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### MART 330.50: Principles of Sound Design

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## MART 330 PRINCIPLES OF SOUND DESIGN | SPRING 2016

Instructor: Geoff Cole

Email: geoff.cole@umontana.edu

Virtual Office Hours: by appointment

### OVERVIEW

Principles of Sound Design is an exploration into audio technique and creative sonic theory. The class defines sound design as a crucial aspect of film making, Integrated Digital Media, and as a unique art form. The course is divided into 3 sections: Fundamentals, Production, and Post-Production. Each section will consist of weekly assignments based on the principles and techniques of the particular topic. See course calendar for specific information. Each week will consist of an audio introduction overview, focus areas specific to that topic, a Spotlight area featuring a specific artist or individual and an Insights area relating sonic theory and application to expand concepts for critical thinking. Assignments will explore a variety of sonic applications that are explained in detail in Moodle.

### LEARNING OUTCOMES

We begin by developing an understanding of our relationship to sound itself. From the history of sound design to the current trends, we embrace the creative power of sonic manipulation. Through exploration of contemporary audio theory and it's implications, the student will learn to listen and understand the sonic arts in a new and masterful way.

The challenge of the media arts student is to integrate the capabilities and possibilities of the digital process with a refined aesthetic expression. This class intends to empower the individual by addressing the need to achieve the highest possible fidelity and most creative expression.

At the conclusion of this course students should be able to:

- Understand the basic fundamentals of acoustics, signal flow, microphones.
- Understand the basics of recording sound in various settings.
- Understand the basics of editing techniques, mixing, effects and final output.

### RESOURCES

Throughout the course there will be a variety of online examples and insights that introduce various concepts and techniques relevant to each assignment.

### THE MOODLE SHELL

Due to the online nature of the course it is the responsibility of the student to review and complete work in a timely manner. Moodle will contain the syllabus, your gradebook, assignment descriptions and upload areas, with particular forums. Mozilla Firefox is the recommended web browser for moodle. Firefox is also available for various mobile device operation systems including Apple iOS.

### CORRESPONDENCE

All class emails will be sent from Moodle to your university email account. All correspondence must be sent through University of Montana email accounts, any email received from a personal email account will be ignored. Most emails will be addressed within 24 hours.

Discussion Forums will also be utilized in Moodle and accompany certain assignments. When questions are posted to class forums, everyone in class benefits from the response. Students are also encourage to share experiences to create more collaborative online learning environment.

### MATERIALS

Headphones

Earbud style headphones are not recommended and should not be used for this course! Earbuds generally do not provide the

fidelity we need as professional sound designers. Many headphone manufacturers produce both consumer and professional models and prices can be deceiving. Just because a pair of headphones costs more, does not mean there are better quality. Many consumer models will be tailored to listening to music with added bass response. As sound designers, we want good quality professional studio headphones with a very flat frequency response.

## Software

This class does not focus on specific software training. The goal is to understand what sound is, the recording process, post production processes and output. These topics are not software dependent, as the majority of software can perform the tasks we will cover in course material. The BA lab in McGill 123 has Apple Logic 9 and Adobe Audition CC 2015 already loaded and available for use during lab hours (see schedule posted on door for current hours). Students that already have a subscription to Adobe Creative Cloud have access to Audition CC. Apple users have access to Garage Band which comes loaded on various releases of OS X, or downloaded from the app store (purchase may be required).

## Equipment

Equipment from the Media Arts equipment room may not be checked out for use in this class. Many students already have phones and mobile devices that are capable of recording high quality audio, which will come in handy for field recording. Most of these devices can record by default or with the aid of a recording app, many of which are free and can record uncompressed files! If you are looking for an app, make sure you can share the files directly via email or usb connection from the device. Some apps are set to only share to a cloud based service like Soundcloud, which will add more steps in getting the file into an editing program and ultimately submitted as the assignment. There are also many very affordable stand-alone recorders available from a variety of retailers that can work for this class and other projects.

## TOPICS

The semester will consist of the following topics. See the website for specific information and refer to assignment descriptions in Moodle for due dates.

### SECTION 1: Fundamentals

- Session 1: Deep Listening
- Session 2: What is Sound
- Session 3: Acoustics
- Session 4: Signal Flow
- Session 5: Microphones

### SECTION 2: Production

- Session 6: Studio Recording
- Session 7: Location Recording
- Session 8: ADR / Foley
- Session 9: Digital Production

### SECTION 3: Post-Production

- Session 10: Editing
- Session 11: Mixing
- Session 12: Effects – Dynamics
- Session 13: Effects – Time
- Session 14: Output

## GRADING

### Assignments

Due dates and individual parameters will be posted with each assignment.

Assignments must be fully submitted for grading by clicking the "Submit Assignment" button in moodle. "Draft" assignments that are not fully submitted by the assignment due date will be eligible for partial credit.

### Late Policy

Late work may submitted, per the discretion of the instructor, for partial credit with a minimum of 2 points deducted from the earned score.

Assignments 1(writing portion), 6-13 cutoff: 5pm, Friday, May 6, 2016.

Assignment 14 cutoff date: 5pm, Friday, May 13, 2016.

Assignments 2-5 (quizzes), no late quizzes accepted.

### Grades

There will be a total of 100 points for the semester and the following formula will be used:

- Assignments 1 through 13: 7 Points each = 91 points
- Assignment 14: 9 points

Total points earned will translate into the following letter grade:

- A 95-100
- A- 90-94
- B+ 86-89
- B 83-85
- B- 80-82
- C+ 76-79
- C 73-75
- C- 70-72
- D 60-69
- F 0-59

## ACADEMIC MISCONDUCT AND STUDENT CONDUCT CODE

All students must practice academic honesty. Academic misconduct is subject to an academic penalty by the course instructor and/or disciplinary sanction by the University. All students need to be familiar with the Student Conduct Code. The Code is available online at [http://www.umd.edu/vpsa/policies/student\\_conduct.php](http://www.umd.edu/vpsa/policies/student_conduct.php)

\*This syllabus is subject to change at any point per the instructor.