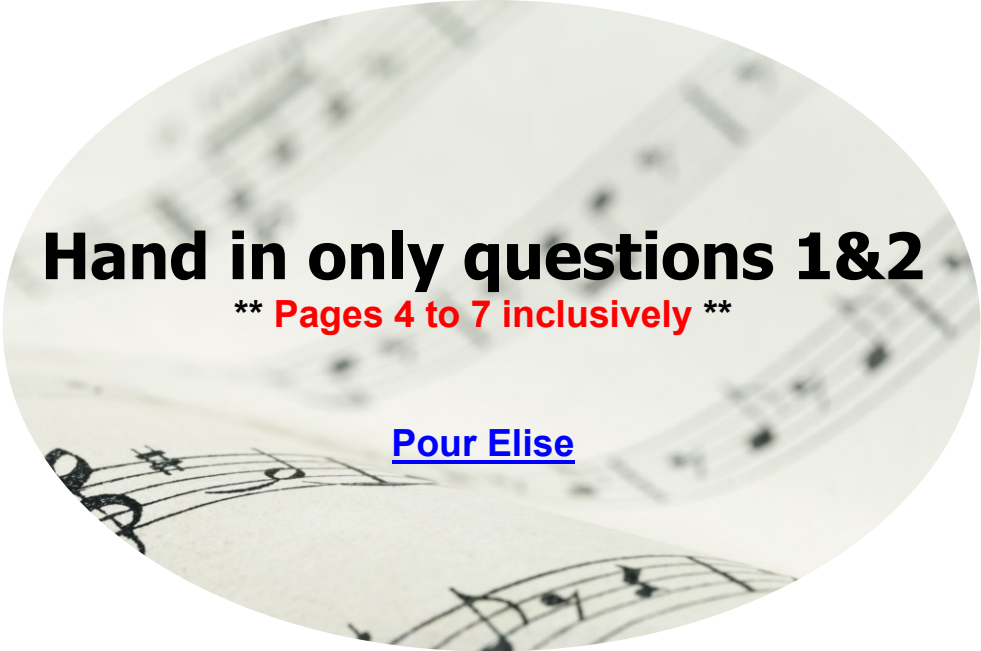


Itec/Modr/huma 2655

Take-home Final



Hand in only questions 1&2

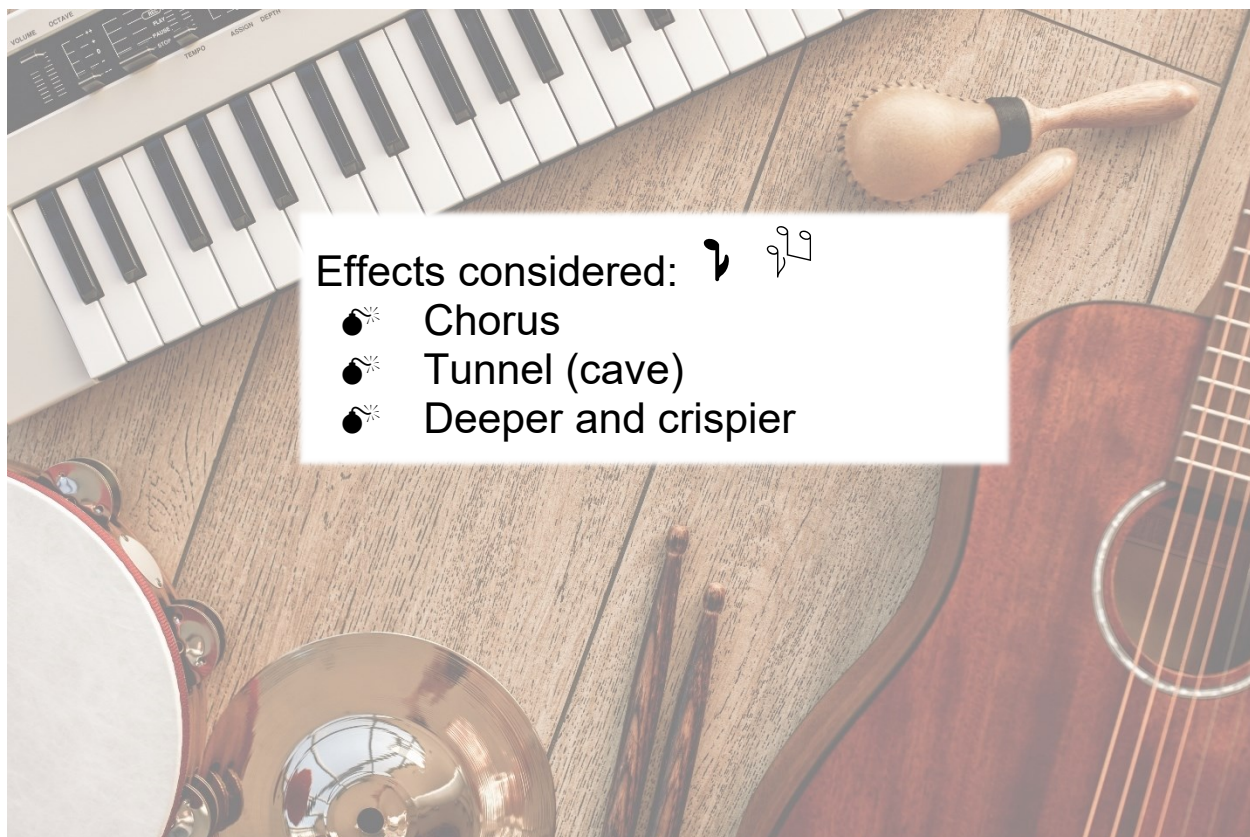
**** Pages 4 to 7 inclusively ****

Pour Elise

Submission Link

Due Aril 26 2023 (Wednesday) at midnight

Please submit a short report (PDF or WORD), with brief explanations of ALL your steps, and links to your web results (URL)



Effects considered: ♩ ♪

- 🔊 Chorus
- 🔊 Tunnel (cave)
- 🔊 Deeper and crispier

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Hand in only questions 1&2

1. AUDIO TO MIDI & MUESCORE AU CLAIRE DE LA LUNE



A. AU CLAIRE DE LA LUNE, 1ER COUPLET (FIRST VERSE), MULTI-TRACK

Watch the video at:

<http://oldtown.glendon.yorku.ca/~teaching/2023/huma2655/final/preparation/embed-youtube.html>

[URL 1]

A.1 Please describe what you hear/view.

A.2 Can you make your URL AT:

<http://oldtown.glendon.yorku.ca/~yourname/2023/huma2655/takehome/fr/rap.html>

that looks exactly like my page in [URL 1] above.

B. MIXING AND RENDERING MULTI-TRACK AUDIO

Download the tracks and the mixdown of the rap music at (zip file):

<http://oldtown.glendon.yorku.ca/~teaching/2023/huma2655/final/tracks/q1-rap.zip>

B.1 Mix and render all tracks, except the track metrodomo.wav which is used normally for rapping only. Name your mixing as mixdown.wav.

B.1.1 Display mixdown.mp3 at:

<http://oldtown.glendon.yorku.ca/~yourname/2023/huma2655/takehome/effects/mix-down.mp3>

B.1.2 Display it as an embedded web page at:

<http://oldtown.glendon.yorku.ca/~yourname/2023/huma2655/takehome/effects/mix.html>

B.2 Using Audacity to edit (add effects to) the vocal-only track, **vocal.wav** – The goal is make this singing voice (vocal.wav) deeper and raspier. The resulting audio is named **raspier.wav**.

B.2.1 Display this audio as **raspier.mp3** file at:

<http://oldtown.glendon.yorku.ca/~yourname/2023/huma2655/takehome/effects/raspier.mp3>

B.2.2 Display it as an embedded web page at:

<http://oldtown.glendon.yorku.ca/~yourname/2023/huma2655/takehome/effects/raspier.html>

B.2.3 Discribe the effects you have used briefly in your report.

B.3 [In this part, B3, we work with the original audio, **vocal.wav**, only. Not the **raspier.mp3**.] Convert the **original** audio, **vocal.wav**, to a **MIDI** file at the web site below:

<https://basicpitch.spotify.com/>

Download the resulting MIDI file to your PC as **original-vocal.mid**.

B.3.1 Display it at your URL:

<http://oldtown.glendon.yorku.ca/~yourname/2023/huma2655/takehome/effects/original-vocal.mid>

B.3.2 Muscores to sheet music (PDF)

Use MUESCORE to open the midi file **original-vocal.mid**, in **B.3** above.

Your result should look like this video: (but you do not have to do a video capture to show me):

<http://oldtown.glendon.yorku.ca/~teaching/2023/huma2655/lab/muscores-aud2midi.mp4>

Export (or save as) the muscores file above as an PDF file.

Display your PDF scoresheet at your URL indicated below:

<http://oldtown.glendon.yorku.ca/~yourname/2023/huma2655/final/files/>

2. MAKE A MIDI FILE AND A PDF MUSIC SHEET & SPLITTING A MUSIC INTO SEPARATE TRACKS

A. MUSIC VIDEO, MIDI, AUDIO, TEMPO

Given this video at:

<http://oldtown.glendon.yorku.ca/~teaching/2023/huma2655/hw2/takehome/piano/AuClairdeLaLune.mp4>

A.1 Make MIDI, mp3 and PDF files from the video above, and display them at your URL:

<http://oldtown.glendon.yorku.ca/~yourname/2023/huma2655/final/musescore/>

A.2 Embed the mp3 audio file here:

<http://oldtown.glendon.yorku.ca/~yourname/2023/huma2655/final/musescore/mp3.html>

A.3 Describe very briefly all your steps in your report.

B. MUSIC & TEMPO

Change [tempo](#) of a music video and display it at your web page at Glendon:

1. To speed up/slow down audio, use the "**bpm** or beats per minute" **effect** in Audacity.
2. To speed up/slow down video, use "**fps** or frames per second" **filter** in Avidemux

- ☐ Audacity is an audio editor while Avidemux is a video editor
- ☐ We need to process audio and video tracks separately, and then put them back together to achieve perfect synchronization which is required in music education.
- ☐ We can download and install Avidemux and Audacity for PC at your local device at: <http://oldtown.glendon.yorku.ca/~teaching/binary/>
- ☐ You can **also** use [Audacity](#) and [Avidemux](#) on-line as chrome extension plugins.

- Given the video at:

http://oldtown.glendon.yorku.ca/~teaching/2021/videos/imagine_2020.mp4

that plays “Imagine” by Lennon at tempo.

Code to embed an mp4 video:

```
<video playsinline autoplay muted loop >
  <source
src="http://oldtown.glendon.yorku.ca/~teaching/2021/videos/imagine_2020.mp4"
type="video/mp4">
</video>
```

- Create a new video, named **slow.mp4**, which plays at 88% tempo of the video above. Here is a screen capture of [the output video format](#) suitable for streaming.
- Display your slow video at:
<http://oldtown.glendon.yorku.ca/~lastname/final/2655/makeup/april10/video/slow88.mp4>
- Display also your slower music as an embedded web page at:
<http://oldtown.glendon.yorku.ca/~lastname/final/2655/makeup/april10/video/slow.html>

C. CHORUS EFFECTS:

From this music video:

<http://oldtown.glendon.yorku.ca/~teaching/2023/huma2655/imagine/united-imagine.mp4>

C.1 Can you extract the audio as **imagine.wav** (using audacity → import → video)

C.2 Visit this web site: <https://mvsep.com/>

Split this **imagine.wav** into two tracks: **vocals.mp3** and **instruments.mp3**. Display the two tracks at your URL at:

<http://oldtown.glendon.yorku.ca/~yourname/2023/huma2655/final/files/imagine/>

C.3 Can you add a chorus effects to **vocals.mp3**. Give it the name **chorus.mp3**

C.4 Mix down the tracks **instruments.mp3** and **chorus.mp3** to get **mix-down.mp3**

C.5 Can you also “embed the four audios here: (one on top of the other):

<http://oldtown.glendon.yorku.ca/~yourname/2023/huma2655/final/files/imagine/imagine.html>

3. MAKE YOUR SINGING VOICE DEEPER AND CRISPIER USING AUDACITY

A. CAN YOU MAKE THE BEATLES TO SING WITH A DEEPER AND CRISPIER VOICE?

- What is your strategy to do this in Audacity? Here is the links to the audio tracks:

Vocal-only audio:

<http://oldtown.glendon.yorku.ca/~teaching/2023/huma2655/hw2/takehome/sun/mp3/vocals.mp3>

In the audio above, from time 41 sec to end (approximately), there is some unwanted sound. Can you replace this with silence. Explain how.

The rest of the tracks you may need is here:

<http://oldtown.glendon.yorku.ca/~teaching/2023/huma2655/hw2/takehome/sun/mp3/>

Here is your hint to begin (pitch effect):

<http://oldtown.glendon.yorku.ca/~teaching/2023/huma2655/hw2/takehome/images/start-pitch.png>

- Display your result as an embed and mix-down audio at your URL below:

<http://oldtown.glendon.yorku.ca/~yourname/2023/huma2655/takehome/sun/deeper1.html>

B. CHORUS EFFECTS

What is your strategy to make the Beatles to sing in **chorus** with themselves using their original vocals given in (a) above. I want 3 voices.

- The original vocal is here:

<http://oldtown.glendon.yorku.ca/~teaching/2023/huma2655/hw2/takehome/sun/mp3/vocals.mp3>

- Display your result as a vocal-only audio (chorus2.mp3) at your embed URL at:

<http://oldtown.glendon.yorku.ca/~yourname/2023/huma2655/takehome/sun/chorus2.html>

- Mix down your result from (b) – 3-voice **vocals (from b above) + strings + drums**

Here are the links to the strings and drums audios:

<http://oldtown.glendon.yorku.ca/~teaching/2023/huma2655/hw2/takehome/sun/mp3/>

- Display your result of the **MIX-Down** audio (chorus-mixdown.mp3) in your embed URL at:

<http://oldtown.glendon.yorku.ca/~yourname/2023/huma2655/takehome/sun/mix1.html>

4. AUDIO TO MIDI & MUESCORE

A. WATCH THE VIDEO AT:

<http://oldtown.glendon.yorku.ca/~teaching/2023/huma2655/drake/>

Please describe what you hear/view.

<http://oldtown.glendon.yorku.ca/~yourname/2023/huma2655/takehome/drake/>

CAN YOU MAKE YOUR URL AT:

<http://oldtown.glendon.yorku.ca/~yourname/2023/huma2655/takehome/drake/>
that looks exactly like my URL in (a) above.

B. BOHEMIAN RAPSHODY – MIX AND RENDER

Download the file: <http://oldtown.glendon.yorku.ca/~teaching/bohemian/piano.flac>

B.1 Using Audacity to edit out the first 2 minutes and convert it from FLAC to MP3 format (save it as **piano.mp3** file)

B.2 Convert piano.mp3 you made in (i) to **MIDI** file at the web site:

<https://basicpitch.spotify.com/>

Download the MIDI file in (ii) to your PC as piano.mid.

C. MUESCORE TO SHEET MUSIC, AUDIO (MP3, WAV) ETC...

C.1 Use MUESCORE to make the music score from the midi file piano.mid in a(ii).

Your result should look like this video:

<http://oldtown.glendon.yorku.ca/~teaching/2023/huma2655/lab/musescore-aud2midi.mp4>

Export (save as) the musescore file in (i) above as PDF file, and mp3 audio. Display your PDF and mp3 files at your URL indicated below:

<http://oldtown.glendon.yorku.ca/~yourname/2023/huma2655/takehome/sun/files/>

Below is the screen capture (video). Your result should be similar to it.

<http://oldtown.glendon.yorku.ca/~teaching/2023/huma2655/lab/musescore-aud2midi.mp4>

C.2 Make a midi file and a PDF music sheet (using musescore) from the video:

<http://oldtown.glendon.yorku.ca/~teaching/2023/huma2655/hw2/takehome/piano/AuClairdeLune.mp4>

Describe very briefly all your steps.

5. CHANGE TEMPO OF A MUSIC VIDEO.

View the [help video](#).

A. CHANGE [TEMPO](#)

[Audacity](#) is an audio editor while [Avidemux](#) is a video editor

We need to process audio and video tracks separately, and then put them back together to achieve perfect synchronization which is required in music education.

- a. To speed up/slow down audio, use the "[bpm or beats per minute](#)" **effect** in Audacity.
- b. To speed up/slow down video, use "**fps** or frames per second" **filter** in Avidemux

For AVIDEMUX:

Change FPS = change duration of video.

Resample FPS = change and enforce FPS. Keep duration and sync.

For Audacity:

Change BPM = change duration of audio

We can download and install Avidemux and Audacity at your local device

at: <http://oldtown.glendon.yorku.ca/~teaching/binary/>

- You can **also** use [Audacity](#) and [Avidemux](#) on-line as **chrome** extension plugins.

Given the video at: http://oldtown.glendon.yorku.ca/~teaching/2021/videos/imagine_2020.mp4

that plays “Imagine” by Lennon at tempo.

Create a new video, named slow.mp4, which plays at 90% tempo of the video above. Here is a screen capture of [the output video format](#) suitable for streaming.

Display your slow video ([format mp4](#)) at:

<http://oldtown.glendon.yorku.ca/~lastname/video/lennon/slow90.mp4>

B. VIDEO STREAMING (HTML)

Also display your slower music as a web page (use video embed) at:

<http://oldtown.glendon.yorku.ca/~lastname/video/lennon/imagine.html>

