

# Digital Audio Technology I (2017)

Adopted 2017

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

- A.** participate in training, education, or certification for employment; **DATI.1.A**

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- 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; **DATI.1.B**

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- C.** demonstrate skills related to seeking and applying for employment; and **DATI.1.C**

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- D.** create a resume and cover letter/letter of interest to document information such as work experiences, licenses, certifications, and work samples. **DATI.1.D**

The student applies academic knowledge and skills in audio and video projects. The student is expected to: **DATI.2**

- A.** apply English language arts knowledge and skills by demonstrating use of content, technical concepts, and vocabulary; using correct grammar, punctuation, and terminology to write and edit documents; and composing and editing copy for a variety of written documents such as scripts, captions, schedules, reports, and manuals; and **DATI.2.A**

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- B.** apply mathematics knowledge and skills in invoicing and time-based mathematics by demonstrating knowledge of arithmetic operations and applying measurement to solve problems. **DATI.2.B**

The student understands professional communications strategies. The student is expected to: **DATI.3**

- A.** adapt language such as structure and style for audience, purpose, situation, and intent; **DATI.3.A**

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- B.** organize oral and written information; **DATI.3.B**

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- C.** interpret and communicate information, data, and observations; **DATI.3.C**

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- D.** deliver formal and informal presentations; **DATI.3.D**

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- E.** apply active listening skills; **DATI.3.E**

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- F.** listen to and speak with diverse individuals; and **DATI.3.F**

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- G.** exhibit public relations skills. **DATI.3.G**

The student understands and examines problem-solving methods. The student is expected to: **DATI.4**

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**A. employ critical-thinking skills independently and in groups; and** **DATI.4.A**

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**B. employ interpersonal skills in groups to solve problems.** **DATI.4.B**

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The student applies technology applications and processes. The student is expected to: **DATI.5**

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**A. use technology applications such as social media, email, Internet, writing and publishing, presentation, and spreadsheet or database applications for audio production projects; and** **DATI.5.A**

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**B. use processes such as personal information management, file management, and file sharing.** **DATI.5.B**

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The student understands the evolution and current trends of the audio industry. The student is expected to: **DATI.6**

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**A. summarize the history and evolution of the audio production industry; and** **DATI.6.A**

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**B. analyze the current trends of the audio production industry.** **DATI.6.B**

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The student applies safety regulations. The student is expected to: **DATI.7**

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**A. implement personal and workplace safety rules and regulations; and** **DATI.7.A**

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**B. follow emergency procedures.** **DATI.7.B**

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The student develops leadership characteristics. The student is expected to: **DATI.8**

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**A. employ leadership skills;** **DATI.8.A**

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**B. employ teamwork and conflict-management skills;** **DATI.8.B**

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**C. participate in meetings; and** **DATI.8.C**

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**D. participate in mentoring activities.** **DATI.8.D**

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The student applies ethical decision making and complies with laws and regulations regarding use of technology in audio production. The student is expected to: **DATI.9**

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**A. demonstrate an understanding of ethical conduct related to interacting with others and providing proper credit for ideas;** **DATI.9.A**

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**B. model respect for intellectual property;** **DATI.9.B**

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**C. analyze the ethical impact of the audio production industry on society;** **DATI.9.C**

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**D. understand and comply with all copyright and fair use laws; and** **DATI.9.D**

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**E. understand 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.** **DATI.9.E**

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The student develops career-building characteristics. The student is expected to demonstrate skills in evaluating and comparing employment opportunities. [DATI.10](#)

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The student applies technical skills for efficiency. The student is expected to: [DATI.11](#)

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**A.** employ planning and time-management skills to complete work tasks; and [DATI.11.A](#)

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**B.** use technology to enhance productivity. [DATI.11.B](#)

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The student develops a basic understanding of the audio production industry. The student is expected to: [DATI.12](#)

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**A.** identify various career pathways and job opportunities in the audio production industry; [DATI.12.A](#)

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**B.** understand the roles of various industry audio professionals such as producers, editors, engineers, and talent as they apply to specific audio production career pathways; [DATI.12.B](#)

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**C.** understand the history, current practices, and future trends for audio production careers such as radio and television broadcasting, video and film, animation and game design, music production, and live sound; [DATI.12.C](#)

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**D.** describe how the changing technology is impacting the audio industry; and [DATI.12.D](#)

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**E.** define and appropriately use terminology associated with the audio production industry. [DATI.12.E](#)

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The student develops a basic understanding of audio production equipment. The student is expected to: [DATI.13](#)

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**A.** understand types and application of microphones such as dynamic, condenser, ribbon, pressure zone (PZM), universal serial bus (USB), and wireless; [DATI.13.A](#)

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**B.** understand pick-up patterns and application of microphones such as cardioid, omni-directional, and figure eight; [DATI.13.B](#)

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**C.** understand the operation and application of audio consoles (mixers) such as broadcast consoles, live sound consoles, and recording consoles; [DATI.13.C](#)

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**D.** understand the operation and application of audio processing equipment or software such as equalizer (EQ), dynamic compressor, noise gate, band pass filters, reverb, and delays; [DATI.13.D](#)

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**E.** understand the operation and application of analog and digital audio recording devices such as handheld recorders, USB interfaces, multi-track devices, and digital audio workstations (DAW); [DATI.13.E](#)

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**F.** understand the application of audio interconnect cabling and connectors such as XLR balanced, TRS balanced, TS unbalanced, RCA, 1/4" TRS/TS, and mini TRS/TS; [DATI.13.F](#)

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**G.** understand the operation and application of additional audio hardware such as musical instrument digital interface (MIDI) controllers, direct boxes, audio splitters, and analog to digital converters as needed; and [DATI.13.G](#)

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**H.** understand the types and applications of audio speakers such as broadcast monitors, studio monitors, and live sound speakers. [DATI.13.H](#)

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The student develops an understanding of audio production elements. The student is expected to: [DATI.14](#)

**A.** identify key elements (stems) of an audio production such as dialogue, sound effects, music, and environmental; [DATI.14.A](#)

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**B.** understand how music styles, sound effects, or vocal performance can create a specific emotional impact; [DATI.14.B](#)

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**C.** identify key technical elements of audio production for effect such as panning, ducking, track doubling, retiming, and auto-tune; and [DATI.14.C](#)

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**D.** understand and identify digital audio codecs and compression standards such as Waveform Audio (WAV), MP3, and advanced audio coding (AAC). [DATI.14.D](#)

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The student identifies, creates, and obtains required assets for audio production projects. The student is expected to: [DATI.15](#)

**A.** identify key elements required in audio scripts; [DATI.15.A](#)

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**B.** apply writing skills to develop an audio script; and [DATI.15.B](#)

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**C.** create or obtain required audio assets through recording, synthesis, or permissions. [DATI.15.C](#)

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The student develops a basic understanding of a DAW and audio editing. The student is expected to: [DATI.16](#)

**A.** understand how to record or import various types of audio content such as audio files, MIDI data or automation; [DATI.16.A](#)

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**B.** understand types and application of audio track such as instrument track, master track, auxiliary track, and global attributes track; [DATI.16.B](#)

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**C.** understand audio editing tools and transitions such as cut, trim, and fade; [DATI.16.C](#)

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**D.** understand the use and application of software plug-ins such as EQ, dynamic compression, reverb, and software instruments; [DATI.16.D](#)

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**E.** understand the use and application of software automation; and [DATI.16.E](#)

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**F.** understand the various delivery formats such as disk, broadcast, cellular, portable device, electronic, and online delivery. [DATI.16.F](#)

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