



**Learning Outcomes:**

- The successful student will know how to record, edit, and process audio and MIDI data using three commercial software packages (ProTools, Reason, and Logic Pro).
- The student will recognize relevant events in the development of music technologies and historically significant trends in the aesthetics of digital music.
- The student will be able to define and explain terms and concepts pertaining to digital audio.
- The student will compose and produce digital music and sound art for their professional portfolio.

**Disability/Medical Information:**

If you need an adaptation or accommodation because of a disability, if you have emergency medical information to share with me, or if you need special arrangements in case the building must be evacuated, please make an appointment to see me. My office location and hours are listed above.

If require assistance with a disability of any sort, please contact Disabled Student Services, 180 Strand Union Building, (406) 994-2824 as soon as possible. Please note that I will be unable to accommodate your needs unless you have registered with DSD.

**Academic Integrity, Discrimination, and Harrassment:**

Students of the university must conduct themselves in accordance with the highest standards of academic honesty and integrity. Academic dishonesty will be treated in accordance with the MSU Student Conduct Code, available at [http://www.montana.edu/policy/student\\_conduct/](http://www.montana.edu/policy/student_conduct/). If a student is found to have plagiarized, cheated, or in any other way violated the University's policies on academic honesty on any piece of work in this class, the minimum penalty will be a grade of "F" on the assignment. In egregious cases, or in cases where the student has repeatedly or flagrantly violated the University's policies on academic honesty, the penalty will be more severe, ranging from a grade of "F" in the course to suspension from the university. Note: Working in groups on non-group projects is a form of academic dishonesty and subject the aforementioned policies and procedures.

Discrimination on the basis of race, age, color, religion, gender, national origin, sexual orientation, or disability will not be tolerated or perpetrated. If any student in this course feels that he or she has suffered discrimination on the basis of one of these factors in any of his or her courses, I urge them to contact the Affirmative Action Office, 118 Hamilton Hall, (406) 994-2042.

Sexual harassment is a form of sexual discrimination and constitutes a violation of federal and state law. This policy applies to employment and academic relationships among faculty, staff, and students and is intended to protect the rights of all persons within the university by providing fair and impartial investigations of all complaints brought to the attention of appropriate officials. Violations may lead to disciplinary action. Every attempt will be made to maintain confidentiality of all parties involved. Questions regarding this policy may be addressed to the Affirmative Action Office, 118 Hamilton Hall, (406) 994-2042.

**Email and Website Policies:**

Students are expected to monitor their MSU email accounts on a regular basis. Periodically, I will need to send important information to you via email. MSU email can be configured to forward to an outside account if you so desire, but I am not responsible for keeping track of your personal (non-MSU) email addresses.

Information regarding course assignment, lectures, and other important notices will be communicated via the course website on D2L. The course website is not a substitute for coming to class. It is the student's

responsibility to check the website each day for additional explanations, updates on readings and other assignments, and alterations to course content. I usually put course lecture outlines on my teaching blog (teachingmusic.keithkothman.com), and I have a lot of guides and how-to information that I have previously posted.

### Classroom Climate:

The following are distractions during class, so we'll avoid them:

- **Socializing / talking** is not allowed unless it is part of a class activity.
- **Using the computer or other equipment** when someone is addressing the class.
- **Misusing** the equipment, including bringing food or drink into the lab area.
- Being **offensive** in your **words, speech, or actions**.
- **Cell phones and other handheld devices** are prohibited. **Personal laptops** may be used only during class lab sessions when all students are working on the computers. Cell phones must be out of sight and turned off or in "Airplane Mode" or "Do Not Disturb." Setting the ring tone to "vibrate" is not acceptable—all musicians should know that vibration causes sound!

### Assessment and Grading Percentages:

*You will **\*never\*** use an audio or MIDI file that you did not create for a project in this class.*

You must submit all assignments to pass the class. Exceptions may be made at the discretion of the instructor in cases of documented illness or injury.

*Late work is accepted for drastically reduced credit if submitted by noon the following day.* Lost or corrupted data is not an acceptable excuse for late submission of an assignment. The backups you make along the way are as important as the final version.

*45% of the final grade* will be earned through submission of creative and applied skills projects demonstrating an understanding of topics and technologies covered in the course. All files used in creating the project must be turned in.

*Progress* towards the final project is a significant part of that project's final score. *Good art and artistic growth require revisions.* You will be guided through your revisions by critiques from your teacher and peers.

*45% of the final grade* will be earned through written work (exams, essays, analyses, critiques of others' work, etc.)

*10% of the grade* will be earned by your attendance, participation, and service to the School of Music. Everyone in class will benefit by your attendance and participation—especially *you*. The participation average is based on ideas you share during lectures, lab sessions, critiques of others' works, and by being an active member of your learning community.

You will assist in recording two concerts for the Department of Music as part of the grade for this course. *Being late to or missing your scheduled recording event will drop your final grade 10 percentage points.*

**Attendance Policy:**

- Contact the instructor in advance if you must miss class. Most excused absences are known about well in advance.
- Contact the instructor as soon as possible regarding unforeseen absences. (Standard policy is that absences due to illness can be excused with written documentation. Other documentable misfortunes may also qualify as excused absences at the discretion of the instructor.)
- Email (keith.kothman@montana.edu) is the best way to keep your instructor informed about your absences. It provides a document with a date, time, and record of your communication with the instructor.
- Late work due to an *excused* absence may be made up *at the discretion of the instructor*. It is recommended that you *do* the work anyway so that you don't fall behind.
- Regardless of the reason for your absence, it is **your** responsibility to ask classmates what was covered during your absence and to complete any assignments given for the day(s) you missed. I will not re-teach missed class material during office hours.
- Accumulating five unexcused absences will lower the final grade up to a full letter grade. Deductions will continue for further unexcused absences.
- Students not present for roll call will be marked absent.
- Students who violate our guidelines for creating a cordial and respectful learning environment may be counted for an unexcused absence if asked to leave the class for the day. (See Classroom Climate above)
- Failure to follow Class and University guidelines or excessive absences from class will result in loss of studio privileges.

**Final Exam Times:**

Final exam times for all courses can be found at:  
<http://www.montana.edu/registrar/pdfs/fall2015finals.pdf>

Our final exam will be on 12/11, 8:00 am – 9:50 am, in our regular classroom. *Do not schedule travel home before the scheduled final exam.*

**Course Outline (subject to modifications):**

Module I (~Week 1 – Week 2): Sound, Timbre, and the Ear

*Software*

- demonstrations on Adobe Audition and Sonic Visualizer

*Hardware*

- Hardware for all modules: Kontakt 6 Audio Interface, Macintosh computers, select microphones from the MSU MUST mic cabinet, and appropriate cables.
- Demonstrations on other hardware will be provided.

*Reading, Lecture and Discussion Topics*

- History of Music Technology through Musique concrète

**Reading Assignment**

- Section 1: Sound and Ear Handout

**Written Exam 1—Week 3**

Module II (~Week 3 – Week 6): Audio

*Software*

- ProTools , the Macintosh Operating System

*Reading, Lecture and Discussion Topics*

- Recording and Editing Audio
- Applying Effects to audio
- Other relevant ProTools/DAW topics (automation, panning, bouncing, etc.)
- Composition through Listening and Critique of Works in Progress
- History of Music Technology through Musique concrète

***Reading Assignment***

- Section 2: Audio

***Project 1 Critique***—Week 5

***Project 1***—Due Friday, September 25

***Written Exam 2***—Week 6

***Listening 1***

Module III (~Week 7 – Week 11): Synthesis and Sampling

*Software*

- Reason (primary) and Logic's Sculpture, demonstrations on other software

*Reading, Lecture and Discussion Topics*

- Sound Synthesis Techniques and Sequencing
- Recording, Editing, and Effects in Reason
- Other relevant Reason/DAW topics (automation, panning, bouncing, etc.)
- Composition through Listening and Critique of Works in Progress
- History of Music Technology through Modern Synthesis

***Reading Assignment***

- Section III: MIDI and Software Instruments Chapters 11, 12, 13, 14

***Project 2 Critique***—Week 10

***Project 2***—Due Friday, October 30

***Written Exam 3***—Week 11

***Listening 2***

Module IV (~Week 12 – Week 15): MIDI

*Software*

- Logic

*Reading, Lecture and Discussion Topics*

- MIDI
- History of Music Technology as relates to MIDI
- Composition through Listening and Critique of Works in Progress
- Recording, Editing, and Effects in Logic
- Creating and Editing MIDI data in the DAW/Logic
- Other relevant Reason/DAW topics (automation, panning, bouncing, etc.)
- Composition through Listening and Critique of Works in Progress

*Reading Assignment*

- Section III: MIDI and Software Instruments Chapter 8, 9, 10, 15

*Project 3 Critique*—tba

*Project 3*—tba

*Written Exam 4*—tba

*Listening 3*

**School of Music Health and Safety Information:**

Please download [http://www.montana.edu/music/documents/health/MSU\\_health\\_safety\\_web\\_doc](http://www.montana.edu/music/documents/health/MSU_health_safety_web_doc)