Practicum in Digital Audio Technology

PEIMS Code: N1300996
Abbreviation: PRACDAT
Grade Level(s): 11-12
Award of Credit: 2.0

Approved Innovative Course

- Districts must have local board approval to implement innovative courses.
- In accordance with Texas Administrative Code (TAC) §74.27, school districts must provide instruction in all essential knowledge and skills identified in this innovative course.
- Innovative courses may only satisfy elective credit toward graduation requirements.
- Please refer to TAC §74.13 for guidance on endorsements.

Course Description:

The Practicum of Digital Audio Course will prepare students for entry into the digital audio or entertainment industry, military, or postsecondary education by partnering with industry and local employers to provide students hands-on, real-world experiences and expectations. Building upon the concepts taught in Digital Audio Technology I and II and its co-requisite Digital Audio Production, students will be expected to develop an increasing understanding of the Audio industry with a focus on industry pathways such as live sound, broadcast, streaming, podcasting, studio recording and audio for film, video, and games. This course will give students the ability to build their resume and demo reel as well as obtain industry certifications such as Apple Logic Pro X.

Essential Knowledge and Skills:

(a) General Requirements. This course is recommended for students in grades 11-12. Prerequisites: Students must have successfully completed Digital Audio Technology I and Digital Audio Technology II. Students shall be awarded *two* credits for successful completion of this course.

(b) Introduction.

(1) Career and technical education instruction provide content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.

(2) The Arts, Audio/Video Technology, and Communications Career Cluster focuses on careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content, including visual and performing arts and design, journalism, and entertainment services.

(3) Careers in Digital Audio Production span all aspects of the audio entertainment and digital audio communications industry. Building upon the concepts taught in Digital Audio Technology II and its co-requisite Digital Audio Production in addition to developing

advanced technical knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to develop an increasing understanding of the Audio industry with a focus on industry pathways such as Live Sound, Broadcast, Streaming, Podcasting, Studio Recording and Audio for Film ,Video and Games. This course may be implemented in an advanced audio format. Instruction may be delivered through lab-based classroom experiences or career preparation opportunities.

(4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

(5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(c) Knowledge and Skills.

(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:

(A) participate in a paid or unpaid, laboratory or work-based application of previously studied knowledge and skills related to Digital Audio;

(B) demonstrate professional standards and personal qualities needed to be employable such as oral and written communication, leadership, teamwork, appreciation for diversity, conflict management, customer service, work ethic, and adaptability;

(C) demonstrate professional standards and personal qualities needed to be employable such as self-discipline, integrity, customer service, work ethic, and adaptability;

(D) create and maintain a resume and cover letter/letter of interest to document information such as work experiences, licenses, certifications, references;

(E) create and maintain a professional portfolio to highlight knowledge, skills, and accomplishments including the acquisition of industry-based certifications and post-secondary credentials;

(F) identify potential employment, job types, and requirements;

(G) use professional etiquette and protocol in situations such as making introductions, speaking on the phone, and communicating via electronic devices;

(H) exhibit appropriate grooming and attire; and

(I) demonstrate professionalism in receiving criticism and follow-up communication

(2) The student applies academic knowledge and skills in production projects. The student is expected to:

(A) apply proper English language arts knowledge and skills by consistently demonstrating use of content, technical concepts, and vocabulary; using correct grammar, punctuation, and terminology to write and edit documents;

(B) compose and edit copy for a variety of written documents such as scripts, captions, schedules, reports, manuals, proposals, and other client-based documents; and

(C) apply proper mathematics knowledge and skills in invoicing and time-based mathematics by consistently demonstrating knowledge of arithmetic operations and applying measurement to solve problems.

(3) The student implements advanced professional communications strategies. The student is expected to:

(A) adapt language such as structure and style for audience, purpose, situation, and intent;

(B) formulate, analyze, and organize oral, and written information;

(C) formulate, analyze, interpret, and communicate information, data, and observations;

(D) use clear and appropriate communications to convey skill set to others;

(E) create and deliver formal and informal presentations;

(F) apply active listening skills to obtain and clarify information;

(G) listen to and speak with diverse individuals; and

(H) exhibit public relations skills to increase internal and external customer/client satisfaction.

(4) The student implements advanced problem-solving methods. The student is expected to:

(A) employ critical-thinking skills, including data collection, analysis, and interpretation and evaluation both independently and in groups;

(B) employ interpersonal skills in groups to solve problems and make decision; and

(C) use the creative process to meet client needs and expectations.

(5) The student implements advanced technology applications and processes. The student is expected to:

(A) explain the fundamentals of network connections and interface requirements;

(B) explain the steps required to install and configure a computer on a network;

(C) identify the steps to troubleshoot network connectivity;

(D) create audio production projects using technology applications such as social media, email, Internet, writing and publishing, presentation, and spreadsheet or database applications for;

(E) implement processes such as personal information management and file management;

(F) facilitate collaboration by using file sharing services such as Dropbox, Google drive or other cloud-based file management systems;

(G) analyze the benefits and drawbacks of various media distribution services such as YouTube, Vimeo, Soundcloud or other internet-based streaming or on demand services; and

(H) apply basic network operations and protocols such as connecting devices to a network; mapping to servers, drives, or folders; and connecting Audio Video over Internet Protocol (AVoIP) equipment point to point.

(6) The student implements advanced knowledge of the evolution and current trends of the audio production industries. The student is expected to:

(A) summarize the history and evolution of audio production industries;

(B) analyze the current trends of audio production industries; and

(C) analyze the current impact of the audio production industries on society.

(7) The student applies safety regulations of digital audio industries. The student is expected to:

(A) implement consistently personal and workplace safety rules and regulations, including emergency procedures specific to a workplace; and

(B) identify and resolve potential safety concerns.

(8) The student implements leadership characteristics in student organizations and professional development activities. The student is expected to:

(A) employ leadership skills to accomplish goals and objectives by analyzing the various roles of leaders within organizations, exhibiting problem-solving and management traits, describing effective leadership styles, and participating in civic and community leadership and teamwork opportunities to enhance skills;

(B) employ teamwork and conflict-management skills to achieve collective goals;

(C) establish and maintain effective working relationships by providing constructive praise and criticism, demonstrating sensitivity to and value for diversity, and managing stress and controlling emotions;

(D) prepare for meetings by developing goals and objectives to achieve within a scheduled time and producing agendas;

(E) conduct and participate in meetings to accomplish work tasks by achieving goals and objectives within a scheduled time; producing meeting minutes, including decisions and next steps; and using parliamentary procedures, as needed; and

(F) employ mentoring skills to inspire and teach others.

(9) The student implements ethical decision making and complies with laws regarding use of technology. The student is expected to:

(A) research and comply with all copyright, fair use, trademark, and personal privacy laws;

(B) exhibit ethical conduct by citing sources and providing proper credit for intellectual property, ideas and work using established methods;

(C) model respect for intellectual property when manipulating, morphing, and editing graphics, video, text, and sound by obtaining permissions and or licensing as required;

(D) exhibit ethical conduct related to receiving, managing, and utilizing sensitive data, information, or content;

(E) exhibit proper etiquette and knowledge of acceptable use policies when using internet and intranet networks, Internet based resources such as search engines and Internet platforms such as social media;

(F) evaluate the consequences of creating socially provocative media; and

(G) research and comply with all applicable rules and regulations of the associated governing authority such as the Federal Communications Commission (FCC), local school district, or client.

(10) The student demonstrates appropriate career-building characteristics and maintains a professional portfolio. The student is expected to:

(A) evaluate and compare employment opportunities;

(B) examine and employ professional networking opportunities such as career and technical student organizations, professional social media, and industry professional organizations; and

(C) examine employment opportunities in entrepreneurship.

(11) The student employs effective planning and time-management skills to enhance productivity. The student is expected to:

(A) employ effective planning and time-management skills to complete work tasks; and

(B) enhance productivity by using available technology.

(12) The student implements an advanced understanding of a client-based production in all stages of production. The student is expected to:

(A) determine and meet client needs by conducting client meetings to identify specific project requirements, specifications, and target demographics; and

(B) develop a production proposal for client approval that includes a production schedule, research-based production costs, and appropriate delivery and distribution options.

(13) The student understands the pre-production activities for successful execution of a project. The student is expected to:

(A) identify cast, crew, equipment, and location requirements;

(B) develop a budget with considerations for cast, crew, equipment, and location;

(C) analyze the script and storyboard processes; and

(D) assign team roles required for production.

(14) The student comprehends the production activities for successful execution of a project. The student is expected to:

(A) conduct a client meeting for presenting production strategies and implement client feedback;

(B) implement a coherent sequence of production events;

(C) ensure quality productions by organizing and implementing necessary equipment and crew;

(D) exhibit teamwork and knowledge of interpersonal skills with sensitivity to diversity;

(E) demonstrate appropriate use of editing systems; and

(F) make decisions appropriate for each element of production.

(15) The student understands post-production activities for a successful output and distribution of the project. The student is expected to:

(A) evaluate and make necessary adjustments regarding compatibility issues, including digital file formats and cross-platform connectivity;

(B) apply various compression standards to facilitate distribution;

(C) research and advise clients on optimal delivery options for the target audience;

(D) analyze distribution options for optimal project reach;

(E) list content on relevant online distribution directories;

(F) explain the importance of updating metadata to include publishing and copyright information;

(G) create basic thumbnail art to be included in directories; and

(H) analyze and discuss analytical data for promotional and content creation purposes.

(16) The student practices business skills for freelance entrepreneurs. The student is expected to:

(A) implement standard freelance entrepreneur self-promotion techniques;

(B) develop proposals, standard billing, and collection practices;

(C) research freelance entrepreneur start-up practices; and

(D) use technology applications common to freelance entrepreneurs, such as spreadsheets, word processors, scheduling, communications, and presentation applications.

Recommended Resources and Materials:

Ballou, Glen. *Handbook for Sound Engineers*. New York: Focal Press, 2015.

Bartlebaugh, R. *SBE certification handbook for radio operators*. 2nd ed. Society of Broadcast Engineers, 2018.

Collins, Daniel, and Richard Swale. *Carrier-grade VoIP*. New York: McGraw-Hill Education, 2014.

Dittmar, Tim. *Audio Engineering 101: A Beginners Guide to Music Production*. New York: Routledge, 2018.

Huber, David Miles, and Robert E. Runstein. *Modern Recording Techniques*. Philadelphia: Taylor & Francis, 2014.

Lowe, Doug. *Networking for Dummies*. John Wiley and Sons, 2020.

Owsinski, Bobby. *Mixing Engineer's Handbook: 4th Edition*. Burbank: Bobby Owsinski Media Group, 2017.

Whitaker, J. *SBE broadcast engineering handbook: A hands on guide to station design and maintenance*. 1st ed. Society of Broadcast Engineers, 2018.

Recommended Course Activities:

- Students may be assigned to interview potential customers, giving their pitch for the business, gathering customer feedback and consider revising business plans where appropriate.
- Students may be assigned to job shadow within a digital audio environment.
- Students may be assigned to assess businesses that have failed, determine factors associated with business closure, and prepare analysis to share with class.
- Students should work with mentors from industry to analyze and discuss digital audio employment positions.
- Students should work with mentors on how to build and read financial statements to improve the essence of business performance in their business model of choice.
- Students may participate in CTSO competitive events related to Digital Audio in SkillsUSA, BPA, FBLA and/or DECA to enhance and practice related skills.

Suggested methods for evaluating student outcomes:

- Student work may be evaluated after each update to their portfolio at the end of each unit. Student portfolio will encompass skills and competencies of the digital audio course.
- Student performance may be evaluated on the changes made to the student portfolio as per the content mastered in each unit.
- Student performance may be evaluated on a portfolio project to be presented orally to interested stakeholders.
- Student learning outcomes may include the review and evaluation of case studies. A case study analysis is not simply descriptive but a critical exercise which involves the examination of a situation, business, or institution with a goal of making recommendations.
- Students may work in groups, with specific areas of digital audio responsibility assigned to each group member. Students may evaluate the performance of other group members in peer review fashion throughout the year.
- Student work may be evaluated by local industry professionals or post-secondary school to provide adequate feedback on student performance and skill level.

Teacher qualifications:

An assignment for the Practicum in Digital Audio Technology is allowed with one of the following certificates.

- Secondary Industrial Arts: Grades 6-12
- Secondary Industrial Technology: Grades 6-12

- Technology Applications:
- Technology Applications: Early Childhood-Grade 12
- Technology Applications: Grades 8-12
- Technology Education: Grades 6-12
- Trade and Industrial Education:
- Trade and Industrial Education: Grades 6-12 - This assignment requires appropriate work approval.
- Trade and Industrial Education: Grades 8-12 - This assignment requires appropriate work approval.
- Vocational Trades and Industry - This assignment requires appropriate work approval.

Additional information: