Sound Editing and Distribution Workshop

http://www.cla.purdue.edu/vpa/etb/
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Required software/supplies for this workshop:

| Description	
Audacity Download for free at: http://audacity.sourceforge.net/	
Apple iTunes Download for free at: http://www.apple.com/itunes/download	

Sound Editing and Manipulation Workshop

In addition to this workshop, please also consult the following Audacity resources online:
Audacity manual: http://audacity.sourceforge.net/manual-1.2/
Audacity tutorials: http://wiki.audacityteam.org/index.php?title=Tutorials

Audacity Toolbar
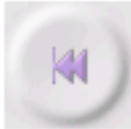
Skip to Start – moves the cursor to time 0. If you press Play at this point, you project will play from the beginning.

Play – starts playing audio at the cursor position. If some audio is selected, only the selection is played.

Loop – if you hold down the Shift key, the Play button changes to a Loop button, which lets you keep playing the selection over and over again.

Record – starts recording audio at the project sample rate (the sample rate in the lower-left corner of the window). The new track will begin at the current cursor position, so click the "Skip to Start" button first if you want the track to begin at time 0.

Pause – temporarily stops playback or recording until you press pause again.

Stop – stops recording or playing. You must do this before applying effects, saving or exporting.
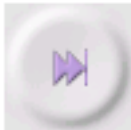
Skip to End – moves the cursor to the end of the last track.

I   Selection tool – for selecting the range of audio you want to edit or listen to.

Envelope tool – for changing the volume over time.

Draw tool – for modifying individual samples (you need to be zoomed in to see the individual samples for this tool to work).

Zoom tool – for zooming in and out.

Timeshift tool – for sliding tracks left or right.

Multi tool – lets you access all of these tools at once depending on the location of the mouse and the keys you are holding down.

Track Controls

The buttons and pulldown menu on the left hand side of each track allow you to access important features of a track, such as its volume or pan properties (use panning to audibly position the track, either closer to your left or right ear or centered)
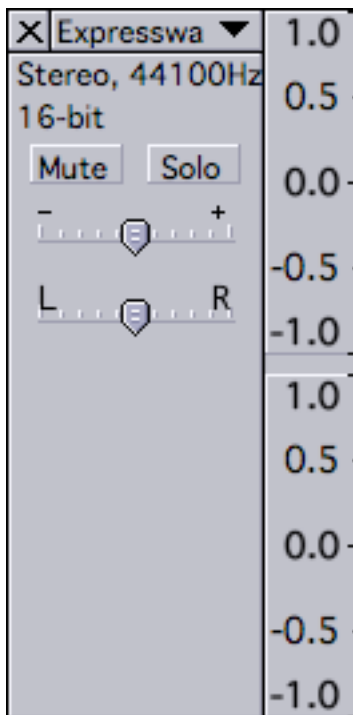
You can use the "X" to close a track – careful: the track will be lost when you close it before saving your project!

On the right hand side of the "X" is the track's name

Below you find information on the track's audio settings, these should always be 44100Hz and 16–bit

"Mute" allows you to mute (set volume to "0') the track and play all other tracks.

"Solo" allows you to play only this track and automatically mute all other tracks

The slider underneath (with "–" and "+" marks) makes it possible to adjust the individual volume of the track

The "L" and "R" slider is for panning, position the track closer to the left or right ear when listening.
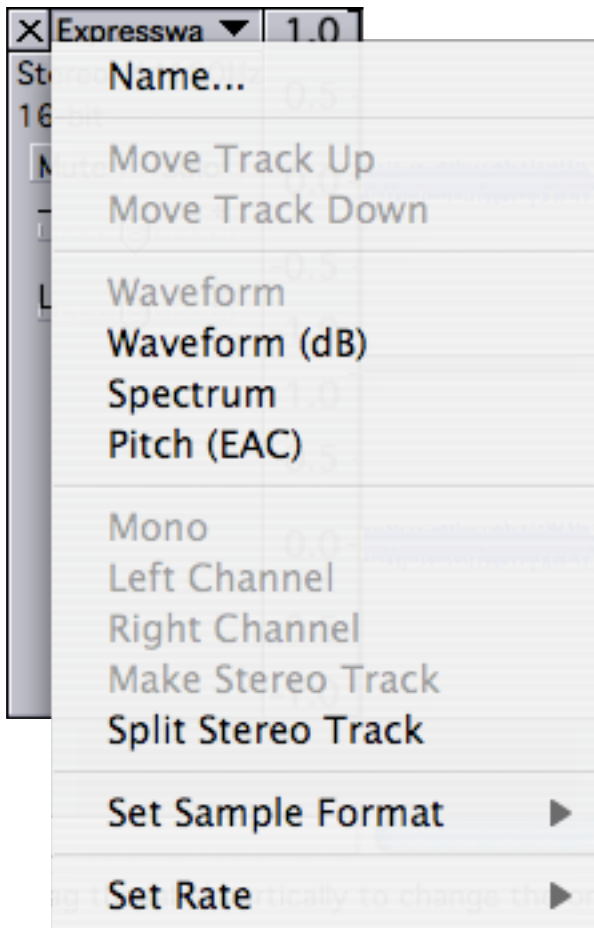
When you click on a track's name you open another menu which allows you to do the following things:

Rename the track

___

Change the position of the track in the stack of track in your timeline

___

Look at different features of the sound in the track visually (volume, spectrum, pitch)

___

Change the tracks mono/stereo properties

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Set the sample format and sample rate

Editing

Please look at the excellent documentation in the Audacity manual online:

Cut, Copy and Paste: http://audacity.sourceforge.net/manual-1.2/tutorial_ed_beginner2.html

Silence, Duplicate and Split: http://audacity.sourceforge.net/manual-1.2/tutorial_ed_beginner3.html

Splitting and Submixes: http://audacity.sourceforge.net/manual-1.2/tutorial_ed_beginner4.html

Further editing tasks: http://audacity.sourceforge.net/manual-1.2/tutorial_common_ed_1.html

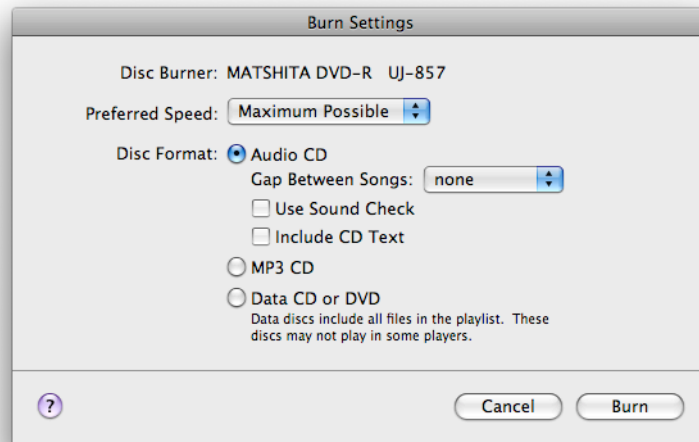**Exporting your final project and burning it as Audio CD on a CD-R**

Once you have finished your editing and sound manipulation in Audacity you need to export your project as either WAVE or AIFF file (stereo, 44100Hz, 16-bit). We will import this file into Apple iTunes and directly burn an Audio CD in ITunes.
Please make sure to keep your Audacity project file and all associated folders, so that you can go back and work directly with each individual track if needed. Exporting a project as WAVE or AIFF file will make it universally playable in other pieces of sound software but it will also flatten sound layers (tracks) to only two tracks (left and right for a stereo track).

1. Go to "File → Export As AIFF…" or "Export Selection As AIFF…" if you only want to export a selected area of your project. Save the file in your project folder for this assignment.
2. Then open iTunes and create a new playlist by going to "File → New Playlist"
3. Drag the WAVE/AIFF file from your project folder in the empty area of the playlist (right side of window)
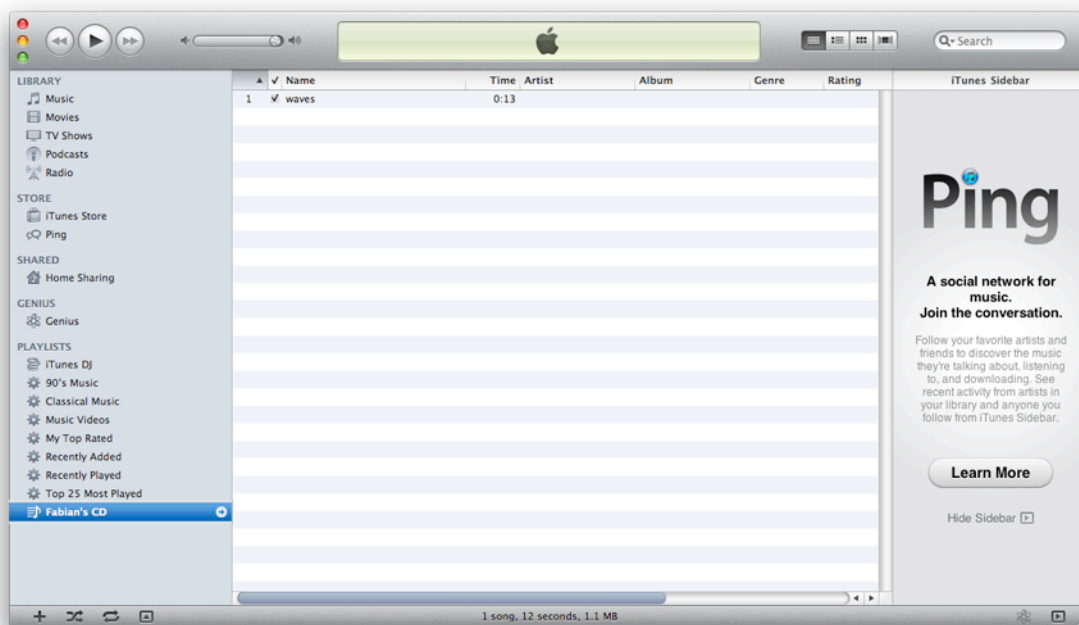

4. If you have multiple sound files, add them one after another to your playlist. You can then drag them in the playlist up and down to change their track number (order of playback on the final CD)
5. You can pre-listen to your CD by clicking the playback button
6. Finally go to "File → Burn Playlist to Disc… ", a window open which allows you to set the duration of the gaps between songs and the speed of the burner (see next page). The program asks you to insert a blank CD-R and then automatically starts to burn your track from the playlist in Audio CD format.

Exporting your final project as MP3 file (in iTunes)
You can export your final project as an MP3 file in iTunes. Select the sound file in your playlist and then go to "Advanced → Create MP3 Version". iTunes converts the file and saves a new MP3 version of it in your iTunes Music folder (on the Mac this is: your_home_directory/Music_iTunes/iTunes Music/name of your Album (if you didn't specify an album name it is: Unknown Artist/Unknown Album) – you can set this location by going to the Preferences:
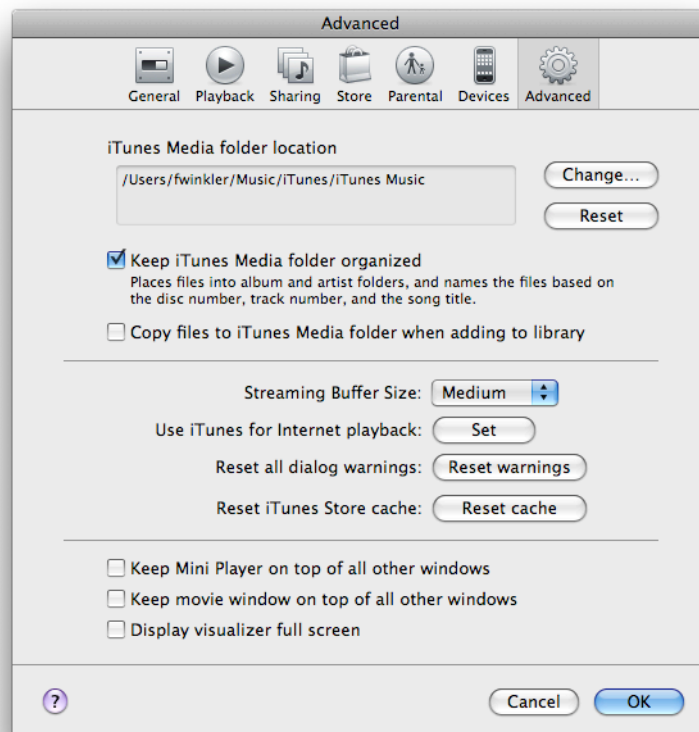
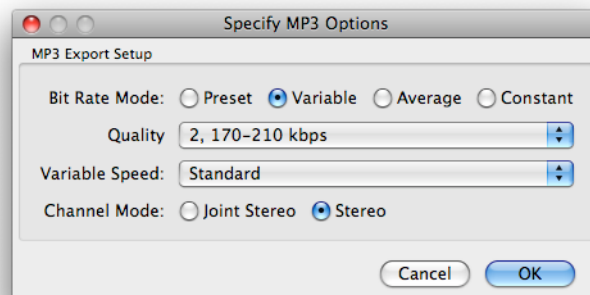**Exporting your final project as MP3 file (in Audacity)**

You can export your final project as an MP3 file using Audacity, too. However this requires that you download and install the LAME mp3 encoder which can be a little time consuming. See the detailed instructions on how to do so here:
http://wiki.audacityteam.org/wiki/Lame_Installation
If the exporter/encoder is installed correctly you simply choose "File → Export…" and choose MP3 as the format in the window's drop-down menu.
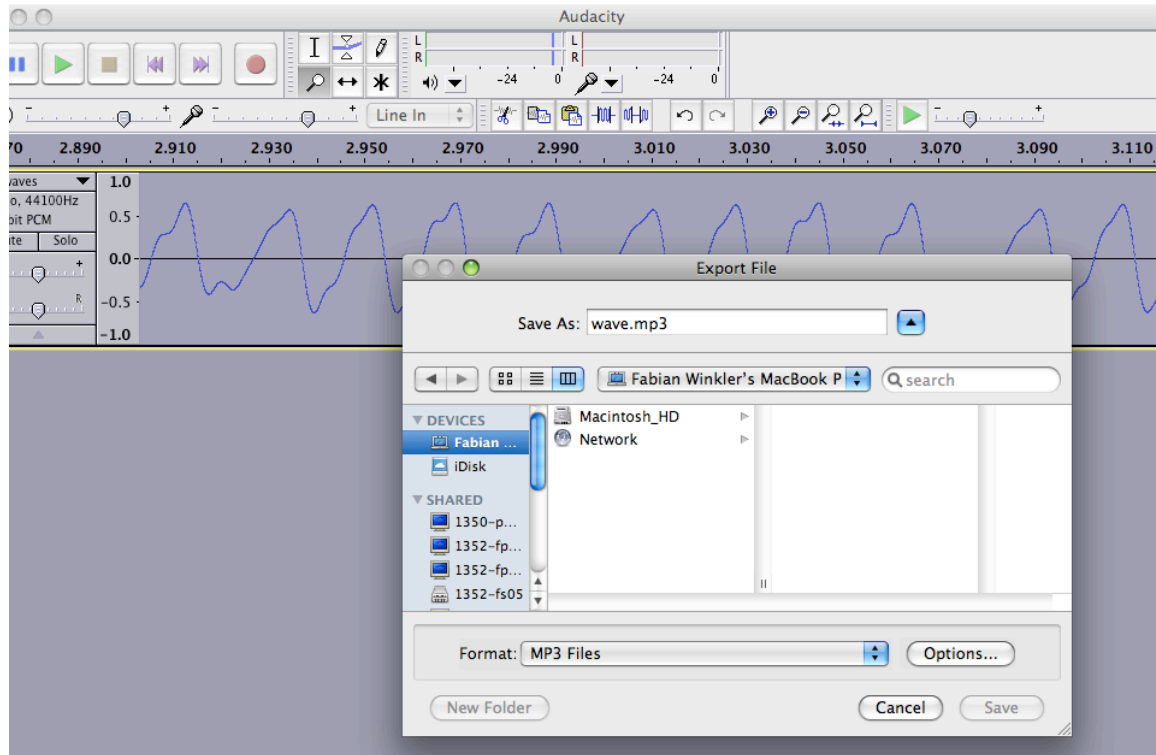
You can then set the quality by clicking on Options (VBR – variable bit rate recommended):

and provide some metadata before you finally save the file:

Edit Metadata

Press F2 or double click to edit.

Tag Name	Tag Value
Artist Name	Fabian Winkler
Track Title	Waves
Album Title	Waves Record
Track Number	
Year	2011
Genre	experimental
Comments	

Add   Remove   Clear

Genres

Edit   Reset

Template

Load...   Save...   Set Default

Cancel   OK