MUT 205-001 and MUT 205-002 - Microphone Techniques
Syllabus
Fall 2018

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Course times: Section 1: MW 2:00 - 2:50
Section 2: TR 2:00 - 2:50
Credits: Two
Class Location: Griffith 310

This course is designed to introduce the art and science of utilizing microphones to properly capture the sound of different instruments and voices. Topics to be covered include the basics of how microphones work, the different types of microphones used in the recording studio as well as various microphone placement techniques. Additionally, student will game hands-on experience, learn microphone care, maintenance and selection, and engage in several recording projects to further cement their understanding of the course material. To be taken concurrently with Introduction to Audio Technology (MUT 210).

Learning Outcomes:
1. Students will be able to understand and articulate microphone terminology.
2. Student will learn the basics of microphone construction and function.
3. STudents will complete three recording projects that demonstrate their ability to apply learned conceptual topics.
4. Students will complete an academic research project that demonstrates their understanding of the course subject matter.
5. Students will learn microphone selection parameters.
6. Students will learn fundamental techniques for each microphone type.
7. Students will be prepared for more advanced studies in music technology and recording arts.

Program Learning Outcomes:
1. Students will demonstrate experience and expertise in music technology hardware and software for live sound reinforcement, recording, editing, mixing, producing, MIDI sequencing, and notation.
2. Students will demonstrate broad knowledge of the music industry.
3. Students will have developed and honed their skills as musicians and recording artists.
4. Students will demonstrate a working knowledge of various studio and live sound equipment operations.
5. Students will be prepared to pursue careers in the music industry and/or graduate studies in music and sound technology.
Required Text and Materials:

- *The recording Engineer’s Handbook, 3rd Edition* by Bobby Owinski
- Headphones with ¼ and ⅛” adapters.
- Portable data storage device with at least 4GB of free space.
- Access online resources including MS Office applications and Brightspace.

Evaluations and Assessments:

5%   Recording Project 1  
10%  Recording Project 2  
20%  Final Recording Project  
10%  Mid-term Examination  
15%  Final Examination  
15%  Homework  
10%  Quizzes  
10%  Experience Project  
5%   Research Project

Course Requirements:

Recording Projects:

*Project 1:*
Make a simple 20-30 second recording using at least two different types of microphones and submit a 200-300 word analysis explaining which mics were used, their specifications, what position they were in, and the different sonic characteristics of the microphones.

*Project 2:*
Students will create a 30-60 second recording of a solo instrument or voice, choosing from one of these three options:
1. Record in at least two locations in a single room,
2. Record in at least two separate rooms, or
3. Record an instrument with two or more mics simultaneously.
Students will then write a 300-500 word summary of which microphones were used, how they were used, the locations and their acoustic characteristics, and a comparison of the results.

*Final Recording Project:*
Students will create a recording that is one to four minutes long utilizing at least two different microphone types, two different microphone placement techniques, and two different instruments or one instrument with voice. Student will give a brief presentation of their projects in class and submit a 400-700 word summary of their project, which will include as many details as possible as they pertain to the course material.
Examinations:

This course includes one midterm and one final exam, which will cover the terminology, concepts, and technical aspects of the semester. Details will be provided in class.

Quizzes:

Several quizzes will take place in class, which will allow students to demonstrate their comprehension of the material as the semester progresses, and will also prepare them for larger examinations and projects.

Homework:

Students will complete several short assignments, which will supplement the material and activities that take place in class. Guidelines will be provided throughout the semester.

Listening Assignments:

Students will analyze two recordings of several instruments throughout the semester to facilitate active listening skills and provide a frame of reference as they progress through in-class recording sessions throughout the semester. Students will then write a 150-300 word summary describing the differences between the recordings, as well as any informed theories on how the instruments were recorded in terms of the microphones used, their placement, the acoustics, etc.

Experience Project:

Students will observe or assist with (pending instructor approval) an outside event which directly pertains to this course. This may be in the form of observing other music department recording session or events off campus. Students will then submit a 200-300 word summary of the event, which microphones were used, how they were used, and what they learned from the event. Opportunities will be announced in class, but students are welcome to submit proposals to the instructor, but must do so in advance to ensure the quality of the educational experience.

Research Project:

Students will submit a 200-300 word research paper on a microphone, including information about the company, information about the microphone, its specifications, and specific examples of its best applications.

Due dates and late submissions:
Unless otherwise stated in class or in writing, all assignments are due by 11:59 pm on the day that they are due.

Late assignments (not presentations) may be submitted late at the instructor’s discretion. If accepted late, a 20 point penalty will be assessed for the first 24 hours that it is late. Afterwards, each assignment will lose 10 points per day for each subsequent 24 hours.

**Make-up quizzes and exams:**
Generally, in-class quizzes and exams cannot be made up. Every student must make every effort to attend all exams. If a significant conflict completely prohibits a student from attending, that student must make every effort to notify the instructor with as much notice as possible. At the instructor’s discretion, make-ups may be issued in very special circumstances.

**Attendance and Participation Policy:**

All students at SFA are expected to meet a high standard to reflect the university’s motto, “Striving For Personal Excellence In Everything That We Do.” Therefore, in addition to excellence outside of the classroom with a student’s studies, assignments, and activities, students are expected to excel as students during each class session; this extends to both attendance and participation.

All students must be in their seats ready to learn before the start of each class session. Late students are a disruption to the learning environment of the classroom and lack of attendance will obviously prevent a student from achieving a high level of success in their classes. Furthermore, being in attendance and on time is not sufficient if a student is not participating. Any student who is on their electronic devices, fails to participate in activities, leaves class frequently, or anything else that inhibits their learning or the learning of others will be at least be marked absent for the day at the instructor’s discretion.

If a student is experiencing hardship, they are encouraged to see the instructor for guidance. If significant absences are due to illness, injury, family emergencies, etc. documentation may be waived at the discretion of the instructor; documentation may be required.

Attendance is taken at the very beginning of class, which means that tardies may be counted as absences.

Students may have three unexcused absences of tardies with no effect on their grade. Each successive absence lowers the final grade by 5 points (e.g. a 90 would become an 85) with a maximum penalty of 20 points.

**Tentative Course Calendar:**
Week 1: Syllabus and Introduction to the course and facilities

Week 2: Microphone basics; first class microphone activity

Week 3: Microphone characteristics; microphone tests
Assignment: Microphone University

Week 4: **Microphone University Due.** Special topics in microphone placement; acoustic resonance activity

Week 5: Introduction to phase; harmonics activity. Vocal miking.

Week 6: **Quiz.** Woodwinds and Brass recording activities

Week 7: Strings recording activities
Assignment: nylon and steel string guitar listening

Week 8: **Midterm**
Mono guitar and bass recording activities
Assignment: piano listening

Week 9: **Guitar listening due.** Recording multiple microphones; guitar activities continued
**Piano listening due.** Piano recording activities
Assignment: Drum recording listening

Week 10: **Drum listening due.** Drum recording activities

Week 11: Drum and percussion recording activities

Week 12: Mixed ensemble recording activities; wrapping up

Week 13: **No class. Thanksgiving Break**

Week 14: **Presentations of final projects.**

Week 15: **Presentations of final projects. Experience projects due.**

Finals Week: **Final Exam**

*All dates subject to change with fair notice.*

**Recital Attendance:**
Frequently throughout the year, students, faculty members and guest artists are presented in recitals by the School of Music and College of Fine Arts. These recitals are open to the public. Because performance and listening experiences constitute an area of major importance in the study of music, all music majors are required to enroll in MUP 100.001 for seven semesters with a minimum of 10 recitals and all convocations attended each semester. Music minors are required to enroll for two semesters in MUP 100.003 with a minimum of 10 recitals and all convocations attended each semester.

Course Evaluations:

Near the conclusion of each semester, students electronically evaluate courses they have taken. Evaluation data is used for a variety of important purposes including: 1. Course and program improvement, planning, and accreditation; 2. Instruction evaluation purposes; and 3. Making decisions on faculty tenure, promotion, pay, and retention. As you evaluate this course, please be thoughtful, thorough, and accurate in completing the evaluation. Therefore, your response is critical.

Student Ethics and Other Policy Information: see [http://www.sfasu.edu/policies/](http://www.sfasu.edu/policies/)

Class Attendance and Excused Absence:

Policy 6.7 Regular, punctual attendance, documented participation, and, if indicated in the syllabus, submission of completed assignments are expected at all classes, laboratories, and other activities for which the student is registered. Based on university policy, failure of students to adhere to these requirements shall influence the course grade, financial assistance, and/or enrollment status. The instructor shall maintain an accurate record of each student’s attendance and participation as well as note this information in required reports (including the first 12 day attendance report) and in determining final grades. Students may be excused from attendance for reasons such as health, family emergencies, or student participation in approved university-sponsored events. However, students are responsible for notifying their instructors in advance, when possible, for excusable absences. Whether absences are excused or unexcused, a student is still responsible for all course content and assignments. Students with accepted excuses may be permitted to make up work for up to three weeks of absences during a semester or one week of a summer term, depending on the nature of the missed work. Make-up work must be completed as soon as possible after returning from an absence.

Academic Accommodation for Students with Disabilities:

Policy 6.1 and 6.6 To obtain disability related accommodations, alternate formats and/or auxiliary aids, students with disabilities must contact the Office of Disability Services (ODS), Human Services Building, and Room 325, 936-468-3004 as early as possible in the semester. Once verified, ODS will notify the course instructor and outline the accommodation and/or
Student Academic Dishonesty:
Policy 4.1 Abiding by university policy on academic integrity is a responsibility of all university faculty and students. Academic dishonesty includes both cheating and plagiarism. Cheating includes, but is not limited to: - using or attempting to use unauthorized materials on any class assignment or exam; - falsifying or inventing of any information, including citations, on an assignment; - helping or attempting to help another in an act of cheating or plagiarism.
Plagiarism is presenting the words or ideas of another person as if they were one’s own. Examples of plagiarism include, but are not limited to: - submitting an assignment as one’s own work when it is at least partly the work of another person; - submitting a work that has been purchased or otherwise obtained from the Internet or another source; - incorporating the words or ideas of an author into one’s paper or presentation without giving the author credit.

Penalties for Academic Dishonesty Penalties may include, but are not limited to, reprimand, no credit for the assignment or exam, resubmission of the work, make-up exam, failure of the course, or expulsion from the university. Student Appeals A student who wishes to appeal decisions related to academic dishonesty should follow procedures outlined in Academic Appeals by Students (6.3).

Withheld Grades:

Policy 5.5 At the discretion of the instructor of record and with the approval of the academic unit head, a grade of WH will be assigned only if the student cannot complete the course work because of unavoidable circumstances. Students must complete the work within one calendar year from the end of the semester in which they receive a WH, or the grade automatically becomes an F, except as allowed through policy [i.e., Active Military Service (6.14)]. If students register for the same course in future semesters, the WH will automatically become an F and will be counted as a repeated course for the purpose of computing the grade point average.

Student Code of Conduct:

Policy 10.4 Classroom behavior should not interfere with the instructor’s ability to conduct the class or the ability of other students to learn from the instructional program. Unacceptable or disruptive behavior will not be tolerated. Students who disrupt the learning environment may be asked to leave class and may be subject to judicial, academic or other penalties. This policy applies to all instructional forums, including electronic, classroom, labs, discussion groups, field trips, etc. The instructor shall have full discretion over what behavior is appropriate/inappropriate in the classroom. Students who do not attend class regularly or who perform poorly on class projects/exams may be referred to the iCare: Early Alert Program at SFA. Information regarding the iCare program is found at http://www.sfasu.edu/judicial/earlyalert.asp or call the office at 936-468-2703.