COURSE SYLLABUS

South Plains College
Technical Education Division
Creative Arts Department
Sound Technology Program
Levelland Campus

DEPT-NO: MUSC 1327 (3:3:1)
COURSE: AUDIO ENGINEERING I
SECTIONS:
1327.003, 1327.004

COURSE SYLLABUS

COURSE TITLE: MUSC 1327 Audio Engineering I

INSTRUCTOR: Dolf Guardiola

OFFICE: Creative Arts Building CA 119

PHONE: 806-894-9611 x 2273 (direct line: 716-2273)

E-MAIL: rguardiola@southplainscollege.edu

OFFICE HOURS: POSTED ON INSTRUCTORS DOOR and on Blackboard

WEB SITE: http://southplainscollege.blackboard.com/

SOUTH PLAINS COLLEGE IMPROVES EACH STUDENT'S LIFE

GENERAL COURSE INFORMATION:

- a. Course Description: This course provides an overview of the modern recording studio and related personnel. Topics include basic studio electronics and acoustic principles, wave form analysis, microphone concepts and miking techniques, studio set up and signal flow, recording console theory, signal processing concepts, recorder principles and operation, and an overview of mixing and editing.
- b. Course Learning Outcomes: Identify acoustic and electronic concepts; describe waveform properties; explain microphone characteristics and discuss their placement; describe studio setup and signal routing; explain console and recording machine operation techniques; and discuss basic studio production procedures
- c. Course Competencies: To receive a passing grade for this course a student must be able to master at least 60% of the skills and knowledge demonstrated throughout the semester. Students will demonstrate knowledge of recording terminology and recording concepts presented in the texts and PowerPoint presentations through examinations and quizzes. Students will demonstrate proficiency in the basic operations of a DAW-based recording system through projects and assignments.
- d. **Academic Integrity:** It is the aim of the faculty of South Plains College to foster a spirit of complete honesty and a high standard of integrity. The attempt of any student to present as his or her own work which he or she has not honestly performed is regarded by the faculty and administration as a most serious offense and renders the offender liable to serious consequences, possibly suspension. Students should refer to the SPC General Catalog, pg.22-23, regarding consequences for cheating and plagiarism (see "Academic Integrity" and "Student Conduct" sections).
- e. **SCANS:** This course includes all SCANS competencies C1 through C20. Foundation skills include F1, F2, and F5 through F17. A key to these codes is found on the last 4 pages of this syllabus.
- f. Verification: This course is a requirement for the Commercial Music A.A.A. Degree and the Video Production Technology Certificate. It is also an option for any Commercial Music Certificate. This course does not fulfill the prerequisite for MUSC 2427 Audio Engineering II unless the student also takes MUSC 2101 Audio Engineering Practices.

II. SPECIFIC COURSE/INSTRUCTOR REQUIREMENTS:

- a. Textbooks:
 - Pro Tools 101: Fundamentals I v2022. By Frank D. Cook ISBN: 978-1-943446-97-1 Retain this book for use in Audio Engineering II, MIDI I, and for the Pro Tools User Certification Exam.
- Attendance: Any student may be withdrawn from the course at the instructor's discretion if either 1) in compliance with the general attendance policy of South Plains College, a student fails to attend class for two consecutive weeks; 2) if the student has in excess of 3 excused or unexcused absences; or 3) it is determined by the instructor based on the student's grades and attendance record that the student is unable to pass the course.
 - Due to the amount and technical nature of the information it is imperative that students attend and are attentive during class time. Assignments, Quizzes, etc. missed may only be made up if arrangements are made with the instructor prior to the absence. Call or email the instructor if you are not going to be able to attend.

- Any student not present when roll is taken will be counted absent. A student who
 comes in after roll is taken may request that the absence be changed to a tardy after
 the class period has ended.
- iii. Every absence above 3 will result in a ½ letter grade reduction in your final grade. A Tardy counts as ½ of an unexcused absence.
- iv. In order to avoid a grade of "F" appearing on his/her transcript, the student should formally withdraw from the class if he/she no longer plans to attend. Students who receive financial aid and have excessive absences will be reported to the Dean of Students.
- c. Supplies: all students will need to have a USB drive to backup their assignments/projects. Due to certain restrictions on lab computer use, certain computers may not be available for use on a given day. Therefore, it is important for students to copy their files to the network storage drive and keep a physical copy of their files with them on a USB drive or other personal storage. A fast USB (3.0) with 32 or 64GB+ storage would be recommended. The student should also utilize the "ST_Storage" network drive to backup their data. The student is responsible to purchase any media necessary to turn in projects and assignments and backup their data.
- d. Assignment/Project Policy: Students will be expected to read the textbook readings and watch video content as they relate to assignments and projects. Students will be required to complete several in- and out-of-class assignments and projects. Assignments and Projects will be distributed in class and where applicable will be available on Blackboard.
- e. **Late Policy**: All out-of-class projects & assignments are due at the beginning of class on the due date. Any assignment or project received after the class period on the due date will be penalized based on the following, using business/school days M-F:
 - 1 day late: 2.5% deduction; 2 days late: 5% deduction; 3 days late: 10%; and 4 days to 1 week late: 25% deduction; Late assignments will not be accepted after 1 week and will receive a zero.
 - ii. There may be some assignments or projects where this late policy will not apply and the project or assignment will not be accepted beyond the due date. This will be communicated on the project details handout for the project or assignment.
- f. Make-up Work: Assignments, tests, and other missed work can only be made up if arrangements are made with the instructor <u>prior</u> to an absence. Missed quizzes may not be made up under any circumstance.
- g. **Workload Policy**: For college level courses you should plan on 2 hours of work outside of the classroom for every hour in the classroom. This means for a 3-credit hour course, like this course, you should plan on 6 hours a week for readings, videos, homework, assignments, projects, and study in general. So please plan accordingly!
- Weekly Preparation: Before each class meeting, you are expected to have 1) read the assigned readings 2) watch any assigned video content and 3) completed any class or homework assignments.

i. Communication:

- i. Office Hours: My regular office hours will be posted on my office door and are also available online on Blackboard. Other meeting times can be arranged by appointment. You may stop by my office at anytime, however, making an appointment will ensure my undivided attention. If at anytime during the semester you require help or special consideration regarding any subject, please feel free to contact me. I encourage you to utilize these office hours and appointments.
- ii. E-mail: I will utilize e-mail during the course of the semester to communicate with you. It is important that you have an active email and know how to use (or learn) e-mail, the Internet, and computing in general (such as word processing, graphics, and database management) as part of your college education.
- iii. I will utilize Blackboard to post documents, hand-outs, additional required readings and other communications. If you have questions regarding Blackboard please see your instructor or log-on to your MySPC page, which also can link you to Blackboard. There is a link to Blackboard Help in the "Other" section in the main content menu.
- Grading Policy: Students will be graded by examination, quizzes, assignments, exercises, projects, and professionalism.
 - i. Exams will represent 33% of final grade.
 - ii. Projects will represent 33% of final grade. All projects must be completed to receive ANY project points
 - iii. Assignments/Exercises/Reviews/Quizzes/Attendance will represent 33% of final grade.
 - iv. Absences in excess of 3, excused or unexcused, will result in a $\frac{1}{2}$ letter grade reduction for each absence. A Tardy counts as $\frac{1}{2}$ of an unexcused absence.

- v. All exams will be announced at least one week prior to the exam.
- vi. Students will not be allowed to make-up or re-take any test or quiz. Students will be allowed to take exams early by making arrangements with the instructor. Exceptions may be made for extreme medical or family related issues at the instructor's discretion.
- vii. The instructor reserves the right to drop any student if the student's overall grade is below 60%.

k. Grading Format:

A = 90 - 100%, B = 80 - 89%, C = 70 - 79%, D = 60 - 69%, F = 0 - 59%

Miscellaneous:

- iii. There will be no phones, laptops, or electronic devices of any nature allowed during class time or testing. Use of a device during class will result in the students removal from class and the student's attendance grade for the day changed from Present to Tardy.
- iv. Using phones or text messaging during class will result in immediate dismissal from the class and result in an unexcused absence for that class period. If you must take a call or read/answer a text message please leave the classroom, as making/taking calls and text messaging during class is distracting to the instructor and other students. Leaving class repeatedly to make/take calls or text messages will result in a loss of professionalism points.
- v. I expect: students to be on time, awake & attentive, respectful, and complete the assignments and readings on-time.
- vi. The student can expect: class to start and end on-time, proper time to prepare for tests and complete assignments, and to be treated with respect.

m. Class Conduct:

- i. Students are expected to be respectful of the instructor and the other students. Students should behave in a manner that reflects the degree of professionalism to be expected in a learning and professional audio environment. Students should not talk when the instructor is talking. When a student is asked to respond verbally other students should listen respectfully. The only time more than one person should be talking is when the instructor permits group discussion.
- ii. Sleeping in class is prohibited and will not be tolerated. If you are too tired to stay awake in class don't come. It is unprofessional, rude, and distracting to the instructor and to the rest of the class and you will be asked to leave. It is your responsibility to insure that you have the rest you need so that you may fully participate in the class. If you think you may have a sleeping disorder you must contact the Student Services office and get the proper counseling, treatment and/or accommodation for your disorder.
- iii. Medical/physiological conditions: The same goes for any other condition that you may have that could impact your performance in the classroom. There are services available to address learning disabilities, physical impairments, chronic illnesses, etc. but it is your responsibility to make arrangements with Student Services in order to find the most appropriate solution.
- iv. Respect the equipment. It belongs to everyone who is enrolled in Sound Technology courses. Budgets are very tight and equipment is expensive. If something gets destroyed, lost, or is taken it may not be replaced. If you see anyone abusing the gear or attempting to remove equipment from its designated area please tell an instructor or lab assistant. Use common sense. Audio equipment, whether it is a \$50 mic stand or a \$5000 pair of reference monitors, is delicate equipment and should not be forced or pushed too hard under any circumstances. If you think you need to force it you are doing it wrong! (Or someone else forced it and now it's messed up.) Get an instructor to help you.
- n. **SPC Tutors:** Tutoring is FREE for all currently enrolled students. Make an appointment or drop-in for help at any SPC location or online! Visit the link below to learn more about how to book an appointment, view the tutoring schedule, and view tutoring locations.
 - http://www.southplainscollege.edu/exploreprograms/artsandsciences/ teacheredtutoring.php
 - ii. **Tutor.com:** You also have 180 FREE minutes of tutoring with Tutor.com each week, and your hours reset every Monday morning. Log into Blackboard, click on the tools option from the left-hand menu bar. Click on the Tutor.com link and you will automatically be logged in for free tutoring. You may access tutor.com tutors during the following times:
 - 1. Monday Thursday: 8pm-8am
 - 2. 6pm Friday 8am Monday morning
 - iii. For questions regarding tutoring, please email tutoring@southplainscollege.edu or call 806-716-2538.

III. DESCRIPTIONS:

- a. Class Participation: Active participation in this course is required and is an important part of the learning process. Students are expected to participate in various in-class activities that are designed to enhance the learning process.
- b. **Assignments**: There will be weekly assignments given throughout the semester. These assignments unless otherwise indicated on the instructions are individual assignments allowing the student to apply a given technique or set of techniques as described in class.
- c. **Examinations**: The tests will be made up of any combination of multiple-choice, true/false, matching, fill-in-the-blank, hands-on, and other various formats.
- d. **Quizzes**: There will be announced and unannounced quizzes given before, during, or at the end of class. Quizzes will cover lecture material as well as the assigned readings/videos. These quizzes are intended to give the student an idea of how certain topics will be assessed on examinations, and to give the instructor feedback on the student's mastery of topics.
- e. **Competencies**: Each competency must be passed with a score of 70% or better in order for the student to pass that competency. <u>ALL competencies must be passed to receive credit for ANY of the competencies</u>. The majority of the competencies, including the hands-on competencies, will be given during the week prior to finals week. The student will be given one chance to re-take a competency, if the student does not receive a passing grade on their first attempt. In order to pass this exam the student will show mastery of the equipment and studio techniques discussed and demonstrated during class.
- f. **Projects**: There will be between 1 and 3 projects given throughout the semester. The projects are individual projects and are intended to allow the student to demonstrate their mastery of techniques learned in class.
- g. **Assigning Grades**: The grade of "F" will be assigned to a student as an earned grade in regard to the learning objectives of a course. A student who does not meet the attendance requirements of a class as stated in the course syllabus, and does not officially withdraw from that course by the official census date of the semester, may be administratively withdrawn from that course and receive a grade of "X" as determined by the instructor. An "F" will not be assigned to any student administratively withdrawn from a course for non-attendance by an instructor. Instructors are responsible for clearly stating their administrative drop policy in the course syllabus, and it is the student's responsibility to be aware of that policy.
 - An "F" may be assigned to a student in the case of academic dishonesty and/or plagiarism at the discretion of the instructor, as clearly defined in the course syllabus, due to the severity of the student's actions and disregard for the learning objectives of the course.
- q. Out-of-Class Assignments: There will be several outside of class assignments.
- Meeting Place: the class will typically meet in CA 135, however, on occasion the class will meet
 in one of the other classrooms/studios.

Attendance Policy: Students are expected to attend all classes in order to be successful in a course. The student may be administratively withdrawn from the course when absences become excessive as defined in the course syllabus.

When an unavoidable reason for class absence arises, such as illness, an official trip authorized by the college or an official activity, the instructor may permit the student to make up work missed. It is the student's responsibility to complete work missed within a reasonable period of time as determined by the instructor. Students are officially enrolled in all courses for which they pay tuition and fees at the time of registration. Should a student, for any reason, delay in reporting to a class after official enrollment, absences will be attributed to the student from the first class meeting.

Students who enroll in a course but have "Never Attended" by the official census date, as reported by the faculty member, will be administratively dropped by the Office of Admissions and Records. A student who does not meet the attendance requirements of a class as stated in the course syllabus and does not officially withdraw from that course by the official census date of the semester, may be administratively withdrawn from that course and receive a grade of "X" or "F" as determined by the instructor. Instructors are responsible for clearly stating their administrative drop policy in the course syllabus, and it is the student's responsibility to be aware of that policy.

It is the student's responsibility to verify administrative drops for excessive absences through MySPC using his or her student online account. If it is determined that a student is awarded financial aid for a class or classes in which the student never attended or participated, the financial aid award will be adjusted in accordance with the classes in which the student did attend/participate and the student will owe any balance resulting from the adjustment.

IV. Course Outline:

- a. Overview of the Recording Process
- b. Overview of the Studio and Acoustics
- c. Overview of Microphones
- d. Overview of Careers in the Recording Industry
- e. Introduction to Pro Tools Software and Multi-track Recording
- f. Introduction to Signal Flow in the recording chain
- g. Introduction to Equalization
- h. Introduction to Compression
- Introduction to Effects Processing
- j. Introduction to Mixing
- k. Introduction to Editing
- Introduction to Stereo Audio File Creation

V. Accommodations:

Please visit https://www.southplainscollege.edu/syllabusstatements/ for a comprehensive list of accommodations provide at South Plains College.

VI. SCANS Key

Competencies

C1 Time Management

- Using lab time and completing project in time allotted
- Completion of projects and assignments by deadline

C3 Material/Facility Management

- Using available facilities to complete task in time allotted
- Following lab rules to facilitate organized sessions
- Organizing recorded material and managing storage

C4 Working with Others

Interfacing between other artists

C5 Study/Evaluation Skills

- Using technical manuals proficiently
- Critical thinking demonstrated by adapting technology to task
- Demonstrating hands-on operation of equipment

C6 Organizing and Maintaining Information

- Note taking
- Project documentation
- Editing projects/storing them on hard drive and other media

C7 Interpreting and Communication Information

Communicating with musicians on sessions

C8 Computer Usage

Using Digital Audio Workstations for project production

C9 Being a Team Member

Working toward one goal with others in a recording session

C11 Showing Ability to Serve Industry Clientele

Producing professional quality recordings

C12 Exercising leadership

- Leading recording sessions
- Recording sessions, arranging talent

C13 Making Decisions

- Choosing which productions techniques to use on projects
- Creating appropriate mixes
- Choosing and applying the appropriate effects
- Allocating enough time for each phase of the project

C14 Developing a Sense of Cultural Diversity

- Working with artists in the studio
- Recording many different styles of music
- Working with musicians of diverse heritage

C15 Understanding Social, Organizational and Technological Systems

- Demonstrating an understanding of the music industry
- Understanding signal flow in audio systems
- Understanding studio psychology
- Understanding the flow of information within a session

C16 Monitoring and Correcting Performance

- Doing recallable mixes which can be retrieved/corrected
- Troubleshooting signal flow in the DAW
- Analyzing and redoing mixes
- Assuming the role of producer
- Critiquing one's own projects

C17 Improving or Designing Systems

Experimentation with effects devices

C18 Selecting the Appropriate Technology

- Choosing the proper microphone for the application
- Choosing the appropriate signal processors, effects

C19 Applying Appropriate Technology to Tasks

Creating a usable demo project

C20 Maintaining and Troubleshooting Technology

 Receiving hands-on experience in the proper use, handling, and maintenance of audio equipment Foundation Skills

F1 Reading – locates, understands, and interprets written information

Reading the assignments from the texts and applying the information to recording projects

F2 Writing - communicates thoughts, ideas, information in written form

Writing answers on written tests

F3 Arithmetic - basic computations, numerical concepts

Calculating basic acoustical functions such as wavelength or period.

F5 Listening - receives, interprets, responds to verbal messages

- Listening to lectures, following verbal instructions
- Following the instructions of the instructor while performing operations on the DAW
- Critical listening to recordings and mixes

F6 Speaking - organizes ideas and communicates orally

Effectively running a recording session

F7 Creative Thinking - generates new ideas

- Creative use of effects
- Unusual miking techniques
- Songwriting

F8 Decision Making-specifies goals, assesses risk, makes best choice

Working within time restrictions

Following instructions with regard to project submissions

F10 Seeing Things in the Minds Eye-organizes/processes symbols, etc.

Imagining how the finished recording will sound

F11 Knowing How to Learn - acquire and apply knowledge/skills

Operating new or unfamiliar equipment

F12 Reasoning - discovery and application of underlying principles

• Applying recording techniques to different instrumentation, acoustical environments and different styles of music

F13 Responsibility - perseverance toward goal attainment

- Turning in quality recording project on time
- Running a recording session

F14 Self-esteem - believes in own self worth/has a positive view of self

- Handling musicians in the lab
- Turning in properly formatted documents
- Turning in projects that garner favorable critiques from peers

F15 Sociability - friendliness, adaptability, empathy, understanding, etc.

Interacting with other students in a recording session

F16 Self-management - assesses self, sets goals, monitors progress

- Operating recording equipment with confidence and prudence
- Creating a recording that reflects the desires of others
- Attending class
- Reading/studying, demonstrating ability on tests and projects

F17 Integrity/Honesty – chooses ethical courses of action

- Utilizing production values compatible with the industry
- Keeping production projects within budget
- Using the lab properly
- Properly accomplishing objectives of courses as required without asking for extensions
- Does not pass of other's work as one's own