# Multimedia Communications Program of Study with Complementary Course Standards



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#### Vision

All Nevada students are equipped and feel empowered to attain their vision of success

#### Mission

To improve student achievement and educator effectiveness by ensuring opportunities, facilitating learning, and promoting excellence



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#### **Standards Development Members**

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#### **Business and Industry Validation**

All CTE standards developed through the Nevada Department of Education are validated by business and industry through one or more of the following processes: (1) the standards are developed by a team consisting of business and industry representatives, or (2) a separate review panel is coordinated with industry experts to ensure the standards include the proper content, or (3) nationally recognized standards currently endorsed by business and industry.

The Multimedia Communication standards were validated through active participation of business and industry representatives on the development team.

#### Introduction

The standards in this document are designed to clearly state what the student should know and be able to do upon completion of a high school Multimedia Communications program of study. These standards are designed for a two-credit course sequence that prepares the student for a technical assessment directly aligned to the standards.

These exit-level standards are designed for the student to complete all standards through their completion of a program of study. These standards are intended to guide curriculum objectives for a program of study.

The standards are organized as follows:

- Content Standards are general statements that identify major areas of knowledge, understanding, and the skills students are expected to learn in key subject and career areas by the end of the program.
- Performance Standards follow each content standard. Performance standards identify
  the more specific components of each content standard and define the expected abilities
  of students within each content standard.
- Performance Indicators are very specific criteria statements for determining whether a
  student meets the performance standard. Performance indicators may also be used as
  learning outcomes, which teachers can identify as they plan their program learning
  objectives. The indicators are followed by designations that reflect the course sequence
  (e.g., L1 for the first-year course of a two-year program and L2 for the second-year course,
  C is to designate the indicators to be taught in the complementary courses) as referenced
  in the Core Course Sequence table.

The crosswalks and alignments are located in the Program Supplemental Program Resources document. These will show where the performance indicators support the Nevada Academic Content Standards. For individual course descriptions, please reference the Supplemental Program Resource or the Nevada CTE Catalog.

All students are encouraged to participate in the career and technical student organization (CTSO) that relates to the Multimedia Communications program. CTSOs are co-curricular national organizations that directly reinforce learning in the CTE classroom through curriculum resources, competitive events, and leadership development. CTSOs provide students the ability to apply academic and technical knowledge, develop communication and teamwork skills, and cultivate leadership skills to ensure college and career readiness.

The Employability Skills for Career Readiness identify the skills needed to be successful in all careers and must be taught as an integrated component of all CTE course sequences. These standards are available in a separate document.

The **Standards Reference Code** is only used to identify or align performance indicators listed in the standards to daily lesson plans, curriculum documents, or national standards. The Standards Reference Code is an abbreviated name for the program, and the content standard, performance standard and performance indicator are referenced in the program standards. This abbreviated code for identifying standards uses each of these items. For example, MMC is the Standards Reference Code for Multimedia Communications. For Content Standard 2, Performance Standard 3 and Performance Indicator 4 the Standards Reference Code would be MMC.2.3.4.

#### **Multimedia Communications**

#### **Program Information**

**Program of Study: Multimedia Communications** 

Standards Reference Code: MMC

Career Cluster: Arts, A/V Technology and Communications

Career Pathway(s): Journalism and Broadcasting
Program Length: 2-year, completed sequentially

CTSO: DECA / FBLA / SkillsUSA

#### **Program Structure Required Program of Study Courses**

The core course sequencing is provided in the following table. Complementary Courses are available and provided later in this document. The following courses provide a completed program of study. The Lab is a complementary course available concurrently with the Multimedia Communications II course.

#### Core Course Sequence (R) with Lab Course(s) (C)

Required/ Complementary	Course Title	Abbreviated Name
R	Multimedia Communications I	MULTIMEDIA COM I
R	Multimedia Communications II	MULTIMEDIA COM II
С	Multimedia Communications II LAB	MULTIMEDIA COM II L

#### **CONTENT STANDARD 1.0: INTEGRATE CAREER AND TECHNICAL STUDENT ORGANIZATIONS (CTSOs)**

#### Performance Standard 1.1: Explore the History and Organization of CTSOs

- 1.1.1 Discuss the requirements of CTSO participation/involvement as described in Carl D. Perkins Law (Level 1 (L1), Level 2 (L2), Complementary (C)
- 1.1.2 Research nationally recognized CTSOs (L1, L2, C)
- 1.1.3 Investigate the impact of federal and state government regarding the progression and operation of CTSOs (e.g., Federal Statutes and Regulations, Nevada Administrative Code [NAC], Nevada Revised Statutes [NRS]) (L1, L2, C)

#### Performance Standard 1.2: Develop Leadership Skills

- 1.2.1 Discuss the purpose of parliamentary procedure (L1, L2, C)
- 1.2.2 Demonstrate the proper use of parliamentary procedure (L1, L2, C)
- 1.2.3 Differentiate between an office and a committee (L1, L2, C)
- 1.2.4 Discuss the importance of participation in local, regional, state, and national conferences, events, and competitions (L1, L2, C)
- 1.2.5 Participate in local, regional, state, or national conferences, events, or competitions (L1, L2, C)
- 1.2.6 Describe the importance of a constitution and bylaws to the operation of a CTSO chapter (L1, L2, C)

#### Performance Standard 1.3: Participate in Community Service

- 1.3.1 Explore opportunities in community service-related work-based learning (WBL) (L1, L2, C)
- 1.3.2 Participate in a service learning (program related) and/or community service project or activity (L1, L2, C)
- 1.3.3 Engage with business and industry partners for community service (L1, L2, C)

#### Performance Standard 1.4: Develop Professional and Career Skills

- 1.4.1 Demonstrate college and career readiness (e.g., applications, resumes, interview skills, presentation skills) (L1, L2, C)
- 1.4.2 Describe the appropriate professional/workplace attire and its importance (L1, L2, C)
- 1.4.3 Investigate industry-standard credentials/certifications available within this Career Cluster™ (L1, L2, C)
- 1.4.4 Participate in authentic contextualized instructional activities (L1, L2, C)
- 1.4.5 Demonstrate technical skills in various student organization activities/events (L1, L2, C)

## Performance Standard 1.5: Understand the Relevance of Career and Technical Education (CTE)

- 1.5.1 Make a connection between program standards to career pathway(s) (L1, L2, C)
- 1.5.2 Explain the importance of participation and completion of a program of study (L1, L2, C)
- 1.5.3 Promote community awareness of local student organizations associated with CTE programs (L1, L2, C)

#### CONTENT STANDARD 2.0: ELEMENTS AND PRINCIPLES OF DESIGN AND COMPOSITION

#### Performance Standard 2.1: Describe Elements and Principles of Design

- 2.1.1 Analyze the applications of color, line, shape, texture, size, and value in samples of work (L1)
- 2.1.2 Explain the elements of design (L1)
- 2.1.3 Analyze the principles of balance, contrast, alignment, rhythm, repetition, movement, harmony, emphasis, and unity (L1)
- 2.1.4 Describe the principles of design through various drawing techniques (L1)
- 2.1.5 Analyze guidelines for composition (simplicity, rule of thirds, point of view, focal point, proportion/scale, exposure, and framing) (L1)
- 2.1.6 Demonstrate guidelines for composition (L1)
- 2.1.7 Use critical thinking skills to describe, interpret, analyze, and make judgments about composition (L1)

#### **Performance Standard 2.2: Explain Composition**

- 2.2.1 Discuss text, fonts, colors, title safe area, lower thirds, and placement (L1)
- 2.2.2 Enhance a project using appropriate graphics (L1)
- 2.2.3 Enhance a project using appropriate visual effects (picture-in-picture, motion graphics, etc.) (L1)
- 2.2.4 Evaluate possible shooting locations for a project (sound, lighting, environment, etc.) (L1)
- 2.2.5 Create and incorporate titles and other graphics in a production (L1)

### CONTENT STANDARD 3.0: MEDIA PLATFORMS, (PHOTOGRAPHY, GRAPHIC DESIGN, AUDIO, VIDEO, WEB, LIVE EVENTS

## Performance Standard 3.1: Demonstrate Knowledge of the Trends of Multimedia Communications

- 3.1.1 Research the major technological developments as related to multimedia communications (L1)
- 3.1.2 Describe the past, present, and future of multimedia communications (L1)
- 3.1.3 Identify eras in art history as applicable to art, media, design, architecture, etc. (L1)
- 3.1.4 Identify the major organizations/institutions involved with the multimedia communications industry (L1)

#### Performance Standard 3.2: Identify the Various Components of Multimedia Communications

- 3.2.1 Describe considerations for communications at live events (L1)
- 3.2.2 Explain the role of news stories and reporting (L1)
- 3.2.3 Discuss the use of mobile applications as a communications tool (L1)
- 3.2.4 Analyze the use of websites and online integrations (L1)
- 3.2.5 Compare communications used in advertising and promotional campaigns (L1)
- 3.2.6 Explain uses of social media platforms (L1)

#### CONTENT STANDARD 4.0: LEGAL AND ETHICAL ISSUES IN PROJECT DEVELOPMENT

#### Performance Standard 4.1: Explain Legal and Ethical Issues for Project Development

- 4.1.1 Explain and practice the proper use of release forms (L1)
- 4.1.2 Describe elements of a business contract (L1)
- 4.1.3 Research the purpose of non-disclosure agreements (NDAs) (L1)
- 4.1.4 Practice ethical and legal use of social media and online platforms (L1)
- 4.1.5 Debate the concept of censorship (L1)
- 4.1.6 Identify types of disabilities that should be considered when designing content (L2)

#### Performance Standard 4.2: Explain the Legal and Ethical Use of Content

- 4.2.1 Describe ethical issues related to image manipulation (L1)
- 4.2.2 Debate the fair-use law (L1)
- 4.2.3 Explain libel, slander, privacy, and copyright laws (L1)
- 4.2.4 Describe methods used to protect intellectual property, copyrights, trademarks, etc. (L1)
- 4.2.5 Explain legal and ethical acquisition and use of materials, giving attribution using established methods (L1)
- 4.2.6 Define terms applicable to ethics and laws (plagiarism, copyright law, libel, slander, etc.) (L1)

#### Performance Standard 4.3: Explain Legal and Ethical Issues As It Relates to the Workplace Environment

- 4.3.1 Describe and analyze ethics related issues in the workplace environment (L2)
- 4.3.2 Compare and contrast security measures taken in various formats and/or workplace environment (L2)
- 4.3.3 Discuss the impact of bias in the workplace (L2)
- 4.3.4 Explain technology related security issues in the workplace environment (L2)

#### CONTENT STANDARD 5.0: PROPER USE OF PRODUCTION TOOLS AND TECHNIQUES

#### Performance Standard 5.1: Demonstrate Effective Use of Camera Equipment

- 5.1.1 Compare and contrast various camera types (L1)
- 5.1.2 Define camera settings (ISO, aperture, and shutter speed) (L1, L2)
- 5.1.3 Describe and utilize the basic elements of exposure (L1)
- 5.1.4 Describe lenses, accessories, and their functions (L1)
- 5.1.5 Demonstrate the functions and uses of camera mounting devices (tripods, Steadicam, etc.) (L1)
- 5.1.6 Demonstrate adjustments of focal length and shutter speed (L1)
- 5.1.7 Describe and utilize the basic elements of exposure (ISO, aperture, and shutter speed) (L1)
- 5.1.8 Troubleshoot and resolve routing and connectivity issues (L1)
- 5.1.9 Discuss how to set up and execute a multi-camera shoot for various settings (conference, sporting event, live performance, streaming, etc.) (L2)

#### Performance Standard 5.2: Demonstrate Proper Use of Lighting Equipment

- 5.2.1 Utilize various light sources (natural light, diffusers, reflectors, portable lights, etc.) and white balance (L1)
- 5.2.2 Demonstrate one-, two-, and three-point lighting techniques (L1)
- 5.2.3 Describe the purpose of light meters (L2)
- 5.2.4 Use lighting for Chroma key techniques for compositing (green screen, virtual sets, weather maps, etc.) (L2)
- 5.2.5 Adjust angle and intensity of lighting sources to emphasize mood, look, or design (L2)

#### Performance Standard 5.3: Demonstrate Proper Use of Audio Equipment

- 5.3.1 Compare and contrast the types, uses, and pick-up patterns of various microphones (L1)
- 5.3.2 Demonstrate proper placement of microphones for effective audio (L1)
- 5.3.3 Connect microphone(s) to various audio equipment using the proper cables and/or adapters (L1)
- 5.3.4 Execute different methods of gathering sound (room tone, sound effects, dialogue, etc.) (L1)
- 5.3.5 Evaluate shooting locations for audio quality (sound, environment, etc.) (L1)
- 5.3.6 Adjust audio levels for single or multiple inputs (L2)

#### Performance Standard 5.4: Practice Production, Planning, and Execution

- 5.4.1 Research, discuss, and demonstrate various production types (L1)
- 5.4.2 Design a workflow and pre-production plan (L1)
- 5.4.3 Implement a production plan (L1)
- 5.4.4 Perform field production jobs to include camera, lighting, and sound technician (L2)
- 5.4.5 Understand the value of the production team and individual roles (L1)
- 5.4.6 Utilize production techniques to meet post-production content needs (L1)
- 5.4.7 Identify proper post-production media output format based on proposed use (.jpg, .mov, .pdf, etc.) (L1)
- 5.4.8 Manage proper media storage and file structure (L1)
- 5.4.9 Produce a prerecorded and a live video to meet an intended message and audience (L2)

#### CONTENT STANDARD 6.0: MARKETING CONCEPTS AND SOCIAL MEDIA

#### Performance Standard 6.1: Utilize Marketing Information Systems

- 6.1.1 Create a marketing plan and budget (L1)
- 6.1.2 Describe the need for marketing information (L1)
- 6.1.3 Demonstrate research techniques used in marketing (L1)
- 6.1.4 Utilize market research to determine target market and genre (L2)
- 6.1.5 Explain the use of search engine optimization (SEO) tactics for digital marketing (L2)
- 6.1.6 Examine media analytics (L2)
- 6.1.7 Create keywords and descriptions (meta tags) to be utilized in web content for search engine optimization (SEO) (L2)

#### Performance Standard 6.2: Demonstrate the Nature and Scope of Advertising

- 6.2.1 Define advertising (L1)
- 6.2.2 Analyze the cost and benefit of various forms of advertising (L1)
- 6.2.3 Describe components of a marketing campaign (L1)
- 6.2.4 Explain the nature of digital advertising (texting, gaming, virtual worlds, banner ads, pop-up ads, native advertising, pay-per-click ads, search engine optimization (SEO) consideration, etc.) (L1)

#### Performance Standard 6.3: Demonstrate Comprehension of Branding and Target Marketing

- 6.3.1 Define and explore target markets (L1)
- 6.3.2 Select strategies for maintaining and building fan support (L1)
- 6.3.3 Explain public relations and its relationship with customers, media, and government officials (L1)
- 6.3.4 Describe the use of crisis management in public relations (L1)
- 6.3.5 Analyze customers' buying motives and decisions as they relate to a target market (L1)
- 6.3.6 Explain the need to build a product or service brand (L1)
- 6.3.7 Analyze the key factors in building clientele (L2)
- 6.3.8 Categorize publicity as positive or negative and explain its effects on a business (L2)
- 6.3.9 Compare and contrast the differences between employee, customer, and community relations (L2)
- 6.3.10 Explain the role of customer service in positioning, imaging, and social media (L2)
- 6.3.11 Develop a media guide (L2)

#### Performance Standard 6.4: Demonstrate Comprehension of Social Media Management

- 6.4.1 Explain usage and purpose of different social media platforms (L1)
- 6.4.2 Define elements and format specifications needed for various platforms (L1)
- 6.4.3 Develop a social media campaign (L1)
- 6.4.4 Discuss impact of emerging trends in technology and social media (L1, L2)
- 6.4.5 Compare and use social media schedulers and management tools for consistency (L2)
- 6.4.6 Integrate a method to measure results with analytic tools (L2)
- 6.4.7 Identify key influencers and followers to help shape future iterations (L2)

#### **CONTENT STANDARD 7.0: PROFESSIONAL COMMUNICATION**

#### Performance Standard 7.1: Evaluate Information from Various Sources

- 7.1.1 Describe the process of gathering factual information (L1)
- 7.1.2 Identify resources to conduct valid research (L1)
- 7.1.3 Accurately attribute all sources correctly (L1)
- 7.1.4 Practice proper interview techniques (L1)
- 7.1.5 Select interviewee(s) and location appropriate for the topic (L2)
- 7.1.6 Contact interviewee(s) and schedule interview(s) (L2)
- 7.1.7 Recognize the differences between biased and unbiased questions and answers (L2)
- 7.1.8 Develop open-ended questions to elicit in-depth responses (L2)
- 7.1.9 Improvise questions based on the interviewee's responses (L2)

#### Performance Standard 7.2: Write Content for Multimedia Communication

- 7.2.1 Create stories that contain a logical beginning, middle, and end (L1)
- 7.2.2 Determine appropriate writing formats for various industries and context (L1)
- 7.2.3 Write scripts that convey a variety of desired story elements (leads, VO, SOT, VO/SOT, news package, etc.) (L1)
- 7.2.4 Develop storyboards and scriptwriting for effective preproduction and visualization (L1)

#### Performance Standard 7.3: Demonstrate Effective Verbal Communication Techniques

- 7.3.1 Develop proper presentation techniques for appropriate media communication (L1)
- 7.3.2 Critique various styles of delivering information (L1)
- 7.3.3 Conduct a client briefing (L1, L2)
- 7.3.4 Develop proper speaking techniques for appropriate media communication (L1, L2)
- 7.3.5 Discuss and differentiate voice, tone, and style as it applies to presentations (L1, L2)

#### **CONTENT STANDARD 8.0: CONTENT CREATION**

#### Performance Standard 8.1: Demonstrate Effective Website Development

- 8.1.1 Demonstrate basic HTML and block-coded web development tools (L2)
- 8.1.2 Generate project ideas through the use of thumbnails, roughs, mock-ups, wireframes, etc. (L2)
- 8.1.3 Optimize websites for compliance, readability, and accessibility (L2)
- 8.1.4 Compare and contrast web vs mobile applications (L2)
- 8.1.5 Develop user interface based on desired outcome (L2)
- 8.1.6 Monitor validity of hyperlinks (L2)
- 8.1.7 Identify content management systems (CMS) (Word Press, Joomla, etc.) (L2)
- 8.1.8 Integrate social media platforms (L2)
- 8.1.9 Discuss Search Engine Optimization (SEO) and analytics (L2)
- 8.1.10 Evaluate and revise products based on critiques (L2)

#### Performance Standard 8.2: Demonstrate Effective Graphic Layout and Design Techniques

- 8.2.1 Create various print/digital publications using industry appropriate software (newsletters, certificates, brochures, and flyers) (L2)
- 8.2.2 Create tables, charts, and graphs to depict information (L2)
- 8.2.3 Evaluate color, text, and layout (L2)
- 8.2.4 Apply image sizing, cropping, orientation, and resolution adjustment (L2)
- 8.2.5 Discuss text, fonts, colors, title safe area, lower thirds, and placement (L2)
- 8.2.6 Apply effective use of negative space, composition, message structure, graphics, etc. (L2)
- 8.2.7 Evaluate and revise products based on critiques (L2)

#### Performance Standard 8.3: Demonstrate Effective Audio/Visual Techniques

- 8.3.1 Create various motion media projects using industry appropriate software (L2)
- 8.3.2 Explain the impact of editing on continuity, performance, and emphasis (L2)
- 8.3.3 Apply the principles of editing to a production project (L2)
- 8.3.4 Adjust audio levels for single or multiple tracks (L2)
- 8.3.5 Discuss the importance of sound editing (sound effects, Foley, room tone, etc.) segment (L2)
- 8.3.6 Discuss export options relative to usage (L2)
- 8.3.7 Generate various audio/visual productions (L2)
- 8.3.8 Evaluate and revise products based on critiques (L2)

#### Performance Standard 8.4: Demonstrate Photography Techniques

- 8.4.1 Create various photography projects using industry appropriate software (L2)
- 8.4.2 Demonstrate digital asset input and management (L2)
- 8.4.3 Demonstrate editing techniques (L2)
- 8.4.4 Demonstrate effective output techniques (L2)

#### CONTENT STANDARD 9.0: CAREER EXPLORATION AND BUSINESS SKILLS

#### Performance Standard 9.1: Prepare and Explore Career Opportunities

- 9.1.1 Develop and maintain portfolios and resumes (L1)
- 9.1.2 Research job opportunities using skills in multimedia (L2)

#### Performance Standard 9.2: Apply Workplace Skills to Production Projects

- 9.2.1 Identify and locate all safety equipment in media labs and on location (first aid kit, fire extinguisher, etc.) (L1)
- 9.2.2 Practice time management in order to meet production deadlines (L1, L2)
- 9.2.3 Conduct peer and self-evaluations using rubrics (L1)
- 9.2.4 Explain the elements of the critique process, including a respect for peer work and the ability to give and receive dispassionate criticism (L1)
- 9.2.5 Demonstrate effective application processes (L2)
- 9.2.6 Research and practice various interview methods (L2)

#### **Performance Standard 9.3: Explain Business Concepts**

- 9.3.1 Discuss the qualities of responsible business ownership (L2)
- 9.3.2 Research opportunities for remote workers, freelancers, etc. (L2)
- 9.3.3 Analyze the value of your services (L2)
- 9.3.4 Analyze and explain corporate structure (L2)
- 9.3.5 Analyze entrepreneurship concepts (L2)

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#### **Complementary Courses**

#### **State Complementary Skill Standards**

State complementary skill standards are designed to clearly state what the student should know and be able to do upon completion of a **one-year** complementary course related to their career and technical education (CTE) program of study. **Completion of the qualifying Program of Study is required prior to enrollment in a complementary course.** 

#### **Employability Skills for Career Readiness Standards**

Students have completed all program content standards and will pursue advanced study through investigation and in-depth research.

#### **Complementary Course Standards Contributing Members**

Course Contribution(s)	Name	Occupation/Title	Stakeholder Affiliation	School/Organization
2D Animation	James Black	Instructor	Secondary Educator	Desert Pines High School, Clark County School District
2D Animation	Monte Carman	Director and Instructor	Secondary Educator	Southwest Career and Technical Academy, Clark County School District
2D Animation	Kevin Kirk	Instructor	Secondary Educator	Clark High School, Clark County School District
2D Animation	Rory Olvina	CTE Strategist	Secondary Educator	Southwest Career and Technical Academy, Clark County School District
2D Animation	Ashley Stroud	Instructor	Secondary Educator	Las Vegas Academy of the Arts, Clark County School District

#### **Business and Industry Validation**

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The 2D Animation complementary standards for Multimedia Communications program of study were validated through active participation of business and industry representatives on the development team.

# Complementary Course Information for Multimedia Communications

#### **Program Information**

**Qualifying Program of Study: Multimedia Communications** 

Career Cluster: Arts, A/V Technology and Communications

Career Pathway(s): Journalism and Broadcasting

CTSO: DECA / FBLA / SkillsUSA

Grade Level: 11-12

#### **Program Structure for Complementary Courses**

The complementary courses are provided in the following table. The qualifying program of study must be completed prior to enrolling in the complementary courses (except labs that are done concurrently with the second-year course). A program does not have to utilize the complementary courses for students to complete their program of study.

#### **Complementary Courses**

Required/ Complementary	Course Title	Abbreviated Name
С	2D Animation for Multimedia Communications	2D ANIMATE MMC
С	Multimedia Communications Advanced Studies	MULTIMEDIA COM AS
С	Industry-Recognized Credential – Program	IRC MULTIMEDIA COM
С	CTE Work Experience – Arts, A/V Technology and Communications	WORK EXPER AATC

# Complementary Course Standards 2D Animation

#### **CONTENT STANDARD 1.0: THE FIELD OF ANIMATION**

#### Performance Standard 1.1: Purposes and Uses of Animation

- 1.1.1 Research careers in animation
- 1.1.2 Describe trends in animation
- 1.1.3 Explain types of animation (i.e., traditional, stop motion, motion graphic, computer-generated imagery [CGI], and interface animation)

#### Performance Standard 1.2: Communicate Ideas Using Appropriate Industry Terminology

- 1.2.1 Formulate written communications using industry terminology
- 1.2.2 Practice verbal communication using industry terminology
- 1.2.3 Prepare and deliver a visual presentation utilizing appropriate industry terminology

#### Performance Standard 1.3 Apply the Animation Production Process

- 1.3.1 Summarize the general production process
- 1.3.2 Practice the production process
- 1.3.3 Manage production assets
- 1.3.4 Practice time management to meet production deadlines
- 1.3.5 Model fair use in production of animated works

#### **CONTENT STANDARD 2.0: PRE-PRODUCTION**

#### Performance Standard 2.1: Implement Concept Development Practices

- 2.1.1 Practice brainstorming and ideation to develop a concept
- 2.1.2 Conduct visual research to provide reference for a project
- 2.1.3 Produce thumbnails, roughs, and comprehensive layouts for presentation
- 2.1.4 Design and develop environments
- 2.1.5 Design and develop 2D animated assets and characters

#### Performance Standard 2.2: Demonstrate Knowledge of Visual Design

- 2.2.1 Apply the elements and principles of design
- 2.2.2 Apply the twelve principles of animation
- 2.2.3 Explain the role of visual language in an animation project
- 2.2.4 Apply the principles of animation to create animated sequences

#### Performance Standard 2.3: Create Storyboards

- 2.3.1 Illustrate actions with sequential panels
- 2.3.2 Evaluate and revise storyboards for effectiveness and feasibility
- 2.3.3 Describe appropriate camera placement for shot composition

#### **CONTENT STANDARD 3.0: 2D ANIMATION TECHNIQUES**

#### Performance Standard 3.1: Apply Methodologies of 2D Animation

- 3.1.1 Apply straight ahead and pose to pose techniques
- 3.1.2 Apply keyframing, tweens, and breakdowns
- 3.1.3 Simulate a naturally occurring or mechanical cycle/loop

#### Performance Standard 3.2: Perform Motion Design

- 3.2.1 Demonstrate an object following a path
- 3.2.2 Apply masking techniques
- 3.2.3 Simulate depth
- 3.2.4 Implement camera settings (depth of field, focal length, etc.)
- 3.2.5 Create lighting
- 3.2.6 Animate kinetic typography
- 3.2.7 Practice particle systems and visual effects
- 3.2.8 Implement motion tracking
- 3.2.9 Coordinate animated objects to sound

#### Performance Standard 3.3: Create Character Animation

- 3.3.1 Design a character
- 3.3.2 Create rigging for characters (parent/child, joint/bone chain, etc.)
- 3.3.3 Practice lip sync with audio

#### **CONTENT STANDARD 4.0: POST-PRODUCTION**

#### Performance Standard 4.1: Create Final Output

- 4.1.1 Demonstrate editing and compositing techniques
- 4.1.2 Select and render appropriate format for distribution
- 4.1.3 Conduct peer and self-evaluations using rubrics