

New York City College of Technology

Entertainment Technology Department

ENT-1270 Sound Technology, Section HD38 **2022 Spring Semester**

Instructor: Matt Werden

Email: mwerden@entertainmenttechnology.org. I will generally respond within 48 hours.

A note on Covid and class meeting policy:

This semester ENT1270 is a hybrid class that will meet synchronously in-person once per week. There will also be asynchronous work throughout the entire semester, generally one main assignment per week. We will need to remain flexible throughout the semester, any relevant updates on class meetings will be sent via Blackboard Announcement.

Class Meeting Time:

W 4pm-5:40pm, Room v014

Course Description:

ENT1270 is an overview of the basic properties of sound, its characteristics, fundamental concepts, and problems. Students will learn both to understand and hear these basic components of sound. The concepts of audio (as opposed to sound), storage, playback and reinforcement are introduced. Students will learn good audio working practices, and how to understand audio paperwork and be able to assemble small systems based on that paperwork. Students will begin to assemble the personal tools required for professional work.

Required Texts:

For Sound II there is a no cost OER website for all class materials. The OER is available at <https://openlab.citytech.cuny.edu/ent1270/>. You will check the OER before class meetings, this involves video links and/or websites to browse and read. Then we will meet weekly for class discussion, lecture, and questions on the material.

Attendance/Promptness:

If you have a legitimate reason for missing a class/assignment or if you will be late, you must contact me (see above) **BEFORE** class begins. I guarantee if you contact me we can find a solution to any work you must miss. Any missed work due to unexcused absences will receive zero credit.

Computers and Internet Access:

Blackboard, Zoom, internet, and email access are required for this class. All class materials for the entire semester are available on the OER site. Announcements, quizzes, and "written" exams will be done via Blackboard.

Grades:

Your grade will be determined as follows:

Blackboard Midterm and Final Exam	25%
Practical Midterm and Final Exam	25%
Labs	20%
Assignments/Quizzes	20%
Class participation, Attitude, Attendance	10%

NOTE: If you miss a quiz or test due to an unexcused absence, you will receive a zero for that test or quiz. Quizzes are typically given to ensure that you do the reading, and may contain questions not covered in class. Do the reading!

Please see the departmental guidelines regarding grade policy, academic integrity, production attendance policy, minimum work hours outside the classroom, etc.

Required Tools:

Throughout your career as a student in the entertainment technology program, you will be required to add to an inventory of tools. By this time should already have a flashlight and multi-tool at a minimum. Additional tools which need to be purchased immediately include:

- Over the ear headphones, capable of 1/4" **AND** 1/8" connection
- 1/8" TRS to dual 1/4" TS adaptor cable, <http://hosatech.com/product/cmp-150/>

Learning Outcomes:

After completing this course, students should be able to:

- Describe basic sound and audio concepts including, frequency, phase, amplitude and dB
- Implement basic live sound systems with proper gain structure
- Identify and differentiate key parts of a sound system
- Compare and contrast the differences between types of sends on a mixing console (pre and post fade, aux, etc.)
- Operate basic audio editing software
- Describe the way that hearing works
- Calculate Nyquist frequency
- Describe an octave and calculate how it changes in frequency
- Describe simple harmonic motion.
- Describe the difference between dynamic and condenser microphones
- Recognize and identify different microphone patterns.
- Describe what feedback is, and suggest different ways to eliminate or minimize it.
- Differentiate between different types of audio connectors
- Describe phantom power and recognize when it should be used.