

# DESN 275 Week 3 Winter 2010

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## Assignment 1: Sound Creations (Due 1 wk)

The short week challenge! Given only three sound samples and using your choice of pure noise or tones, create any four of these Foley-type sounds:

1. An explosion in a tunnel - exactly 5 seconds
2. An air driven elevator starting & traveling & coming to a stop - exactly 10 seconds
3. A car engine that is misfiring - exactly 10 sec.
4. A high-speed train leaving the tracks and landing in water - exactly 10 seconds
5. A three-legged walking machine with loose parts - exactly 10 seconds
6. An underwater vacuum cleaner accidentally sucking up some large rocks - exactly 10 seconds

### Criteria for all four of your Foley sounds:

- No clipping - but all sounds at about 60% amplitude
- Smooth starts/ends and transitions
- Unrecognizable (generally) constituent sounds
- Sample sounds used in at least two of the four
- Saved as an MP3
- Name the file, substituting your name and the sound number from the list of 6, as the elevator sound in this example: *w3foley2jbraukmann.mp3*

**1 Part 2: Also turn in a one-page written document** with explanation of each of your four Foley sounds. Include a clear illustration of the sound envelope with your secrets explained.

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**Assignment 2: Turn in the answers to this week's study questions. (This sheet is OK if you write clearly and small!)**

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**Reading: Sound Design Ch 2 Analog Recording and Reproduction** (Coming up: Foley sounds using your own live recordings. This reading is critical.)

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?

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.

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**Reading: Sound Design Ch 4 The Computer and audio (selected topics only!)**

p108 Why are zero-crossing points important when editing?

p109 How do we do non-destructive editing?

p110 What is reverb really? What is pitch shift?

p111 What is a noise gate? What is a compressor?

p114 What is a reverse/invert effect? What is normalizing?

p115 What is time stretching? What is rendering?

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**Reading: Alesis USB Manual.** See the PDF link on the course website, & research these topics:

How to set levels. p8

What is the difference between the mic and the line inputs? p9

What is an aux send used for? p10

What is the difference between the main mix out and the control room out? p10

What do each of the controls do on the "channel strip"? gain, level, pan/bal, peak LED, aux, EQ

What is phantom power? p14

What is a simple recording setup? p17

How do you use the mixer with a computer? p18

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**Reading: From drbraukmann's Notes Online**

**1. Microphones and cables**

**2. The recording process flow charts**

All of these notes are important to know.