

## DESN 275 Quiz 4 Topics and Answer Hints

---

### S1 Chapter 4 Virtual Instruments and MIDI

What kind of information does MIDI contain? (Several examples)

Does a virtual instrument *track* have any recorded sound? Explain.

### In either Studio One or Garage Band...

p264 How do you add a MIDI part? How do you add notes to it?

In a MIDI editor, how do you change a note to a different duration, or different pitch?

How can you *transpose* loops?

p270 In MIDI, what is note *Velocity*?

---

### Sound Map Planning

#### What are Object sounds?

*Alarm clocks, church bells, elevators, a radio in the scene.*

#### What are Environment sounds?

Hint: Set the scene for time and place.

#### What are Action sounds?

Hint: Sounds related to the actions of the characters.

#### What are Transitions?

*Changes in locations or times.*

#### What are moments of dramatic transition?

Hint: When the plot turns. When it is about to get dangerous, get better, the moment they fall in love, the moment they realize who the culprit is, etc.

#### Sound design working principles

Overall Hint: • Support the images on the screen.  
• Remember to set the scene. You should add a little time before the narrator begins, or after he ends.  
• Use music to suggest emotions.  
• Emphasize key sound elements.  
• Never overpower the narration. Understated sounds are better.  
• Do not obscure key dialog with sounds that use the same frequency range as the dialog or the narrator's voice.  
• Add a little space between sentences or particular words if it will make room for sounds that will improve the final product.  
• Don't overload the listener. About 3-4 audio elements are all we can expect the listener to notice at the same time.

#### What are Diegetic sounds?

Hint: What the characters could have heard.

#### What are Non-Diegetic sounds?

Hint: They don't emanate from the scene.

#### What is false synchronization?

Hint: the inevitable crash sound that comes at the end of a long tire squeal is replaced by a door slam.

#### What is a leitmotif?

Hint: Dum Dum, Dum Dum, Dum Dum

#### What does a Sound Designer do?

Hint: works with the director in pre-production.  
(also see Working Principles)

What does a Production Recordist do?

What does a Sound Editor do?

What does a Sound Mixer do?

What is done in pre-production?

What is done in production?

#### What is done in post-production?

*Sound processing, normalizing, mixing, mastering*

#### Suppose you are a sound recordist. What would you not want to forget to do?

Hint: what do you want to get out of the recordings later? And what do you not want?

**(Psychoacoustics)** What is the difference between level and loudness?

Hint: level is technical. Loudness is what we think we hear.

What are 5 ways we can make a sound seem louder when the level is actually the same?

#### What edits can help dialog that is hard to understand?

Hint: High Pass at 200Hz Low Pass at 8KHz  
Up +6dB at 1750Hz - one octave wide (the "Q")  
+2dB at 250Hz for warmth Tell the talent not to mumble.

What sample rate is used for film editing? 48K

#### What is the academy curve?

Hint: A +2 dB bump at 2.5K and a treble boost +2dB starting at 6K

**What do you do if a mix sounds fine in stereo, but not in mono?**

Hint: • *Something is out of phase between the channels!* • *Are two mics picking up the same sound?*

- *Invert one track. (Audacity: Effect > Invert)* • *Slide one track and match to the other.* • *Use a different mic setup next time.*

**What do you do if there is too much room sound in your recording?**

Hints: • *Dampen the room with sound blankets, including the floor.*

- *Use a shotgun mic* • *Put the mic close to the talent*
- *Notice where prop movement is heard. Arrange the dialog around it.*

**What do you do if there are extra undesirable noises in the production recording location, like a motor running, or...?**

Hint: • *Rumble/motor noise? Record an extra channel at the same time, with mic aimed only at rumble source. Use phase to cancel it out in the mix.*

- *You can make a close mic sound distant later, but you can't make a distant one sound close later.*
- *Automatic level control on a camera will bring up the noise between dialog lines.*

**What are the three general tips for production recording?**

- *Use headphones that seal and allow you to hear the noises you are recording while you are there.*
- *Record some of the room noise by itself. Use it to fill in gaps later.*
- *Make notes. Keep as many variables as possible the same from take to take. Same mic. Same settings. Same location re the talent. Same level, etc. (See the example log sheet.)*

**What are typical sound track Interval (2-note) strategies when using music to suggest emotions?**

*Consonance and Dissonance*

*(1/2 steps) Play two notes.*

12	Octave	<i>Purity, peace, unity</i>
7	Fifth	<i>Harmony, working together</i>
5	Fourth	<i>Harmony, something going on</i>
4	Third	<i>Harmony, interest</i>
3	Flatted Third	<i>Darker, sad, troubled</i>
2	Second	<i>Tension, a problem presented</i>
1	Flated Second	<i>Discord, urgent problems</i>

**Musical Terminology**

Beats?

Tempo or BPM?

Measures or bars?

Time signature? The difference between 3/4 and 4/4 time?

**Key?** *Starting with a particular note, what other notes customarily sound good with it?*

**Notes in the key of C?** CDEFGAB

**Octave?** 12 half-steps, C to C above it or below it

**1/2 steps as related to notes in a scale**

So if the form goes:           1 1 4 1 5 4 1 5  
 ...the pitch 1/2 steps are:   0 0 5 0 7 5 0 7

**Transposing?**

Hint: *moving a note, or a set of notes, or a whole song, up or down on a scale. Uses half-steps.*

**Resolving?**

Hint: *relaxing tension. Examples: returning to the "tonic," that is to C, after transposing to other notes or keys away from C, or going from a minor to a major chord, or going from a fourth interval to a fifth interval, or going from a sharped 5<sup>th</sup> to a regular 5<sup>th</sup>. Or going from any any other interval to an octave.*

**What is involved in mastering?**

Hint: • *Making it sound good on any playback system.*

- *Song to Song-> Normalize levels, EQ consistency, balance the whole album / or set of albums / or set of files.*
- *Adjusting overall compression and EQ - Matching the genre*
- *Remixing individual tracks if necessary*
- *adjusting the spacing on the CD*

**Bringing your files to be mastered elsewhere?**

**Then what?**

Hints: *Have a good mix to start with.*

*Play your mix at home, in car, everywhere, first Don't do lots of compression. Let them do that. Bring an example of a project you like. If unsure, bring two versions.*

**Plug in Notes**

What is VST? (Virtual Studio Technology)

What is DirectX?

What is AudioUnit?

What is AAX and which DAW uses it?

What is ReWire?

What is Quantizing?