Arts, AV Technology and Communications Career Cluster
Introduction to Digital Media
Course Number: 48.42100

Course Description
Students in the Introduction of Digital Media course will learn the basic components of 2-D and 3D animation development from storyboarding elements to fundamental software capabilities. The course serves as an introduction to the animation history, keyboarding shortcuts, project filing, and career awareness. Instruction in this course focuses on storyboard creation, the physics and anatomy of motion, technology of animation, properties and use of color, cameras and lighting, fundamentals of modeling and animating, creating a portfolio and file management. This course provides a structure for digital literacy as well as development of technical knowledge and intellectual skills for analytical thinking; in addition, students will work productively and responsibly in individual and collaborative settings. This introductory pathway course of three sequenced courses will give students the opportunity to earn an industry credential in animation. No prerequisite for this course.

Course Standard 1

AAVTC-IDM-1
The following standard is included in all CTAE courses adopted for the Career Cluster/Pathways. Teachers should incorporate the elements of this standard into lesson plans during the course. The topics listed for each element of the standard may be addressed in differentiated instruction matching the content of each course. These elements may also be addressed with specific lessons from a variety of resources. This content is not to be treated as a unit or separate body of knowledge but rather integrated into class activities as applications of the concept.

Standard: Demonstrate employability skills required by business and industry.
The following elements should be integrated throughout the content of this course.

1.1 Communicate effectively through writing, speaking, listening, reading, and interpersonal abilities.

<table>
<thead>
<tr>
<th>Person-to-Person Etiquette</th>
<th>Telephone and Email Etiquette</th>
<th>Cell Phone and Internet Etiquette</th>
<th>Communicating At Work</th>
<th>Listening</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interacting with Your Boss</td>
<td>Telephone Conversations</td>
<td>Using Blogs</td>
<td>Improving Communication Skills</td>
<td>Reasons, Benefits, and Barriers</td>
</tr>
<tr>
<td>Interacting with Subordinates</td>
<td>Barriers to Phone conversations</td>
<td>Using Social Media</td>
<td>Effective Oral Communication</td>
<td>Listening Strategies</td>
</tr>
<tr>
<td>Interacting with Co-workers</td>
<td>Making and Returning Calls</td>
<td>Effective Written Communication</td>
<td>Ways We Filter What We Hear</td>
<td></td>
</tr>
<tr>
<td>Interacting with Suppliers</td>
<td>Making Cold Calls</td>
<td>Effective Nonverbal Skills</td>
<td>Developing a Listening Attitude</td>
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<tr>
<td></td>
<td>Handling Conference Calls</td>
<td>Effective Word Use</td>
<td>Show You Are Listening</td>
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<tr>
<td></td>
<td>Handling Unsolicited Calls</td>
<td>Giving and Receiving Feedback</td>
<td>Asking Questions</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Nonverbal Communication</th>
<th>Written Communication</th>
<th>Speaking</th>
<th>Applications and Effective Résumés</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating Nonverbally</td>
<td>Writing Documents</td>
<td>Using Language Carefully</td>
<td>Completing a Job Application</td>
</tr>
</tbody>
</table>
1.2 Demonstrate creativity by asking challenging questions and applying innovative procedures and methods.

<table>
<thead>
<tr>
<th>Teamwork and Problem Solving</th>
<th>Meeting Etiquette</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thinking Creatively</td>
<td>Preparation and Participation in Meetings</td>
</tr>
<tr>
<td>Taking Risks</td>
<td>Conducting Two-Person or Large Group Meetings</td>
</tr>
<tr>
<td>Building Team Communication</td>
<td>Inviting and Introducing Speakers</td>
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<td></td>
<td>Facilitating Discussions and Closing</td>
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<td></td>
<td>Preparing Visual Aids</td>
</tr>
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<td>Virtual Meetings</td>
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</tbody>
</table>

1.3 Exhibit critical thinking and problem solving skills to locate, analyze and apply information in career planning and employment situations.

<table>
<thead>
<tr>
<th>Problem Solving</th>
<th>Customer Service</th>
<th>The Application Process</th>
<th>Interviewing Skills</th>
<th>Finding the Right Job</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transferable Job Skills</td>
<td>Gaining Trust and Interacting with Customers</td>
<td>Providing Information, Accuracy and Double Checking</td>
<td>Preparing for an Interview</td>
<td>Locating Jobs and Networking</td>
</tr>
<tr>
<td>Becoming a Problem Solver</td>
<td>Learning and Giving Customers What They Want</td>
<td>Online Application Process</td>
<td>Questions to Ask in an Interview</td>
<td>Job Shopping Online</td>
</tr>
<tr>
<td>Identifying a Problem</td>
<td>Keeping Customers Coming Back</td>
<td>Following Up After Submitting an Application</td>
<td>Things to Include in a Career Portfolio</td>
<td>Job Search Websites</td>
</tr>
<tr>
<td>Becoming a Critical Thinker</td>
<td>Seeing the Customer’s Point</td>
<td>Effective Résumés:</td>
<td>Traits Employers are Seeking</td>
<td>Participation in Job Fairs</td>
</tr>
<tr>
<td>Managing</td>
<td>Selling Yourself and the Company</td>
<td>Matching Your Talents to a Job</td>
<td>Considerations Before Taking a Job</td>
<td>Searching the Classified Ads</td>
</tr>
<tr>
<td>Handling Customer Complaints</td>
<td>When a Résumé Should be Used</td>
<td></td>
<td></td>
<td>Using Employment Agencies</td>
</tr>
<tr>
<td>Strategies for Customer Service</td>
<td></td>
<td></td>
<td></td>
<td>Landing an Internship</td>
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<td></td>
<td></td>
<td>Staying Motivated to Search</td>
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</tbody>
</table>

1.4 Model work readiness traits required for success in the workplace including integrity, honesty, accountability, punctuality, time management, and respect for diversity.

<table>
<thead>
<tr>
<th>Workplace Ethics</th>
<th>Personal Characteristics</th>
<th>Employer Expectations</th>
<th>Business Etiquette</th>
<th>Communicating at Work</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demonstrating Good Work Ethic</td>
<td>Demonstrating a Good Attitude</td>
<td>Behaviors Employers Expect</td>
<td>Language and Behavior</td>
<td>Handling Anger</td>
</tr>
</tbody>
</table>
### Behaving Appropriately
- Gaining and Showing Respect
- Objectionable Behaviors
- Keeping Information Confidential
- Dealing with Difficult Coworkers

### Maintaining Honesty
- Demonstrating Responsibility
- Establishing Credibility
- Avoiding Gossip
- Dealing with a Difficult Boss

### Playing Fair
- Showing Dependability
- Demonstrating Your Skills
- Appropriate Work Email
- Dealing with Difficult Customers

### Using Ethical Language
- Being Courteous
- Building Work Relationships
- Cell Phone Etiquette
- Dealing with Conflict

### Showing Responsibility
- Gaining Coworkers’ Trust
- Appropriate Work Texting

### Reducing Harassment
- Persevering
- Understanding Copyright

### Respecting Diversity
- Handling Criticism
- Social Networking

### Making Truthfulness a Habit
- Showing Professionalism

### Leaving a Job Ethically

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1.5 **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.**

<table>
<thead>
<tr>
<th>Expected Work Traits</th>
<th>Teamwork</th>
<th>Time Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demonstrating Responsibility</td>
<td>Teamwork Skills</td>
<td>Managing Time</td>
</tr>
<tr>
<td>Dealing with Information Overload</td>
<td>Reasons Companies Use Teams</td>
<td>Putting First Things First</td>
</tr>
<tr>
<td>Transferable Job Skills</td>
<td>Decisions Teams Make</td>
<td>Juggling Many Priorities</td>
</tr>
<tr>
<td>Managing Change</td>
<td>Team Responsibilities</td>
<td>Overcoming Procrastination</td>
</tr>
<tr>
<td>Adopting a New Technology</td>
<td>Problems That Affect Teams</td>
<td>Organizing Workspace and Tasks</td>
</tr>
<tr>
<td></td>
<td>Expressing Yourself on a Team</td>
<td>Staying Organized</td>
</tr>
<tr>
<td></td>
<td>Giving and Receiving Constructive Criticism</td>
<td>Finding More Time</td>
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<td></td>
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<td>Managing Projects</td>
</tr>
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<td>Prioritizing Personal and Work Life</td>
</tr>
</tbody>
</table>

1.6 **Present a professional image through appearance, behavior and language.**

<table>
<thead>
<tr>
<th>On-the-Job Etiquette</th>
<th>Person-to-Person Etiquette</th>
<th>Communication Etiquette</th>
<th>Presenting Yourself</th>
</tr>
</thead>
<tbody>
<tr>
<td>Using Professional Manners</td>
<td>Meeting Business Acquaintances</td>
<td>Creating a Good Impression</td>
<td>Looking Professional</td>
</tr>
<tr>
<td>Introducing People</td>
<td>Meeting People for the First Time</td>
<td>Keeping Phone Calls Professional</td>
<td>Dressing for Success</td>
</tr>
<tr>
<td>Appropriate Dress</td>
<td>Showing Politeness</td>
<td>Proper Use of Work Email</td>
<td>Showing a Professional Attitude</td>
</tr>
<tr>
<td>Business Meal Functions</td>
<td></td>
<td>Proper Use of Cell Phone</td>
<td>Using Good Posture</td>
</tr>
<tr>
<td>Behavior at Work Parties</td>
<td></td>
<td>Proper Use in Texting</td>
<td>Presenting Yourself to Associates</td>
</tr>
<tr>
<td>Behavior at Conventions</td>
<td></td>
<td></td>
<td>Accepting Criticism</td>
</tr>
<tr>
<td>International Etiquette</td>
<td></td>
<td></td>
<td>Demonstrating Leadership</td>
</tr>
<tr>
<td>Cross-Cultural Etiquette</td>
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<tr>
<td>Working in a Cubicle</td>
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</tbody>
</table>
Support of CTAE Foundation Course Standards and Georgia Standards of Excellence L9-10RST 1-10 and L9-10WHST 1-10:
Georgia Standards of Excellence ELA/Literacy standards have been written specifically for technical subjects and have been adopted as part of the official standards for all CTAE courses.

### Course Standard 2

**AAVTC-IDM-2**

Understand and follow safety procedures when working with computers and audio-video equipment.

- **2.1** State general safety rules for operation of equipment and learning activities specific to film, computer, and TV.
- **2.2** Collect and model safe practices when working on assignments.

### Course Standard 3

**AAVTC-IDM-3**

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

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

### Course Standard 4

**AAVTC-IDM-4**

Understand and utilize trade terminology in an appropriate manner.

- **4.1** Identify and utilize trade terminology in the media production lab.
- **4.2** Identify and utilize trade abbreviations and acronyms as appropriate.

### Course Standard 5

**AAVTC-IDM-5**

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

- **5.1** Recognize the importance of all customers to a business.
- **5.2** Identify and justify an organization's products and services.
- **5.3** State the information technology influence and impact on business practices.
- **5.4** Formulate how technology can be used to create a solution to a business challenge and present to customers in a professional business format.
- **5.5** Display and model an ability to assist customers in a professional manner.
- **5.6** Apply active listening concepts with potential customers.
- **5.7** List and classify customers’ individual needs and draw conclusions concerning these needs.
- **5.8** Design a professional business image (e.g., appearance, voice, grammar, word usage, enunciation, nonverbal communication).
Course Standard 6
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.
   6.1 Construct a sketchbook journal and digital portfolio to research and experiment with artistic conventions to communicate ideas.
   6.2 Apprise solutions to a single artistic problem and for each draw conclusions.
   6.3 Analyze in both written and oral form the implications of artistic decisions.
   6.4 Use concepts to solve artistic problems through discussion and interaction with peers.
   6.5 Critique peers supportively through informal, on-going works in-progress.
   6.6 Design risk-taking production tasks that synthesize concepts of existing knowledge, brainstorming, planning, active listening, and discovery of unexpected connections.

Course Standard 7
AAVTC-IDM-7
Understand and apply media, techniques, and processes in drawing.
   7.1 Create skeleton and inner structure drawings.
   7.2 Apply value to model geometric forms with rendering.
   7.3 Relate contour and value in drawing from direct observations.
   7.4 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).
   7.5 Create contour drawings from observations.

Course Standard 8
AAVTC-IDM-8
Understand and apply media, techniques, and processes in color painting.
   8.1 Apply color theory (hue, value, intensity) and color schemes (monochromatic, analogous, complementary, split-complementary, and triadic) to express emotion and create unity.
   8.2 Review primary, secondary, and tertiary hues.
   8.3 Analyze how color communicates meaning in personal and famous artwork.

Course Standard 9
AAVTC-IDM-9
Demonstrate the ability to specify color materials properly.
   9.1 Assess the ambient and diffuse color of an object.
   9.2 Differentiate the specular, reflective, and luminosity material properties of objects.

Course Standard 10
AAVTC-IDM-10
Demonstrate the ability to create various surface materials.
   10.1 Create various surface patterns such as smoke, tiles, and swirls.
   10.2 Compare and contrast techniques for simulating land and water.
   10.3 Create reflections and refractions on objects.
Course Standard 11
AAVTC-IDM-11
Identify and create various types of scripts.
  11.1 Identify scripts by format.
  11.2 Relate and show the steps leading to the development of various types of scripts (Brainstorm, Proposal and Treatment).
  11.3 Define terminology used in scriptwriting.
  11.4 Create scripts as assigned according to topic.
  11.5 Construct story themes:
    a. Show a main character striving to achieve a goal.
    b. Construct a conflict for the main character to achieve the goal.
    c. Relate the cause/effect relationship of the main character and the conflict.
    d. Predict and display an outcome to this conflict.

Course Standard 12
AAVTC-IDM-12
Demonstrate design skills needed to formally document project goals in order to focus development efforts.
  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.
  12.2 List the objects, backgrounds, and/or characters needed for an animation and project goals.
  12.3 Apply brainstorming techniques to focus development efforts.
  12.4 Create scene-by-scene illustrations.
  12.5 Outline and link action sequences.

Course Standard 13
AAVTC-IDM-13
Analyze the origins of one’s own ideas in relation to community, culture, and the world.
  13.1 Identify and assess values and practices in an artist’s community culture and world that inform art.
  13.2 Compare and contrast the works of a wide range of contemporary and past artists.
  13.3 Appraise how an artist’s experiences in community, culture, and the world impacts their work and to draw conclusions.
  13.4 Differentiate between the values and contributions of diverse individuals, cultures, and communities.

Course Standard 14
AAVTC-IDM-14
Demonstrate knowledge of manipulating stop motion frames and direction.
  14.1 Illustrate how to set frames manually.
  14.2 Illustrate how to ghost an object.
Course Standard 15

AAVTC-IDM-15
Demonstrate knowledge of animation software user-interface and general features.
15.1 Effectively use menu bars, command panels, and software navigation tools including drawing, painting, and transforming on an object.
15.2 Illustrate the ability to map between the various coordinate systems.
15.3 Illustrate the ability to select objects and sub-objects.
15.4 Perform positional transformations to animate a ball and other objects.

Course Standard 16

AAVTC-IDM-16
Acquire knowledge of file management and apply accordingly.
16.1 Arrange and organize files effectively.
16.2 Demonstrate and explain cloud storage and/or libraries to store and access files.

Course Standard 17

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.
17.1 Recognize positive cyber citizenry by applying industry accepted ethical practices and behaviors.
17.2 Interpret the ethical and legal issues while accessing, creating, and using digital tools and resources in order to make informed decisions.
17.3 Apply concepts of digital citizenship as a lifelong learner.
17.4 Connect and apply digital etiquette and responsible social technology interactions, permanence of digital footprints, online image and presence, etc.
17.5 Assess human, cultural, and societal issues related to technology and practice legal and ethical behavior.
17.5 Summarize personal and legal consequences of inappropriate use of resources and online content in the following areas:
a. Plagiarism, b. piracy, c. illegal downloading, d. copyright infringement, e. licensing infringement, f. inappropriate use of software, g. hardware and mobile devices.
17.6 Relate security issues and trends affecting computers and information privacy.
a. Virus, b. open or free networks, c. user control methods, d. file sharing, etc.

Course Standard 18

AAVTC-IDM-18
Create and organize portfolios through the use of a variety of web design tools.
18.1 Apply and explain concepts to create professional and functional portfolios.
18.2 Distinguish elements of web design as it pertains to creating a portfolio.
a. Responsive design, portfolio usability, relation of site to employer, story the site reveals about individual job skills.
18.3 Design simple web pages incorporating media elements (e.g., sound, video, graphics, text, and motion graphics), navigation, and linking.
18.4 Investigate the trends and emerging sites that impact portfolios. (e.g., blogs and social media sites).
Course Standard 19

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.

19.1 Explain the purpose, mission, objectives, motto, colors, official dress and other distinguishing characteristics of SkillsUSA.
19.2 Explain how participation in SkillsUSA can promote lifelong responsibility for community service, professional growth and development.
19.3 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.
19.4 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.