

Arts, A/V Technology and Communications (2021)

Adopted 2021

Advanced Animation, Game and App Design (48.423)

AAVTC-AAGAD-1. The following standard is included in all CTAE courses adopted for the Career Cluster/Pathways. AAVTC-AAGAD-1

1. Communicate effectively through writing, speaking, listening, reading, and interpersonal abilities. AAVTC-AAGAD-1.1
2. Demonstrate creativity by asking challenging questions and applying innovative procedures and methods. AAVTC-AAGAD-1.2
3. Exhibit critical thinking and problem solving skills to locate, analyze and apply information in career planning and employment situations. AAVTC-AAGAD-1.3
4. Model work readiness traits required for success in the workplace including integrity, honesty, accountability, punctuality, time management, and respect for diversity. AAVTC-AAGAD-1.4
5. Apply the appropriate skill sets to be productive in a changing, technological, diverse workplace to be able to work independently and apply team work skills. AAVTC-AAGAD-1.5
6. Present a professional image through appearance, behavior and language. AAVTC-AAGAD-1.6

AAVTC-AAGAD-2. Demonstrate following safety procedures when working with computer and TV equipment. AAVTC-AAGAD-2

1. Categorize general safety rules for operation of equipment and learning activities specific to film, computer, and TV. AAVTC-AAGAD-2.1
2. Apply concepts of safe practices when working on assignments. AAVTC-AAGAD-2.2
3. Recognize and practice safe and secure transportation of equipment. AAVTC-AAGAD-2.3
4. Identify and apply concepts of safe handling of art media and tools. AAVTC-AAGAD-2.4

AAVTC-AAGAD-3. Demonstrate an understanding of the history of animation and the evolution of 2-D to 3-D animation. AAVTC-AAGAD-3

1. Review and distinguish concepts of animation history. AAVTC-AAGAD-3.1
2. Recognize and practice safe and secure transportation of equipment of the transition from using drawings to digital media. AAVTC-AAGAD-3.2
3. Review an understanding of flip books, pegs and light and how they apply to animation. AAVTC-AAGAD-3.3
4. Identify and assess the role and influence of new technologies on contemporary artwork. AAVTC-AAGAD-3.4
5. Differentiate past, present, and future technological advances as they relate to an animation. AAVTC-AAGAD-3.5
6. Report key influences on the origin and evolution of art, technology, media, and performance (e.g., the influence of historical styles on contemporary idioms). AAVTC-AAGAD-3.6

AAVTC-AAGAD-4. Demonstrate applying trade terminology in an appropriate manner. AAVTC-AAGAD-4

1. Identify and utilize trade terminology in the media production lab. AAVTC-AAGAD-4.1
2. Identify and utilize trade abbreviations and acronyms as appropriate. AAVTC-AAGAD-4.2

AAVTC-AAGAD-5. Demonstrate the use of effective professional communication skills (oral, written, and digital) and practices that enable positive customer relationships. [AAVTC-AAGAD-5](#)

1. Assess the importance of all customers to a business. [AAVTC-AAGAD-5.1](#)
2. Identify organization's products and services. [AAVTC-AAGAD-5.2](#)
3. State the influence of instructional technology on business. [AAVTC-AAGAD-5.3](#)
4. Show how technology can be used to create a solution to business challenge and present to customer in professional business format. [AAVTC-AAGAD-5.4](#)
5. Apply concepts ability to assist customers in a professional manner. [AAVTC-AAGAD-5.5](#)
6. Apply actively listen to customers. [AAVTC-AAGAD-5.6](#)
7. Investigate, interpret, and synthesize customers' individual needs. [AAVTC-AAGAD-5.7](#)
8. Formulate a professional business image (e.g., appearance, voice, grammar, word usage, enunciation, nonverbal communication). [AAVTC-AAGAD-5.8](#)

AAVTC-AAGAD-6. Demonstrate using formal qualities of art (elements and principles) to create unified composition and communicate meaning. [AAVTC-AAGAD-6](#)

1. Uses a viewfinder to develop compositions. [AAVTC-AAGAD-6.1](#)
2. Apply concepts of design to organize elements to communicate meaning and unified compositions concepts, such as activating negative space, visual weight, paths of movement, non-centered focal point, dominance and subordination of design elements, and variety within repetition. [AAVTC-AAGAD-6.2](#)
3. Demonstrate using thumbnail sketches and visual/verbal notes to plan compositions. [AAVTC-AAGAD-6.3](#)
4. Interpret and apply concepts, such as activating negative space, visual weight, paths of movement, non-centered focal point, and variety within repetition. [AAVTC-AAGAD-6.4](#)
5. Differentiate the structural elements of the plot (e.g., subplots, parallel episodes, and climax), the plot's development, and the way in which conflicts are (or are not) addressed and resolved. [AAVTC-AAGAD-6.5](#)

AAVTC-AAGAD-7. Demonstrate using computational thinking procedures to analyze and solve problems. [AAVTC-AAGAD-7](#)

1. Apply concepts for identifying routine hardware and software problems current to everyday life. [AAVTC-AAGAD-7.1](#)
2. Identify patterns of compatibility issues and describe operational problems caused by hardware errors. [AAVTC-AAGAD-7.2](#)
3. Investigate how technology can be used to solve problems. [AAVTC-AAGAD-7.3](#)
4. Draw conclusions of the software development process is used to solve problems. [AAVTC-AAGAD-7.4](#)
5. Distinguish commonly used documentation tools for design specifications, including flowcharts and visual and textual storyboards. [AAVTC-AAGAD-7.5](#)

AAVTC-AAGAD-8. Develop in an independent production setting the direction of specialization for news, film, and graphics by effectively using tools for media production, development, and project management. [AAVTC-AAGAD-8](#)

1. Apply learned skills to conference with teacher and pitch production video concept. [AAVTC-AAGAD-8.1](#)
2. Create finished production for distribution via desired delivery format. [AAVTC-AAGAD-8.2](#)
3. Categorize and display the basic functions of media design software, such as key frame animation, two-dimensional design, and three-dimensional design. [AAVTC-AAGAD-8.3](#)
4. Demonstrate using appropriate software to design and produce professional quality images, documents, and presentations. [AAVTC-AAGAD-8.4](#)
5. Analyze the purpose of the media to determine the appropriate file format and level of compression. [AAVTC-AAGAD-8.5](#)
6. Analyze media and develop strategies that target the specific needs and desires of the audience. [AAVTC-AAGAD-8.6](#)
7. Develop a logical explanation of the development and management process of a show (e.g., television programs, musicals, and radio programs). [AAVTC-AAGAD-8.7](#)
8. Classify the basic design elements necessary to produce effective print, video, audio, and Web-based media. [AAVTC-AAGAD-8.8](#)
9. Demonstrate use of technical skills (e.g., pagination, printing, folding, cutting, and binding) to produce publishable materials. [AAVTC-AAGAD-8.9](#)
10. Apply the concepts of a high-quality craftsmanship to a product or presentation and continually refine and analyze over an extended period of time. [AAVTC-AAGAD-8.10](#)

AAVTC-AAGAD-9. Demonstrate applying media, techniques, and processes in color painting. AAVTC-AAGAD-9

1. Apply concepts of color theory (hue, value, intensity) and color schemes (monochromatic, analogous, complementary, split-complementary, and triadic) to express emotion and create unity. AAVTC-AAGAD-9.1
2. Distinguish primary, secondary, and tertiary hues. AAVTC-AAGAD-9.2
3. Draw conclusions of how color communicates meaning in personal and famous artwork. AAVTC-AAGAD-9.3
4. Demonstrate using the color relationships of monochromatic, warm/cool, complementary, analogous, and split-complementary to achieve visual unity and/or intent of work. AAVTC-AAGAD-9.4
5. Apply concepts of the dark/light value quality of specific colors. AAVTC-AAGAD-9.5
6. Distinguish and summarize of the intensity of color. AAVTC-AAGAD-9.6
7. Apply concepts of tinting and shading by lightening and darkening color. AAVTC-AAGAD-9.7
8. Distinguish and applies warm/cool versions of the same hue. AAVTC-AAGAD-9.8
9. Explain and interpret observations of the impact of juxtaposing various colors. AAVTC-AAGAD-9.9
10. Apply the concepts of conscious mark-making in painting. AAVTC-AAGAD-9.10

AAVTC-AAGAD-10. Demonstrate the ability to specify color materials properly. AAVTC-AAGAD-10

1. Differentiate the ambient and diffuse color of an object. AAVTC-AAGAD-10.1
2. Distinguish the specular, reflective, and luminosity material properties of objects. AAVTC-AAGAD-10.2
3. Apply concepts of filters to an object. AAVTC-AAGAD-10.3
4. Create models that represent their art in clay material. AAVTC-AAGAD-10.4

AAVTC-AAGAD-11. Demonstrate applying media, techniques, and processes in three-dimensional art. AAVTC-AAGAD-11

1. Modelize 2-D sketches into 3-D form. AAVTC-AAGAD-11.1
2. Apply concepts of animation in 3-D media. AAVTC-AAGAD-11.2
3. Compare and contrast sculpture-in-the-round, high relief, bas relief, and additive and subtractive processes. AAVTC-AAGAD-11.3

AAVTC-AAGAD-12. Demonstrate construction of 2 D modeling. [AAVTC-AAGAD-12](#)

1. Create standard, extended and architectural primitives. [AAVTC-AAGAD-12.1](#)
2. Modify object properties. [AAVTC-AAGAD-12.2](#)

AAVTC-AAGAD-13. Distinguish the basic functions of media design software, such as key frame animation, two-dimensional design, and three-dimensional design. [AAVTC-AAGAD-13](#)

1. Classify the tools needed to enable multimedia capabilities (e.g., still images, animated graphics, sound, and video) for Digital Media Projects. [AAVTC-AAGAD-13.1](#)
2. Apply the concepts of sophisticated learning tools by following technical directions (e.g., those found with graphic calculators and specialized software programs and in access guides to World Wide Web sites on the Internet). [AAVTC-AAGAD-13.2](#)
3. Demonstrate using concepts to solve a visual arts problem that involves the effective use of elements of art and principles of design. [AAVTC-AAGAD-13.3](#)
4. Critique and apply concepts of the manipulation of digital imagery (either still or video). [AAVTC-AAGAD-13.4](#)

AAVTC-AAGAD-14. Demonstrate applying the principles of Character Rigging, Cut-Out Animation, Inverse Kinematics, and Paths and Motion. [AAVTC-AAGAD-14](#)

1. Analyze and describe how the composition of a work of art is affected by the use of a particular principle of design. [AAVTC-AAGAD-14.1](#)
2. Solve and explain a visual arts problem that involves the effective use of the elements of art and the principles of design. [AAVTC-AAGAD-14.2](#)
3. Demonstrate developing and refining the manipulation of digital imagery (either still or video). [AAVTC-AAGAD-14.3](#)
4. Analyze how irony, tone, mood, the author's style, and the tone of language achieve specific rhetorical and/or aesthetic purposes. [AAVTC-AAGAD-14.4](#)
5. Analyze how technical design (e.g., color theory, lighting, graphics, typography, posters, sound, costumes, and makeup) contributes to a performance or presentation. [AAVTC-AAGAD-14.5](#)
6. Construct the component steps and skills required to design, edit, and produce a production for audio, video, electronic, or printed presentation. [AAVTC-AAGAD-14.6](#)
7. Create a variety of audio, visual, written, and electronic products and presentations using technology. [AAVTC-AAGAD-14.7](#)
8. Distinguish and explain the writing processes, formats, and conventions used for various media. [AAVTC-AAGAD-14.8](#)
9. Report and interpret observations of technical support related to various media and design arts. [AAVTC-AAGAD-14.9](#)
10. Assess models, simulations, and other tests to determine optimal design solutions from a variety of options. [AAVTC-AAGAD-14.10](#)
11. Formulate the elements involved in creating a media or performing arts production for video or electronic presentation. [AAVTC-AAGAD-14.11](#)
12. Demonstrate using technical applications in the creative process, where appropriate. [AAVTC-AAGAD-14.12](#)
13. Apply and explain the appropriate skills and vocabulary of the animation art form. [AAVTC-AAGAD-14.13](#)
14. Categorize and analyze the elements of the animation art form. [AAVTC-AAGAD-14.14](#)
15. Estimate and interpret digital applications appropriate to specific media and projects. [AAVTC-AAGAD-14.15](#)
16. Interpret observations of how technology and the arts are interrelated in the development of presentations and productions. [AAVTC-AAGAD-14.16](#)

17. Apply and explain appropriate problem-solving strategies and work-related critical thinking skills. [AAVTC-AAGAD-14.17](#)
18. Compare and apply the elements of the art form to observe, perceive, and respond to a particular application. [AAVTC-AAGAD-14.18](#)
19. Apply and interpret the concepts of research and analysis to the creation of content. [AAVTC-AAGAD-14.19](#)
20. Construct and continually refine a high-quality product or presentation that proves commitment and craftsmanship of the medium. [AAVTC-AAGAD-14.20](#)

AAVTC-AAGAD-15. Create a basic character head and lip-syncing animation that focuses on two dimensional sketches, preparation, and design of a digitally-created project and includes a short clip with audio. [AAVTC-AAGAD-15](#)

1. Design various drawings representing the lip syncing process to include head tilts and phrasing. [AAVTC-AAGAD-15.1](#)
2. Collect and display the concepts of the lip syncing design process and illustrate the pre-planning of how will work. [AAVTC-AAGAD-15.2](#)
3. Create and describe facial expressions and lip syncing using phonemes. [AAVTC-AAGAD-15.3](#)
4. Apply concepts that industry experts utilize to create cohesive sound clips and character lip syncing. [AAVTC-AAGAD-15.4](#)

AAVTC-AAGAD-16. Create a video to illustrate finding, recording, editing, and producing a portion of an animatic/animation into a digital production and demonstrate rendering/ exporting media into a standalone file format (.mov/.m4v/.wmv/.avi) position. AAVTC-AAGAD-16

1. Interpret and evaluate the various ways in which events are presented and information is communicated by visual image makers (e.g., graphic artists, documentary filmmakers, illustrators, news photographers). [AAVTC-AAGAD-16.1](#)
2. Demonstrate using concepts to design, edit, and produce a production for audio, video, electronic, or printed presentation. [AAVTC-AAGAD-16.2](#)
3. Explain key points and frames that change the view orientation. [AAVTC-AAGAD-16.3](#)
4. Illustrate how to set the view orientation through a camera, and then apply concepts to move the camera through key points. [AAVTC-AAGAD-16.4](#)
5. Create one or more cameras to use to define a camera view. [AAVTC-AAGAD-16.5](#)
6. Apply concepts of camera use to rotate, pan, and zoom in on the model to define the animation. [AAVTC-AAGAD-16.6](#)
7. Use concepts of animation to show a sequence of camera view orientations through time. [AAVTC-AAGAD-16.7](#)

AAVTC-AAGAD-17. Create mechanical, optical and computer generated illusions for movies, television shows and computer games using software graphics programs that apply concepts in Digital Media. AAVTC-AAGAD-17

1. Assemble, edit, and synchronize enlarged storyboard images with audio production in a movie time line. [AAVTC-AAGAD-17.1](#)
2. Create two and three dimensional images and models that can be animated to do things human bodies can't accomplish and things that are unsafe for people to attempt. [AAVTC-AAGAD-17.2](#)
3. Create effects that would be impractical to reproduce live to enhance a production, ex. building explosions. [AAVTC-AAGAD-17.3](#)
4. Hypothesize how things would happen in real life into a screen image. [AAVTC-AAGAD-17.4](#)
5. Change the green screen image or shape into another through a seamless transition for digital media productions. [AAVTC-AAGAD-17.5](#)

AAVTC-AAGAD-18. Create a portfolio, or e-portfolio, using a website that demonstrate skills, experience, and showcases work that would help obtain a job. AAVTC-AAGAD-18

1. Create and critique a resume 18.2 Obtain letters of recommendations and references. AAVTC-AAGAD-18.1
3. List and explain job skills. AAVTC-AAGAD-18.3
4. Demonstrate uploading video demo reels highlighting skill sets. AAVTC-AAGAD-18.4

AAVTC-AAGAD-19. Apply concepts of collaborating effectively in group media production. AAVTC-AAGAD-19

1. Use concepts of leadership to solve non-routine problems that benefit the common good of the group involved in a collaborative experience by utilizing the strengths of each individual in a group production. AAVTC-AAGAD-19.1
2. Create collaboratively a studio or location segment in which each student produces and directs his/her designed project with other team members supporting the producer/director. AAVTC-AAGAD-19.2
3. Demonstrate using teamwork and flexibility to collaboratively complete postproduction tasks. AAVTC-AAGAD-19.3

AAVTC-AAGAD-20. Identify logistical, ethical, and legal Issues related to digital media and apply concepts to use of text, graphics, animation, sound, video, and digital images in digital products. AAVTC-AAGAD-20

1. Apply the privacy, legal and ethical issues of digital media ensuring to meet the W3C standards and web accessibility requirements for completed digital products including but not limited to copyright, digital rights management, piracy, trademark, open source, plagiarism, fair use, permission, creative commons license, etc. AAVTC-AAGAD-20.1
2. Demonstrate appropriate legal and ethical behavior when using social media. AAVTC-AAGAD-20.2
3. Identify violations of copyright and trademark. AAVTC-AAGAD-20.3
4. Explain the major local, district, state, and federal regulatory agencies and entities that affect the industry and how they enforce laws and regulations. AAVTC-AAGAD-20.4
5. Explain the role of personal integrity and ethical behavior in the workplace. AAVTC-AAGAD-20.5
6. Analyze the ways in which current laws and regulations enforce appropriate financial practices. AAVTC-AAGAD-20.6

AAVTC-AAGAD-21. Examine how related student organizations are integral parts of career and technology education courses through leadership development, school and community service projects and competitive events. AAVTC - AAGAD - 21

1. Explain the purpose, mission, objectives, motto, colors, official dress and other distinguishing characteristics of SkillsUSA. AAVTC - AAGAD - 21.1
2. Explain how participation in SkillsUSA can promote lifelong responsibility for community service, professional growth and development. AAVTC - AAGAD - 21.2
3. Explore the impact and opportunities SkillsUSA can develop to bring business and industry together with education in a positive working relationship through innovative leadership and career development programs. AAVTC - AAGAD - 21.3
4. Explore the local, state, and national opportunities available to students through participation in SkillsUSA including but not limited to conferences, competitions, community service, philanthropy, and other SkillsUSA activities. AAVTC - AAGAD - 21.4

Advanced Graphic Design (48.528)

AAVTC-AGD-1. Demonstrate employability skills required by business and industry. AAVTC - AGD - 1

1. Communicate effectively through writing, speaking, listening, reading, and interpersonal abilities. AAVTC - AGD - 1.1
2. Demonstrate creativity by asking challenging questions and applying innovative procedures and methods. AAVTC - AGD - 1.2
3. Exhibit critical thinking and problem solving skills to locate, analyze and apply information in career planning and employment situations. AAVTC - AGD - 1.3
4. Model work readiness traits required for success in the workplace including integrity, honesty, accountability, punctuality, time management, and respect for diversity. AAVTC - AGD - 1.4
5. Apply the appropriate skill sets to be productive in a changing, technological, diverse workplace to be able to work independently and apply teamwork skills. AAVTC - AGD - 1.5
6. Present a professional image through appearance, behavior and language. AAVTC - AGD - 1.6

AAVTC-AGD-2. Demonstrate proper equipment operation and following procedures in a safe manner and achieving one-hundred percent on a written/demonstration safety test. [AAVTC-AGD-2](#)

1. Demonstrate and explain proper lab safety features and general to industry practices. [AAVTC-AGD-2.1](#)
2. Demonstrate knowledge and proper use of personal protection equipment needed for general to the industry and labs [AAVTC-AGD-2.2](#)
3. Demonstrate knowledge of and proper use of equipment operating instructions for both general to the industry and labs. [AAVTC-AGD-2.3](#)

AAVTC-AGD-3. Demonstrate the development of a professional portfolio and self-branding. [AAVTC-AGD-3](#)

1. List and describe the criteria for selecting artwork. [AAVTC-AGD-3.1](#)
2. Collect and refine all previous graphic design projects in a form, such as, but not limited to print, digital, and cloud, etc. [AAVTC-AGD-3.2](#)
3. Develop a professional resume using a word processing software. (e.g. Word, Microsoft Works, Google Drive, iWork Pages, or other cloud-based text file writer). [AAVTC-AGD-3.3](#)
4. Practice giving and receiving constructive criticism of portfolios in verbal and/or written format; as well as virtually and/or in person. [AAVTC-AGD-3.4](#)
5. List and describe the characteristics and content of portfolios for both employment and postsecondary admissions. [AAVTC-AGD-3.5](#)
6. Critique various types of packaging found in a professional portfolio, such as, but not limited to printed, digital, and web pages, etc. [AAVTC-AGD-3.6](#)

AAVTC-AGD-4. Research professional business ethics guidelines and copyright laws utilized throughout the graphic design industry. [AAVTC-AGD-4](#)

1. Explore professional client/designer contracts. [AAVTC-AGD-4.1](#)
2. Explore pricing options for various graphic design service(s). [AAVTC-AGD-4.2](#)
3. Research billing practices and effective operating procedures. [AAVTC-AGD-4.3](#)
4. Create a creative/design brief as part of the creative process. [AAVTC-AGD-4.4](#)
5. Demonstrate utilizing a job ticket for graphic design service(s). [AAVTC-AGD-4.5](#)
6. Demonstrate following ethical guidelines and copyright laws, such as, but not limited to intellectual property, creative commons, Work For Hire, Fair Use, etc. [AAVTC-AGD-4.6](#)

AAVTC-AGD-5. Determine requirements for selected career(s). [AAVTC-AGD-5](#)

1. Determine postsecondary educational requirements for selected careers. [AAVTC-AGD-5.1](#)
2. Research how to locate job listings through a variety of sources, such as, but not limited to internet, clubs, associations, and networking, etc. [AAVTC-AGD-5.2](#)
3. Research the fundamentals of employer/employee, client/designer working relationships. [AAVTC-AGD-5.3](#)
4. Complete a practice job application form. [AAVTC-AGD-5.4](#)
5. Design and write an appropriate cover letter for a selected career choice. [AAVTC-AGD-5.5](#)
6. Demonstrate proper follow-up techniques, such as, but not limited to a thank-you letter, a phone call, an email, and in-person, etc. [AAVTC-AGD-5.6](#)

AAVTC-AGD-6. Demonstrate an understanding of the importance of developing a project from concept thru completion. [AAVTC-AGD-6](#)

1. Maintain a sketchbook/journal/electronic file of art produced to add to a personal portfolio. [AAVTC-AGD-6.1](#)
2. Formulate strategies for brainstorming and organizing content, such as, but not limited to mind mapping and word association, etc. [AAVTC-AGD-6.2](#)
3. Explore different target audiences and identify the most effective media selection(s). [AAVTC-AGD-6.3](#)
4. Evaluate the performance of existing marketing strategies. [AAVTC-AGD-6.4](#)
6. Apply creative thinking skills to artistic problems, such as, but not limited to rhetoric. [AAVTC-AGD-6.6](#)

AAVTC-AGD-7. Explore the process of project production. AAVTC-AGD-7

1. List and follow the following steps and resources needed for project completion: AAVTC-AGD-7.1
 - a. Determine size, weight, quantities, type, and the amount of paper necessary for fulfilling a job order; AAVTC-AGD-7.1.A
 - b. Preflight documents; AAVTC-AGD-7.1.B
 - c. Determine proper resolution; AAVTC-AGD-7.1.C
 - d. Demonstrate image and file conversions and format [Example: Process color, four color (CMYK) to Red, green, and blue (RGB), Illustrator file (AI) to Encapsulated PostScript (EPS), etc.]; AAVTC-AGD-7.1.D
 - e. Determine proper resolution; and AAVTC-AGD-7.1.E
 - f. Explore web hosting options. AAVTC-AGD-7.1.F
2. Prepare a timeline and budget/cost estimation for selected project(s), to include the following steps: AAVTC-AGD-7.2
 - a. Demonstrate the use of Gantt charts; AAVTC-AGD-7.2.A
 - b. Calculate the price of materials used in commercial jobs; AAVTC-AGD-7.2.B
 - c. Determine substrate quantities and costs required; and AAVTC-AGD-7.2.C
 - d. Establish additional equipment overhead, physical plant, time, labor, waste management, shipping costs, and projected profit margin. AAVTC-AGD-7.2.D
3. Design a self-branding logo and collateral materials, such as, but not limited to business cards, letterheads, brochures, websites, and podcasts, etc., including the following suggested assignments: AAVTC-AGD-7.3
 - a. Create a multiple-page design for a product (example: DVD insert/case, CD insert/case, software package/insert, product instruction insert, etc.). AAVTC-AGD-7.3.A
 - b. Identify a client and design static and/or animated promotional materials for digital signage. AAVTC-AGD-7.3.B
 - c. Design and produce a product and corresponding packaging. (Example: Soft drink packaging, perfume box, and cereal box, etc.). AAVTC-AGD-7.3.C
 - d. Design a landing page and secondary page for the web. AAVTC-AGD-7.3.D
 - e. Design identity and promotional products for a non-profit organization. AAVTC-AGD-7.3.E
 - f. Research, layout/impose, and produce a booklet in the style of a well-known graphic designer. AAVTC-AGD-7.3.F

AAVTC-AGD-8. Explore vector illustration techniques per assignments. [AAVTC-AGD-8](#)

1. Demonstrate live trace. [AAVTC-AGD-8.1](#)
2. Create custom vector graphics. [AAVTC-AGD-8.2](#)

AAVTC-AGD-9. Explore digital imaging and multimedia. [AAVTC-AGD-9](#)

1. Research the history and development of photography. [AAVTC-AGD-9.1](#)
2. Define the application of digital photography in electronic imaging. [AAVTC-AGD-9.2](#)
3. Define and demonstrate terms associated with digital photography from point-n-shoot to digital single-lens reflex (DSLR), such as, but not limited to International Organization for Standardization (ISO), Aperture, f-stop, White Balance, and Manual Mode, etc. [AAVTC-AGD-9.3](#)
4. Identify and describe various formats for saving digital images, such as, but not limited to RAW, Camera RAW, Portable Network Graphics (PNG), Joint Photographic Experts Group (JPEG), Tagged Image File Format (TIFF), Adobe Photoshop Document (PSD), Encapsulated PostScript (EPS), etc. [AAVTC-AGD-9.4](#)
5. Demonstrate taking photographs incorporating elements and principles of design. [AAVTC-AGD-9.5](#)
6. Demonstrate utilizing a digital darkroom for making adjustments to digital images [AAVTC-AGD-9.6](#)
7. Constructively critique digital photos for appropriate composition. [AAVTC-AGD-9.7](#)
8. Demonstrate techniques for scanning images digitally. [AAVTC-AGD-9.8](#)

AAVTC-AGD-10. Examine how SkillsUSA is a co-curricular part of career and technical education through leadership development, school and community service projects, and competitive events. [AAVTC-AGD-10](#)

1. Explain the purpose, mission, objectives, motto, colors, official dress and other distinguishing characteristics of SkillsUSA. [AAVTC-AGD-10.1](#)
 2. Explain how participation in SkillsUSA can promote lifelong responsibility for community service, professional growth and development. [AAVTC-AGD-10.2](#)
 3. Explore the impact and opportunities that SkillsUSA can develop to bring business and industry together with education in a positive working relationship through innovative leadership and career development programs. [AAVTC-AGD-10.3](#)
 4. Explore the local, state, and national opportunities available to students through participation in SkillsUSA, including but not limited to conferences, competitions, community service, philanthropy, and other SkillsUSA activities. [AAVTC-AGD-10.4](#)
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**Advanced Graphic
Output Processes
(48.57)**

AAVTC-AGOP-1. Demonstrate employability skills required by business and industry. AAVTC-AGOP-1

1. Communicate effectively through writing, speaking, listening, reading, and interpersonal abilities. AAVTC-AGOP-1.1
2. Demonstrate creativity by asking challenging questions and applying innovative procedures and methods. AAVTC-AGOP-1.2
3. Exhibit critical thinking and problem solving skills to locate, analyze and apply information in career planning and employment situations. AAVTC-AGOP-1.3
4. Model work readiness traits required for success in the workplace including integrity, honesty, accountability, punctuality, time management, and respect for diversity. AAVTC-AGOP-1.4
5. Apply the appropriate skill sets to be productive in a changing, technological, diverse workplace to be able to work independently and apply team work skills. AAVTC-AGOP-1.5
6. Present a professional image through appearance, behavior and language. AAVTC-AGOP-1.6

AAVTC-AGOP-2. Demonstrate proper equipment operation and follow procedures in a safe manner and achieve 100 percent on a written/demonstration safety test. AAVTC-AGOP-2

1. Demonstrate proper procedures regarding safety features practices for both general to the industry and specific to lab. AAVTC-AGOP-2.1
2. Demonstrate the proper use of personal protection equipment needed for both general to the industry and specific to lab. AAVTC-AGOP-2.2
3. Demonstrate the proper use equipment operating instructions for both general to the industry and specific to lab. AAVTC-AGOP-2.3

AAVTC-AGOP-3. Investigate entrepreneurship as it relates to economic development. AAVTC-AGOP-3

1. Compare and contrast the traits of successful and unsuccessful business ventures. AAVTC-AGOP-3.1
2. Examine and report the advantages of entrepreneurship, such as but not limited to control of income, personal responsibility and independency, establishment of professional and community relationships, etc. AAVTC-AGOP-3.2
3. Summarize the disadvantages of entrepreneurship, such as but not limited to long work hours, monetary risk, enforcement of workplace standards, paperwork, and record keeping, etc. AAVTC-AGOP-3.3
4. Evaluate the market for potential customers. AAVTC-AGOP-3.4

AAVTC-AGOP-4. Develop a portfolio for a graphics-related career plan. AAVTC-AGOP-4

1. Investigate and report on a career path that leads to a career in graphic communications. AAVTC-AGOP-4.1
2. Prepare a portfolio to illustrate student experiences and abilities related to graphic communications that includes the following information: AAVTC-AGOP-4.2
 - a. Report the criteria for selecting final product. AAVTC-AGOP-4.2.A

AAVTC-AGOP-5. Implement optimal job production processes. AAVTC-AGOP-5

1. Accurately read and interpret job specifications. AAVTC-AGOP-5.1
2. Maintain project schedule processes, such as a Gantt chart, to meet deadlines. AAVTC-AGOP-5.2
3. Accurately generate a job ticket and identify key parts related to production process. AAVTC-AGOP-5.3
4. Demonstrate how to determine the best allocation of materials, output processes, binding, finishing, and manpower to job specification. AAVTC-AGOP-5.4
5. Summarize appropriate delivery and/or shipping requirements. AAVTC-AGOP-5.5

AAVTC-AGOP-6. Accurately analyze project costs. AAVTC-AGOP-6

1. Evaluate material and waste management costs, including comparing and contrasting project costs per job specifications to determine the difference in projected profit margin. AAVTC-AGOP-6.1
2. Assess and analyze optimal manpower use. AAVTC-AGOP-6.2
3. Predict equipment costs. AAVTC-AGOP-6.3
4. Demonstrate and explain correct invoicing and collection procedures. AAVTC-AGOP-6.4
5. Analyze and implement color management among color systems including CMYK (cyan, magenta, yellow, and black colors), RGB (red, green, blue colors), and spot colors (according to the Pantone Matching System). AAVTC-AGOP-6.5
6. Accurately create printed color with halftones. AAVTC-AGOP-6.6
7. Summarize the transition of tone images to dots of an output process. AAVTC-AGOP-6.7
8. Connect appropriate output devices with appropriate use, according to the job description. AAVTC-AGOP-6.8
9. Report image registration issues. AAVTC-AGOP-6.9
10. Design traps and spot color for production. AAVTC-AGOP-6.10

AAVTC-AGOP-7. Practice customer service skills; as well as, follow ethical guidelines and copyright laws. AAVTC-AGOP-7

1. Analyze project and prepare estimation for client. AAVTC-AGOP-7.1
2. Communicate with client during all production phases. AAVTC-AGOP-7.2
3. Examine inventory and verify and calculate necessary supplies and materials. AAVTC-AGOP-7.3
4. Demonstrate following ethical guidelines and copyright laws, such as but not limited to Intellectual Property, Creative Commons, Work for Hire, Fair Use, etc. AAVTC-AGOP-7.4

AAVTC-AGOP-8. Plan, create, and prepare files for production. AAVTC-AGOP-8

1. Analyze given project to determine necessary software and provide rationale. AAVTC-AGOP-8.1
2. Demonstrate and apply optimal use of design principles. AAVTC-AGOP-8.2
3. Design and produce a digital document that includes placed/support graphics, correct color mode, correct/appropriate size, and most appropriate imposition format. AAVTC-AGOP-8.3
4. Preflight project and identify problems, such as but not limited to resolution, missing fonts, missing graphics, number of inks, HTML (Hyper Text Markup Language) and CSS (Cascading Style Sheets), trapping, etc. AAVTC-AGOP-8.4
5. Demonstrate knowledge of spell check and proofreaders marks to proofread, edit, and make corrections/adjustments to copy. AAVTC-AGOP-8.5

AAVTC-AGOP-9. Identify and describe the major components and operating controls of output devices. AAVTC-AGOP-9

1. Identify and describe the major components and controls of the output device. AAVTC-AGOP-9.1
2. Describe the function of major components and operating controls relating to the final product. AAVTC-AGOP-9.2
3. Summarize the correct startup, operation, maintenance, and shutdown of the output device. AAVTC-AGOP-9.3

AAVTC-AGOP-10. Identify the various types of inks and/or toners used in the graphics and printing industry. AAVTC-AGOP-10

1. Examine the different types of inks and/or toners used in the graphics & design industry, such as but not limited to inkjet (solvent, gel or water based), toner, lithography (oil, acrylic or rubber based), flexography, screen printing (plastisol, enamel, water-based), Ultraviolet (UV), sublimation, etc. AAVTC-AGOP-10.1
2. Describe a Pantone Matching System (PMS) Chart and explain its importance. AAVTC-AGOP-10.2
3. Produce digital files using appropriate dots per inch (DPI) and pixels per inch (PPI) resolution for media. AAVTC-AGOP-10.3

AAVTC-AGOP-11. Explain the various applications and characteristics of paper substrates. AAVTC-AGOP-11

1. Describe the common uses of the various types of substrates, such as but not limited to coated/uncoated, bond paper, tag, index, carbonless paper (NCR), cover, recycled paper, etc. AAVTC-AGOP-11.1
2. Describe the various substrates qualities, such as but not limited to paper grain, surface texture, caliper, brightness, opacity, etc. AAVTC-AGOP-11.2
3. Read and interpret a label on a case/ream of paper, such as brightness, size, pounds, grain, Global System for Mobile Communications (GSM), etc. AAVTC-AGOP-11.3
4. Determine size, weight, quantities, type, and amount of paper necessary for fulfilling a job order. AAVTC-AGOP-11.4
5. Investigate efficient production methods to minimize material waste during jobs. AAVTC-AGOP-11.5

AAVTC-AGOP-12. Demonstrate knowledge of inks, toners, and substrates for commercial output. AAVTC-AGOP-12

1. Determine size, weight, quantities, type, and amount of paper necessary for fulfilling a job order. AAVTC-AGOP-12.1
2. Explain how paper is manufactured. AAVTC-AGOP-12.2
3. Describe the basic ingredients and characteristics of inks (vehicle, pigment/dye, additives). AAVTC-AGOP-12.3
4. Describe the basic ingredients and characteristics of toner (particle size, surface additives, etc.). AAVTC-AGOP-12.4
5. Explore and report on emerging technologies with new inks and substrates. AAVTC-AGOP-12.5

AAVTC-AGOP-13. Demonstrate the ability to use an output process to create a quality product. AAVTC-AGOP-13

1. Utilize appropriate software and/or equipment necessary to produce final project. AAVTC-AGOP-13.1
2. Select appropriate substrate(s) and ink(s) to produce a quality project. AAVTC-AGOP-13.2
3. Interpret and formulate correct liquid measurements for various chemical needs in production processes. AAVTC-AGOP-13.3
4. Position images on substrates using appropriate measurements. AAVTC-AGOP-13.4
5. Demonstrate an understanding of adjustments that may be needed in the equipment and materials used for output, such as but not limited to pressure settings, ink quantities, and mechanical adjustments. AAVTC-AGOP-13.5
6. Demonstrate usage of optimal quality control standards. AAVTC-AGOP-13.6

AAVTC-AGOP-14. Identify, demonstrate, and practice safe & proper paper cutting techniques on various class projects. AAVTC-AGOP-14

1. Identify and describe the types of paper cutters. AAVTC-AGOP-14.1
2. Demonstrate safe and proper cutter operation. AAVTC-AGOP-14.2
3. Identify problems and/or special considerations when cutting various paper types. AAVTC-AGOP-14.3
4. Demonstrate the ability to cut both standard and combination cuts on a variety of paper stock. AAVTC-AGOP-14.4
5. Demonstrate the ability to trim the head, foot, and face of a publication. AAVTC-AGOP-14.5

AAVTC-AGOP-15. Plan and impose the binding and finishing workflow of a multiple page publication. AAVTC-AGOP-15

1. Read and interpret job ticket/specifications. AAVTC-AGOP-15.1
2. Produce a product using an imposition plan, such as but not limited to a greeting card, program, brochure, booklet, etc. AAVTC-AGOP-15.2
3. Create thumbnail sketches and folding dummy of the imposition following the job ticket specifications. AAVTC-AGOP-15.3
4. Determine what steps are needed to transfer the plan to the digital file. AAVTC-AGOP-15.4

AAVTC-AGOP-16. Identify and describe binding & finishing processes. AAVTC-AGOP-16

1. List the binding methods and applications, such as but not limited to comb, velo, padding, stitching, perfect, spiral, etc. AAVTC-AGOP-16.1
2. List the finishing methods and applications such as but not limited to cutting, folding, embossing, foil stamping, die cutting, thermography, varnishing, etc. AAVTC-AGOP-16.2
3. Identify production considerations in using different bindery and finishing techniques, such as but not limited to folding against the grain, etc. AAVTC-AGOP-16.3

AAVTC-AGOP-17. Plan and impose the finishing and binding workflow of a multiple page publication. AAVTC-AGOP-17

1. Read and interpret job ticket/specification. AAVTC-AGOP-17.1
2. Identify and describe the parts of page (head, foot, base, backbone). AAVTC-AGOP-17.2
3. Explain and apply industry standards for page numbering. AAVTC-AGOP-17.3
4. Create thumbnail sketches and folding dummy of the imposition following the job ticket specifications. AAVTC-AGOP-17.4
5. Determine what steps are needed to transfer the plan to the digital file. AAVTC-AGOP-17.5
6. Produce the product following the imposition plan. AAVTC-AGOP-17.6

AAVTC-AGOP-18. Identify and describe binding processes as well as demonstrate the ability to bind a printed product. AAVTC-AGOP-18

1. List and describe the binding methods. AAVTC-AGOP-18.1
2. Identify and describe safety considerations in bindery operations. AAVTC-AGOP-18.2
3. Identify and describe production considerations in using different binds. AAVTC-AGOP-18.3
4. Analyze the proper application of the binding methods. AAVTC-AGOP-18.4
5. Demonstrate binding techniques on various printed materials. AAVTC-AGOP-18.5

AAVTC-AGOP-19. Identify and describe finishing processes as well as demonstrate the ability to add finishes to a printed product. AAVTC-AGOP-19

- . List and describe the possible finishing methods. AAVTC-AGOP-19.1.
- . Identify and describe safety consideration in finishing operations. AAVTC-AGOP-19.2.
- . Identify and describe production considerations in using different finishing techniques. AAVTC-AGOP-19.3.
- . Analyze the proper application of the finishing methods. AAVTC-AGOP-19.4.
- . Demonstrate finishing techniques on various printed materials. AAVTC-AGOP-19.5.

AAVTC-AGOP-20. Exercise effective project preparation following proper customer service and quality control principles. AAVTC-AGOP-20

1. Develop and interpret a job ticket per customer request. AAVTC-AGOP-20.1
2. Estimate costs of a project by determining substrate quantities needed and calculating price of materials used in commercial jobs. AAVTC-AGOP-20.2
3. Determine a schedule in terms of capabilities, resources, and deadline. AAVTC-AGOP-20.3
4. Prepare digital file layouts. AAVTC-AGOP-20.4
5. Generate a proof for customer approval. AAVTC-AGOP-20.5
6. Manage customer change requests to fulfill order according to job ticket, accuracy, color, waste, order quantity, and quality. AAVTC-AGOP-20.6

AAVTC-AGOP-21. Examine how related student organizations are integral parts of career and technology education courses through leadership development, school and community service projects, and competitive events. AAVTC-AGOP-21

1. Explain the purpose, mission, objectives, motto, colors, official dress and other distinguishing characteristics of SkillsUSA. AAVTC-AGOP-21.1
2. Explain how participation in SkillsUSA can promote lifelong responsibility for community service, professional growth and development. AAVTC-AGOP-21.2
3. Explore the impact and opportunities SkillsUSA can develop to bring business and industry together with education in a positive working relationship through innovative leadership and career development programs. AAVTC-AGOP-21.3
4. Explore the local, state, and national opportunities available to students through in SkillsUSA including but not limited to conferences, competitions, community service, philanthropy, and other SkillsUSA activities. AAVTC-AGOP-21.4

**Animation Practicum
Capstone (48.424)**

AAVTC-AIC-1. The following standard is included in all CTAE courses adopted for the Career Cluster/Pathways. AAVTC-AIC-1

1. Communicate effectively through writing, speaking, listening, reading, and interpersonal abilities. AAVTC-AIC-1.1
2. Demonstrate creativity by asking challenging questions and applying innovative procedures and methods. AAVTC-AIC-1.2
3. Exhibit critical thinking and problem solving skills to locate, analyze and apply information in career planning and employment situations. AAVTC-AIC-1.3
4. Model work readiness traits required for success in the workplace including integrity, honesty, accountability, punctuality, time management, and respect for diversity. AAVTC-AIC-1.4
5. Apply the appropriate skill sets to be productive in a changing, technological, diverse workplace to be able to work independently and apply team work skills. AAVTC-AIC-1.5
6. Present a professional image through appearance, behavior and language. AAVTC-AIC-1.6

AAVTC-AIC-2. Research and demonstrate advanced technical skills in production. AAVTC-AIC-2

AAVTC-AIC-3. Research and demonstrate advanced technical skills for the 2D digital animator. AAVTC-AIC-3

AAVTC-AIC-4. Research and demonstrate advanced technical skills within design. [AAVTC-AIC-4](#)

AAVTC-AIC-5. Research and demonstrate advanced technical skills within animation. [AAVTC-AIC-5](#)

AAVTC-AIC-6. Analyze advanced technical skills within the film industry. [AAVTC-AIC-6](#)

AAVTC-AIC-7. Perform advanced technical skills within Modeling/Rigging. [AAVTC-AIC-7](#)

AAVTC-AIC-8. Research the field of Compositing. Compositing Artist The compositing artist combines visual elements from separate sources into single images, often to create the illusion that all those elements are parts of the same scene. [AAVTC-AIC-8](#)

AAVTC-AIC-9. Perform advanced technical skills within frame scenes. Layout Artist Layout Artists are responsible for perspective and composition of every shot. Layout Artists must set up and stage the scene that animators will use to deliver a quality performance. Layout requires an understanding of fundamental principles of Cinematography to understanding concepts of place and environment. [AAVTC-AIC-9](#)

AAVTC-AIC-10. Research the area of Directing. Animator Director Animator Directors are responsible for responding to producer needs and communicating these needs while leading and coordinating the animation team. The role requires the ability to recruit, select and build strong animation teams. [AAVTC-AIC-10](#)

AAVTC-AIC-11. Investigate the advanced technical skills within lip syncing. [AAVTC-AIC-11](#)

AAVTC-AIC-12. Perform advanced technical skills with surface qualities. Texturers A Texture Artist will determine the surface qualities of each 3D modeled character, object and environment. Texturer's must be able to envision what textures will create an appealing surface for a 3D computer model. Texture artists must be both artistically creative and proficient with industry software. [AAVTC-AIC-12](#)

AAVTC-AIC-13. Analyze technical skills of the art director/matte painter. [AAVTC-AIC-13](#)

AAVTC-AIC-14. Investigate technical skills within special effects. [AAVTC-AIC-14](#)

AAVTC-AIC-15. Research the technical skills within lighting lighter. [AAVTC-AIC-15](#)

AAVTC-AIC-16. Investigate the technical skills with directing-technical director. [AAVTC-AIC-16](#)

Audio Video Technology and Film I (10.5181)

AAVTC-ACTFI-1. Demonstrate employability skills required by business and industry. [AAVTC-ACTFI-1](#)

1. Communicate effectively through writing, speaking, listening, reading, and interpersonal abilities. [AAVTC-ACTFI-1.1](#)
 2. Demonstrate creativity by asking challenging questions and applying innovative procedures and methods. [AAVTC-ACTFI-1.2](#)
 3. Exhibit critical thinking and problem solving skills to locate, analyze and apply information in career planning and employment situations. [AAVTC-ACTFI-1.3](#)
 4. Model work readiness traits required for success in the workplace including integrity, honesty, accountability, punctuality, time management and respect for diversity. [AAVTC-ACTFI-1.4](#)
 5. Apply the appropriate skill sets to be productive in a changing, technological, diverse workplace to be able to work independently and apply teamwork skills. [AAVTC-ACTFI-1.5](#)
 6. Present a professional image through appearance, behavior and language. [AAVTC-ACTFI-1.6](#)
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AAVTC-ACTFI-2. Understand and follow safety procedures when working with TV equipment. [AAVTC-ACTFI-2](#)

1. State general safety rules for operation of equipment and learning activities specific to film and TV. [AAVTC-ACTFI-2.1](#)
 2. Perform safe practices when working on assignments. [AAVTC-ACTFI-2.2](#)
 3. Transport equipment safely and securely. [AAVTC-ACTFI-2.3](#)
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AAVTC-ACTFI-3. Understand and utilize trade terminology in an appropriate manner. [AAVTC-ACTFI-3](#)

1. Identify and utilize trade terminology in the media production lab. [AAVTC-ACTFI-3.1](#)
2. Identify and utilize trade abbreviations and acronyms as appropriate. [AAVTC-ACTFI-3.2](#)

AAVTC-ACTFI-4. Demonstrate proper set-up and use of basic production equipment. AAVTC-ACTFI-4

1. Demonstrate steps necessary to set-up, turn on, and operate equipment according to instructor's directions. AAVTC-ACTFI-4.1
2. Use both traditional camcorders and non-traditional capture devices like DSLR cameras, smart phones, and iPads to record and edit video. AAVTC-ACTFI-4.2
3. Demonstrate proper picture composition techniques. AAVTC-ACTFI-4.3
4. Demonstrate proper camera movement. AAVTC-ACTFI-4.4
5. Demonstrate proper use of microphones. AAVTC-ACTFI-4.5
6. Identify qualities of a technically acceptable audio track. AAVTC-ACTFI-4.6
7. Demonstrate mastery of aesthetics to include composition, coordination, balance and color contrast. AAVTC-ACTFI-4.7
8. Demonstrate basic lighting techniques. AAVTC-ACTFI-4.8
9. Explain care, storage and use of media hardware and software. AAVTC-ACTFI-4.9
10. Determine proper cables for set-up and operation of production equipment. AAVTC-ACTFI-4.10

AAVTC-ACTFI-5. Identify and create various types of scripts. AAVTC-ACTFI-5

1. Identify Scripts by format. AAVTC-ACTFI-5.1
2. Demonstrate the steps leading to the development of various types of scripts. AAVTC-ACTFI-5.2
3. Define terminology used in scriptwriting. AAVTC-ACTFI-5.3
4. Write scripts as assigned according to designated deadline. AAVTC-ACTFI-5.4
5. Plan and produce a storyboard. AAVTC-ACTFI-5.5

AAVTC-ACTFI-6. Demonstrate proper use and operation of studio equipment and production techniques while working as a part of a production team during a studio broadcast. AAVTC-ACTFI-6

1. Operate production switcher. AAVTC-ACTFI-6.1
2. Operate audio console. AAVTC-ACTFI-6.2
3. Operate recording/broadcasting equipment. AAVTC-ACTFI-6.3
4. Operate studio cameras. AAVTC-ACTFI-6.4
5. Operate character generator. AAVTC-ACTFI-6.5
6. Identify and perform duties of a floor director. AAVTC-ACTFI-6.6
7. Demonstrate basic three point lighting for studio broadcasting. AAVTC-ACTFI-6.7

AAVTC-ACTFI-7. Demonstrate teamwork and proper use of equipment while participating in a live field production which may include electronic news gathering, film work or streaming live events. AAVTC-ACTFI-7

1. Operate field cameras. AAVTC-ACTFI-7.1
2. Demonstrate live audio recording using proper microphones and field mixer. AAVTC-ACTFI-7.2
3. Identify different types of internet connections. AAVTC-ACTFI-7.3
4. Demonstrate the difference between uploading and downloading and identify different compression methods commonly used with digital video. AAVTC-ACTFI-7.4

AAVTC-ACTFI-8. Demonstrate the use of technology in recording and post-production applications. AAVTC-ACTFI-8

1. Identify recording formats and compression methods used with digital media. AAVTC-ACTFI-8.1
2. Demonstrate the production of still and motion graphics. AAVTC-ACTFI-8.2
3. Capture and/or transfer digital video using editing application. AAVTC-ACTFI-8.3
4. Demonstrate basic editing techniques while producing a finished video. AAVTC-ACTFI-8.4
5. Demonstrate various methods to export completed media including DVD authoring and digital upload. AAVTC-ACTFI-8.5
6. Demonstrate basic audio editing techniques. AAVTC-ACTFI-8.6
7. Demonstrate special effects processing to include color correction, keying and digital compositing. AAVTC-ACTFI-8.7

AAVTC-ACTFI-9. Develop an understanding of audio video and film careers, describe the principal fields of specializations and identify associated career opportunities. [AAVTC-ACTFI-9](#)

1. Identify education requirements for audio video and film occupations and locations where programs of study are available. [AAVTC-ACTFI-9.1](#)
2. Match audio video and film job titles with qualifications and responsibilities. [AAVTC-ACTFI-9.2](#)
3. Participate in activities related to career interests. [AAVTC-ACTFI-9.3](#)

AAVTC-ACTFI-10. Examine how related student organizations are integral parts of career and technology education courses through leadership development, school and community service projects and competitive events. [AAVTC-ACTFI-10](#)

1. Explain the purpose, mission, objectives, motto, colors, official dress and other distinguishing characteristics of SkillsUSA. [AAVTC-ACTFI-10.1](#)
 2. Explain how participation in SkillsUSA can promote lifelong responsibility for community service, professional growth and development. [AAVTC-ACTFI-10.2](#)
 3. Explore the impact and opportunities SkillsUSA can develop to bring business and industry together with education in a positive working relationship through innovative leadership and career development programs. [AAVTC-ACTFI-10.3](#)
 4. Explore the local, state and national opportunities available to students through participation in SkillsUSA including but not limited to conferences, competitions, community service, philanthropy, and other SkillsUSA activities. [AAVTC-ACTFI-10.4](#)
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AAVTC-AVTFIII-1. Demonstrate employability skills required by business and industry. [AAVTC-AVTFIII-1](#)

1. Communicate effectively through writing, speaking, listening, reading, and interpersonal abilities. [AAVTC-AVTFIII-1.1](#)
 2. Demonstrate creativity by asking challenging questions and applying innovative procedures and methods. [AAVTC-AVTFIII-1.2](#)
 3. Exhibit critical thinking and problem solving skills to locate, analyze and apply information in career planning and employment situations. [AAVTC-AVTFIII-1.3](#)
 4. Model work readiness traits required for success in the workplace including integrity, honesty, accountability, punctuality, time management, and respect for diversity. [AAVTC-AVTFIII-1.4](#)
 5. Apply the appropriate skill sets to be productive in a changing, technological, diverse workplace to be able to work independently and apply teamwork skills. [AAVTC-AVTFIII-1.5](#)
 6. Present a professional image through appearance, behavior and language. [AAVTC-AVTFIII-1.6](#)
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AAVTC-AVTFIII-2. In an independent production setting, select and develop the direction of specialization for news, film, and graphics. [AAVTC-AVTFIII-2](#)

1. Apply learned skills to conference with teacher and pitch production video concept. [AAVTC-AVTFIII-2.1](#)
 2. Prepare finished production for distribution via desired delivery format. [AAVTC-AVTFIII-2.2](#)
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AAVTC-AVTFIII-3. Create portfolios to include resume, letter of recommendations, references, list of skill sets, and demo reel highlighting of the students' skill sets. [AAVTC-AVTFIII-3](#)

1. Collect and display final products of student's resume, letters of recommendation, references and list of student's skill set. [AAVTC-AVTFIII-3.1](#)
2. Organize demo-reels or video files highlighting student's projects. [AAVTC-AVTFIII-3.2](#)

AAVTC-AVTFIII-4. Demonstrate collaborating effectively in group media production. [AAVTC-AVTFIII-4](#)

1. Demonstrate exercising leadership on behalf of the common good over a collaborative experience by utilizing the strengths of each individual in a group production. [AAVTC-AVTFIII-4.1](#)
2. Demonstrate working collaboratively to produce and direct location and/or studio segments. [AAVTC-AVTFIII-4.2](#)
3. Demonstrate collaborating to complete post-production tasks. [AAVTC-AVTFIII-4.3](#)

AAVTC-AVTFIII-5. Describe and apply the principles of media law. [AAVTC-AVTFIII-5](#)

1. Identify and apply principles of copyright, fair use, plagiarism, licensing, creative commons, and public domain. [AAVTC-AVTFIII-5.1](#)

AAVTC-AVTFIII-6. Examine how SkillsUSA is a co-curricular part of career and technical education through leadership development, school and community service projects, and competitive events. [AAVTC-AVTFIII-6](#)

1. Explain the purpose, mission, objectives, motto, colors, official dress and other distinguishing characteristics of SkillsUSA. [AAVTC-AVTFIII-6.1](#)
 2. Explain how participation in SkillsUSA can promote lifelong responsibility for community service, professional growth and development. [AAVTC-AVTFIII-6.2](#)
 3. Explore the impact and opportunities that SkillsUSA can develop to bring business and industry together with education in a positive working relationship through innovative leadership and career development programs. [AAVTC-AVTFIII-6.3](#)
 4. Explore the local, state, and national opportunities available to students through participation in SkillsUSA, including but not limited to conferences, competitions, community service, philanthropy, and other SkillsUSA activities. [AAVTC-AVTFIII-6.4](#)
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Audio Video Technology and Film II (10.5191)

AAVTC-AVTFII-1. The following standard is included in all CTAE courses adopted for the Career Cluster/Pathways. AAVTC-AVTFII-1

1. Communicate effectively through writing, speaking, listening, reading, and interpersonal abilities. AAVTC-AVTFII-1.1
2. Demonstrate creativity by asking challenging questions and applying innovative procedures and methods. AAVTC-AVTFII-1.2
3. Exhibit critical thinking and problem solving skills to locate, analyze and apply information in career planning and employment situations. AAVTC-AVTFII-1.3
4. Model work readiness traits required for success in the workplace including integrity, honesty, accountability, punctuality, time management, and respect for diversity. AAVTC-AVTFII-1.4
5. Apply the appropriate skill sets to be productive in a changing, technological, diverse workplace to be able to work independently and apply team work skills. AAVTC-AVTFII-1.5
6. Present a professional image through appearance, behavior and language. AAVTC-AVTFII-1.6

AAVTC-AVTFII-2. Demonstrate use of multiple types and formats of programs and productions. AAVTC-AVTFII-2

1. Identify and explain a script using the following types/formats of programs and productions:
 - Film, including short film, long form, documentary.AAVTC-AVTFII-2.1
2. Plan and write a script following appropriate production format, including a treatment/program proposal. AAVTC-AVTFII-2.2
3. Demonstrate editing a program using appropriate production format. AAVTC-AVTFII-2.3
4. Prepare a finished production for distribution via multiple delivery formats (i.e., phone, web, DVD, TV, and Blu-Ray). AAVTC-AVTFII-2.4

AAVTC-AVTFII-3. Identify and demonstrate specified operational and set-up/maintenance procedures. AAVTC-AVTFII-3

1. Review basic electrical needs for a production AAVTC-AVTFII-3.1
2. Review types of audio/video/data connectors and cables. AAVTC-AVTFII-3.2
3. Describe data transfer devices and protocols. AAVTC-AVTFII-3.3
4. Demonstrate troubleshooting audio/video functions/signal path & distribution (i.e., output to TV, computer, web streaming, bad cable connection, and proper connectors). AAVTC-AVTFII-3.4

AAVTC-AVTFII-4. Perform advanced editing operations. AAVTC-AVTFII-4

1. Edit multiple layers of video/audio and perform split audio/video edits. AAVTC-AVTFII-4.1
2. Calculate back time and running time of production AAVTC-AVTFII-4.2
3. Demonstrate matching action/matching frame editing AAVTC-AVTFII-4.3
4. Demonstrate special effects processing to include color correction, keying and digital compositing. AAVTC-AVTFII-4.4
5. Demonstrate maintaining proper continuity for a production. AAVTC-AVTFII-4.5

AAVTC-AVTFII-5. Demonstrate teamwork and proper use of equipment while participating in studio productions. AAVTC-AVTFII-5

1. Identify and describe different studio productions (i.e., commercial, news, talk show, interview, and film). AAVTC-AVTFII-5.1
2. Identify and develop leaders for studio production, including assigning leadership roles for producer and director. AAVTC-AVTFII-5.2
3. Select appropriate studio equipment based on production requirements (i.e., green screens, news casts, and talk shows). AAVTC-AVTFII-5.3
4. Demonstrate operating studio equipment, as assigned. AAVTC-AVTFII-5.4
5. Demonstrate setting and adhering to production deadlines. AAVTC-AVTFII-5.5

AAVTC-AVTFII-6. Demonstrate correct operations for studio and field lighting. AAVTC-AVTFII-6

1. Demonstrate setting lighting required for field production (i.e., using reflectors, on camera lights, and portable lighting instruments). AAVTC-AVTFII-6.1
2. Demonstrate designing and setting lights for a studio broadcast. AAVTC-AVTFII-6.2
3. Demonstrate setting lights for special effects (i.e., green screen and compositing). AAVTC-AVTFII-6.3
4. Demonstrate using light modifiers (i.e., reflectors, bounce cards, flag, cookies, and gels). AAVTC-AVTFII-6.4
5. Demonstrate and perform correct operation of a lighting dimmer. AAVTC-AVTFII-6.5

AAVTC-AVTFII-7. Create production graphics. [AAVTC-AVTFII-7](#)

1. Design and produce computer motion graphics and animation. [AAVTC-AVTFII-7.1](#)
2. Demonstrate and explain key frames, motion paths and motion tracking. [AAVTC-AVTFII-7.2](#)
3. Describe 3D space (i.e., x,y,z axis). [AAVTC-AVTFII-7.3](#)

AAVTC-AVTFII-8. Identify and research related career opportunities. [AAVTC-AVTFII-8](#)

1. Identify and research a career direction. [AAVTC-AVTFII-8.1](#)
2. Demonstrate participating in productions to support a career direction. [AAVTC-AVTFII-8.2](#)
3. List and describe a mastered-skills inventory. [AAVTC-AVTFII-8.3](#)

AAVTC-AVTFII-9. Examine how SkillsUSA is a co-curricular part of career and technical education through leadership development, school and community service projects, and competitive events. [AAVTC-AVTFII-9](#)

1. Explain the purpose, mission, objectives, motto, colors, official dress and other distinguishing characteristics of SkillsUSA. [AAVTC-AVTFII-9.1](#)
 2. Explain how participation in SkillsUSA can promote lifelong responsibility for community service, professional growth and development. [AAVTC-AVTFII-9.2](#)
 3. Explore the impact and opportunities that SkillsUSA can develop to bring business and industry together with education in a positive working relationship through innovative leadership and career development programs. [AAVTC-AVTFII-9.3](#)
 4. Explore the local, state, and national opportunities available to students through participation in SkillsUSA, including but not limited to conferences, competitions, community service, philanthropy, and other SkillsUSA activities. [AAVTC-AVTFII-9.4](#)
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**Broadcast Video
Production Application
(10.5141)**

AATC-BVPA-1. Demonstrate employability skills required by business and industry. AATC-BVPA-1

1. Communicate effectively through writing, speaking, listening, reading, and interpersonal abilities. AATC-BVPA-1.1
2. Demonstrate creativity by asking challenging questions and applying innovative procedures and methods. AATC-BVPA-1.2
3. Exhibit critical thinking and problem solving skills to locate, analyze and apply information in career planning and employment situations. AATC-BVPA-1.3
4. Model work readiness traits required for success in the workplace including integrity, honesty, accountability, punctuality, time management, and respect for diversity. AATC-BVPA-1.4
5. Apply the appropriate skill sets to be productive in a changing, technological, diverse workplace to be able to work independently and apply teamwork skills. AATC-BVPA-1.5
6. Present a professional image through appearance, behavior and language. AATC-BVPA-1.6

AATC-BVPA-2. Students will demonstrate a mastery proficiency level of production equipment used in broadcasting and video production in various workplace settings. AATC-BVPA-2

1. Identify and apply complex camera operations. AATC-BVPA-2.1
2. Exhibit effective mixing techniques for multiple audio sources during production. AATC-BVPA-2.2
3. Produce broadcast quality programming with a Non-Linear Editor (Workstation). AATC-BVPA-2.3

AATC-BVPA-3. Students will produce a variety of programming that emulates professional productions. AATC-BVPA-3

1. Write appropriate copy for a variety of programming. AATC-BVPA-3.1
2. Collaborate with a team to plan and produce broadcast productions (i.e. news package, commercial, documentary, etc.). AATC-BVPA-3.2

AATC-BVPA-4. Students will produce samples to enhance or replace existing portfolio artifacts. AATC-BVPA-4

1. Add authentic learning experiences to their resumes. AATC-BVPA-4.1
2. Gather evaluations from outside sources. AATC-BVPA-4.2
3. Finalize a self-promotional package highlighting the pathway. AATC-BVPA-4.3

AAATC-BVPA-9. Explore how related student organizations are integral parts of career and technology education courses through leadership development, school and community service projects, entrepreneurship development, and competitive events. AAATC-BVPA-9

1. Explain the goals, mission and objectives of Future Business Leaders of America AAATC-BVPA-9.1
2. Explore the impact and opportunities a student organization (FBLA) can develop to bring business and education together in a positive working relationship through innovative leadership and career development programs. AAATC-BVPA-9.2
3. Explore the local, state, and national opportunities available to students through participation in related student organization (FBLA) including but not limited to conferences, competitions, community service, philanthropy, and other FBLA activities. AAATC-BVPA-9.3
4. Explain how participation in career and technology education student organizations can promote lifelong responsibility for community service and professional development. AAATC-BVPA-9.4
5. Explore the competitive events related to the content of this course and the required competencies, skills, and knowledge for each related event for individual, team, and chapter competitions AAATC-BVPA-9.5

Film Production Applications (10.5221)

AAVTC-FPA-1. Demonstrate employability skills required by business and industry. AAVTC-FPA-1

1. Communicate effectively through writing, speaking, listening, reading, and interpersonal abilities. AAVTC-FPA-1.1
2. 1.3 Demonstrate creativity by asking challenging questions and applying innovative procedures and methods. AAVTC-FPA-1.2
4. Workplace Ethics Demonstrating Good Work Ethic Behaving Appropriately Maintaining Honesty Model work readiness traits required for success in the workplace including integrity, honesty, accountability, punctuality, time management, and respect for diversity. AAVTC-FPA-1.4
5. Apply the appropriate skill sets to be productive in a changing, technological, diverse workplace to be able to work independently and apply teamwork skills. AAVTC-FPA-1.5
6. Present a professional image through appearance, behavior, and language. AAVTC-FPA-1.6

AAVTC-FPA-2. Explain and simulate the processes needed to set up and manage each film production department to have a successful set experience. [AAVTC-FPA-2](#)

1. Identify and simulate a working model for establishing a successful production office operation. [AAVTC-FPA-2.1](#)
2. Identify and simulate a working model for establishing a successful Script Writing and Location Scouts department operations. [AAVTC-FPA-2.2](#)
3. Identify and simulate a working model for establishing a successful Casting and Wardrobe department operations. [AAVTC-FPA-2.3](#)
4. Identify and simulate a working model for establishing a successful Grip, Electrical, and Sound operations. [AAVTC-FPA-2.4](#)
5. Identify and simulate a working model for establishing a successful Hair and Makeup operations. [AAVTC-FPA-2.5](#)
6. Identify and simulate a working model for establishing a successful Camera and Acting in front of camera operations. [AAVTC-FPA-2.6](#)
7. Identify and simulate a working model for establishing a successful Special Effects or computer-generated imagery (CGI) in post-production operations. [AAVTC-FPA-2.7](#)
8. Identify and simulate a working model for establishing a successful Production and Editing operations. [AAVTC-FPA-2.8](#)

AAVTC-FPA-3. Model and simulate skills and technical elements used with departments on a production set. [AAVTC-FPA-3](#)

1. Simulate the department hierarchy within a working production set. [AAVTC-FPA-3.1](#)
2. Apply etiquette and interpersonal skills when working on a simulated production set, production meetings, and production office. [AAVTC-FPA-3.2](#)
3. Create and simulate the distribution of industry-standard paperwork including, insurance packages, correct paperwork, and legal responsibilities for a film production. [AAVTC-FPA-3.3](#)

AAVTC-FPA-4. Simulate interactions including production set leadership within a short film and establish a functional set with appropriate departments, crew, and actors. AAVTC-FPA-4

1. Categorize members of production set identified as "Above the Line" and appropriate times, responses, and professional interactions. AAVTC-FPA-4.1
2. Categorize members of production set identified as "Below the Line" and appropriate times, responses, and professional interactions within departments. AAVTC-FPA-4.2
3. Create production checklists, procedures, requirements, and deadlines for departments from initiating a production location to shutdown of established set. AAVTC-FPA-4.3
4. Diagram and allocate film production department spaces and document interdepartmental relationships, reports, and professional set expectations. AAVTC-FPA-4.4

AAVTC-FPA-5. Collect and display a current list of local or regional film projects, upcoming film festivals and film-related projects to apply production skills. AAVTC-FPA-5

1. List and describe key film festivals and requirements for entry and production elements. AAVTC-FPA-5.1
2. Identify key local and regional film companies and potential Above the Line film leaders for networking. AAVTC-FPA-5.2
3. Create and submit an appropriate entry for film festivals. AAVTC-FPA-5.3

AAVTC-FPA-6. Apply and implement technical skills for each department used in a production set. AAVTC-FPA-6

1. Simulate proper communications and follow appropriate departmental hierarchy. AAVTC-FPA-6.1
2. Apply correct editing system terms, acronyms, and naming conventions. AAVTC-FPA-6.2
3. Demonstrate related organizational structures within the production and editing systems. AAVTC-FPA-6.3
4. Apply and use visual effects (VFX) and computer-generated imagery (CGI) for special effects features. AAVTC-FPA-6.4
5. Implement general studio color coding, uses of colors, collate, and order of colors in a production set script edits and updates. AAVTC-FPA-6.5
6. Simulate production skills for each production department listed below for a production. AAVTC-FPA-6.6

AAVTC-FPA-7. Explain and simulate proper safety procedures for all stages of film production within a set. AAVTC-FPA-7

1. Demonstrate the protocols and procedures the Head of Production is responsible for including overall management and administration of safety protocols on a film production set. [AAVTC-FPA-7.1](#)
2. Perform the responsibilities of Safety Coordinators (Art Director in Pre-Production, First Assistant Director) including meetings covering safety protocols and required safety equipment use. [AAVTC-FPA-7.2](#)
3. Create Codes of Safe Practices and inspection guidelines. [AAVTC-FPA-7.3](#)
4. Create the necessary documents and safety-related correspondence and records to be maintained on a production. [AAVTC-FPA-7.4](#)
5. Organize necessary documents, establish accident report and investigation procedures, and ensure regulatory agencies are notified. [AAVTC-FPA-7.5](#)

AAVTC-FPA-8. Examine how related student organizations are integral parts of career and technology education courses through leadership development, school and community service projects and competitive events. AAVTC-FPA-8

1. Explain the purpose, mission, objectives, motto, colors, official dress, and other distinguishing characteristics of SkillsUSA. [AAVTC-FPA-8.1](#)
 2. Explain how participation in SkillsUSA can promote lifelong responsibility for community service, professional growth, and development. [AAVTC-FPA-8.2](#)
 3. Explore the impact and opportunities SkillsUSA can develop to bring business and industry together with education in a positive working relationship through innovative leadership and career development programs. [AAVTC-FPA-8.3](#)
 4. Explore the local, state, and national opportunities available to students through participation in SkillsUSA including but not limited to conferences, competitions, community service, philanthropy, and other SkillsUSA activities. [AAVTC-FPA-8.4](#)
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Graphic Design and Production (48.562)

AAVTC-GDP-1. Demonstrate employability skills required by business and industry. [AAVTC-GDP-1](#)

1. Communicate effectively through writing, speaking, listening, reading, and interpersonal abilities. [AAVTC-GDP-1.1](#)
 2. Demonstrate creativity by asking challenging questions and applying innovative procedures and methods. [AAVTC-GDP-1.2](#)
 3. Exhibit critical thinking and problem solving skills to locate, analyze and apply information in career planning and employment situations. [AAVTC-GDP-1.3](#)
 4. Model work readiness traits required for success in the workplace including integrity, honesty, accountability, punctuality, time management, and respect for diversity. [AAVTC-GDP-1.4](#)
 5. Apply the appropriate skill sets to be productive in a changing, technological, diverse workplace to be able to work independently and apply teamwork skills. [AAVTC-GDP-1.5](#)
 6. Present a professional image through appearance, behavior and language. [AAVTC-GDP-1.6](#)
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AAVTC-GDP-2. Build upon previous knowledge and demonstrate proper equipment operation and follow procedures in a safe manner and achieve 100 percent on a written or demonstration safety test. [AAVTC-GDP-2](#)

1. Demonstrate knowledge of safety features and practices for both general to the industry and specific to lab. [AAVTC-GDP-2.1](#)
 2. Demonstrate knowledge of and proper use of personal protection equipment needed for both general to the industry and specific to lab. [AAVTC-GDP-2.2](#)
 3. Demonstrate knowledge of and proper use of equipment operating instructions for both general to the industry and specific to lab. [AAVTC-GDP-2.3](#)
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AAVTC-GDP-3. Examine and prepare for career opportunities in the design profession. [AAVTC-GDP-3](#)

1. Research various design specialties that exist in the field. [AAVTC-GDP-3.1](#)
2. Demonstrate an understanding of the importance of developing professional self-promotional materials, such as but not limited to resume, brochure, business card, cover letter, twitter avatar, and other emerging technologies. [AAVTC-GDP-3.2](#)
3. Demonstrate an understanding of specific job requirements for the graphic communication and design industry. [AAVTC-GDP-3.3](#)
4. Demonstrate building a professional portfolio. [AAVTC-GDP-3.4](#)

AAVTC-GDP-4. Understand and demonstrate the fundamental basic elements and principles of design. [AAVTC-GDP-4](#)

1. Compare and contrast or critique professionally-completed works. [AAVTC-GDP-4.1](#)
2. Apply knowledge of design principles to new products. [AAVTC-GDP-4.2](#)
3. Incorporate design elements and principles in hand drawn sketches and measured layouts. [AAVTC-GDP-4.3](#)
4. Design successful compositions that employ elements found in existing collateral design pieces. [AAVTC-GDP-4.4](#)
5. Apply creative thinking skills to produce solutions to artistic problems. [AAVTC-GDP-4.5](#)
6. Create original designs that utilize basic elements and principles. [AAVTC-GDP-4.6](#)

AAVTC-GDP-5. Demonstrate an understanding of the fundamental basics of a creative brief and demonstrate the proper usage. [AAVTC-GDP-5](#)

1. Demonstrate the requirements and the importance of developing a creative brief on the job. [AAVTC-GDP-5.1](#)
2. Demonstrate the ability to identify the required audience. [AAVTC-GDP-5.2](#)
3. Apply knowledge to determine project purpose and audience needs. [AAVTC-GDP-5.3](#)

AAVTC-GDP-6. Explore color and the variety of methods in which it can be applied. Interpret and apply color models through graphic manipulations. Identify the output issues involving color and demonstrate the proper usage. [AAVTC-GDP-6](#)

1. Demonstrate an understanding of how color impacts the creative strategy of a project. [AAVTC-GDP-6.1](#)
2. Choose and implement optimal color schemes. [AAVTC-GDP-6.2](#)
3. Demonstrate effective use of black and white (one-color) design [AAVTC-GDP-6.3](#)
4. Generate monochromatic, limited chromatic and full-color solutions to solve design problems. [AAVTC-GDP-6.4](#)
5. Analyze and implement color management among color systems including CMYK (cyan, magenta, yellow, and key [black] colors), RGB (red, green, blue colors), and spot colors (according to the Pantone Matching System). [AAVTC-GDP-6.5](#)
6. Demonstrate the creation of printed color with halftones. [AAVTC-GDP-6.6](#)
7. Demonstrate an understanding of the transition of tone images to dots of an output process. [AAVTC-GDP-6.7](#)
8. Understand output devices and which is appropriate according to job description. [AAVTC-GDP-6.8](#)
9. Evaluate image registration issues. [AAVTC-GDP-6.9](#)
10. Demonstrate designing traps and spot color for production. [AAVTC-GDP-6.10](#)

AAVTC-GDP-7. Explore different outlets for typography and define its role in design. [AAVTC-GDP-7](#)

1. Demonstrate knowledge of typographic principles relating to layout and page composition. [AAVTC-GDP-7.1](#)
2. Investigate and demonstrate typography as an expressive form, not limited to type as an image, etc. [AAVTC-GDP-7.2](#)
3. Demonstrate the ability to explore possible combinations of type and image as two different entities combined into a cohesive form. [AAVTC-GDP-7.3](#)

AAVTC-GDP-8. Develop professional written, verbal and non-verbal communication skills and follow ethical guidelines and copyright laws. AAVTC-GDP-8

1. Demonstrate the ability to follow directions. [AAVTC-GDP-8.1](#)
2. Demonstrate the ability to work collaboratively in creative teams. [AAVTC-GDP-8.2](#)
3. Constructively criticize classmate(s) work objectively, as well as accept criticism. [AAVTC-GDP-8.3](#)
4. Follow ethical guidelines and copyright laws and explain their history and purpose; such as but not limited to, Intellectual Property, Creative Commons, Work For Hire, Fair Use, etc. [AAVTC-GDP-8.4](#)

AAVTC-GDP-9. Identify and demonstrate a working knowledge of illustration as it pertains to the design field. AAVTC-GDP-9

1. Apply traditional drawing skills to graphic solutions, such as but not limited to cross hatch, stipple, contouring, perspective, etc. [AAVTC-GDP-9.1](#)
2. Develop a process or sketchbook that carries visual solutions from hand-drawn thumbnails and roughs to a finished digital composition. [AAVTC-GDP-9.2](#)
3. Identify the role and purpose of illustration in the professional field. [AAVTC-GDP-9.3](#)
4. Identify and demonstrate a working knowledge of illustration software. [AAVTC-GDP-9.4](#)

AAVTC-GDP-10. Demonstrate knowledge of file management and file formats and digital file preparation. AAVTC-GDP-10

1. Create folder structure to organize documents along with all support files including client original files, fonts, images, etc. AAVTC-GDP-10.1
2. Identify and demonstrate proper usage of file formats used in industry, such as but not limited to native/default format; metafiles (e.g. wmf, pdf, eps,), generic (e.g. tif, jpg, gif, png, txt, etc.), and will be able to identify future/emerging file formats AAVTC-GDP-10.2
3. Read and interpret a job ticket for production information. AAVTC-GDP-10.3
4. Demonstrate knowledge of preflight and package documents, as well as the ability to identify problems that include resolution, missing fonts, missing graphics, number of inks, etc. AAVTC-GDP-10.4
5. Demonstrate knowledge of spell check and proofreaders marks in order to proofread, edit, and make corrections/adjustments to copy. AAVTC-GDP-10.5
6. Design and produce a digital document in a page layout program. Layout should include placed graphics of appropriate quality, correct number of inks, correct margins, and gutters for folding purposes. AAVTC-GDP-10.6
7. Demonstrate image/file conversions, such as but not limited to CMYK (cyan, magenta, yellow, and black colors) to RGB (red, green, blue colors), Adobe Illustrator (AI) to Metafile EPS, etc. AAVTC-GDP-10.7
8. Demonstrate how to place scanned graphics/photos into existing page layout program. AAVTC-GDP-10.8
9. Produce digital files using appropriate dots per inch (DPI) and pixels per inch (PPI) resolution for media. AAVTC-GDP-10.9
10. Demonstrate how to plan, by creating a folding dummy, and impose a multipage document. AAVTC-GDP-10.10

AAVTC-GDP-11. Demonstrate proper usage of measuring units and devices. AAVTC-GDP-11

1. Examine and construct documents with multiple measurement systems used in the field including inches, points and picas. AAVTC-GDP-11.1
2. Demonstrate the accurate execution of measurement conversions. AAVTC-GDP-11.2
3. Demonstrate positioning images on substrates using appropriate measurements. AAVTC-GDP-11.3

AAVTC-GDP-12. Demonstrate knowledge of production and output in the graphics & design industry. [AAVTC-GDP-12](#)

1. List and understand output methods and applications used in the graphics industry. [AAVTC-GDP-12.1](#)
2. List and understand binding methods and applications used in the graphics industry [AAVTC-GDP-12.2](#)
3. List and understand finishing methods and applications used in the graphics industry [AAVTC-GDP-12.3](#)
4. Explain characteristics of substrates used in the graphics industry [AAVTC-GDP-12.4](#)
5. Identify various types of inks/toners used in the graphics industry [AAVTC-GDP-12.5](#)
6. Demonstrate proper design and production workflow. [AAVTC-GDP-12.6](#)
7. Demonstrate the ability to provide quote/cost estimate according to job ticket. [AAVTC-GDP-12.7](#)
8. Determine time schedule for completion of project per job ticket. [AAVTC-GDP-12.8](#)
9. Generate a hard and soft proof for customer approval. [AAVTC-GDP-12.9](#)
10. Manage customer change requests to fulfill order according to job ticket, accuracy, color, waste, order quantity, and quality. [AAVTC-GDP-12.10](#)

AAVTC-GDP-13. Examine how SkillsUSA is a co-curricular part of career and technical education through leadership development, school and community service projects, and competitive events. [AAVTC-GDP-13](#)

1. Explain the purpose, mission, objectives, motto, colors, official dress and other distinguishing characteristics of SkillsUSA. [AAVTC-GDP-13.1](#)
 2. Explain how participation in SkillsUSA can promote lifelong responsibility for community service, professional growth and development. [AAVTC-GDP-13.2](#)
 3. Explore the impact and opportunities that SkillsUSA can develop to bring business and industry together with education in a positive working relationship through innovative leadership and career development programs. [AAVTC-GDP-13.3](#)
 4. Explore the local, state, and national opportunities available to students through participation in SkillsUSA, including but not limited to conferences, competitions, community service, philanthropy, and other SkillsUSA activities. [AAVTC-GDP-13.4](#)
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Introduction to Digital Media (48.421)

AAVTC-IDM-1. The following standard is included in all CTAE courses adopted for the Career Cluster/Pathways. AAVTC-IDM-1

1. Communicate effectively through writing, speaking, listening, reading, and interpersonal abilities. AAVTC-IDM-1.1
 2. Demonstrate creativity by asking challenging questions and applying innovative procedures and methods. AAVTC-IDM-1.2
 3. Exhibit critical thinking and problem solving skills to locate, analyze and apply information in career planning and employment situations. AAVTC-IDM-1.3
 4. Model work readiness traits required for success in the workplace including integrity, honesty, accountability, punctuality, time management, and respect for diversity. AAVTC-IDM-1.4
 5. Apply the appropriate skill sets to be productive in a changing, technological, diverse workplace to be able to work independently and apply team work skills. AAVTC-IDM-1.5
 6. Present a professional image through appearance, behavior and language. AAVTC-IDM-1.6
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AAVTC-IDM-2. Understand and follow safety procedures when working with computers and audiovideo equipment. AAVTC-IDM-2

1. State general safety rules for operation of equipment and learning activities specific to film, computer, and TV. AAVTC-IDM-2.1
 2. Collect and model safe practices when working on assignments. AAVTC-IDM-2.2
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AAVTC-IDM-3. Develop an understanding of the history of animation and the evolution of 2-D to 3-D animation. AAVTC-IDM-3

1. Identify and distinguish concepts of art history. AAVTC-IDM-3.1
2. Interpret the transition from using drawings to digital media. AAVTC-IDM-3.2
3. Formulate an understanding of flip books, pegs and lighting tables and how they apply to the state of animation. AAVTC-IDM-3.3

AAVTC-IDM-3D. animation development from storyboarding elements to fundamental software capabilities. AAVTC-IDM-3D

AAVTC-IDM-4. Understand and utilize trade terminology in an appropriate manner. AAVTC-IDM-4

1. Identify and utilize trade terminology in the media production lab. AAVTC-IDM-4.1
2. Identify and utilize trade abbreviations and acronyms as appropriate. AAVTC-IDM-4.2

AAVTC-IDM-5. Demonstrate effective professional communication skills (oral, written, and digital) and practices that enable positive customer relationships. AAVTC-IDM-5

1. Recognize the importance of all customers to a business. AAVTC-IDM-5.1
2. Identify and justify an organization's products and services. AAVTC-IDM-5.2
3. State the information technology influence and impact on business practices. AAVTC-IDM-5.3
4. Formulate how technology can be used to create a solution to a business challenge and present to customers in a professional business format. AAVTC-IDM-5.4
5. Display and model an ability to assist customers in a professional manner. AAVTC-IDM-5.5
6. Apply active listening concepts with potential customers. AAVTC-IDM-5.6
7. List and classify customers' individual needs and draw conclusions concerning these needs. AAVTC-IDM-5.7
8. Design a professional business image (e.g., appearance, voice, grammar, word usage, enunciation, nonverbal communication). AAVTC-IDM-5.8

AAVTC-IDM-6. Find and solve problems of the production process through open-ended inquiry, the consideration of multiple options, weighing consequences, and assessing results. AAVTC-IDM-6

1. Construct a sketchbook journal and digital portfolio to research and experiment with artistic conventions to communicate ideas. AAVTC-IDM-6.1
2. Apprise solutions to a single artistic problem and for each draw conclusions. AAVTC-IDM-6.2
3. Analyze in both written and oral form the implications of artistic decisions. AAVTC-IDM-6.3
4. Use concepts to solve artistic problems through discussion and interaction with peers. AAVTC-IDM-6.4
5. Critique peers supportively through informal, on-going works in-progress. AAVTC-IDM-6.5
6. Design risk-taking production tasks that synthesize concepts of existing knowledge, brainstorming, planning, active listening, and discovery of unexpected connections. AAVTC-IDM-6.6

AAVTC-IDM-7. Understand and apply media, techniques, and processes in drawing. AAVTC-IDM-7

1. Create skeleton and inner structure drawings. AAVTC-IDM-7.1
2. Apply value to model geometric forms with rendering. AAVTC-IDM-7.2
3. Relate contour and value in drawing from direct observations. AAVTC-IDM-7.3
4. Construct one- and two-point perspective to draw cubes, rectangles, and related objects from observation and analyze use of one and two-point perspective in famous artwork (landscape, interiors, and still-life). AAVTC-IDM-7.4
5. Create contour drawings from observations. AAVTC-IDM-7.5

AAVTC-IDM-8. Understand and apply media, techniques, and processes in color painting. AAVTC-IDM-8

1. Apply color theory (hue, value, intensity) and color schemes (monochromatic, analogous, complementary, split-complementary, and triadic) to express emotion and create unity. AAVTC-IDM-8.1
2. Review primary, secondary, and tertiary hues. AAVTC-IDM-8.2
3. Analyze how color communicates meaning in personal and famous artwork. AAVTC-IDM-8.3

AAVTC-IDM-9. Demonstrate the ability to specify color materials properly. AAVTC-IDM-9

1. Assess the ambient and diffuse color of an object. AAVTC-IDM-9.1
2. Differentiate the specular, reflective, and luminosity material properties of objects. AAVTC-IDM-9.2

AAVTC-IDM-10. Demonstrate the ability to create various surface materials. AAVTC-IDM-10

1. Create various surface patterns such as smoke, tiles, and swirls. AAVTC-IDM-10.1
2. Compare and contrast techniques for simulating land and water. AAVTC-IDM-10.2
3. Create reflections and refractions on objects. AAVTC-IDM-10.3

AAVTC-IDM-11. Identify and create various types of scripts. [AAVTC-IDM-11](#)

1. Identify scripts by format. [AAVTC-IDM-11.1](#)
2. Relate and show the steps leading to the development of various types of scripts (Brainstorm, Proposal and Treatment). [AAVTC-IDM-11.2](#)
3. Define terminology used in scriptwriting. [AAVTC-IDM-11.3](#)
4. Create scripts as assigned according to topic. [AAVTC-IDM-11.4](#)
5. Construct story themes: / a. Show a main character striving to achieve a goal. [AAVTC-IDM-11.5](#)

AAVTC-IDM-12. Demonstrate design skills needed to formally document project goals in order to focus development efforts. [AAVTC-IDM-12](#)

1. Describe the purpose of an animation including the target audience, create a storyboard, and explain the differences between a storyboard, scene, panel, sequence and act. [AAVTC-IDM-12.1](#)
2. List the objects, backgrounds, and/or characters needed for an animation and project goals. [AAVTC-IDM-12.2](#)
3. Apply brainstorming techniques to focus development efforts. [AAVTC-IDM-12.3](#)
4. Create scene-by-scene illustrations. [AAVTC-IDM-12.4](#)
5. Outline and link action sequences. [AAVTC-IDM-12.5](#)

AAVTC-IDM-13. Analyze the origins of one's own ideas in relation to community, culture, and the world. [AAVTC-IDM-13](#)

1. Identify and assess values and practices in an artist's community culture and world that inform art. [AAVTC-IDM-13.1](#)
2. Compare and contrast the works of a wide range of contemporary and past artists. [AAVTC-IDM-13.2](#)
3. Appraise how an artist's experiences in community, culture, and the world impacts their work and to draw conclusions. [AAVTC-IDM-13.3](#)
4. Differentiate between the values and contributions of diverse individuals, cultures, and communities. [AAVTC-IDM-13.4](#)

AAVTC-IDM-14. Demonstrate knowledge of manipulating stop motion frames and direction. [AAVTC-IDM-14](#)

1. Illustrate how to set frames manually. [AAVTC-IDM-14.1](#)
2. Illustrate how to ghost an object. [AAVTC-IDM-14.2](#)

AAVTC-IDM-15. Demonstrate knowledge of animation software user-interface and general features. [AAVTC-IDM-15](#)

1. Effectively use menu bars, command panels, and software navigation tools including drawing, painting, and transforming on an object. [AAVTC-IDM-15.1](#)
2. Illustrate the ability to map between the various coordinate systems. [AAVTC-IDM-15.2](#)
3. Illustrate the ability to select objects and sub-objects. [AAVTC-IDM-15.3](#)
4. Perform positional transformations to animate a ball and other objects. [AAVTC-IDM-15.4](#)

AAVTC-IDM-16. Acquire knowledge of file management and apply accordingly. [AAVTC-IDM-16](#)

1. Arrange and organize files effectively. [AAVTC-IDM-16.1](#)
2. Demonstrate and explain cloud storage and/or libraries to store and access files. [AAVTC-IDM-16.2](#)

AAVTC-IDM-17. Describe, analyze, develop, and follow policies for managing ethical and legal issues in the business world and in a technology-based society. AAVTC-IDM-17

1. Recognize positive cyber citizenry by applying industry accepted ethical practices and behaviors. AAVTC-IDM-17.1
2. Interpret the ethical and legal issues while accessing, creating, and using digital tools and resources in order to make informed decisions. AAVTC-IDM-17.2
3. Apply concepts of digital citizenship as a lifelong learner. AAVTC-IDM-17.3
4. Connect and apply digital etiquette and responsible social technology interactions, permanence of digital footprints, online image and presence, etc. AAVTC-IDM-17.4
5. Assess human, cultural, and societal issues related to technology and practice legal and ethical behavior. AAVTC-IDM-17.5
6. Summarize personal and legal consequences of inappropriate use of resources and online content in the following areas: AAVTC-IDM-17.6
 - a. Plagiarism, AAVTC-IDM-17.6.A
 - b. piracy, AAVTC-IDM-17.6.B
 - c. illegal downloading, AAVTC-IDM-17.6.C
 - d. copyright infringement, AAVTC-IDM-17.6.D
 - e. licensing infringement, AAVTC-IDM-17.6.E
 - f. inappropriate use of software, AAVTC-IDM-17.6.F
 - g. hardware and mobile devices. AAVTC-IDM-17.6.G
7. Relate security issues and trends affecting computers and information privacy. AAVTC-IDM-17.7

AAVTC-IDM-18. Create and organize portfolios through the use of a variety of web design tools. AAVTC-IDM-18

1. Apply and explain concepts to create professional and functional portfolios. AAVTC-IDM-18.1
2. Distinguish elements of web design as it pertains to creating a portfolio. AAVTC-IDM-18.2
3. Design simple web pages incorporating media elements (e.g., sound, video, graphics, text, and motion graphics), navigation, and linking. AAVTC-IDM-18.3
4. Investigate the trends and emerging sites that impact portfolios. (e.g., blogs and social media sites). AAVTC-IDM-18.4

AAVTC-IDM-19. Examine how related student organizations are integral parts of career and technology education courses through leadership development, school and community service projects and competitive events. AAVTC-IDM-19

1. Explain the purpose, mission, objectives, motto, colors, official dress and other distinguishing characteristics of SkillsUSA. **AAVTC-IDM-19.1**
2. Explain how participation in SkillsUSA can promote lifelong responsibility for community service, professional growth and development. **AAVTC-IDM-19.2**
3. Explore the impact and opportunities SkillsUSA can develop to bring business and industry together with education in a positive working relationship through innovative leadership and career development programs. **AAVTC-IDM-19.3**
4. Explore the local, state, and national opportunities available to students through participation in SkillsUSA including but not limited to conferences, competitions, community service, philanthropy, and other SkillsUSA activities. **AAVTC-IDM-19.4**

Introduction to Film Production (10.5211)

AAVTC-IFP-1. Demonstrate employability skills required by business and industry. AAVTC-IFP-1

1. Communicate effectively through writing, speaking, listening, reading, and interpersonal abilities. **AAVTC-IFP-1.1**
2. Demonstrate creativity by asking challenging questions and applying innovative procedures and methods. **AAVTC-IFP-1.2**
3. Exhibit critical thinking and problem-solving skills to locate, analyze and apply information in career planning and employment situations. **AAVTC-IFP-1.3**
4. Workplace Ethics Demonstrating Good Work Ethic Behaving Appropriately Maintaining Honesty Playing Fair Using Ethical Language Model work readiness traits required for success in the workplace including integrity, honesty, accountability, punctuality, time management, and respect for diversity. **AAVTC-IFP-1.4**
5. Apply the appropriate skill sets to be productive in a changing, technological, diverse workplace to be able to work independently and apply teamwork skills. **AAVTC-IFP-1.5**
6. Present a professional image through appearance, behavior, and language. **AAVTC-IFP-1.6**

AAVTC-IFP-2. Identify and summarize key elements to follow set hierarchy, professional performance expectations, and abide with above and below the line aspects on a film production location. [AAVTC-IFP-2](#)

1. Interpret and demonstrate key skills of production set hierarchy (e.g., above the line, below the line), teachability, taking initiative. [AAVTC-IFP-2.1](#)
2. List and demonstrate steps involved in production behaviors targeting listening, teamwork, communication, practicing strong work ethic, punctuality, good interpersonal skills, and demonstrate a growth mindset. [AAVTC-IFP-2.2](#)
3. Demonstrate the roles and responsibilities of a professional film production (e.g., pre-production, principal of photography, post-production). [AAVTC-IFP-2.3](#)
4. Apply and explain how logic, problem solving, growing to learn, and being aware of the production set surroundings impacts your working experiences. [AAVTC-IFP-2.4](#)
5. Practice networking and provide ways to anticipate set needs with the goal to maintain efficiency. [AAVTC-IFP-2.5](#)
6. Recognize and simulate professionally the need to develop an understanding of working in a stressful environment and sticking to the set schedule for a production. [AAVTC-IFP-2.6](#)
7. Practice and explain how production set safety is followed and practiced within each department. [AAVTC-IFP-2.7](#)

AAVTC-IFP-3. Describe and model skills and technical elements used and expectations for individuals working on a production set. [AAVTC-IFP-3](#)

1. Diagram and explain the departmental hierarchy within a professional film production. [AAVTC-IFP-3.1](#)
2. Observe and summarize etiquette and interpersonal interactions when working on a production set, production meetings, and in a production office. [AAVTC-IFP-3.2](#)
3. Collect and display roles and responsibilities of freelance work (gig employment) within film production and ways to establish financial stability regarding employment paperwork, completing and filing taxes accordingly, and reading contracts. [AAVTC-IFP-3.3](#)
4. Identify and compare different types of production set insurance, and various film-related union requirements and benefits for each production department. [AAVTC-IFP-3.4](#)
5. Describe the elements within a Non-Disclosure Agreement (NDA) and what is appropriate to share without violating. [AAVTC-IFP-3.5](#)
6. Explain copyright issues, use of social media on set, cameras and cell phones, location pinging, and related items to a film production and what is appropriate to share without violating. [AAVTC-IFP-3.6](#)

AAVTC-IFP-4. Explain and compare the types and interactions of production leadership, types of film sets, and essential steps to establish a functional film production. AAVTC-IFP-4

1. Compare and contrast members of production set identified as "Above the Line" and appropriate times, responses, and professional interaction expectations. [AAVTC-IFP-4.1](#)
2. Compare and contrast members of production set identified as "Below the Line" and appropriate times, responses, and professional interaction expectations within departments. [AAVTC-IFP-4.2](#)
3. Organize and create a checklist of production steps, procedures, requirements to establish a set with departments listed below, operate working set departments, and close a production location. [AAVTC-IFP-4.3](#)
 1. Creative Department - Secure Intellectual Property, including script, book, film concept. Secure screenwriter, cast, and director. [AAVTC-IFP-4.3.1](#)
 2. Business Development - Secure attorney and set up business entity (e.g., S-Corp, LLC, LP). Set up federal and state taxes and reporting. [AAVTC-IFP-4.3.2](#)
 3. Pre-Production - Hire cast and crew. Secure locations, set designs, production equipment, and all physical elements necessary to shoot the project. Initiate tracking and recording budget expenses, and payroll. [AAVTC-IFP-4.3.3](#)
 4. Principal Photography (Production) - Film the project with cast and shooting crew. [AAVTC-IFP-4.3.4](#)
 5. Production wrap - Return all film items used during production. Restore film locations to original conditions. [AAVTC-IFP-4.3.5](#)
 6. Post-Production - Complete editing, sound design, coloring, music. Complete paper deliverables (all documentation, clearances, union paperwork). Finalize payroll and expenses, including petty cash. [AAVTC-IFP-4.3.6](#)
 7. Distribution - Pitch completed film to distributors, markets, and film festivals. Negotiate distribution deal(s). Deliver tech and paper deliverables per distributor. Deliver marketing materials (e.g., stills, EPK, one-sheet, marketing blurbs,). [AAVTC-IFP-4.3.7](#)
4. Diagram and explain the film production departments, such as construction, wardrobe, electrical, art, sound, camera, assistant directors, and office to document interdepartmental relationships for working seamlessly. [AAVTC-IFP-4.4](#)
5. Describe the broad-base concepts for each department on set and within production office. [AAVTC-IFP-4.5](#)
6. Identify similarities and differences between types of film productions (e.g., independently financed films, studio productions, network

programming, short films, web series, podcasts). [AAVTC-IFP-4.6](#)

AAVTC-IFP-5. Distinguish relevant information regarding equipment, tools, software, safety, and procedures of work on a set. [AAVTC-IFP-5](#)

1. List and describe key concepts for each large department with essential terminology, responsibilities, and appropriate procedures related to safety and set protocols. [AAVTC-IFP-5.1](#)
 2. Identify proper uses and handling of key equipment and software within each film production department. [AAVTC-IFP-5.2](#)
 3. Identify and simulate set up, maintenance, and proper storage of key equipment (audio and video) within each film production department. [AAVTC-IFP-5.3](#)
 4. Summarize how departments report to other departments and work together on a regular basis to simulate full scope of jobs, tasks, and responsibilities across the entire production set. [AAVTC-IFP-5.4](#)
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AAVTC-IFP-6. Understand and apply technical skills used within a production set. [AAVTC-IFP-6](#)

1. Simulate how to communicate with producer(s) when working closely with them on specific jobs and appropriate communication following departmental hierarchy. [AAVTC-IFP-6.1](#)
2. Demonstrate understanding of how creative and technical elements translate from principal photography to post-production. [AAVTC-IFP-6.2](#)
3. Explain and demonstrate naming conventions, and related organizational structures within the production and editing systems. [AAVTC-IFP-6.3](#)
4. Identify and recall general studio script and schedule color coding for professional film production. [AAVTC-IFP-6.4](#)
5. Describe and simulate production skills for each production department listed below. [AAVTC-IFP-6.5](#)

AAVTC-IFP-7. Identify and simulate the procedures and processes involved in the Distribution, Marketing, and Promotion for a new film production. AAVTC-IFP-7

1. Identify the procedures in Distribution, Marketing, and Promotion for a new film. AAVTC-IFP-7.1
2. Explain the purpose and procedures for sales agents in Distribution, Marketing, and Promotion for a new film. AAVTC-IFP-7.2
3. Understand and identify the related careers in Distribution, Marketing, and Promotion for a film. AAVTC-IFP-7.3
4. Research and develop through use of appropriate software the trailers, movie posters, and marketing materials for a new film. AAVTC-IFP-7.4
5. Compare and contrast the related marketing procedures for a film when using web and social media resources. AAVTC-IFP-7.5
6. Understand and create a checklist for finding film investors and support for film projects by using visual presentations (e.g., look books, sizzle reels), promotional materials, or related film resources. AAVTC-IFP-7.6
7. Understand the best practices of distribution and marketing. AAVTC-IFP-7.7
8. Identify concepts and ways to distribute, market, and promote collaboratively. AAVTC-IFP-7.8

AAVTC-IFP-8. Explain and simulate proper safety procedures for every filmmaker and a safe workplace within a film production set. AAVTC-IFP-8

1. Explain the protocols and procedures the Head of Production is responsible for including overall management and administration of safety protocols on a film production set. AAVTC-IFP-8.1
2. Identify Safety Coordinators (Art Director in Pre-Production, First Assistant Director) and responsibilities, including meetings covering safety protocols and required safety equipment use. AAVTC-IFP-8.2
3. Create Codes of Safe Practices and inspection guidelines. AAVTC-IFP-8.3
4. Identify and distinguish the necessary documents and safety-related correspondence and records to be maintained on a production. AAVTC-IFP-8.4
5. Organize necessary documents, establish accident report and investigation procedures, and ensure regulatory agencies are notified. AAVTC-IFP-8.5

AAVTC-IFP-9. Analyze and simulate an application of terminology and processes within film production departments. AAVTC-IFP-9

1. Development Phase AAVTC-IFP-9.1
 - a. Describe and apply the terminology and processes for Script Writing. AAVTC-IFP-9.1.A
2. Pre-Production Phase AAVTC-IFP-9.2
 - a. Describe and apply the terminology and processes for Location Scouts. AAVTC-IFP-9.2.A
3. Principal Photography Phase AAVTC-IFP-9.3
 - a. Describe and apply the terminology and processes for Grip, Electrical, and Sound. AAVTC-IFP-9.3.A
4. Post-Production Phase AAVTC-IFP-9.4
 - a. Describe and apply the terminology and processes for picture edit. AAVTC-IFP-9.4.A
5. Distribution/ Marketing Phase AAVTC-IFP-9.5
 - a. Describe and apply the terminology and processes for distributors, film markets, and festivals. AAVTC-IFP-9.5.A

AAVTC-IFP-10. Examine how related student organizations are integral parts of career and technology education courses through leadership development, school and community service projects and competitive events. AAVTC-IFP-10

1. Explain the purpose, mission, objectives, motto, colors, official dress, and other distinguishing characteristics of SkillsUSA. AAVTC-IFP-10.1
 2. Explain how participation in SkillsUSA can promote lifelong responsibility for community service, professional growth, and development. AAVTC-IFP-10.2
 3. Explore the impact and opportunities SkillsUSA can develop to bring business and industry together with education in a positive working relationship through innovative leadership and career development programs. AAVTC-IFP-10.3
 4. Explore the local, state, and national opportunities available to students through participation in SkillsUSA including but not limited to conferences, competitions, community service, philanthropy, and other SkillsUSA activities. AAVTC-IFP-10.4
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Introduction to Graphics and Design (48.561)

AAVTC-IGD-1. Demonstrate employability skills required by business and industry. [AAVTC-IGD-1](#)

1. Communicate effectively through writing, speaking, listening, reading and interpersonal abilities. [AAVTC-IGD-1.1](#)
 2. Demonstrate creativity by asking challenging questions and applying innovative procedures and methods. [AAVTC-IGD-1.2](#)
 3. Exhibit critical thinking and problem solving skills to locate, analyze and apply information in career planning and employment situations. [AAVTC-IGD-1.3](#)
 4. Model work readiness traits required for success in the workplace including integrity, honesty, accountability, punctuality, time management, and respect for diversity. [AAVTC-IGD-1.4](#)
 5. Apply the appropriate skill sets to be productive in a changing, technological, diverse workplace to be able to work independently and apply teamwork skills. [AAVTC-IGD-1.5](#)
 6. Present a professional image through appearance, behavior and language. [AAVTC-IGD-1.6](#)
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AAVTC-IGD-2. Explore careers available in the field of graphic communications and the design industry. [AAVTC-IGD-2](#)

1. Identify the certificates, diplomas, and degrees available. [AAVTC-IGD-2.1](#)
2. Compare and contrast careers in graphics and design, along with their education training requirements, and salary ranges. [AAVTC-IGD-2.2](#)
3. Identify the college majors that are found in the area of graphics design and communication. [AAVTC-IGD-2.3](#)
4. Investigate how graphics and design permeates our daily lives. [AAVTC-IGD-2.4](#)
5. Demonstrate understanding of education and career development as a lifelong learning process. [AAVTC-IGD-2.5](#)
6. List and describe professional organizations in the field of computing. [AAVTC-IGD-2.6](#)

AAVTC-IGD-3. Discuss developments and individuals relating to the history of the graphics and design industry and explore emerging trends and technologies. AAVTC-IGD-3

1. Describe the development of the graphic communication and design industries. AAVTC-IGD-3.1
2. Identify persons with major contributions to the field of graphic design. AAVTC-IGD-3.2
3. Outline the history of printing and graphic design and explain its effects on the print/design industry and society. AAVTC-IGD-3.3
4. Identify and describe emerging trends and technologies. AAVTC-IGD-3.4

AAVTC-IGD-4. Examine the professional and ethical issues involved in the visual communications and design industry. AAVTC-IGD-4

1. Identify basic copyright issues for graphic communications and design industries to include understanding the use of Creative Commons copyright. AAVTC-IGD-4.1
2. Explain the consequences of copyright infringement. AAVTC-IGD-4.2
3. Explain ethics issues for the graphics communication and design industries. AAVTC-IGD-4.3

AAVTC-IGD-5. Examine and describe the business cycle elements. AAVTC-IGD-5

1. Describe the job flow from initial customer contact to collection of payment. AAVTC-IGD-5.1
2. Interpret basic business terms. AAVTC-IGD-5.2

AAVTC-IGD-6. Explain and demonstrate how to operate equipment in a safe manner. AAVTC-IGD-6

1. Identify safety features and practices. AAVTC-IGD-6.1
2. Describe proper personal protection equipment needed. AAVTC-IGD-6.2
3. Read and interpret equipment operating instructions. AAVTC-IGD-6.3

AAVTC-IGD-7. Identify safety and health procedures utilized in the classroom/lab environment. AAVTC-IGD-7

1. Identify location of safety and first aid equipment. AAVTC-IGD-7.1
2. Identify procedures for emergency situations. AAVTC-IGD-7.2
3. Identify procedures for handling hazardous and combustible materials (MSDS, OSHA). AAVTC-IGD-7.3
4. Identify proper ergonomic practices. AAVTC-IGD-7.4
5. Describe OSHA, MSDS, and EPA. AAVTC-IGD-7.5
6. Describe Lockout and Tagout. AAVTC-IGD-7.6
7. Explain Right to Know. AAVTC-IGD-7.7

AAVTC-IGD-8. Demonstrate proper usage of measuring units and devices. AAVTC-IGD-8

1. Examine and construct documents with multiple measurement systems used in the field (including inches and picas). AAVTC-IGD-8.1
2. Understand and accurately execute measurement conversions. AAVTC-IGD-8.2

AAVTC-IGD-9. Recognize and utilize basic paper types and sizes for output. AAVTC-IGD-9

1. Determine size, weight, quantities, type, and amount of paper necessary for fulfilling a job order. AAVTC-IGD-9.1

AAVTC-IGD-10. Generate and manipulate various graphic imaging processes. AAVTC-IGD-10

1. Discern appropriate use of technology in areas of color and design choices. AAVTC-IGD-10.1
2. Evaluate photographic digital techniques for maximum effect. AAVTC-IGD-10.2
3. Manage resolution issues. AAVTC-IGD-10.3
4. Assess the issues of sizing images in various forms. AAVTC-IGD-10.4

AAVTC-IGD-11. Analyze pre-press, pre-flight, and output operations. AAVTC-IGD-11

1. Determine and use proper imposition to save materials used in multi-page and multi piece projects. AAVTC-IGD-11.1
2. Position images on substrates using appropriate measurements. AAVTC-IGD-11.2

AAVTC-IGD-12. Understand and demonstrate how to design a page layout. AAVTC-IGD-12

1. Demonstrate how to log on/boot up, save, and print using a page layout program. AAVTC-IGD-12.1
2. Demonstrate proper document set-up. AAVTC-IGD-12.2
3. Design and produce a document using desired fonts, formatting, margins, indents, tabs, gutter, header and footer, guides, trims, folds and proper leading. AAVTC-IGD-12.3
4. Demonstrate text alignment, element positioning, and rules of page design for printed matter. AAVTC-IGD-12.4
5. Set up column grids for page layout according to job specifications. AAVTC-IGD-12.5
6. Set up and select appropriate pagination for a given job. AAVTC-IGD-12.6
7. Proofread, edit, and make corrections/adjustments to copy on the screen. AAVTC-IGD-12.7

AAVTC-IGD-13. Identify and define the five elements incorporated in basic graphic designs and understand the application of effective color usage. AAVTC-IGD-13

1. Identify the utilization of the elements of design including line, shapes, value, mass, space, texture, and color as they apply to basic design. AAVTC-IGD-13.1
2. Understand the color wheel: primary, secondary, tertiary. AAVTC-IGD-13.2
3. Understand the use of color schemes, such as analogous and complementary colors. AAVTC-IGD-13.3
4. Understand and apply the psychology of color in design. AAVTC-IGD-13.4
5. Define CMYK and RGB and understand the difference between them and when to use them. AAVTC-IGD-13.5

AAVTC-IGD-14. Identify and produce files utilizing different digital formats. AAVTC-IGD-14

1. Describe the strengths and weaknesses of TIFF, EPS, JPG, GIF, PDF, and PNG on a postscript environment. AAVTC-IGD-14.1
2. Create documents/images and demonstrate the ability to save as digital files. AAVTC-IGD-14.2
3. Demonstrate how to place scanned graphics/photos into an existing page layout program. AAVTC-IGD-14.3
4. Produce digital files using appropriate DPI and PPI resolution for media. AAVTC-IGD-14.4

AAVTC-IGD-15. Identify and demonstrate page layout terminology and tools. [AAVTC-IGD-15](#)

1. Identify and demonstrate use of basic design principles including figure/ground, unity/variety, proportion/scale, emphasis, contrast, balance, repetition and rhythm. [AAVTC-IGD-15.1](#)
2. Identify and demonstrate use of layout methods/stages: (1) Thumbnail, (2) Rough, and (3) Comprehensive/Computer. [AAVTC-IGD-15.2](#)
3. Identify and demonstrate use of traditional and computer-generated tools in the production of page layout. [AAVTC-IGD-15.3](#)

AAVTC-IGD-16. Distinguish and demonstrate the difference between page layout, raster-based photo manipulation, and vector-based graphic software applications. [AAVTC-IGD-16](#)

1. Identify and demonstrate the basic capabilities of page layout, raster-based photo manipulation, and vector-based software applications as they apply to the completion of graphic communication projects. [AAVTC-IGD-16.1](#)
2. Define and identify the difference between raster- and vector-based software. [AAVTC-IGD-16.2](#)
3. Demonstrate the ability to properly integrate text and images in a computer-generated page layout. [AAVTC-IGD-16.3](#)
4. Demonstrate the ability to properly alter and enhance an image using a raster-based photo manipulation software application. [AAVTC-IGD-16.4](#)
5. Demonstrate the ability to create a logo utilizing a vector-based software application. [AAVTC-IGD-16.5](#)

AAVTC-IGD-17. Discuss the origins of type by examining the evolution of letterforms. [AAVTC-IGD-17](#)

1. Define the terms "pictograms", "ideograms", "icons", and distinctions between them and letterforms. [AAVTC-IGD-17.1](#)
2. Outline the evolution of alphabet, punctuation, upper case letter, lower case letters, and ligatures as elements of typography and explain the effect of each in its development. [AAVTC-IGD-17.2](#)
3. Identify and describe how current communication technologies impact emerging trends in typography. [AAVTC-IGD-17.3](#)

AAVTC-IGD-18. Evaluate the function of typeface design in supporting legibility in a variety of media applications. AAVTC-IGD-18

1. Define the concept of "mood and theme" in typography. AAVTC-IGD-18.1
2. Identify effects applied to typefaces to achieve "readability" and evaluate when each is/is not appropriate to use. AAVTC-IGD-18.2
3. Identify major type classifications and define distinguishing characteristics of each such as Roman/Serif, Block/Square Serif, Sans Serif, Script, Black letter, Decorative/Novelty. AAVTC-IGD-18.3
4. Define the use of reverse type and the concept of weight and color as type effect. AAVTC-IGD-18.4
5. Identify the four methods of alignment and describe how each impacts the presentation of type. AAVTC-IGD-18.5
6. Define and apply the difference between display type (14 pts or larger) and body copy (12pts or smaller). AAVTC-IGD-18.6
7. Select and use appropriate type composition techniques involving leading, tracking, kerning, scaling, and aligning based on job particulars. AAVTC-IGD-18.7

AAVTC-IGD-19. Distinguish between the different print/output processes. AAVTC-IGD-19

1. Create printed products by using at least two different print processes from design to completion. AAVTC-IGD-19.1
2. Describe the differences between the processes used. AAVTC-IGD-19.2
3. Identify the steps in making an image using one process. AAVTC-IGD-19.3
4. Demonstrate an understanding of the terms and technology of these processes. AAVTC-IGD-19.4

AAVTC-IGD-20. Explore the different electronic imaging processes. AAVTC-IGD-20

1. Create images by using an electronic media process from concept to delivery. AAVTC-IGD-20.1
 2. Identify the steps in making an image using one process. AAVTC-IGD-20.2
 3. Demonstrate an understanding of the terms and technology of these processes. AAVTC-IGD-20.3
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Principles and Concepts of Animation (48.422)

AAVTC-PCA-1. The following standard is included in all CTAE courses adopted for the Career Cluster/Pathways. AAVTC-PCA-1

1. Communicate effectively through writing, speaking, listening, reading, and interpersonal abilities. AAVTC-PCA-1.1
 2. Demonstrate creativity by asking challenging questions and applying innovative procedures and methods. AAVTC-PCA-1.2
 3. Exhibit critical thinking and problem solving skills to locate, analyze and apply information in career planning and employment situations. AAVTC-PCA-1.3
 4. Model work readiness traits required for success in the workplace including integrity, honesty, accountability, punctuality, time management, and respect for diversity. AAVTC-PCA-1.4
 5. Apply the appropriate skill sets to be productive in a changing, technological, diverse workplace to be able to work independently and apply team work skills. AAVTC-PCA-1.5
 6. Present a professional image through appearance, behavior and language. AAVTC-PCA-1.6
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AAVTC-PCA-2. Understand and follow safety procedures when working with computer and television equipment. AAVTC-PCA-2

1. State general safety rules for operation of equipment and learning activities specific to film, computer, and graphic laboratory equipment. AAVTC-PCA-2.1
 2. Collect and display safe practices when working on assignments. AAVTC-PCA-2.2
 3. Recognize and practice safe and secure transportation of equipment. AAVTC-PCA-2.3
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AAVTC-PCA-3. Understand and utilize trade terminology in an appropriate manner. AAVTC-PCA-3

1. Identify and utilize trade terminology in the media production lab. AAVTC-PCA-3.1
 2. Identify and utilize trade abbreviations and acronyms as appropriate. AAVTC-PCA-3.2
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AAVTC-PCA-4. Demonstrate effective professional communication skills (oral, written, and digital) and practices that enable positive customer relationships. AAVTC-PCA-4

1. Recognize the importance of all customers to a business. AAVTC-PCA-4.1
2. Display and practice approaches to assist customers in a professional manner. AAVTC-PCA-4.2

AAVTC-PCA-5. Develop an understanding of the history of animation and the evolution of 2-D to 3-D animation. AAVTC-PCA-5

1. Identify and distinguish concepts of animation history. AAVTC-PCA-5.1
2. Interpret an understanding of the transition from using drawings to digital media. AAVTC-PCA-5.2
3. Formulate an understanding of flip books, pegs, and light table and how they apply to animation. AAVTC-PCA-5.3

AAVTC-PCA-6. Demonstrate storyboarding skills and document project goals in order to develop an animation project. AAVTC-PCA-6

1. Recognize the purpose of the animation and target audience. AAVTC-PCA-6.1
2. List the objects, backgrounds, and/or characters. AAVTC-PCA-6.2
3. Apply brainstorming techniques to focus development efforts. AAVTC-PCA-6.3
4. Create scene-by-scene illustrations. AAVTC-PCA-6.4
5. Identify patterns between scripting and storyboarding. AAVTC-PCA-6.5
6. Apply concepts of sketching basics and cut-out animations. AAVTC-PCA-6.6
7. Identify, organize, and synthesize the rules governing an animation world (realistic/fantastic animations). AAVTC-PCA-6.7
8. List, classify, and differentiate the sequence of production. (Pre-production, Production, Post-production) AAVTC-PCA-6.8
9. Identify patterns and apply concepts of an effective story. AAVTC-PCA-6.6.9

AAVTC-PCA-7. Acquire knowledge of animation software and features. AAVTC-PCA-7

1. Show effective use of menu bars, command panels, and software navigation tools. AAVTC-PCA-7.1
2. Illustrate the ability to select objects and sub objects. AAVTC-PCA-7.2
3. Use, construct, and create project files and libraries. AAVTC-PCA-7.3
4. Show effective use of common Keyboard Shortcuts. AAVTC-PCA-7.4
5. Use common file formats for animations, graphics, sounds, and movies. AAVTC-PCA-7.5
6. Explain how to import images; and distinguish when to use these images effectively. AAVTC-PCA-7.6
7. Design a character head and apply lip-syncing concepts in a short clip. AAVTC-PCA-7.7
8. Rig characters and objects to animate them using forward and inverse kinematics. AAVTC-PCA-7.8

AAVTC-PCA-8. Understand and use trade terminology in an appropriate manner. AAVTC-PCA-8

1. Identify and use trade terminology of the animation lab. AAVTC-PCA-8.1
2. Collect and display trade abbreviations and acronyms. AAVTC-PCA-8.2
3. Identify and use science terminology appropriately. AAVTC-PCA-8.3

AAVTC-PCA-9. Demonstrate knowledge of creating 2-D and 3-D animations. AAVTC-PCA-9

1. Define, interpret, and apply concepts of inverse kinematics. AAVTC-PCA-9.1
2. Create effective frame-by-frame animation, layers, and cloning. AAVTC-PCA-9.2
3. Create animation paths and motion. AAVTC-PCA-9.3

AAVTC-PCA-10. Compare and contrast methods used to modify 3-D models. AAVTC-PCA-10

1. Apply concepts to project a 2-D object into a 3-D object. AAVTC-PCA-10.1
2. Investigate and apply concepts how modifiers will rotate an object. AAVTC-PCA-10.2
3. Use concepts to modify edges, faces, and vertices. AAVTC-PCA-10.3

AAVTC-PCA-11. Demonstrate knowledge of the movement cycles in animation. AAVTC-PCA-11

1. Construct a simple two-dimensional animation of a walk cycle. AAVTC-PCA-11.1
2. Show the mechanics of motion (speed, acceleration, action/reaction, gravity). AAVTC-PCA-11.2
3. Apply the concepts of the natural movements of motion (pendulum and squash/stretch). AAVTC-PCA-11.3
4. Apply the concepts and tools used for movement cycles. AAVTC-PCA-11.4

AAVTC-PCA-12. Demonstrate the ability to apply color to animations properly. [AAVTC-PCA-12](#)

1. Categorize color formats. [AAVTC-PCA-12.1](#)
2. Distinguish the ambient and diffuse color of an object. [AAVTC-PCA-12.2](#)
3. Summarize and classify the specular, reflective, and luminosity material properties of objects. [AAVTC-PCA-12.3](#)
4. Illustrate filters to an object. [AAVTC-PCA-12.4](#)

AAVTC-PCA-13. Apply knowledge of effective use of lights on 2-D and 3-D objects. [AAVTC-PCA-13](#)

1. Compare and contrast natural light versus artificial light. [AAVTC-PCA-13.1](#)
2. Apply principles of basic color theory to lighting. [AAVTC-PCA-13.2](#)
3. Construct the functions of shadows. [AAVTC-PCA-13.3](#)

AAVTC-PCA-14. Demonstrate knowledge of setting and modifying camera views. [AAVTC-PCA-14](#)

1. Compare and contrast the difference between a free and a target camera. [AAVTC-PCA-14.1](#)
2. Calculate and change camera's focal length. [AAVTC-PCA-14.2](#)
3. Create a multi plane and multilayer project. [AAVTC-PCA-14.3](#)
4. Describe and apply the use of motion blur on an object. [AAVTC-PCA-14.4](#)
5. Apply techniques to create shadows. [AAVTC-PCA-14.5](#)
6. Locate and import sounds and clips into projects. [AAVTC-PCA-14.6](#)
7. Apply correctly the concept of parallax. (Depth of field and camera view) [AAVTC-PCA-14.7](#)
8. Develop a lip sync sequence. [AAVTC-PCA-14.14.8](#)
9. Create multi effects in an animation. [AAVTC-PCA-14.9](#)

AAVTC-PCA-15. Identify logistical, ethical, and legal Issues related to digital media and apply concepts to use of text, graphics, animation, sound, video, and digital images in digital products. [AAVTC-PCA-15](#)

1. Research the privacy, legal and ethical issues of digital media ensuring to meet the standards and web accessibility requirements for completed digital products including but not limited to copyright, digital rights management, piracy, trademark, open source, plagiarism, fair use, permission, creative commons license, etc. [AAVTC-PCA-15.1](#)
2. Investigate the legal and ethical implications of using social media. [AAVTC-PCA-15.2](#)
3. Cite evidence of security issues associated with the internet including but not limited to backing up files & cloud storage, e-commerce and collecting customer information, vendor tracking devices, hacking, and data security on a web site. [AAVTC-PCA-15.3](#)
4. Assess violations of copyright and trademark. [AAVTC-PCA-15.4](#)
5. Collect and display copyright and trademark principles. [AAVTC-PCA-15.5](#)

AAVTC-PCA-16. Create and maintain a working portfolio of student projects and activities. [AAVTC-PCA-16](#)

1. Create a multimedia portfolio that includes correctly published animation(s). [AAVTC-PCA-16.1](#)
2. Hypothesize the audience's experience. [AAVTC-PCA-16.2](#)
3. Summarize student's major decisions in the production process. [AAVTC-PCA-16.3](#)
4. Create and exhibit the portfolio in a class setting. [AAVTC-PCA-16.4](#)

AAVTC-PCA-17. Examine how related student organizations are integral parts of career and technology education courses through leadership development, school and community service projects and competitive events. [AAVTC-PCA-17](#)

1. Explain the purpose, mission, objectives, motto, colors, official dress and other distinguishing characteristics of SkillsUSA. [AAVTC-PCA-17.1](#)
2. Explain how participation in SkillsUSA can promote lifelong responsibility for community service, professional growth and development. [AAVTC-PCA-17.2](#)
3. Explore the impact and opportunities SkillsUSA can develop to bring business and industry together with education in a positive working relationship through innovative leadership and career development programs. [AAVTC-PCA-17.3](#)
4. Explore the local, state, and national opportunities available to students through participation in SkillsUSA including but not limited to conferences, competitions, community service, philanthropy, and other SkillsUSA activities. [AAVTC-PCA-17.4](#)