# Digital Audio

#### I. General Information

Instructor: Mr. Gabino Noriega

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Room: B203

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### II: Course Description (1.00 Sem/Elective/Practical Art, Grades 10-12)

Digital Audio is a survey of the fundamental theories of sound, capturing, and editing audio, production of audio projects, and the legal considerations involved. The student explores the science of audio, recording techniques using digital and computer devices, software technologies, and current applications in the market place. Topics include, but are not limited to, sound waves, analog vs. digital sound, frequency response, decibels, recording techniques, hardware and software technologies, career exploration, and presentation formats. Literacy strategies are integrated throughout the curriculum.

#### III. Texts and Documents

- · Audio Editing with Adobe Audition by Richard Riley
- Digital Audio Essentials by Bruce and Marty Fries
- Shure Home Recording Techniques
- Supplemental Articles and Readings

#### IV. Course Objectives

The student will have the opportunity to:

- · Examine theories of digital and analog sound
- Analyze and explore Sound waves, frequency response, and decibels
- Develop digital recordings with Adobe Audition and editing techniques with Adobe Premier
- Investigate current applications of digital audio in the market place
- Create digital audio projects in cooperation with Digital Animation and Film classes
- Investigate career opportunities in the audio recording industry
- Research further education in the field audio recording

#### V. Course Requirements

This course is designed to acquaint the student with all aspects of audio production including audio production techniques, audio for television/film, and multimedia audio. In this class we will look at different ways of creating, recording, and presenting works of sound including synthesis, field recording, and multi-channel pieces. Trips to recording studios and weekly listening/participation in discussion of class work are expected. This class will include an introduction to Adobe Audition, basic recording, and audio production techniques. Students will attend lectures and gain experience in production as

they complete the projects assigned in the course. Students in this class will have the opportunity to gain and demonstrate a growing knowledge of Digital Audio by:

- · Completing all of the assigned readings in advance
- Taking two exams (a midterm and a final)
- Taking periodic reading quizzes and completing short in class assignments
- Completing group projects
- Completing individual projects
- · Keeping a weekly Listening Lab journal and vocabulary log
- Participating in an outside of class Internship
- Participating in class discussion and group learning activities

Student attendance and participation are required. A student with excessive absences will be dropped from the class. Refer to your student handbook's section on attendance for more clarity.

#### VI. Course Grading Procedure

There will be no "extra credit" in this course. Make-up work will only be accepted if the students turns in an excused absence form in a timely manner. Students are responsible to find out what class assignments or homework assignments they missed and then complete the work. When absences are anticipated, the student is to contact his/her teacher to determine what assignments are to be completed during the absence. It is the student's responsibility to check with his/her teacher as to work missed during the absence and the procedure to follow. All assignments need to be turned in on the dates they are due; significant loss of points will result from assignments turned in late. All work is important. Your grade will reflect class work, homework, tests, quizzes and projects. IF YOU SNOOZE, YOU WILL LOSE...

Grade scale:

A = 90 - 100

B = 80 - 89

C = 70 - 79

D = 60-69

F = 0.59

## VII. Course Expectations

Digital Audio students are expected to attend class regularly and arrive promptly, to assume responsibility for their assignments and participate in class activities and discussions. In addition, students are expected to display behavior that conveys respect toward the instructor and fellow students and honesty in their academic and personal interactions. Academic dishonesty and Plagiarism on part of the student, such as cheating on a test or aiding others who are cheating, or engaging in plagiarism, falsification, fabrication, or unauthorized collaboration, will be subject to serious academic sanctions. For more information about academic dishonesty and how such incidents will be handled, consult your student handbook.

#### VIII: Classroom Rules and Procedures

- No cell phones or any other electronic devices are allowed in the classroom.
- Treat each other with respect. This includes respecting each other's personal belongings and classroom interactions. Respect each other while having discussions and while working in groups.
- Respect the classroom as well as it's equipment. We are in here together so lets keep it clean and functional
- No food or drinks are allowed in the classroom. Only bottled water.
- Come prepared to class everyday with your notebook and a writing utensil.
- If you need the restroom, ask the instructor by raising your hand or approaching his desk.
- If you are ill or have to miss class for any reason, inform your instructor as soon as possible. No make up work will be given unless you have an approved excuse.

# I expect that you:

Be on time.

End talking when class begins.

Have all materials daily and ready.

Act appropriately.

Value and respect others.

Enthusiasm is KEY!

# IX. Weekly Schedule of Topics (Schedule Subject to Change)

Week	Topic
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1	Intro, Rules, Procedures, Syllabus, Listening, Getting to know you,
	Logistics The History of Audio Recording.
2	Sound: Wave, Air Pressure, Frequency, Cycle, Peak, and Amplitude.
	How we perceive sound: The Human Ear.
3	Digital vs. Analog. Recording analysis, what are the differences?
4	Digital Audio on the Radio and in Film (Foley Project)
5	Digital Audio Laws and Copyrights
6	Software, DACs, and DAWs (FL STUDIO PROJECT)
7	Studio Equipment and Project ideas (Build your Own Studio)
8	Microphones and Monitors
9	Microphone Placement (Mini Project)
10	Digital Audio Recording Careers and Schools (Guest Speaker)
11	Capturing Audio
12	Editing Audio and Digital mixing (Mixing Project)
13	Signal Processing
14	Start Projects/Project Lab
15	Project Lab
16	Project Lab
17	Project Presentations
18	Review and Final