MUSC 51B Course Outline as of Fall 2015

CATALOG INFORMATION

Dept and Nbr: MUSC 51B   Title: DIGITAL AUDIO 2
Full Title: Digital Audio 2: Multimedia
Last Reviewed: 11/9/2020

Units			Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	3.00		Lecture Scheduled	2.00	17.5	Lecture Scheduled	35.00
Minimum	3.00		Lab Scheduled	2.00	17.5	Lab Scheduled	35.00
			Contact DHR	1.00		Contact DHR	17.50
			Contact Total	5.00		Contact Total	87.50
			Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 70.00   Total Student Learning Hours: 157.50

Title 5 Category: AA Degree Applicable
Grading: Grade Only
Repeatability: 00 - Two Repeats if Grade was D, F, NC, or NP
Also Listed As:
Formerly:

Catalog Description:
An intermediate- to advanced-level hands-on workshop in digital audio focusing on the production of master audio tracks for multimedia applications. Topics include: audio for video and film; audio for spoken word; non-linear audio for interactive media and video gaming; podcasting and digital broadcasting; postproduction techniques; and mastering to compact disc and DVD.

Prerequisites/Corequisites:
Course Completion of MUSC 51A

Recommended Preparation:

Limits on Enrollment:

Schedule of Classes Information:
Description: An intermediate- to advanced-level hands-on workshop in digital audio focusing on the production of master audio tracks for multimedia applications. Topics include: audio for video and film; audio for spoken word; non-linear audio for interactive media and video gaming; podcasting and digital broadcasting; postproduction techniques; and mastering to compact disc

and DVD. (Grade Only)
Prerequisites/Corequisites: Course Completion of MUSC 51A
Recommended:
Limits on Enrollment:
Transfer Credit: CSU;
Repeatability: Two Repeats if Grade was D, F, NC, or NP

ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:

				Effective:	Inactive:
AS Degree:	**Area**			Effective:	Inactive:
CSU GE:	**Transfer Area**			Effective:	Inactive:
IGETC:	**Transfer Area**			Effective:	Inactive:
CSU Transfer:	Transferable	Effective:	Fall 2009	Inactive:	
UC Transfer:		Effective:		Inactive:	

CID:

Certificate/Major Applicable:
Both Certificate and Major Applicable

COURSE CONTENT

Student Learning Outcomes:
At the conclusion of this course, the student should be able to:
1. Utilize a digital audio workstation (DAW) to produce master audio tracks for multimedia applications, including film, video, gaming, digital broadcasting, compact disc, and DVD.
2. Critically analyze and aesthetically evaluate audio for multimedia applications.

Objectives:
Upon completion of this course, students will be able to:
1. Describe the various jobs and careers available in the Digital Audio industry.
2. Demonstrate hands-on proficiency with a DAW at an advanced level.
3. Explain the critical issues in the digital recording and broadcast of the speaking voice, including dialog, voice-overs, and narration.
4. Create, edit, and master digital audio content suitable for multimedia applications, including video and film.
5. Create, manage, and integrate an audio asset list for interactive media and video gaming.
6. Assess and implement the technical processes involved in Internet audio delivery and podcasting.
7. Demonstrate the technical processes involved in audio postproduction.
8. Explain the mastering process.

Topics and Scope:

Lecture Topics:
I. Overview of the Digital Audio Industry
   A. Jobs and careers in Digital Audio
   B. Industry resources and organizations

II. Audio for Spoken Word
III. Audio for Video and Film
  A. Synchronization and transfers
  B. Sound design
  C. Sound effects (SFX)
  D. Music underscoring
  E. Aesthetic issues in video/film audio
IV. Audio for Interactive Media and Video Gaming
  A. Linear vs. non-linear audio
  B. Data size budgeting
  C. Asset list creation, management, and integration
  D. Use of middleware
  E. Dataflow programming for Interactive Audio
V. Internet Production
  A. Data transfer networks
  B. Fidelity and digital file formats
  C. Acoustic masking (perceptual coding)
  D. Online collaborative recording
  E. Podcasting
VI. Postproduction
  A. Advanced editing
  B. Music mixing
  C. Surround sound
  D. Premixing and rerecording for TV and film
  E. Mastering for CD and DVD
  F. Evaluating the finished product
VII. Synthesis in Sound Design
  A. Reaktor
  B. Layering real world SFX with synthesized sound
  C. Styles of design
VIII. Best practices for productions

Laboratory Topics:
I. Advanced-Level Usage of the Digital Audio Workstation (DAW)
II. Creating, Managing, and Integrating Audio Asset Lists for Interactive Media and Video Gaming
III. Producing a Final Mixdown for Various Platforms
IV. Digital Audio Projects (such as):
  A. Producing radio spots with music beds, voice-overs, and SFX
  B. Scoring short films with music and SFX
  C. Producing podcasts and preparing audio for online delivery
  D. Building a MIDI/RIFF file to video game spec
  E. Copying a film score texture
  F. Organizing a personal SFX library following accepted naming conventions
V.   Mastering a final mix to industry standards

Assignment:

1. Online tutorials: 2 hours per week at Groove3.com.
2. Hands-on proficiency demonstrations (3-5) with the hardware and software.
3. Quizzes (1-3) on vocabulary and technical terminology.
4. Completion of required laboratory hours.

5. Digital audio projects based on the laboratory topics above, with a peer review process.
6. Final digital audio project: score a 1-minute film short.

Methods of Evaluation/Basis of Grade:

Writing: Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

None, This is a degree applicable course but assessment tools based on writing are not included because problem solving assessments and skill demonstrations are more appropriate for this course.	Writing 0 - 0%

Problem Solving: Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Digital audio projects	Problem solving 40 - 55%

Skill Demonstrations: All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

Hands-on proficiency demonstrations	Skill Demonstrations 25 - 35%

Exams: All forms of formal testing, other than skill performance exams.

Terminology quizzes	Exams 10 - 25%

Other: Includes any assessment tools that do not logically fit into the above categories.

Attendance and participation, lab hours	Other Category 5 - 10%

Representative Textbooks and Materials:
Online Tutorials:
Groove3.com (all-access pass)

Text:
Audio in Media (10th). Alten, Stanley R. Wadsworth/Cengage: 2013

Other online resources such as:
Audio Engineering Society (http://www.aes.org/)
Interactive Audio Special Interest Group (http://www.iasig.org/)

Periodicals such as:
Mix Magazine, Electronic Musician Magazine

Instructor prepared materials.