# **DESN 385 Advanced Digital Sound Week 3 Study Questions**

## Sound Design *Ch2 Analog Recording* & Reproduction

What are three significant differences between a *dynamic* microphone and a *condenser* microphone?

What is phantom power?

What are *ribbon* microphones famous for?

What do these microphone directionality terms mean? A sketch would be fine if you understand it.

Omnidirectional Cardioid

Hypercardioid Bi-directional or Figure-8

What does a *pop filter* do?

What are the main things a mixer device does?

What is the difference between *balanced* and *unbalanced* cables? Which one has 3 connectors? Which is better?

What is the definition of *frequency response* for both microphones and monitors?

Review Table 2-2 and Table 2-3 and be able to describe at least 4 of the seven frequency ranges.

# Mixing Engineer's Handbook Ch5 Equalizing What are the three purposes of equalization?

What frequencies affect the bottom – fullness or mud

- low mids - presence - sibilance - and air?

### Reading: Mixing Engineer's Handbook Ch6 Reverberation

EQing reverbs: How to make it stick out, or blend in How to make reverb fit, to fill in a space

How to calculate delays to the track tempo

### Reading: Mixing Engineer's Handbook Ch7 Compression

What is dynamic range?

Be able to explain what a compressor does.

What is a threshold?

What does the ratio do?

Be able to explain what a limiter does.

Be able to explain what a deesser does.

Do pop music bass guitar tracks have much dynamic range, typically? Why?

What is gating? What are a couple examples of situations in which it would be needed?

What is the goal when adding compression to a bass guitar, a lead vocal, or a snare drum? p57

#### From In-Class Demos

In the context of Tracktion Digital Audio Workstation (DAW) software, be able to explain the following:

How to start a project (Folders? Files? Names?)

How to archive a project and then open the archive

How to import audio files into the DAW

How to move and divide clips

How to create zero-crossover points

How to extend/ or merge clips with no or minimal distortion

How to adjust level and pan

How to EQ (apply frequency equalization to) a voice track - also typical EQ settings for a voice track

How to add compression to a track

How to add room reverberation to a track