

Syllabus

Fundamentals of Engineering Acoustics

ECE 473

Fall 2021

Instructor: Professor Michael L Oelze, PhD

Office: Beckman Institute 4251, Ph: 3-9226

Office hours: 10:00-11:00am T (ECEB 2084); 2:00-3:00pm Th (Beckman 4251)

All office hours will simultaneously be on zoom at:

<https://illinois.zoom.us/j/93159564409?pwd=aTJlV1ErMnllYm5vcFVsWUhoeGFEdz09>

Email: uelze@illinois.edu

Text: "Fundamentals of Acoustics," 4th edition, Kinsler, Frey, Coppens and Sanders (John Wiley & Sons, New York, 2000)

Grading: Homework 25% (Homework typically due each Friday)
(no late homework accepted)
Exams (2 @ 20%) 40%
Final Exam 35%

All exams will be open notes and open book.
No phones or calculators allowed.

Graduate students taking the course for 4 hours rather than 3 hours should write a paper dealing with some aspect of acoustics that will be worth one third of their homework grade (typically 8 pages with minimum of 5 peer-reviewed references).

Online Students: Homework solutions can be sent on the due date as a scanned pdf to:
uelze@illinois.edu

Grader: Andres Coila (email: acoila@illinois.edu)

Course will cover:

Chapters 1 and 2 (Basics)

Chapter 1: 1-7

Chapter 2: 1-8, 9a, 10

Chapters 5, 6, 8, 9 and 10 (Transmission Phenomena)

Chapter 5: 1-12

Chapter 6: 1-6

Chapter 8: All (?)

Chapter 9: 1-2

Chapter 10: All

Chapters 7 and 14 (Production/Reception)

Chapter 7:1-6, 8

Chapter 14: 1-5, 7-13 (?), most likely just 7

Lecture notes are available at <https://courses.engr.illinois.edu/ece473/index.htm>

Login with A/D password

Recordings of lecture can be found at: <https://echo360.org/>

COVID

Following University policy, all students are required to engage in appropriate behavior to protect the health and safety of the community, including wearing a facial covering properly, disinfecting the immediate seating area, and using hand sanitizer. Students are also required to follow the campus COVID-19 testing protocol if not vaccinated.

Students who feel ill must not come to class. In addition, students who test positive for COVID-19 or have had an exposure that requires testing and/or quarantine must not attend class. The University will provide information to the instructor, in a manner that complies with privacy laws, about students in these latter categories. These students are judged to have excused absences for the class period and should contact the instructor via email about making up the work.

Students who fail to abide by these rules will first be asked to comply; if they refuse, they will be required to leave the classroom immediately. If a student is asked to leave the classroom, the non-compliant student will be judged to have an unexcused absence and reported to the Office for Student Conflict Resolution for disciplinary action. Accumulation of non-compliance complaints against a student may result in dismissal from the University.

Access to online recordings:

Engineering's Echo360 service can be accessed here: <https://echo360.org>

To login to Echo360, students will need to enter their University of Illinois email address. Students will then be prompted to authenticate using their Active Directory (AD) password. Once authenticated, students should see a dashboard page displaying content for which they are listed as an enrolled as a student.

Student Echo360 user accounts will be auto-generated based on enrollment rosters within 24 hours.

Further documentation on how to use the Echo360 platform for instructors can be found here: <https://answers.uillinois.edu/illinois.engineering/page.php?id=98416>

For students: <https://answers.uillinois.edu/illinois.engineering/page.php?id=81743>