

Burning Audio Files to an Audio/Music CD

There are two main types of CDs that you can create with CD burning software: **Audio (or Music) CDs** and **Data CDs**.

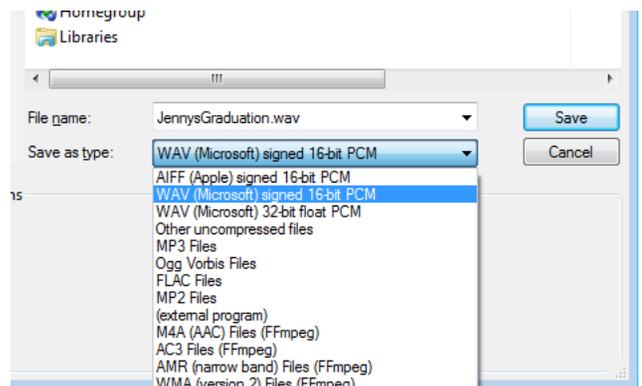
To ensure that you create a CD that will play anywhere it is important to choose the option to burn an **"Audio/Music CD"** and *not* a "Data CD". A Data CD containing MP3 or WAV files, for example, will play on a computer CD/DVD drive (if your computer still has one), but is much less likely to play in a standalone CD player or in-car CD player. An Audio/Music CD will play on any standalone or in-car CD player and in your computer and in modern DVD players.

- Audio/Music CDs are generally limited to 80 minutes playing time on a 700 MB disc
- When buying blank CDs for burning, it is strongly recommended that you purchase good quality **CD-R** discs (that can be burned just once) and **not** the rewritable CD-RW discs which are often problematic.

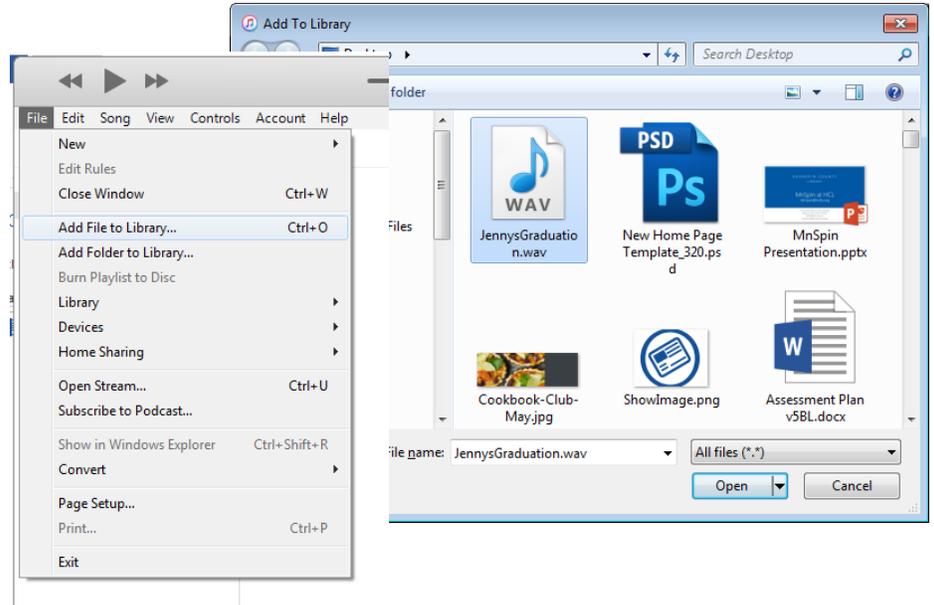
Audio/Music CDs always contain uncompressed PCM stereo audio at 44100 Hz sample rate, 16-bit sample format. So to burn an audio CD, export the file(s) you want to burn as a **44100 Hz, 16-bit stereo WAV file**.

To configure Audacity for this:

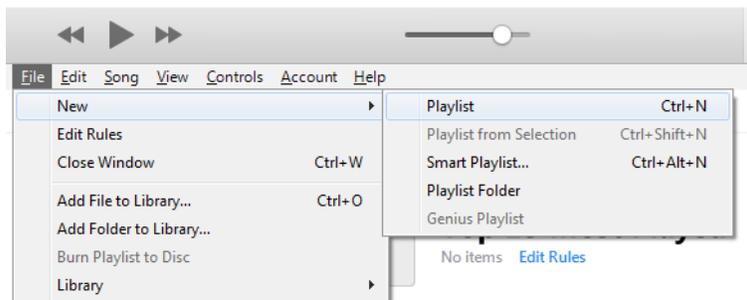
1. At the bottom left of the Audacity window, set the **Project Rate** to 44100 Hz (see page 3).
2. Click **File > Export > Export as WAV (Microsoft) signed 16-bit PCM** then select "Save"
3. Add information to any Metadata Tag Fields you want to and click "Ok"



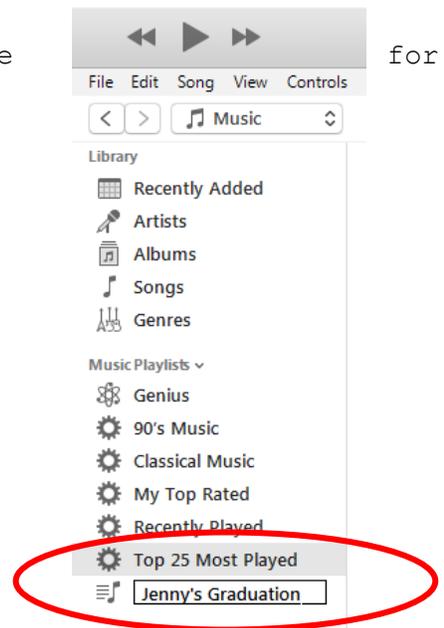
4. Open up iTunes
5. Go to the File menu in the upper left corner of iTunes and choose, **File > Add File to Library**
6. Find your .wav file and click **Open**.
7. Repeat for each audio file you want to burn on a single CD



8. Insert a blank CD-R into the computer CD/DVD drive.
9. Create a playlist by going to **File > New > Playlist**



10. In the left column, type in a name your playlist



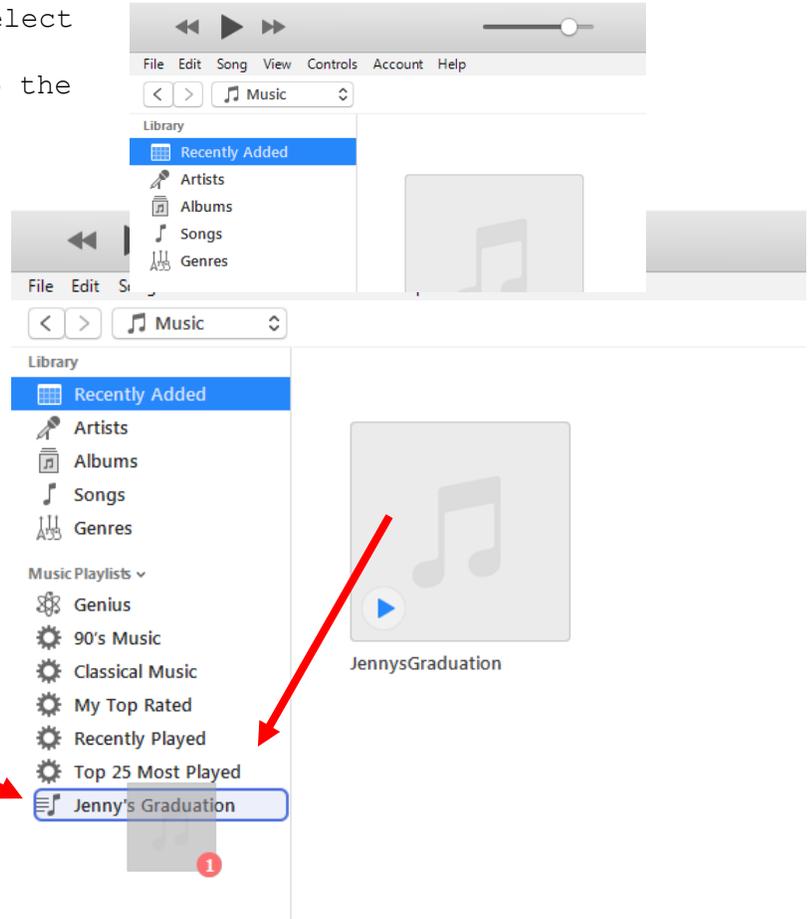
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11. In the left column, select **Recently Added** to view the file(s) you have saved into the iTunes Library

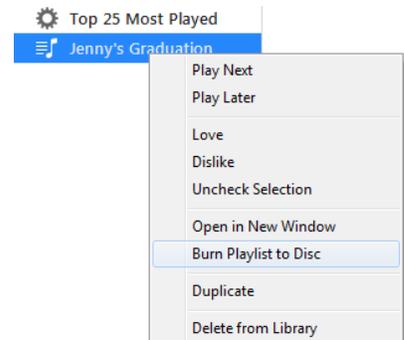
12. Left click and hold the file you want to burn into the playlist and drag it right on top of the playlist name you have created.

You should see an outline from around the title of your list. Let go of the left mouse button to add it to the playlist.

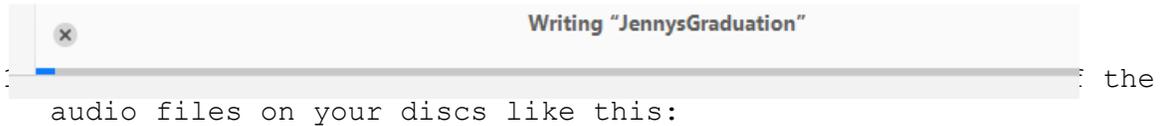
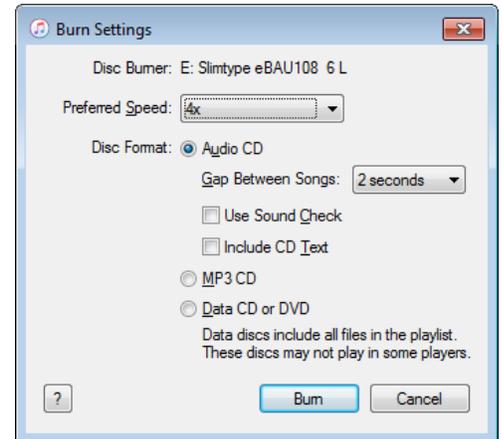
Repeat for any other files you want to add to this disc.



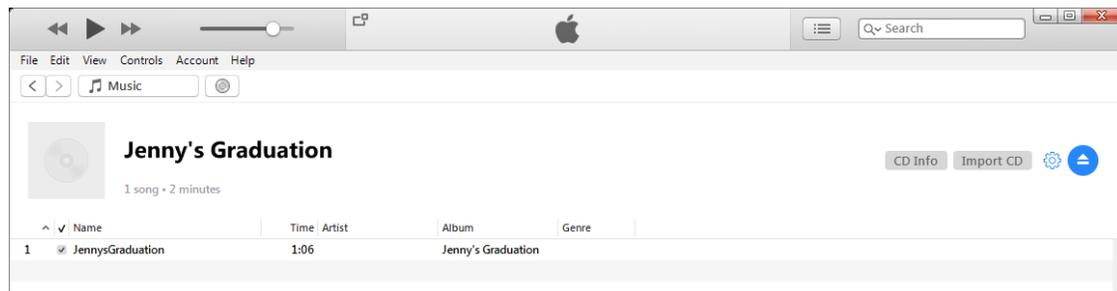
13. Right-click on the name of your newly created playlist in the left hand panel and left click on the "Burn Playlist to Disc" in the dropdown menu.



14. Select the **Preferred Speed** (the slower you set the speed, the more likely you will create a disc without errors. 1x- 4x is recommended)
15. Make sure **Audio CD** is selected as the **Disc Format**
16. (Optional) Set the **Gap Between Songs** if you are burning multiple files onto your CD (2 seconds is usually just fine).
17. Click **Burn**.
18. It may take several minutes (depending on your preferred burning speed and the number of files being burned to your disk. You will see a **Writing** message at the top of the iTunes screen while this process is taking place).



- the audio files on your discs like this:
20. Unless you get an error message, your disc should be ready to go once the disc drive stops spinning (you can usually hear it stop - the drawer may even pop open on its own). You may want to test your CD in the CD player in the Conversion Lab to make sure it plays properly



If You Get a Failure Message when Burning Your CD

Unfortunately, burning blank CDs doesn't always work the first time. If you run into that, try another blank CD and hopefully it will work.

Some troubleshooting tips

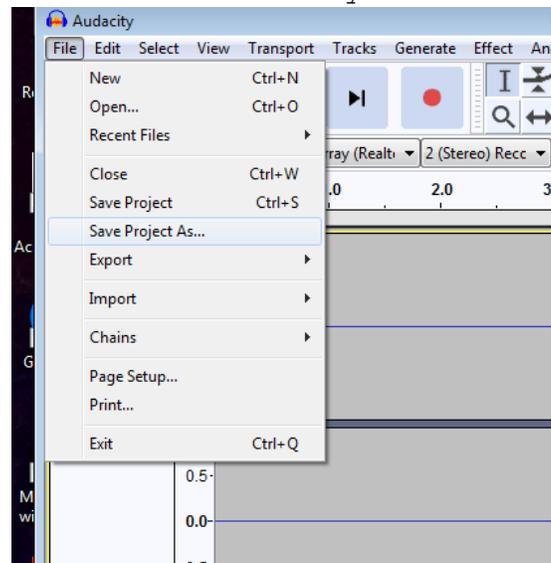
- Make sure you have a blank CD-R and not a CD-RW or DVD by mistake
- Make sure there are no other files previously burned on the disc

- Make sure your CD is clean and free of scratches/fingerprints or other flaws
- Try burning your disc at a slower speed

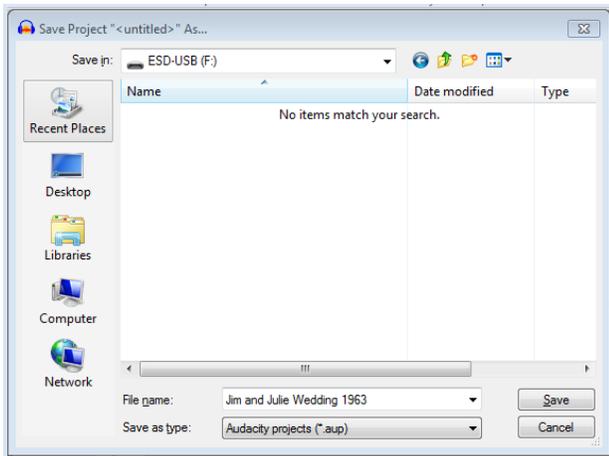
In some cases, you just have a bunch of flawed discs and you can't burn a copy using any of them. If it just won't work, you can save your .wav file(s) onto a flash drive or upload them onto Google Drive, Dropbox or other online service and try another computer or brand of blank disc at a future date.

Save Your Files for Editing Later Using Audacity

If you are going to do more editing on your audio file after you have created a digital copy (for example taking out pauses or clicks, changing the volume level, mixing together several different audio files, etc.,) using the Audacity program, you will want to save your audio as an **Audacity Project**. This will preserve your audio recording in the Audacity's format and you'll be able to use the program to edit it without losing any of the quality of your recording. However, keep in mind the Audacity Project files are larger than regular audio files and they will only play using Audacity.



Go to the **File** menu in the upper left side of the menu and choose **Save Project As...** Then navigate to the location of your storage device, give your project a name that makes sense to you (such as "Jim and Julie Wedding 1963", for example) and click **Save**



You will get a warning from Audacity about saving the file as an Audacity project (.aup), but go ahead and click **OK**.

Choose your storage device the saving location, and give the file a descriptive name (Steve and Sharon's wedding 1963") and click on **Save**.

After the project saves, it is safe for you to close the Audacity program.

A Few Notes About Audacity "Projects"

Each saved Audacity **Project** is composed of an .aup file and a folder with your audio "data". If you are transferring your project to another device (such as a different computer or a flash drive) make sure to get BOTH the **filename.aup** file (ex. Jennys Weeding.aup) and the folder that goes with it: **filename_data** (ex. Jennys Wedding_data).



To reopen up your saved Audacity **Project** (for further editing), find the .aup file of your project, double click it on a computer with Audacity installed, and it will open for you. You don't need (or want) to do anything with the data folder other than make sure it is in the same directory as its .aup file.

You can only open and edit .aup files using the Audacity software. If you want to listen to it outside of the program, you need to export it into another format that your computer/device can play (see exporting options in the previous sections.)

Doing more with Audacity

Audacity offers a lot of other functions that we cannot cover here. Library computers in the Computer Lab have it installed and are available when the Computer Lab has drop-in sessions.

Audacity is a free, open source, cross-platform audio software that can be downloaded and installed for free at www.audacityteam.org on your own computer. To export to MP3 and certain other formats, you will need additional free "enhancements" that you can learn more about from the Audacity website.

To find out more, open the Audacity program and click on the **Help** menu and select **Manual** from the options list or visit <https://manual.audacityteam.org/> online.