

Adding Sound to Online Courses

Adding audio to an online course can enhance learning. However, when sound files are an integral part of the course instruction, a script is necessary to accompany that file to comply with Americans Disability Act.

Objectives:

1. Create a sound file
2. Have a working knowledge of file types
3. Embed a sound file into a webpage
4. Upload sound files to online faculty office space
5. Link to sound files located on the web

What is Necessary before Beginning?

1. **Audacity Software** – It is free audio recording/editing open source software, created by Wayne State University, College of Engineering. To download Audacity to personal computers, visit: <http://www.eng.wayne.edu/news.php?id=536>
Windows also has Sound Recorder as part of Accessories and Entertainment, which has recording and editing capabilities but only for .wav sound files.
2. **Microphone** -Any type microphone that will connect to a computer will be fine.
3. **Quiet Location** – Depending on the background noise that is picked up when recording, some participants may wish to redo files.
4. **Prepare Faculty Office** – Some instructors may wish to house all audio files on faculty office web space, therefore creating a new folder to house audio files would be good.

This workshop only covers the basics for creating and adding audio files for access by online students. Audacity offers other possibilities. Wayne State University, College of Engineering has tutorials to help users import and edit other audio files, record multi-track files, and more. Visit their tutorials: <http://audacity.sourceforge.net/help/tutorials>

File Types

When putting audio files on the web, it is best to compress them first, especially if they are large. Compressing files should begin from the original wav file or from a purchased CD. Audacity compresses and exports as mp3 format, but an encoder is required. http://www.free-codecs.com/Lame_Encoder_download.htm

Compressed file Types

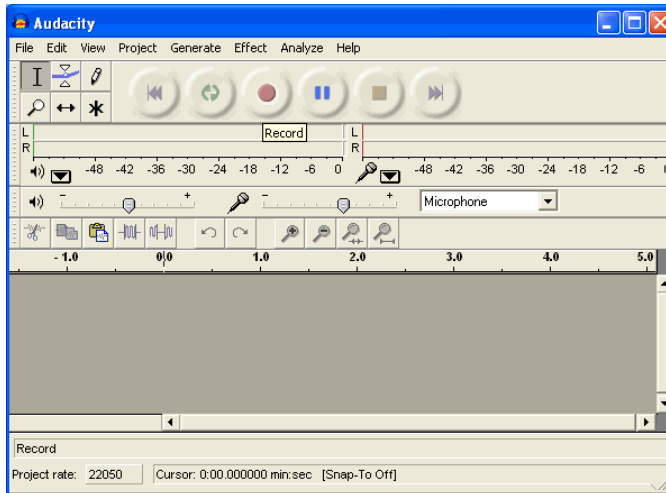
.mp3 - compressed to about 1/12 of a .wav file
.wma - compressed more than .mp3 for Windows Media Player
.ogg - compressed more than .mp3 with open source software

Other Audio File Types

.midi - basic file format used for digital musical instruments
.aiff - created for Macintosh computers
.mov - Created or exported by QuickTime


Recording Audio Files


1. Determine what the message will be.
2. Ready the computer with microphone and recording software
3. For speech, lower the per/second rate.
 - Edit > Preferences > Quality Tab > and change the dropdown menus for sample rate and format to 22,050HZ and 16 bit.
4. Click the **Record** button and begin speaking.
5. Monitor the volume, by watching the levels on the screen while speaking into the microphone.
6. Click **Stop**
7. Replay to determine if re-recording is necessary. It is not uncommon to have a few attempts before being satisfied.
8. When satisfied, **export as wav** unless you have the LAME encoder software and then **export as mp3**.



Edit Audio Files

If before exporting, some editing may need to be done. The more one plays with the Audacity software, the more things can be learned. Below is the most common editing feature for this basic workshop.

1. Click the  tool in the upper left of the Audacity screen.
2. Click and drag over an area to be deleted. Many times there is too much silence at the beginning and ends.

3. Click the  tool.
4. Save the changes.

To open other audio files within Audacity, they must be .wav.

Embed Audio Files into a Webpage for WebCT

Using FrontPage:

1. Prepare and save an HTML page and the sound file in the same path they will be linked from within WebCT.
2. Enter text for or about which the audio file will be used, for instance explaining a process etc.
3. Highlight an image or text to link to the audio file
4. Use the linking tool to choose the file to be heard by students
5. Save and upload to WebCT.

Upload Files to Web Space and link from WebCT

Similar steps will be done if files are located on a Faculty Office, except the URL will need to be used instead of navigating to the file itself.

1. Create and name a folder on faculty office space
2. Upload audio files to that folder – the files don't have to be linked within the faculty office. They can simply be housed there and linked from within WebCT.
3. Prepare an HTML page for WebCT
4. Enter text for or about which the audio file will be used, for instance explaining a process etc.
5. Save the page to this point
6. Open the web URL for the office space – *Example:*
 - username.nhmccd.cc
 - put a forward slash after the .cc
 - add the name of the folder, another slash, and the name of the audio file such as: username.nhmccd.cc/audio/welcome.wav
7. Copy the URL
8. Open the HTML page again
9. Highlight an image or text to link to the audio file
10. Use the linking tool and paste the URL
11. Save and Upload to WebCT