

Physics 130: The Acoustics of Music and Speech Online/Blackboard

Textbook: *The Fundamentals of Sound Science* by Elena Borovitskaya. You may use the most economical and environmentally friendly method you can find.

Instructor

Melinda Whitfield Thomas, MS

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Email is the best and quickest method of communication with me. I respond to ALL emails from students. If you do not get a response within 24 hours I did not receive your email. Please resend it.

Office hours by appointment

Class Objective

The fundamental laws of mechanics and wave motion are studied with particular emphasis being placed upon their application to the production and control of music and speech. Laboratory experiments and field trips are an integral part of the course.

Learning Outcomes

Understanding the fundamentals of sound production, propagation and perception in relation to music and speech successful students will be able to:

1. Demonstrate an understanding of the methods of science inquiry as used in the acoustics special project.
2. Explain basic concepts and principles in the sound and acoustics areas.
3. Apply scientific principles to interpret and make predictions used in the labs setting applied to sound and acoustics.
4. Explain how scientific principles relate to issues of personal and/or public importance from an application of acoustics to sound production and usage.

Grades

Your grade will consist of BlackBoard assignments, labs and quizzes (20%), 2 or 3 regular exams (20%), a comprehensive final exam (30%) and a special project (30%).

Late work **WILL NOT** be accepted without PRIOR justification. Make-up exams **WILL NOT** be given unless the absence has been approved prior OR a doctor's statement is provided.

Special Projects

You will be required to present a special project on a topic of your choosing related to the acoustics of music and speech. Projects can be PowerPoint presentations, laboratory experiments, video presentations or research papers.

PowerPoint presentations, laboratory experiments and video presentations will be a minimum of 5 minutes long unless they are done by a group. The minimum time will be adjusted based on the size of the group presenting. In the case of a group presentation, each participant must contribute to the project. You will not only be graded by me but by everyone in your group.

Project papers will be a minimum of 7 pages double spaced (Including cover page, 5 full pages to text and references page.) They will be graded on content and grammar.

Students with disabilities:

Students with disabilities who require accommodations (academic adjustments and/or auxiliary aids or services) for this course must contact the Office for Student Disability Services, Room 445, Potter Hall. The OFSDS telephone number is (270) 745-5004. Per university policy, please do not request accommodations directly from the professor or instructor without a letter of accommodation from the Office for Student Disability Services.

Safety:

Review emergency exits and procedures during the first class period.

Academic Honesty: Students are expected to adhere to the WKU standards of integrity and honesty with regards to cheating and plagiarism. All work you turn in must be your own, WKU uses *TERM PAPER*© to check against web resources for plagiarism, any violations will be handled by the Judicial Board.

Students caught cheating on quizzes or exams will receive a grade of zero for that particular quiz/exam and will be asked to sit elsewhere during subsequent quizzes/exams.

If you have questions or need more clarification about anything regarding this class, you should ask me. I will be happy to help you in any way I can.