

TechTrendsetter Highlight

Dr. Joshua Hauser
Dr. Andy Pardue

Agenda

Introduction to
the
TechTrendsetters
Grant

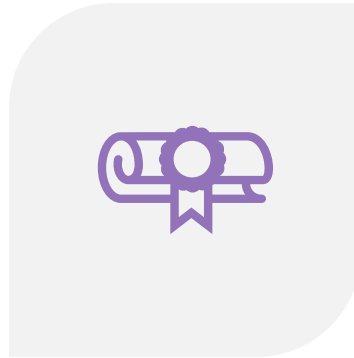
TechTrendsetters:
Dr. Joshua Hauser
Dr. Andy Pardue

Q & A

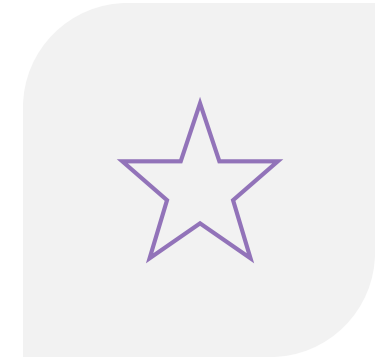
CITL TechTrendsetters Grant



The TechTrendsetters Grant is designed to boost faculty engagement and proficiency in **incorporating emerging technologies, tools, and digital literacy** into their curricula.



Selected grantees will complete the **Online Learning Consortium (OLC) Online Teaching Certification**, which includes **three elective workshops**, as well as working directly with one of our **Instructional Designers** for the duration of the grant and beyond.



In addition, grantees receive **extra salary support** and **funding for technology**.

Dr. Joshua Hauser

Professor of Trombone
School of Music

Online Teaching Certificate Final Presentation

Dr. Joshua Hauser | Professor of Trombone

MUS 4510: Computer Applications in Music



Tennessee
TECH

Course Navigation



Tennessee TECH MUS-4510-001 - Compute... Joshua Hauser as Banner_Student

Content Assignments Quizzes Discussions YuJa Media Grades Course Tools Resources

MUS-4510-001 - Computer App In Music

Updates

There are no current updates for MUS-4510-001 - Computer App In Music

Content Navigator

Return to Last Viewed: Most common types of microphones

Handouts and Worksheets 25%

Videos and Video Quizzes 27%

Announcements

Welcome to MUS 4510: Computer Applications in Music

Joshua Hauser posted on Jan 5, 2025 11:33 PM

Please take some time to explore the website to learn more about the course. The Syllabus and Course Schedule are located under the Content tab in the purple bar at the top of the screen.

- Our students should all be familiar with iLearn (D2L) by the point that they take my class, but if they aren't everything can be found in the purple navigation bar at the top of the screen.
- I also use Course Announcements to clarify any questions that students may have during the course as well as any changes in the schedule that may happen.



Course Navigation

All assignments, discussions, and handouts are on iLearn

- **Content page:** Syllabus, course schedule, and handouts.
- **Assignments & Discussions:** Found under respective tabs with due dates listed there and in the calendar.
- **Announcements:** Check regularly for updates, changes, and clarifications.

MUS 4510: Computer Applications in Music

Course Schedule

Date	Topic	Assignment Due
Friday, January 17	Class Intro	
Monday, Jan 20	MLK Holiday – no class	
Wednesday, Jan 22	Tonal Energy Demo	
Friday, Jan 24	Intro to Dorico	HW for the weekend: Watch Getting Started with Dorico Videos
Monday, Jan 27	Getting Started with Dorico Worksheet - TOGETHER IN CLASS	Dorico SE must be installed on your personal device
Wednesday, Jan 29	Work Day – Grasshopper Duet	Getting Started with Dorico Worksheet Due
Friday, Jan 31	Assign lead sheets	Grasshopper Duet Due
Monday, Feb 3	Intro to iReal Pro	Dorico Lead Sheets Due
Wednesday, Feb 5	Approval of Solos/Etudes for Dorico copying Work Day – In Class	iReal Pro Lead Sheet due
Friday, Feb 7 (Audition Day)	Work Day – In Class	
Monday, Feb 10	Yamaha Stagepas 600BT PA system Demo	Dorico Lesson Music Due Tonal Energy Practice Due
Wednesday, Feb 12	Microphone Intro Videos	HW for the weekend: Watch Microphone Videos
Friday, Feb 14	Festival of Winds and Percussion - no class	
Monday, Feb 17	Intro to GarageBand/Audacity	iReal Pro Practice Due
Wednesday, Feb 19	Work Day - Practice/Record	
Friday, Feb 21 (Audition Day)	Work Day - Practice/Record	



Learning Objective(s)

Create multi-track videos involving several musicians using Filmora

Learning Activity

Create a collaborative audio/video project. Students are required to participate in at least two other student's projects as well as their own.

- a. Select a piece, either already for 4+ parts or something that you will arrange, to use for the final project. The length of each project will be in the neighborhood of 1.5-2.5 minutes. This must be approved by Dr. Hauser before continuing.
- b. Work with the other students in the course to choose partners who will record individual audio and video for each other. You should choose students who major in different instruments than you. Everyone will play on 3 projects, their own plus two others. Partners will be selected by random drawing in class so that every project meets these expectations.
- c. Complete Dorico notation for your project and provide a click track and parts for everyone who is playing for you.
- d. Practice your music for your selections and those of the other students with whom you are collaborating.
- e. Record audio for the selections you are responsible for to the best of your ability and edit to match up with click track to send to your Project Manager.
- f. Once the audio is complete, record a video for your part by sidelining as discussed in class.
- g. Edit the combined audio. Create a performance track which leaves out one part for you to perform live in class.
- h. Perform along with edited audio track in class.
- i. Combine the audio and video for your project and edit to complete a multi-track video
- j. Post your video to YouTube with an unlisted link.
- k. Submit the following in a single word document to the appropriate assignment dropbox folder in ilearn:
 - o Link to your video
 - o A PDF of your completed score and parts

Instructional Design

- The main assignment for this course is a group project that includes activities that encourage **student-instructor, student-content, and student-student interaction** through use of in-person and online discussion and hands-on experience with music applications and technology.
- Video content is also provided for students to watch on their own, allowing time for more interaction with the professor and each other during class.



Learner Support

- There are clear directions to students about how to access institutional and course specific support. This is located under the **Course and Instructor Information** and on the **Announcements** page.
- Additionally, students have access to my office hours and the best way to contact me. Students are encouraged to reach out and ask questions, because in the end it may help a peer.

Additional Resources

Technical Help

If you are experiencing technical problems, visit the [myTech IT Helpdesk](#) for assistance.

If you are having trouble with one of the instructional technologies (i.e. Zoom, Teams, Qualtrics, Respondus, or any technology listed [here](#)) visit the [Center for Innovation in Teaching and Learning](#) (CITL) website or call 931-372-3675 for assistance.

For accessibility information and statements for our instructional technologies, visit the [CITL's Learner Success Resource page](#).

If you are having any specific issues with the software and apps that we are using, contact me ASAP, and also ask your colleagues. I have found that there are often fairly easy solutions to problems where we simply are overlooking something in the heat of the moment and talking it through with someone can often help.

Tutoring

The university provides free tutoring to all Tennessee Tech students. Tutoring is available for most classes and subjects, as well as writing, test prep, study skills, and resume support. Appointments are scheduled, so contact the [Learning Center website](#) for more information.

Health and Wellness

Counseling Center

The Counseling Center offers brief, short-term, solution-focused therapeutic interventions for Tennessee Tech University students. The staff of the Counseling Center is available to assist students with their personal and social concerns in hopes of helping them achieve satisfying educational and life experiences. To learn more or schedule an appointment, visit the [Counseling Center website](#).



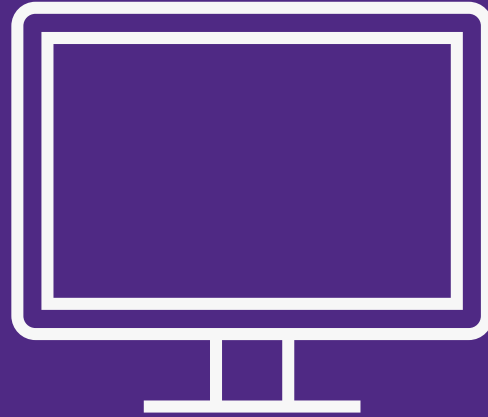
Learner Assessment

Selected Course Goals and Assignments

- Clearly notate sheet music using Dorico
- Operate and implement a small to medium PA system in live performance
- Demonstrate multiple ways to optimize practice sessions using Tonal Energy and iReal Pro mobile and desktop apps
- Record demonstration and audition videos
- Create multi-track videos involving several musicians using Filmora

Discussions and Quizzes

- Students will use online discussion tools to communicate with each other about their final projects and to share audio and video files.
- Video instruction incorporates grades for watching each video with some including embedded quizzes to reinforce learning objectives.



Technology Use

Students will learn to use the Yamaha StagePas 600 PA system, a variety of inexpensive microphones, and digital audio interfaces for recording and live sound reinforcement.

Technology Use



Software and Apps

- As a computer applications-based course, students will be expected to use Tonal Energy and iReal Pro, both available for phones or tablets.
- Dorico, Audacity, GarageBand, and Filmora will be available in the School of Music computer lab, for students who do not wish to purchase their own copies.





Key Learning Points

Foundation Course

- Establish practical learning objectives and multiple forms of assessment to measure progress.
- Consider using AI to help construct rubrics that are easily understood by students and instructor alike, to reduce subjectivity in grading.
- Create a learning community where collaboration and seeking each other's input is a welcome part of the learning process.

Key Learning Points & Impact



1

Elective 1 - ADA & Digital Accessibility

Course and activity design can be done from the outset to promote inclusion and avoid issues where accessibility could affect student engagement and learning. Incorporate more project-based assessments rather than time sensitive quizzes and tests.

2

Elective 2 - YouTube for Teaching & Learning

Use Creative Commons and Public Domain sources to avoid copyright issues. Be aware of how lighting can affect the visual aspects of videos. Create and edit captions carefully to aid in instruction and clarity of presentation..

3

Elective 3 - Podcasting for Teaching and Learning

Tips on hardware selection, how to script your podcast in advance of recording, and effective methods of promotion and distribution.

Learning Reflections:

- Incorporate learning objectives earlier in course design with a goal of approaching things in a way that will be accessible to all students without need for ADA modifications.
- Continue with a hybrid format while looking for opportunities to use videos and other activities for individual instruction outside of class can provide more time for personal interaction between students and between the student and instructor.
- Look for opportunities for personal growth as an instructor. Consider taking additional courses for professional development when time allows.
- Seek out ways to improve engagement and retention of concepts and life skills that students can use post graduation.



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Thank you!

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Dr. Andy Pardue

Senior Lecturer of Mechanical Engineering
College of Engineering

Trendsetter Grant: 3D Visualization

Andy Pardue, Senior Lecturer

Mechanical Engineering



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OLC Training

- Foundation Course
- Electives
 - ADA
 - Assessment Strategies
 - Infographics



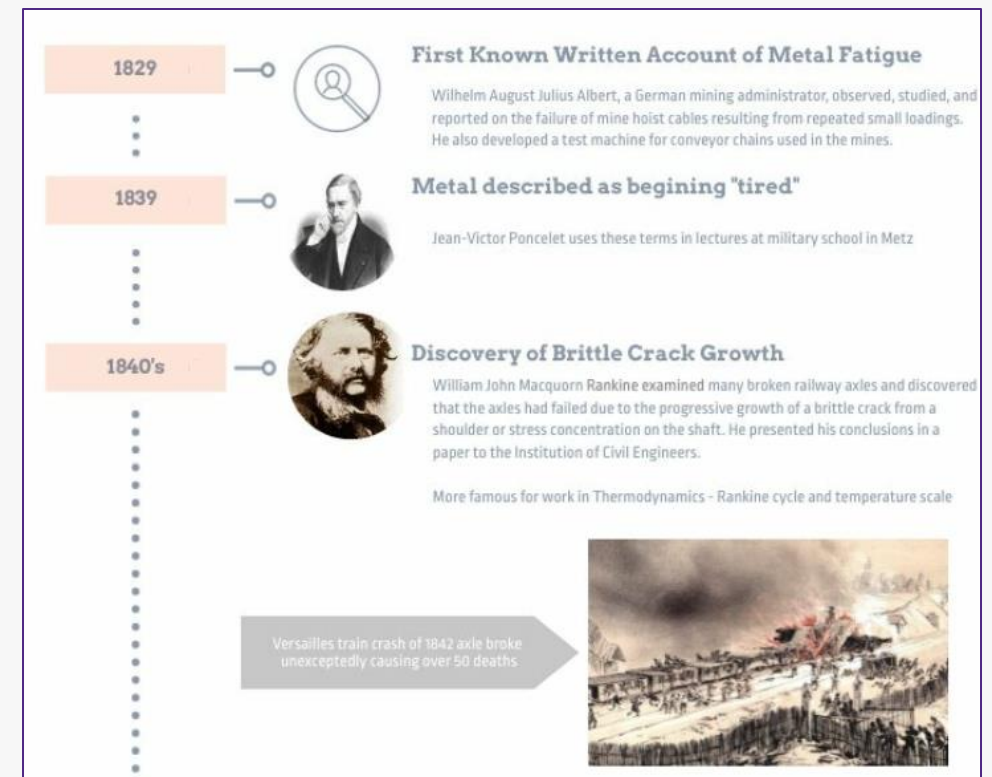


Some Takeaways

Assessment

- Design of assessment is a critical aspect of course design
- How do you measure assessment quality?
 - If a high percentage of students are incorrect on a problem. Why?

Lots of tools for the creation of infographics



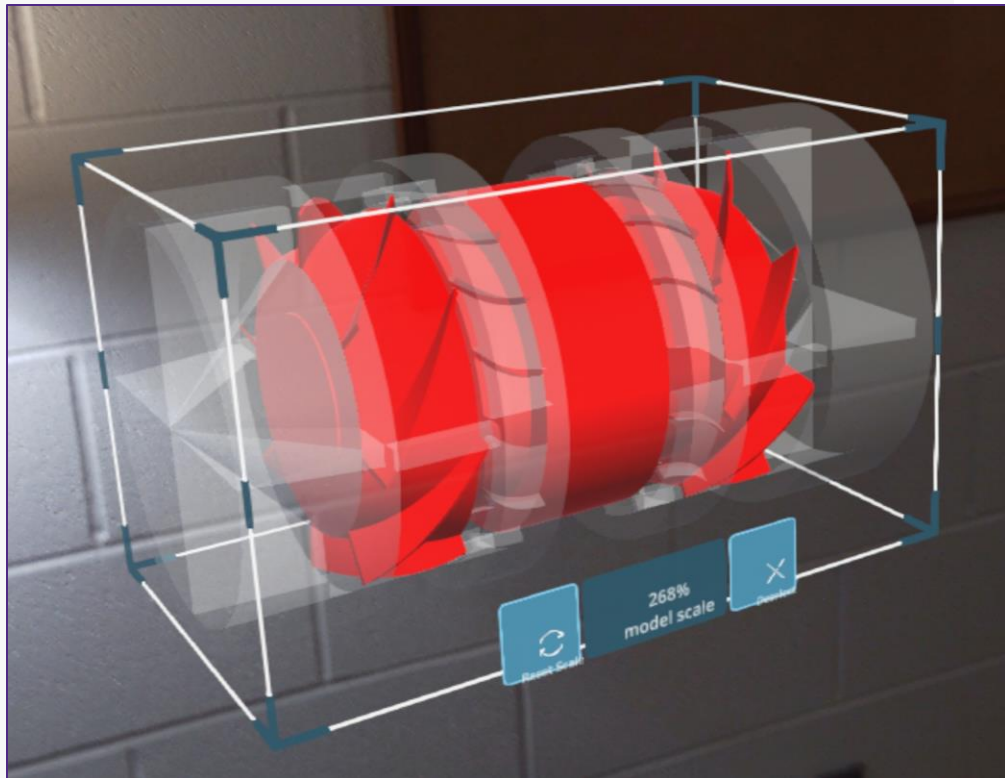
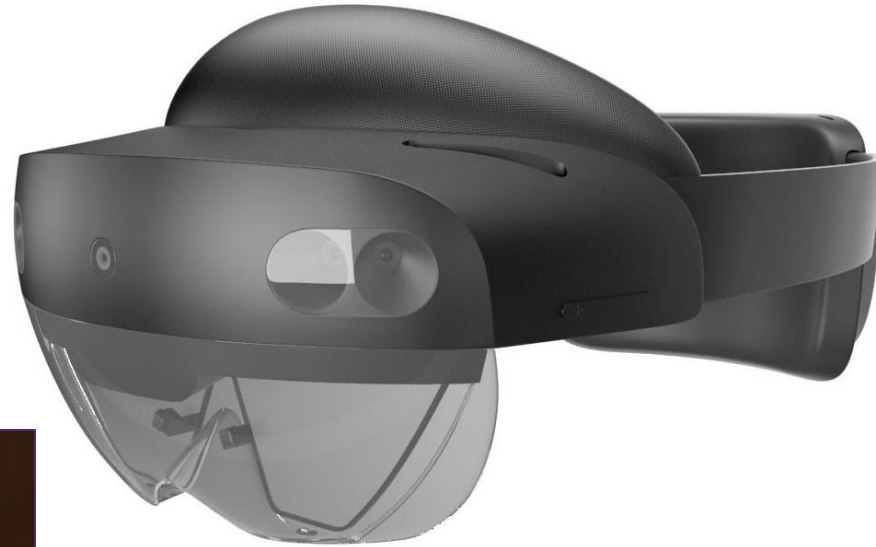
Trendsetter Work

- Applying 3D Visualization Tools to Aid Learning
- Apply Augmented Reality Tools
 - How do I make the models
 - Luckily, the engineering software tools can output the correct formats
 - How to display the models
 - MS Hololens 2
 - AR Tools on Phone



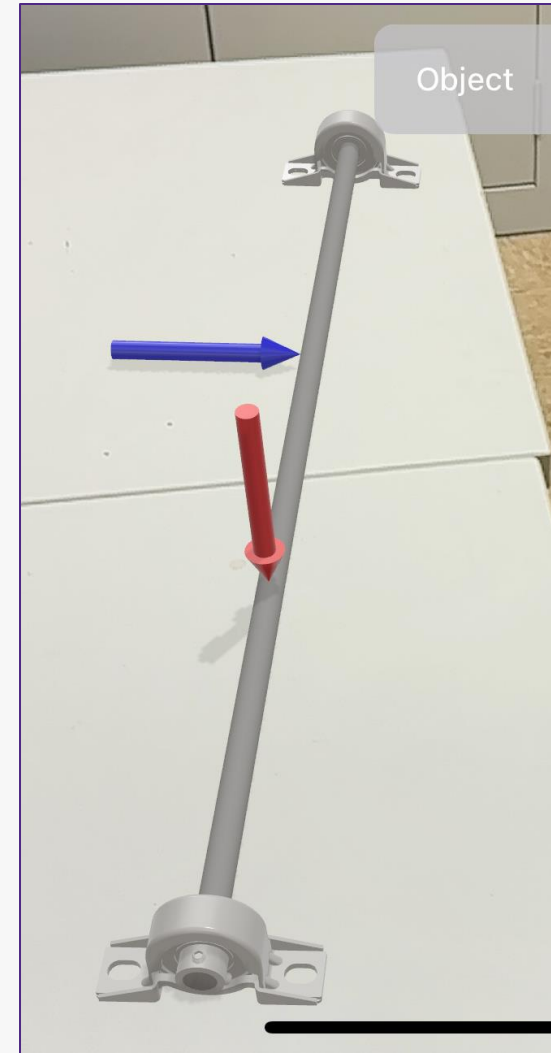
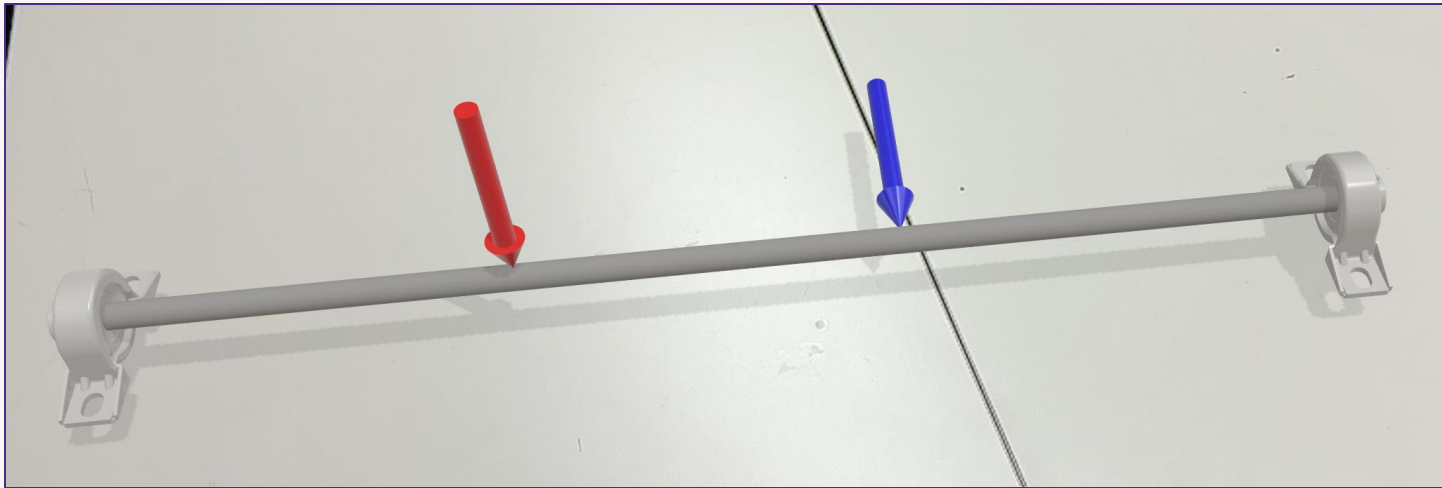
MS HoloLens 2

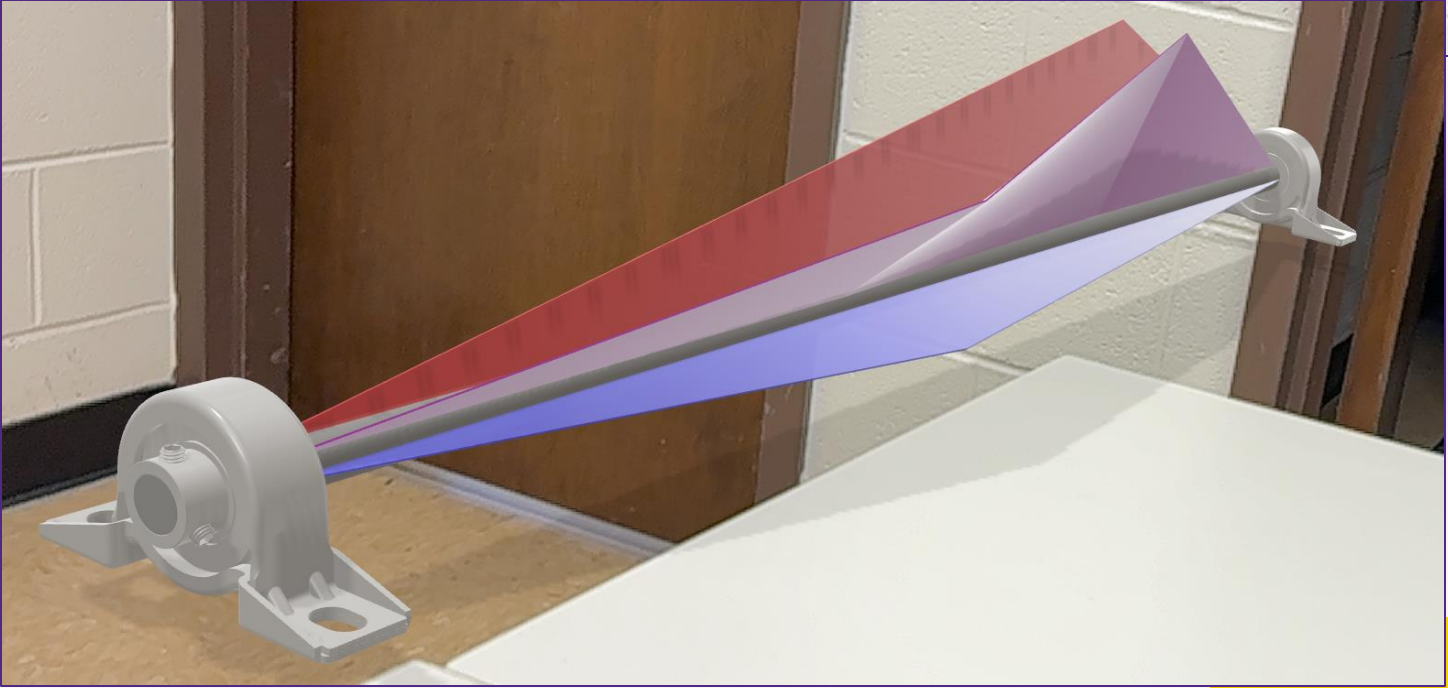
- Immersive
- Expense will limit the impact



Phone AR Tools

- Less Immersive
- Widely Available





Student Feedback

- My initial thoughts were for more advanced analysis results
 - Grad students love it, undergrad not so much
- The undergrad students are looking for reinforcement of more basic ideas
 - The phone AR is an example of a homework problem
- Currently, I am working with Dr. Sally Pardue on examples for a 3000-level course



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Thank you!

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Thank you!

Resources:

- [CITL TechTrendsetters Grant: Redefining Classroom Boundaries](#)
- [Online Learning Consortium](#)

Questions,
Comments,
Concerns?

[Feedback Survey](#)

Next Week's Session:
Updating your Course
Content with Creator+

[Register](#)