

Introduction to Recording and Editing Podcasts with Audacity

Digital Integration Teaching Initiative

ENGW 1111: First Year Writing

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Workshop Objectives

- Learn best practices for audio recording
- Learn about and explore Audacity as a podcast editing tool
- Learn how to:
 - Record audio
 - Clip audio
 - Add/move/delete tracks
 - Add sound effects and/or background music
 - Save and export projects
- Link to module materials: <https://bit.ly/sp26-engw1111-audacity>

Best Practices for Podcasting

General Best Practices

- **Test your mic** and technology before you start.
 - Record some test audio and play it back before you begin.
- **Have a plan** for the conversation and transitions.
 - Give yourself a script. As you record, mark out spaces for transitions in the recording (topic-to-topic, parts of the episode).
- **Prepare phonetic pronunciations** for names or jargon and write out long numbers in full (e.g., "twelve thousand, four hundred and two" vs "12,402")
- Include **transcripts for accessibility** (use software like Otter AI).
- Use **open access media/music** ([BBC Sound Effects](#), [Incompetech](#), [YouTube](#)).

Expressing Research Verbally

- If your podcast includes formal research or numerical data, remember that the way you *write* about research is different from the way we *talk* about it
 - For example, in an essay, you might write something like, “Sullivan et al. (2025) found that 98% of students across 60% of the universities in the U.S.A. report satisfaction with at least 50% of their courses (Sullivan et al., 2025).”
 - However, this format of sharing information does not translate as well to speaking and listening, with lots of numbers/data listed back to back, academic shorthand that makes sense written but is harder to catch while listening (e.g., “et al.”), etc.

Best Practices for Expressing Research

- If you are reporting numbers or data, make sure that you're going slowly enough that listeners can meaningfully catch them
- Pick and choose which sources to quote directly or which data to cite explicitly (especially since with all citations, you will have to provide your sources in some kind of bibliographic format) so that listeners aren't overwhelmed with data but can focus on the most meaningful points
- In-text citations do not translate the same in conversation.
 - E.g., **written**, "This thing happened (Sullivan et al., 2025)."
 - E.g., **spoken**, "In a 2025 study on this one thing, Sullivan and colleagues found that this other thing happened."

Getting Started: Tips for Recording Audio

- Record test audio and adjust mic volume if necessary.
- Record a few seconds of silence at the start and end of each track
- Begin way in advance, and do several takes.
 - Editing often takes much longer than the recording itself!
- Speak slowly, clearly, and conversationally.
 - If you use too many “filler words” (um, like, so) you can always edit them out later. Stop recording and start again at the top of the sentence to avoid jarring sound cuts in post-production.

Environmental Considerations

- Ideally, find a room with good sound absorption to prevent the “echo effect.”
 - **Yes:** carpet, cushions, bookshelves, clothes (bedrooms, closets).
 - **No:** larger spaces with hard, smooth surfaces (kitchens, bathrooms).
- Put some **distance** between yourself and the microphone (depending on your equipment).
 - Being too close can make the audio too loud or garbled sounding. If you are positioned too far away, the audio will be too quiet or too muffled to salvage.
 - Know where your microphone is located and keep it clear of papers/other objects.

Environmental Considerations cont'd.

- Use headphones when recording and editing.
 - After you finish editing, listen to the file without headphones to see where the audio is too loud/quiet when played in a space.
- Take ambient noise into consideration.
 - A/C units, refrigerators, traffic, pets, roommates, loud clothing, etc.
- Stay hydrated!
 - Keep a drink nearby (water, juice, etc.) to soothe your throat and keep it relaxed.

Recording Considerations for Interviews

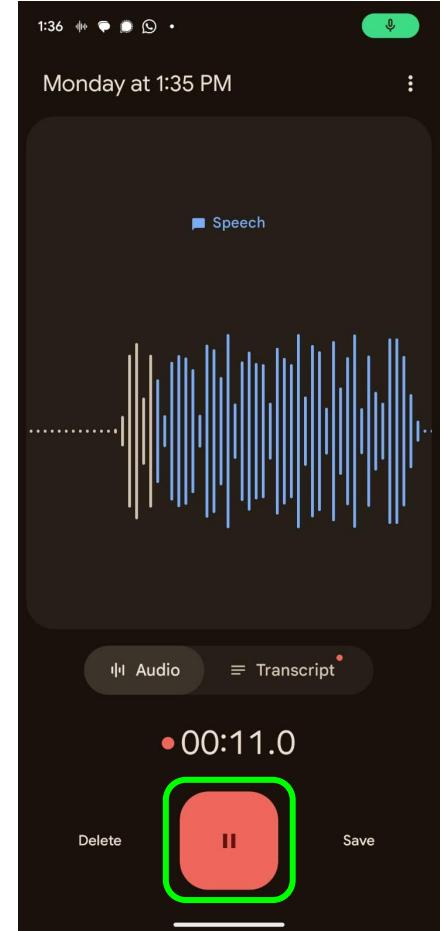
- **Remote recording** (via Skype, Zoom).
 - If you record via Zoom, **save your recording to your computer**, not the cloud.
- **Ease into the interview** with low-stakes conversation
 - Interviews are like playing catch. Start with questions that allow everyone to get comfortable. Be yourself!
- **Don't rush**, and know you can start over
 - You don't need to get everything in a single take, and you won't use all the audio that you record. So don't be afraid to pause frequently and remember you can start over (or cut something altogether!)

Recording From a Phone

- Smartphones have become a very common way to record interview audio. Even professional journalists now primarily use their smartphones.
- Depending on the phone you have, the app you use will be different—any app that can record audio will work. These free apps are a good starting place:
 - Recorder (Google LLC) for Pixel phones
 - Voice Memos (Apple) for iPhones
 - Samsung Voice Recorder (Samsung) for Galaxy

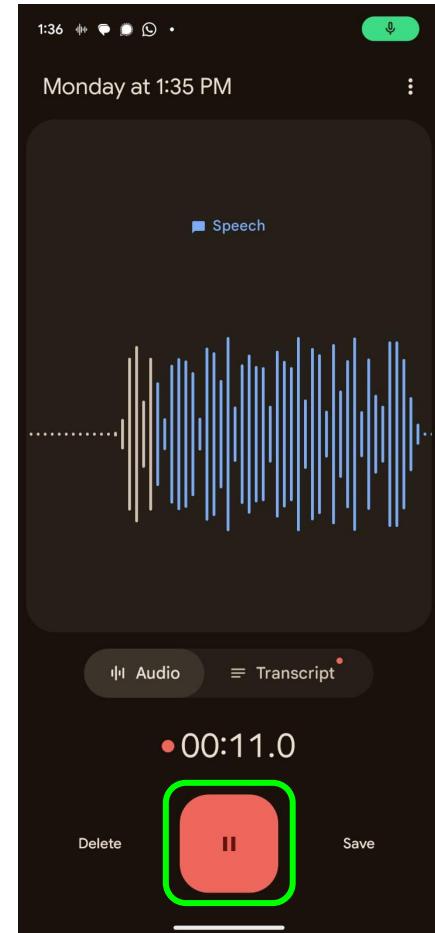
Using Audio Recording Apps 1/2

- These apps universally use a big, red button to start recording. This slide shows Google's Recorder app, but all of these buttons will be very similar regardless of the app you are using.
- If you want to take a short break in your recording you can hit **pause** (highlighted in green). This will stop the recording until you hit record again, but it won't end the recording as a whole.
 - To get to the pause button in Apple Voice Memos, swipe up on the recording while it's running.



Using Audio Recording Apps 2/2

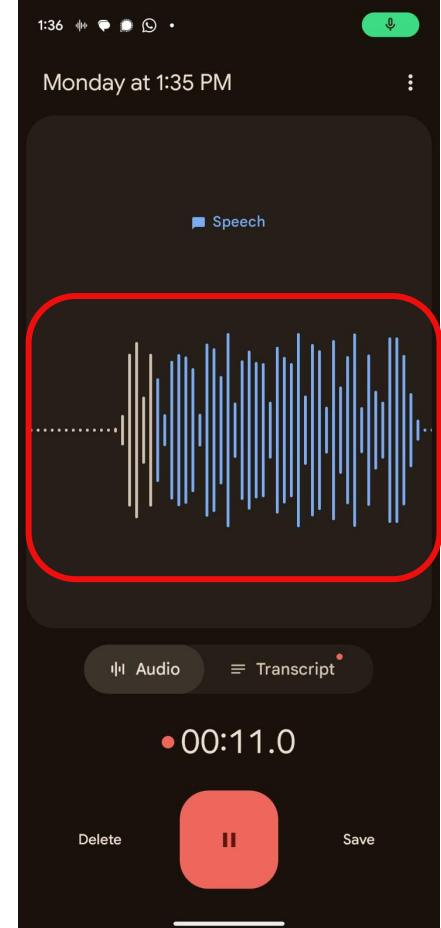
- Finally, when you're done recording remember to hit **save or stop** (often represented by a square) depending on your app. This will end the recording altogether and let you send it to your computer.
- Be mindful of how your data and the recorded audio is stored on different recording apps.



Monitoring Your Recording

While you are recording, the app will show a **waveform** (highlighted in red), which shows the current audio input

- **Make sure to check your waveform intermittently as you record** (especially at the beginning)
- **If you aren't seeing any waveform or it is very small,** the phone is likely **not picking up your audio**
- The peaks and troughs of the wave show when it is picking up more and less audio. This should generally match the louder and quieter parts of your interview recording, though don't worry if it doesn't seem to be completely precise.

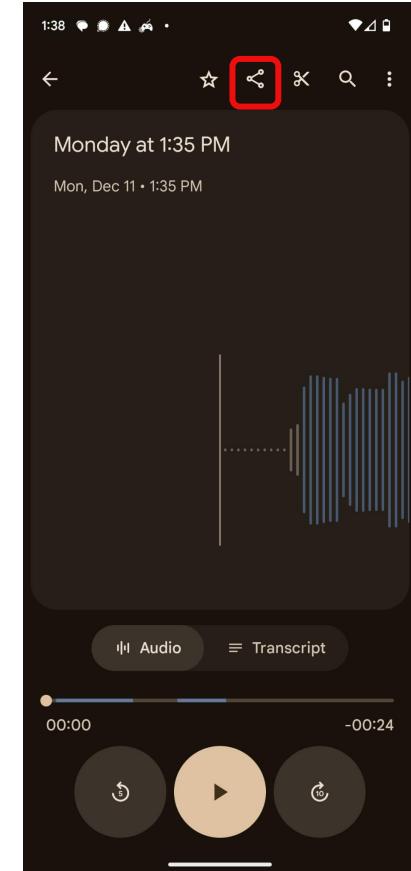


Getting the Audio From Your Android

The easiest way to get the file from your phone to your computer will be to use the **share** function. Look for a symbol like the one highlighted on the right.

- From the share menu, you will be able to send the file to yourself in various forms, such as email.
- Sometimes the file size may exceed the limit for email, which is where Google Drive can work better

As soon as you have files on your computer, you can move on to audio editing!

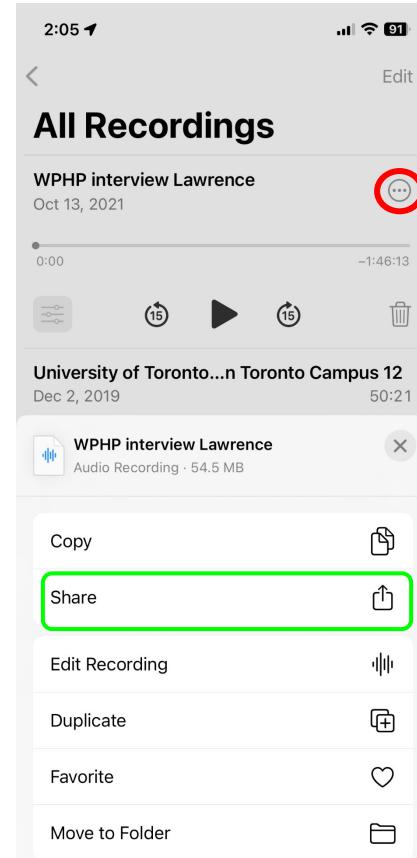


Getting Audio From Your iPhone

To get audio out of Voice Memos, click the three dots (highlighted in red) and select “share” (highlighted in green).

You'll need to pick a method that works for you:

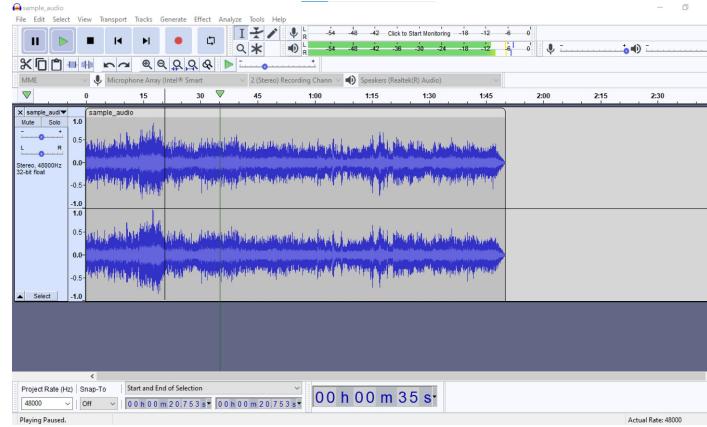
- Airdrop and iCloud work.
- If you download the app for Drive or Dropbox (or similar), you can send the file to those.
- It will probably be too big a file to email to yourself.



Making Podcasts: Audacity

What is Audacity?

Audacity is a free **multi-track** audio editor and one of the more popular free audio editors used for creating podcasts.



Multi-track: the ability to have different layers of audio in one clip.

Downloading Audacity

<https://www.audacityteam.org/> —Audacity is platform-agnostic!

Audacity is free software and developed by volunteers.

Audacity for Windows

Windows 10/8/7/Vista (XP support has officially been dropped)

Audacity for Mac OS X / macOS

Mac OS X/macOS 10.7 and later.

Audacity for GNU/Linux

Source code

For PC users: download **Windows Installer**

For Mac users: download **MacOS.dmg**

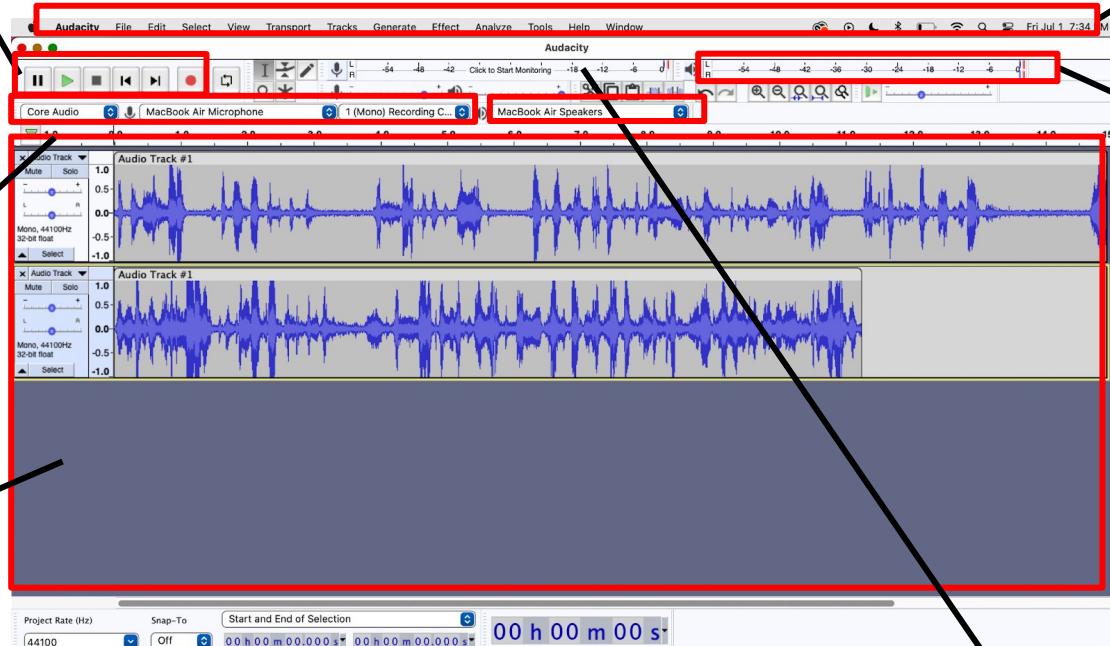
DOWNLOAD	FILE	SIZE	VERSION	ANTIVIRUS
Audacity Windows Installer	Signature	26.6 MB	2.32	0 / 15
Audacity Windows Zip	Signature	13 MB	2.32	0 / 15
Audacity macOS DMG	Signature	36.2 MB	2.32	0 / 15
Audacity Linux Source	Signature	8.6 MB	2.32	0 / 15
Audacity Manual	Signature	20.2 MB	2.32	0 / 15
Audacity macOS 2.1.1-DMG (screen reader accessible)	Signature	38.6 MB	2.11	0 / 15

Anatomy of Audacity

Main buttons (L-R):
pause, play, stop,
fast-forward/
backward, record

Microphone,
volume,
input, and
output

Recordings
(audio tracks)
will display in
this window



Editing, saving, effects, transporting
or exporting the recording

Output
Volume Level Monitor:
shows the
loudness of
each track in
real-time
*Tip: try for -12
to -6db*

Other Audacity tools

Key Terms

- **Track:** a single audio channel or stream.
 - **Multi-track:** an audio recording or channel with more than one track or recording of sound.
- **Clip:** a section of audio, often made with the **split** tool.
- **Waveform:** the curve within a track showing the duration and volume of individual sounds.
- **Mixing:** the process of audio production, or mixing tracks of recordings, music, and other desired media.
- **MP3 File:** the most generally used audio file format. Others include .wav and .mp4.

Basics: Audacity & Recording Audio

Recording



Make sure your **microphone** is working by checking to see that it is selected in the microphone section of the screen. Each computer will have different microphones, so check your sound settings for your model.



To **record**, click the button with the **red circle**.



Hit the **pause** button to pause a recording.



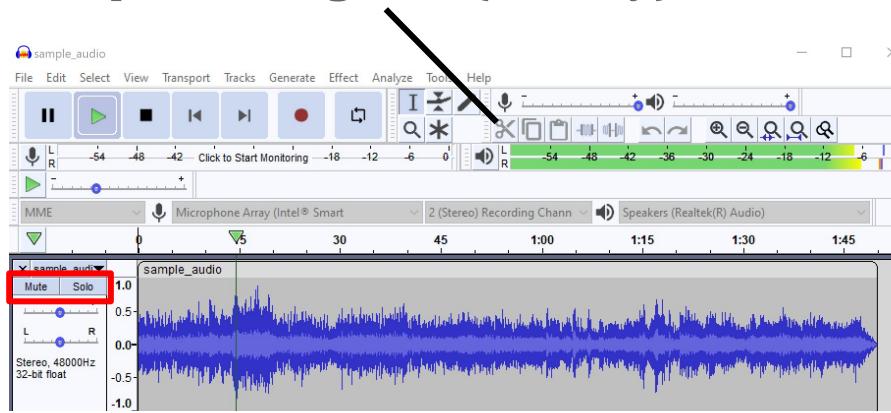
Hit the **stop** button to stop recording.



Use **re-play** to verify that the recording is the quality/ volume that you want.

Checking volume

Keep an eye on the **monitor** when recording and playing back your audio—try to keep it in the **green** (literally).



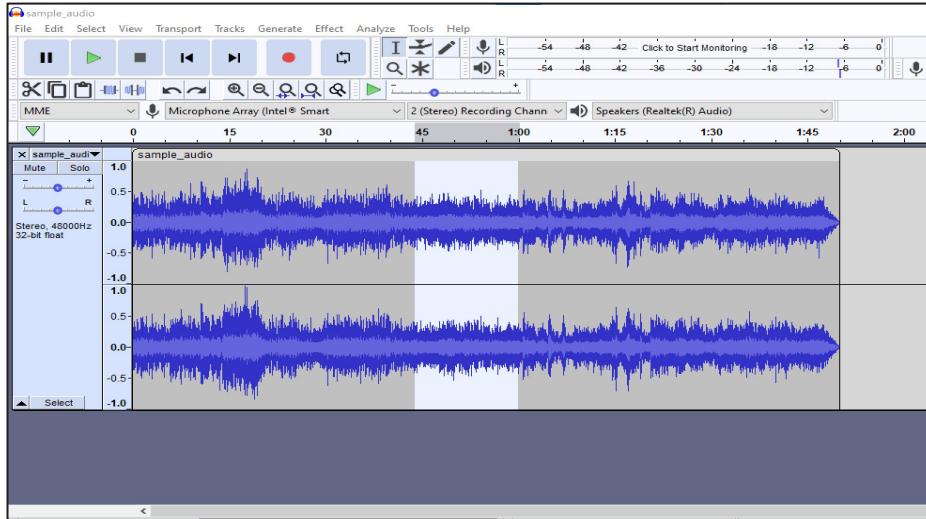
If your volume is too loud, the monitor levels will turn yellow and red. Tracks that are too loud will have a blown-out effect when played back.

If one of your tracks is louder or softer than the others, you can adjust the volume on each track.

Tip: to hear one track without the others, you can **mute** the other tracks or click “**solo**.”

Moving Tracks

To move entire tracks or audio around in Audacity, you can click and drag them by hovering your mouse over the top of the clip.

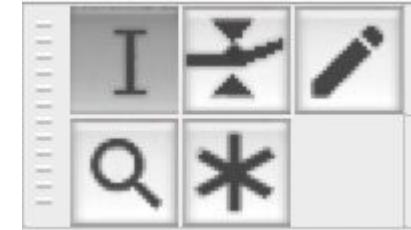


Click whatever clip or track you want to move and drag it into position.

Basics: Audacity & Editing Audio

The Audacity Toolbar 1/2

- I The **selection tool** will be selected automatically when you open Audacity.
- * The most useful tool is the **multitool**, which allows you to use all the functions of the other tools without switching to them.
 - The selection tool function is the default.
 - Hover over the waveform borders to use the envelope tool function.
 - Use your trackpad to zoom.
 - Zoom in and click to use the draw tool function.



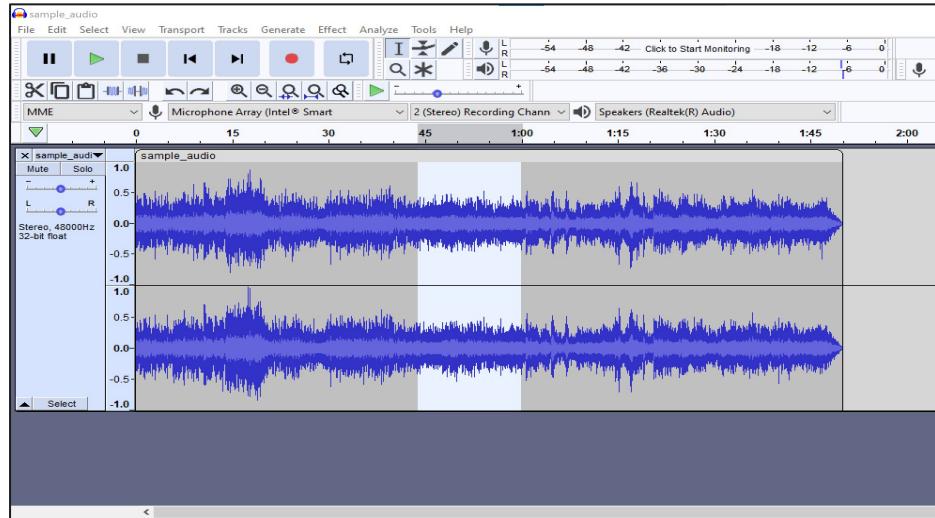
The Audacity Toolbar 2/2



- The **envelope tool** allows you to smooth changes in volume by using control points at the top and bottom of the waveform.
 - Clicking on the blue border will create control points, which you can then move around to adjust the waveform envelope.
- The **zoom tool** lets you zoom in and out of the waveform in order to make adjustments.
- The **draw tool** allows you to manually redraw the waveform to change the volume or correct background noise.
 - You can only use the draw tool if you've zoomed into the waveform.

Removing Parts of Tracks

Once you have recorded audio in Audacity, you can easily edit it. Here is how to remove sections using the **Selection Tool (F1)**:



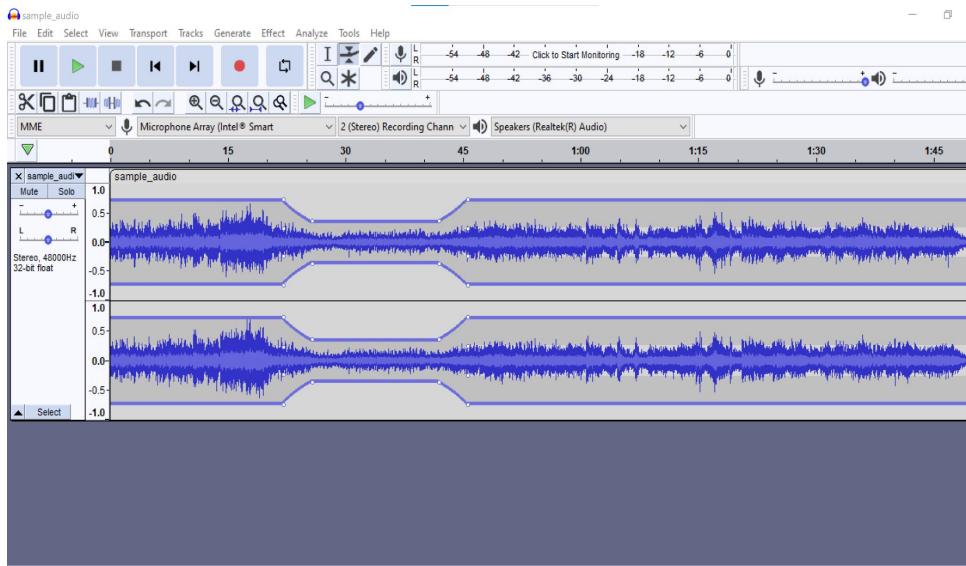
Click and drag with your cursor to select the portion you wish to remove.

Then, hit backspace or delete on your keyboard.

Tip: you can zoom in and out with the **Zoom Tool (F4)** to better see what you're trying to delete.

Fading In/Out

To fade music in and out on Audacity, use the **Envelope Tool (F2)**. Two yellow bars will show up on each track.



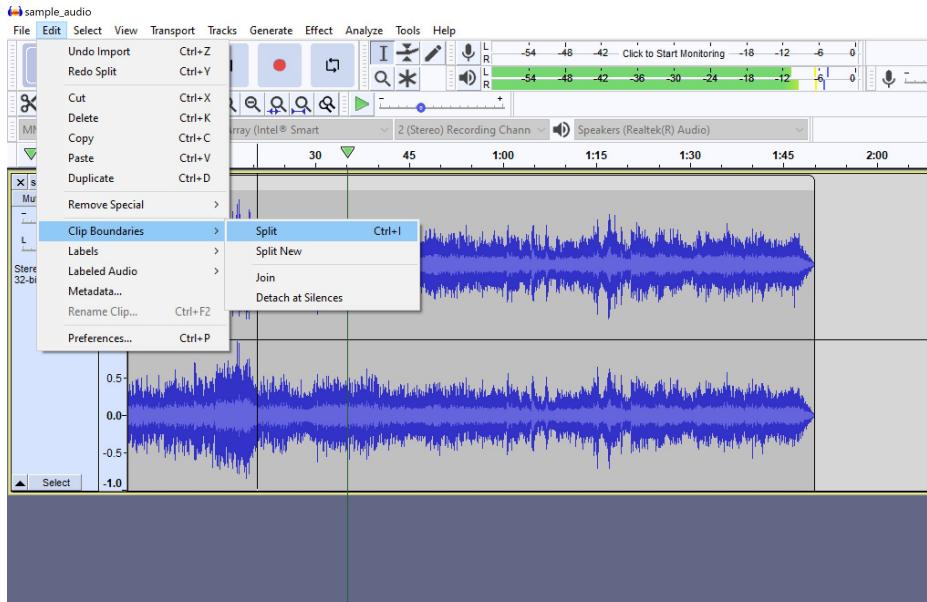
Click to add **control points** (little white dots) on the track you want to fade in.

Drag and move the nodes to up and down and side to side to change the volume and how gradual the volume fade is.

Add and adjust nodes at the end of the track to fade the music back in.

Splitting Tracks

To split a track in Audacity, follow these steps to make shorter clips:

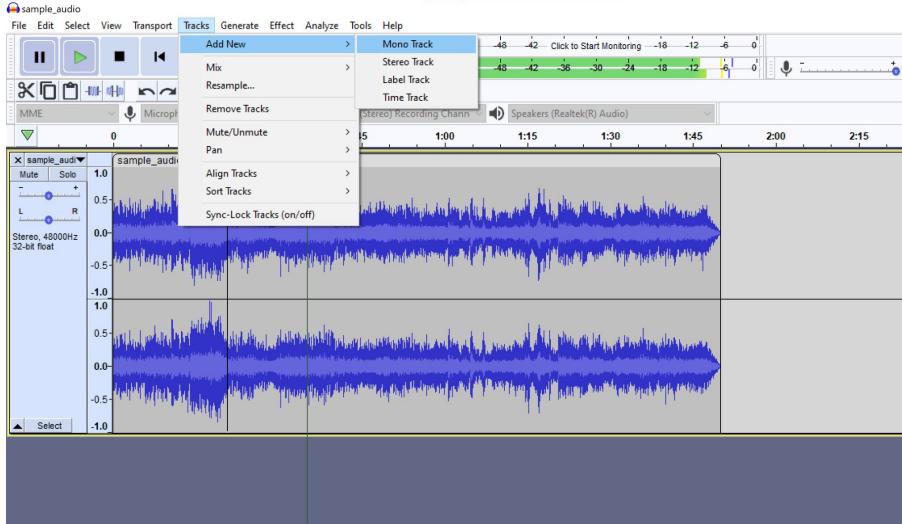


With the **Selection Tool (F1)**, place your cursor over the section where you want to split your track.

Navigate to the **Edit** section, click under “**Clip Boundaries**” and select “**Split**,” or press **Ctrl+I**.

Adding Tracks

To create additional tracks in Audacity for a **new recording**, hit the record button and it will start a new track. Another option is:



Navigate to the “Tracks” menu option and select “Add New.” This will open a list of options. Select the “Mono Track” option. You can also add a new mono track by pressing **Ctrl+Shift+N**.

Your Turn!

- Visit one of the following:
 - [BBC Sound Effects](#) and click on ‘Browse All’
 - [incompetech.com](#) and click on ‘Royalty Free Music’
 - [studio.youtube.com](#) and click on the ‘Audio Library’ tab
 - (you have to be signed into Google for this one)
- Download something you want to play around with and try to:
 - **Remove** some of your track.
 - Choose a part to **fade in** or **fade out**.
 - **Split the track** into multiple.
 - **Add a new track** to your project.

Saving, Exporting,
and Sharing

Saving

Audacity does not auto-save! Save your recording, early and often!

Try and save after each major edit/input of a recording, just to be safe.

Save in multiple places. Always have backup.

File > Save Project > Save Project As> “Name of your podcast”

And once your project is saved...

File > Save Project > Save Project > [saves the updates to your file]

About File Formats

- **Lossless Audio File Formats:** better than or equal to CD-quality.
 - **WAV:** uncompressed file, meaning huge file size. Best for editing raw audio files in Audacity.
 - **AIFF:** Apple's alternative to WAV. Uncompressed, not widely used.
- ***MP3/MP4:** compressed audio file, ensures small file size. Best for exporting and distributing from Audacity.
- **Ogg Vorbis:** Open-source alternative to MP3. Used in Spotify streaming.

**Note: The DITI typically recommends you save files as mp3 (sometimes mp4, if you use a PC).*

Exporting and Sharing

Finished with your recording?

- Make sure you **export** your project as an MP3 before you share it!
- This will ensure that other people are able to listen to your project. Exporting to an MP3 will ensure that anyone—even people who don't have Audacity—can listen to your project file.

File > Export > Export as MP3

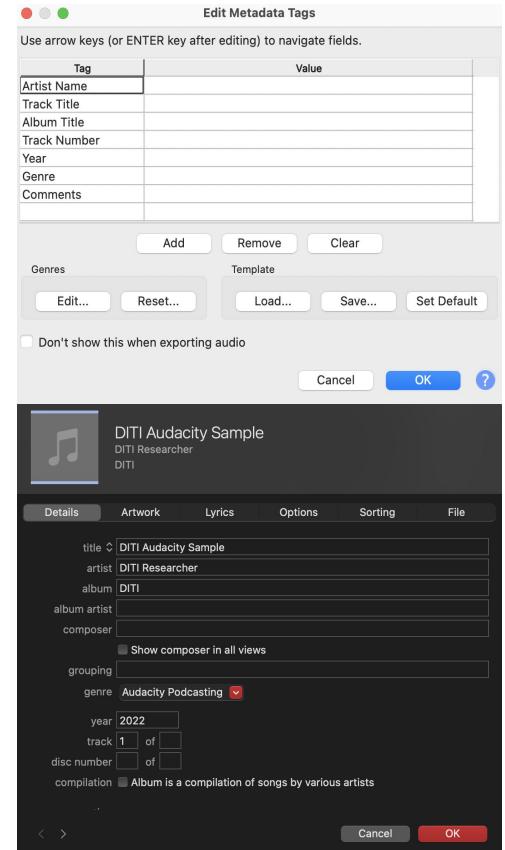
Select “best quality”

Exporting Metadata Tagging

When you export your file, Audacity will prompt you to add metadata tags to identify it.

On a Mac you can add artwork by importing your file to an Apple Music library, Control-clicking on it and choosing “Get info.”

On a PC, you can edit the MP3 metadata by clicking through to File Properties.



For Further Exploration

DITI Handout on Audacity

DITI Handout on Copyright and Fair Use

DITI Handout on Accessibility

Northeastern Library Recording Studios

Northeastern Library Digital Media Toolkit

DITI Handout on Troubleshooting Audio Editing

Collaborating with
Audacity

Collaborating with Audacity (1/2)

- File Size Consideration when collaborating with Audacity.
 - At Audacity's default 32-bit float sample format / 44,100 Hz sample rate using lossless uncompressed audio, stereo Projects take 20 MB of space per minute, which rules out sending projects by email.
- Recording Options
 - If you're using Zoom/Teams, consider recording on both ends and then edit the tracks on Audacity
 - Check the volume using different operating systems: If the volume from different collaborators is very different, don't worry! You have some tools you can use 1) Effects>Amplify 2) Mixer Board.

Collaborating with Audacity (2/2)

- Getting Files to Collaborators
 - Identify a suitable free internet file transfer service or version controlled repositories: [GitHub](#); [DropSend](#); [Dropbox.com](#); [Hightail](#); [MailBigFile](#).
 - Compress .zip archives
 - For Windows: [IZArc](#) or [7-Zip](#)
 - For Mac: [Built-in Compressor](#) or [Keka \(Mac\)](#)
 - Go Analogue! → USB thumb drives.

Resources

- Sharing an Audacity Project
- Sharing Tracks
- Using Zoom or Teams
- Using distributed version control system such as Git
- Adjusting volume when working collaboratively

Audacity Alternatives

Audacity Alternatives (1/2)

- Dark Audacity
 - **Pros:** Uses Audacity's open code. Free. It provides the same functionalities as Audacity. It offers simplified toolbars and remove visual clutter, making it easier to use the tool.
 - **Cons:** Windows only.
- GarageBand for Mac - Apple
 - **Pros:** Free with your Apple computer. Easy to use. It provides the same functionalities as Audacity.
 - **Cons:** Only for Mac users. You can't collaborate with Windows users.

Audacity Alternatives (2/2)

- Bear Audio Editor
 - This is a web-based tool that you can use to accomplish quick tasks such as cutting/deleting audio, merging clips, or fading audio.
 - **Pros:** Quick and easy to use. Free. Web-based editor. No software to install. Works on any operating system. Supports popular formats such as .wav and .mp3. Provides you with functions such as: cut and delete audio, merge clips, or fade audio.
 - **Cons:** Doesn't have all the functionalities you get in Audacity.

Thank you!

—Developed by Emily Sullivan, Juniper Johnson, and Cara Marta Messina

- If you would like to give us feedback: <https://bit.ly/diti-feedback>
- For more information on DITI, please see: <https://bit.ly/diti-about>
- Schedule an appointment with us! <https://bit.ly/diti-meeting>
- If you have any questions, contact us at: nulab.info@gmail.com

Link to module materials: <https://bit.ly/sp26-engw1111-audacity>