Texas A&M University-Corpus Christi
Department of Music

MUSI 4390.002: Live Sound Engineering
Spring Semester 2014
Dr. Brian R. Thacker
TR 9:30 a.m. – 10:50 a.m.
Phone: (361) 825-3291
Location of Class: PAC 306
Office: CA 109
Email:brian.thacker@tamucc.edu

COURSE DESCRIPTION:
An overview of the basic principles of sound reinforcement and how audio can be manipulated utilizing current live sound technology. Topics will include signal flow, microphone selection and placement, signal processing, and mixing.

COURSE OBJECTIVES:
The primary objective of this course is to develop a fundamental working knowledge of sound reinforcement fundamentals.

STUDENT LEARNING OUTCOMES:
At the conclusion of the course, the student will be able to:

• Understand the basic requirements for sound reinforcement
• Become familiar with sound reinforcement techniques for various genres
• Demonstrate working knowledge of a sound reinforcement system
• Be able to design a basic sound reinforcement system.

REQUIRED TEXT & MATERIALS:


TOPICS & ASSIGNMENTS:
Assignments and readings will be given as new concepts and principles are discussed in class. The topics and assignments will cover:

1. the role of sound reinforcement in a performance setting
2. the methods used to design a sound reinforcement system
3. developing a working knowledge of microphones appropriate for sound reinforcement
4. explaining signal flow in a sound reinforcement system
5. explaining the roles of various components in a sound reinforcement system
6. developing a working knowledge of signal gain structure in a sound reinforcement system
7. describing the importance of tuning a sound reinforcement system
8. developing a working knowledge of analog sound boards
9. developing a working knowledge of digital sound boards
10. explaining the process of programing digital sound boards

GRADING PROCEDURES & POLICIES:
Assessment of the student's work is based on the following criteria:

- Command and application of the material covered in the class room.
- Command of terminology.
- There will be a final test that covers basic terminology and procedures in live sound reinforcement.
- Four live sound projects will be assigned.

GRADING SYSTEM:
The student's final grade will be drawn from grades received for each component of the course:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Assignments</td>
<td>25%</td>
</tr>
<tr>
<td>Project One</td>
<td>15%</td>
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<tr>
<td>Project Two</td>
<td>15%</td>
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<td>Project Three</td>
<td>15%</td>
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<tr>
<td>Project Four</td>
<td>15%</td>
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<td>Final</td>
<td>15%</td>
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COURSE OUTLINE

This is subject to change, dependent on the needs and progress of the class.

Unit 1 – What is a Sound System
Unit 2 – Frequency Response
Unit 3 – The Decibel, Sound Level, & Related Items
Unit 4 – Dynamic Range
Unit 5 – Sound Outdoors
Unit 6 – Sound Indoors
Unit 7 – Block Diagrams
Unit 8 – How to Read & Interpret Specifications
Unit 9 – Why Ears Don’t Always Correlate With Specs
Unit 10 – Microphones
Unit 11 – Preamplifiers, Small Mixers, & Mixing Consoles
Unit 12 – Power Amplifiers
Unit 13 – Loudspeakers
Unit 14 – Signal Processing Equipments
Unit 15 – Cabling & Sound System Test Equipment
Unit 16 - Electronics

ATTENDANCE
Since every class is essential, attendance is necessary for success. If you must miss class due to an illness or emergency, please call me, or leave a message on my voice mail prior to class. After 3 absences, each unexcused absence will drop your final grade 4 percent.

**** After 6 absences, your grade will be an automatic F. ****
This is a music department policy.

Perfect attendance will be rewarded with 4 percent being added to your final grade. Only one absence will be rewarded with 2 percent being added to your final grade. **Tardiness** will count as 1/2 an absence. **Leaving early** will count as 1/2 an absence.

**Notice to Students with Disabilities:** Texas A&M University–Corpus Christi complies with the Americans with Disabilities Act in making reasonable accommodations for qualified students with disabilities. If you need disability accommodations in this class, please see me as soon as possible. Please have your accommodation letter from Texas A&M University–Corpus Christi Disability Services (DS) Office with you when you come see me. If you suspect that you may have a disability (physical impairment, learning disability, psychiatric disability, etc.), please contact the Disability Services Office (located in 116 Corpus Christi Hall) at 361.825.5816.

**Academic Advising:** The College of Liberal Arts requires that students meet with an Academic Advisor as soon as they are ready to declare a major. The Academic Advisor will set up a degree plan, which must be signed by the student, a faculty mentor, and the department chair. The College’s Academic Advising Center is located in Driftwood 203E, and can be reached at 825-3466.

**Grade Appeal Process:** As stated in University Rule 13.02.99.C2, Student Grade Appeals, a student who believes that he or she has not been held to appropriate academic standards as outlined in the class syllabus, equitable evaluation procedures, or appropriate grading, may appeal the final grade given in the course. The burden of proof is upon the student to demonstrate the appropriateness of the appeal. A student with a complaint about a grade is encouraged to first discuss the matter with the instructor. For complete details, including the responsibilities of the parties involved in the process and the number of days allowed for completing the steps in the process, see University Rule 13.02.99.C2, Student Grade Appeals, and University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures. These documents are accessible through the University Rules Web site at [http://www.tamucc.edu/provost/university_rules/index.htm](http://www.tamucc.edu/provost/university_rules/index.htm). For assistance and/or guidance in the grade appeal process, students may contact the Office of Student Affairs.