishonesty, forgery, plagiarism, and sabotage. A finding of academic dishonesty may result in a range of academic penalties or sanctions ranging from admonition to expulsion from the University.

ADA Accommodation Statement
UNT makes reasonable academic accommodation for students with disabilities. Students seeking accommodation must first register with the Office of Disability Accommodation (ODA) to verify their eligibility. If a disability is verified, the ODA will provide a student with an accommodation letter to be delivered to faculty to begin a private discussion regarding one's specific course needs. Students may request accommodations at any time, however, ODA notices of accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of accommodation for every semester and must meet with each faculty member prior to implementation in each class. For additional information see the ODA website at disability.unt.edu.

Emergency Notification & Procedures
UNT uses a system called Eagle Alert to quickly notify students with critical information in the event of an emergency (i.e., severe weather, campus closing, and health and public safety emergencies like chemical spills, fires, or violence). In the event of a university closure, please refer to the UNT Learning Management System (LMS) for contingency plans for covering course materials.

Retention of Student Records
Student records pertaining to this course are maintained in a secure location by the instructor of record. All records such as exams, answer sheets (with keys), and written papers submitted during the duration of the course are kept for at least one calendar year after course completion. Course work completed via the Blackboard online system, including grading information and comments, is also stored in a safe electronic environment for one year. Students have the right to view their individual record; however, information about student's records will not be divulged to other individuals without proper written consent. Students are encouraged to review the Public Information Policy and the Family Educational Rights and Privacy Act (FERPA) laws and the University's policy. See UNT Policy 10.10, Records Management and Retention for additional information.

Acceptable Student Behavior
Student behavior that interferes with an instructor's ability to conduct a class or other students' opportunity to learn is unacceptable and disruptive and will not be tolerated in any instructional forum at UNT. Students engaging in unacceptable behavior will be directed to leave the classroom and the instructor may refer the student to the Dean of Students to consider whether the student's conduct violated the Code of Student Conduct. The University's expectations for student conduct apply to all instructional forums, including University and electronic classroom, labs, discussion groups, field trips, etc. The Code of Student Conduct can be found at deanofstudents.unt.edu/conduct.

Access to Information – Eagle Connect
Students' access point for business and academic services at UNT is located at: my.unt.edu. All official communication from the University will be delivered to a student's Eagle Connect account. For more information, please visit the website that explains Eagle Connect and how to forward e-mail: eagleconnect.unt.edu/

Survivor Advocacy
UNT is committed to providing a safe learning environment free of all forms of sexual misconduct, including sexual harassment sexual assault, domestic violence, dating violence, and stalking. Federal laws (Title IX and the Violence Against Women Act) and UNT policies prohibit discrimination on the basis of sex, and therefore prohibit sexual misconduct. If you or someone you know is experiencing sexual harassment,

relationship violence, stalking, and/or sexual assault, there are campus resources available to provide support and assistance. UNT's Survivor Advocates can assist a student who has been impacted by violence by filing protective orders, completing crime victim's compensation applications, contacting professors for absences related to an assault, working with housing to facilitate a room change where appropriate, and connecting students to other resources available both on and off campus. The Survivor Advocates can be reached at SurvivorAdvocate@unt.edu or by calling the Dean of Students Office at 940-565-2648. Additionally, alleged sexual misconduct can be non-confidentially reported to the Title IX Coordinator at oeo@unt.edu or at (940) 565 2759.