Maryland CTE Programs of Study

Video and Audio Production II (2025)

GENERAL REQUIREMENTS. This course is recommended for students in Grades 10-12. 1

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INTRODUCTION 2

A Career and Technical Education (CTE) instruction provides 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.A

B The Arts, Entertainment and Design Career Cluster combines creative roles in visual and performing arts, film, journalism, fashion, interior design, and creative technologies. This Cluster focuses on creating, producing, and sharing artistic and design work across multiple platforms, aiming to entertain, inform, beautify, and inspire. 2.B

C The Video and Audio Production program guides students from foundational to advanced media creation skills. Throughout these courses, students explore graphic design fundamentals, video editing, and audio capture, culminating in comprehensive proficiency with advanced editing suites, sound engineering, and broadcast technology. Participants build a robust portfolio while preparing for industry-recognized certifications (e.g., Adobe, Avid, Apple, CBT). Graduates emerge equipped to thrive in film, television, radio, and streaming, having mastered both creative storytelling and technical workflows. 2.C

D Video and Audio Production II builds on the foundational skills acquired in Video and Audio Production I. Students learn to implement advanced lighting techniques, develop broadcast- quality content, and integrate industry-standard file management and export protocols. Ethical considerations and emerging technologies—such as streaming and AI-driven editing—are introduced to prepare students for evolving industry standards. 2.D

E Students will participate in at least two Career-Connected Education and Work-Based Learning experiences in this course, which might include informational interviews or job shadowing relevant to the program of study. 2.E

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F **Students are encouraged to participate in extended learning experiences through aligned Career and Technical Student Organizations (CTSOs). CTSOs are a cocurricular requirement in the Carl D. Perkins Act, and alignment to CTSO activities is an expectation for CTE programs in the state of Maryland.** 2.F

KNOWLEDGE AND SKILLS 3

A **The student demonstrates the necessary skills for career development, maintenance of employability, and successful completion of course outcomes. The student is expected to:** 3.A

1. Identify and demonstrate positive work behaviors that enhance employability and job advancement, such as regular attendance, promptness, proper attire, maintenance of a clean and safe work environment, and pride in work. 3.A.1
2. Demonstrate positive personal qualities such as flexibility, open-mindedness, initiative, active listening, and a willingness to learn. 3.A.2
3. Employ effective reading, writing, and technical documentation skills. 3.A.3
4. Solve problems using critical thinking techniques and structured troubleshooting methodologies. 3.A.4
5. Demonstrate leadership skills and collaborate effectively as a team member. 3.A.5
6. Implement safety procedures, including proper use of software and following privacy guidelines. 3.A.6
7. Exhibit an understanding of legal and ethical responsibilities in the video and audio production field, following data privacy laws and best practices for security. 3.A.7
8. Demonstrate time-management skills and the ability to prioritize tasks in a technical setting. 3.A.8

B **The student identifies various career pathways in the video and audio production field. The student is expected to:** 3.B

1. Develop a career plan that includes the necessary education, certifications, job skills, and experience for specific roles in video and audio production. 3.B.1
2. Create a professional resume and portfolio that reflect skills, projects, certifications, and recommendations. 3.B.2
3. Demonstrate effective interview skills for roles in media and video and audio production. 3.B.3
4. Identify a preferred specialization pathway (broadcast audio, live events, studio recording, or post-production) and outline two skills to develop in Course III. 3.B.4

C **The student develops technology and digital literacy skills. The student is expected to:** 3.C

1. Use technology as a tool for research, organization, communication, and problem-solving. 3.C.1
2. Use digital tools, including computers, mobile devices, collaboration platforms, and cloud services, to access, manage, and create information. 3.C.2

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3 Demonstrate proficiency in using emerging and industry-standard technologies, including video editing skills and applying basic effects to create media content. 3.C.3

4 Understand ethical and legal considerations for technology use, including the principles of data protection, copyright, and responsible technology use. 3.C.4

D The student integrates core academic skills into video and audio production practices. The student is expected to: 3.D

1 Demonstrate the use of clear communication techniques, both written and verbal, that are consistent with industry standards. 3.D.1

2 Apply English concepts such as writing informative texts and articulate goals through the development of design briefs. 3.D.2

3 Use mathematical concepts, such as applying proportional reasoning and scaling to understand image scaling, aspect rations, and resolution adjustments in digital media. 3.D.3

E The student demonstrates the necessary skills to use professional editing tools and workflows to enhance the quality and storytelling of video content. The student is expected to: 3.E

1 Capture high-quality video footage for varied production contexts, selecting suitable cameras, lenses, frame rates, shutter speeds, exposure, and white-balance settings; employ stabilization and focus techniques to ensure consistent image quality that is ready for post- production. 3.E.1

2 Employ nonlinear editing techniques using industry-standard software (e.g., Adobe Premiere Pro, DaVinci Resolve), applying timeline manipulation, trimming, transitions, and effects. 3.E.2

3 Perform intermediate color correction and grading in DaVinci Resolve (or within Premiere Pro), adjusting contrast, highlights, mid-tones, and color balance to achieve a consistent visual style. 3.E.3

4 Incorporate motion graphics and titling to enhance visual communication, ensuring text clarity and design cohesion aligned with project goals. 3.E.4

5 Import layered graphic assets into Adobe After Effects to create introductory motion graphics: build simple compositions, animate basic transform properties (position, scale, opacity, rotation), and use Dynamic Link or rendered exports to integrate results back into Premiere Pro. 3.E.5

6 Export finished videos in common delivery presets (e.g., 1080p H.264 .mp4 for web, 1080i ProRes .mov for school broadcast), explaining basic trade-offs between file size and quality. 3.E.6

F The student demonstrates the necessary skills to record, edit, and mix audio tracks that complement and elevate video projects, maintaining industry-standard loudness ranges— dialogue between -12 dB and -6 dB, and music or ound effects between -24 dB and -18 dB. The student is expected to: 3.F

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1. Distinguish between natural sound (“NAT sound”) and ambient sound—recognizing NAT sound as nonfiction, on-site audio captured during documentaries, interviews, or other location shoots, while ambient sound is typically created or sweetened in-studio for fictional productions—and record/import high-quality audio (e.g., dialogue, voice-overs, NAT sound, ambient sound, Foley) using appropriate microphone selection, placement, and settings. 3.F.1
2. Create original music scores in a digital audio workstation (e.g., BandLab) or locate and license royalty-free music, ensuring correct attribution and copyright compliance prior to integration with video content. 3.F.2
3. Edit and enhance audio tracks in Adobe Audition (or Audacity for schools using open- source software), applying noise reduction, equalization (EQ), compression, and normalization to maintain consistent levels. 3.F.3
4. Blend and mix audio elements (music, sound effects, dialogue) for clarity, balance, and aesthetic impact, preparing for more advanced audio engineering (Avid Pro Tools) in subsequent courses. 3.F.4
5. Synchronize audio and video accurately, employing timecode or manual alignment techniques to ensure professional and seamless integration. 3.F.5

G The student demonstrates the necessary skills to operate live sound systems for events on campus. The student is expected to: 3.G

1. Produce a small-venue show (assembly, concert, or talk) by creating a stage plot and input list, coordinating A1/A2 roles, and completing soundcheck. 3.G.1
2. Configure FOH and monitor mixes (pre/post-fader auxes) and apply EQ, compression, and gating for speech and basic music reinforcement. 3.G.2
3. Manage RF/cordless systems at a school level (frequency coordination basics, antenna placement, battery protocols) when available. 3.G.3
4. Troubleshoot hums, buzzes, feedback, and routing errors using a methodical signal-flow checklist. 3.G.4

H The student demonstrates intermediate operation of analog and digital mixing consoles. The student is expected to: 3.H

1. Patch inputs/outputs, set proper gain structure, and use channel dynamics; save/recall scenes and presets on a digital console. 3.H.1
2. Implement subgroups/VCA/DCAs to control ensemble balance and use onboard effects (reverb/delay) tastefully for live events. 3.H.2
3. Capture a 2-track board mix and, where available, a multitrack via USB/SD or Dante/USB interface for later post-mix. 3.H.3

I The student demonstrates the necessary skills to manipulate lighting for both aesthetic and functional purposes, reflecting industry practices in film, broadcasting, and live production. The student is expected to: 3.I

1. Apply intermediate lighting setups (e.g., three-point, high-key, low-key) to create mood, direct audience focus, and enhance narrative or thematic elements. 3.I.1

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2 Select and position lighting instruments (e.g., LED panels, spotlights, softboxes), considering color temperature and light quality for desired effects. 3.I.2

3 Use reflectors, diffusers, and gels to modify light intensity and color, adjusting contrast and tone for cohesive visual storytelling. 3.I.3

4 Evaluate lighting needs for different shooting environments, including studio, location, and green-screen setups, aligning with the overall production plan. 3.I.4

J The student demonstrates the necessary skills to effectively organize, plan, and collaborate on video and audio projects, reflecting the interdependent roles of a production team. The student is expected to: 3.J

1 Develop production schedules, shot lists, and scripts to guide filming or recording sessions, incorporating feedback from peers and instructors. 3.J.1

2 Coordinate with team members (e.g., lighting technicians, camera operators, audio engineers) to ensure cohesive collaboration and timely completion of project milestones. 3.J.2

3 Create and maintain production documents (e.g., call sheets, release forms, project logs), practicing professional standards for organization and legal compliance. 3.J.3

4 Analyze workflows to identify best practices for transitioning from pre-production through post-production, streamlining processes for future advanced courses. 3.J.4

5 Integrate live audio into multi-camera productions by routing board mixes to the switcher/encoder, setting intercom/IFB, and coordinating A1/A2 with camera and TD roles. 3.J.5

6 Align timecode (or slate sync) across cameras, audio recorder/console, and switcher to ensure coherent live and post workflows. 3.J.6

7 Apply school-approved loudness targets for streams/broadcasts; verify intelligibility on PA, stream return, and record feeds. 3.J.7

8 Prepare deliverables for both live (PA + stream) and post (board mix + ISO or program record), documenting routing, scene/patch files, and handoffs. 3.J.8

K The student demonstrates the necessary skills to integrate new media tools, observe ethical standards, and understand the impact of evolving technology in media production and broadcasting. The student is expected to: 3.K

1 Investigate emerging software features (e.g., AI-assisted editing, automated color matching) to improve efficiency and creativity. 3.K.1

2 Examine legal and ethical considerations related to copyright, fair use, and intellectual property when selecting and incorporating third-party materials (audio, visual, or text). 3.K.2

3 Adhere to broadcast standards for decency, content rating, and responsible storytelling, reflecting awareness of cultural sensitivities and audience demographics. 3.K.3

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4 Demonstrate data security and backup procedures when handling large media files, ensuring the integrity and confidentiality of project assets. 3.K.4

L The student demonstrates the necessary skills to blend core academic knowledge with professional competencies for success in advanced production roles. The student is expected to: 3.L

1 Apply advanced communication strategies (written, oral, and digital) to present creative briefs, client proposals, or production updates clearly and persuasively. 3.L.1

2 Use mathematical concepts (frame rates, sampling rates, timecode calculations) for precise editing, exporting, and scheduling. 3.L.2

3 Collaborate effectively in teams, practicing leadership, problem-solving, and critical thinking to address production challenges. 3.L.3

4 Include one live-event deliverable (board/2-track mix + program/ISO record) and one edited piece with color + titles. 3.L.4