Regional Occupational Program

Digital Graphic Design 1 A-G 2025-2026

COURSE DESCRIPTION

This course is designed to provide students with the fundamental skills and knowledge of modern graphic design, printing technologies and practices needed for entry-level employment in the graphic design industry. Using industry standard software students will manipulate, modify, and create printed, digital, and 3D projects. Knowledge of layout, content, and message will be shown through the student's ability to incorporate multiple media formats, written narrative, and typography relevant to its intended audience.

Course Information:

Course Length:	1 Year
Prerequisite:	None
Course Level:	Concentrator
UC:	Yes G - Elective
Articulated:	No
Industry Cert.:	No
Industry Sector:	Arts, Media, and Entertainment
Pathway:	Design, Visual, and Media Arts
CALPADS:	7211

O*Net SOC Codes:

27-1024	Graphic Designer
27-3099	Media and Communication Workers

Legend:

CTE - PS	CTE Pathway Standards
CRP	Career Ready Practices
CTE - AS	CTE Anchor Standards
CCSS	Common Core State Standards
ISTE	International Society for Technology in Education

Includes updates from the 24/25 Arts, Media and Entertainment Advisory

Advisory Minutes

Digital Graphic Design 1

Course Orientation

a. Discuss objectives for this course, including competencies, teacher expectations, classroom policies, and procedures.
b. Identify and discuss the acquisition of transferable skills (communication, collaboration, creativity, and critical thinking) and their importance to being college and career ready and for future personal and professional success.
c. Review objectives, competencies, and course syllabus.
d. Discuss student and teacher expectations, including behavior, class rules, appropriate dress, pre-course knowledge, and grading policies, including enrollment and attendance requirements and procedures, and classroom/school safety and disaster procedures.
e. Discuss next steps in course sequence related to the career pathway, the need for reinforcement of basic skills, transferrable skills, and postsecondary and career options.
f. Discuss the Big Six: Career Ready Essentials and the Standards for Career Ready Practice as they relate to this course, all aspects of the industry sector, and being college and career ready.

Big Six: Career Ready Essentials

1. Effective Communication	CTE – PS	CRP	CTE - AS	CCSS	ISTE
a. Demonstrate effective verbal communication and conflict resolution skills. **b. Use the writing process to develop written communication with the appropriate tone, organization, and format for the identified audience.** c. Explain the effect of interpersonal skills on one's ability to communicate effectively and develop relationships. d. Describe the impact of ineffective communication on business relationships. e. Analyze the impact of vocabulary, body language, and tone on verbal communication. f. Demonstrate active listening skills. g. Accurately interpret industry-specific written communication. h. Model responsible and effective use of various communication technologies. i. Identify valid and reliable digital reference and resource materials. j. Gather information from multiple digital sources to compare and contrast, synthesize, and summarize. k. Identify and use appropriate communication and collaboration technologies. l. Utilize technology to solve problems, accomplish tasks, and to produce or publish products.		1 2 11	2 3 4 5 7 8 9 10 11	**LS** 9-10 11-12.6 **SLS** 11-12.2 9-10 11-12.1 11-12.1d **WS** 11-12.7 11-12.6	1b,c 2c 3b,c 5c 6b,c,d

2. Collaboration, Creativity, and Critical Thinking	CTE - PS	CRP	CTE - AS	CCSS	ISTE
a. Demonstrate critical thinking skills for a variety of purposes and in different settings. **b. Collaborate to reach consensus on an identical objective through the sharing of knowledge, tasks, and learning.** c. Discuss the importance of the critical thinking process to real-world applications.		2 4 5 7 9	2 3 4 5 7	**LS** 9-10 11- 12.6 **SLS** 9-10	1c 3c,d 4a-d 5c,d 6c

d. Evaluate the impact of creative thinking on problem solving and innovation in real-world applications. e. Compile work that demonstrates the process used to (elaborate, refine, analyze) evaluate original ideas and maximize creative efforts. f. Apply divergent and convergent thinking to the development of an original idea or solution. g. Examine real-world limits to adopting ideas. h. Demonstrate creative thinking (preparation, insight, evaluation, elaboration, and communication) to create a new idea or concept. i. Assume shared responsibility for collaborative work, and value the individual contributions made by each team member. j. Evaluate evidence, arguments, claims, and beliefs to identify connections. k. Identify bias, prejudice, propaganda, self-deception, distortion, and misinformation. l. Produce intellectual, informational, or material products that serve an authentic purpose. m. Work effectively and respectfully with those from diverse backgrounds or cultures. n. Demonstrate respect, trust, commitment, and the ability to compromise in collaborative projects.		10 11	8 9 11	11-12.1 11-12.1d 11-12.2 **WS** 11-12.7 11-12.6	7b,c,d
3. Leaders and Teams: Roles and Responsibilities	**CTE – PS**	**CRP**	**CTE - AS**	**CCSS**	**ISTE**
a. Determine the individual and team members' roles and responsibilities. **b. Demonstrate leadership skills and qualities (i.e., reliability, negotiation skills, initiative, positive reinforcement, recognition of others' efforts, problem-solving skills, conflict resolution, and delegation).** c. Explain the importance of technical, social, and communication skills to team success. d. Compare and contrast leadership styles and their effectiveness in various situations. e. Organize and delegate responsibilities in a team setting to encourage ideas, perspectives, and contributions from all team members. f. Develop a strong sense of team identity by brainstorming solutions, volunteering, assisting others, practicing respect and courtesy, and taking initiative. g. Examine situations in which a follower becomes the leader. h. Describe twenty-first-century skills required across all occupations. i. Identify and discuss the characteristics of a successful team (i.e., leadership, cooperation, and effective decision-making). j. Leverage social and cultural differences to increase innovation and quality of work.		7 8 9	3 7 8 9 11	**SLS** 11-12.2 9-10 11-12.1 11-12.1d **WS** 11-12.6	7a,c
4. Legal, Ethical, and Environmental Considerations	**CTE - PS**	**CRP**	**CTE - AS**	**CCSS**	**ISTE**
a. Demonstrate industry specific ethical and legal practices. **b. Identify eco-friendly industry specific practices and resources.** c. Identify local, state, and federal regulatory agencies, entities, laws, and regulations.		5 7 8 12	3 5 7 8	**WS** 11-12.6 11-12.7	2a,b 3a,b 5c 6c

d. Identify discrimination based on race, nationality, religion, gender, age, disability, or sexual orientation. e. Summarize the ethical and legal implications of workplace discrimination and harassment. f. Explain the concept of corporate citizenship. g. Examine an employer's role in protecting the health and welfare of employees, the community, and the environment. h. Analyze current environmental laws and regulations and their impact on industry. i. Compare and contrast both society's and industry's impact on the environment.			9 11	**SLS** 9-10 11-12.1 11-12.1d 11-12.2	
5. Personal Growth and Career Planning	**CTE - PS**	**CRP**	**CTE - AS**	**CCSS**	**ISTE**
a. Demonstrate continued personal development and growth. **b. Develop and manage a personal growth and career plan.** c. Explain the relationship between sound financial habits and financial security. d. Create and manage a personal financial plan. e. Demonstrate initiative in achieving personal and professional goals. f. Apply time management strategies to meet deadlines. g. Demonstrate a growth mindset through flexibility and a positive attitude. h. Select and demonstrate appropriate job-search and retention techniques. i. Demonstrate strategies to prepare for employment. j. Demonstrate interpersonal skills appropriate for the workplace. k. Elaborate on the importance of perseverance to personal and professional success. l. Discover personal career interests, aptitudes, and skills.		1 2 3 4 6	2 3 4 7 8 11	**LS** 9-10 11-12.6 **SLS** 9-10 11-12.1 11-12.1d 11-12.2 **WS** 11-12.6	1a 3a,c 4d 6a,d 7b
6. Workplace Safety and Personal Wellness	**CTE - PS**	**CRP**	**CTE - AS**	**CCSS**	**ISTE**
a. Demonstrate proper industry specific safe work practices to prevent injury or illness. **b. Assess the potential impact of goal setting on personal and professional success.** c. Describe the role of security and emergency procedures in workplace safety. d. Describe the effect of preventative measures on emergencies in the workplace. e. Identify and describe the causes, prevention, and treatment of common accidents. f. Identify local, state, and federal agencies that regulate workplace safety. g. Explain the role of the California Occupational Safety and Health Administration (Cal-OSHA) and the Environmental Protection Agency (EPA). h. Discuss the basics of system operations. i. Demonstrate the proper use of personal protective equipment (PPE). j. Explain the purpose of and accurately interpret a Safety Data Sheet (SDS). k. Identify hazardous materials and chemicals. l. Demonstrate proper procedures to respond to work-related accidents and injuries. m. Describe how ergonomics, housekeeping, and maintenance are related to accidents and injuries.		2 5 6 8 12	2 5 6 7 8 10 11	**LS** 9-10 11-12.6 **WS** 11-12.7 11-12.6 **SLS** 9-10 11-12.1 11-12.1d	1a,d 2a,d 5b

n. Demonstrate cyber ethics, cyber safety, and cybersecurity. o. Assess the potential impact of preventative physical and mental health measures on workplace safety.					
Digital Graphic Design 1 Units of Instruction					
7. Introduction to Multimedia	**CTE-PS**	**CRP**	**CTE- AS**	**CCSS**	**ISTE**
a. Explain why multimedia is an extension of traditional media and practices. **b. Describe the five components of a multimedia experience.** c. Describe text, graphics, audio, visual, and animation multimedia components. d. Name three characteristics of old media. e. Explain the new media paradigm shift. f. Name the five principles of new media in the digital age. g. View and respond to a variety of industry-related artistic products integrating industry appropriate vocabulary. h. Describe and demonstrate ethics related to copyrighted materials.	A1.1 A1.4 A1.6 A3.1	1 2 5 8	1 2 5 8 11	**LS** 9-10 11-12.6 **WS** 11-12.7 **SLS** 11-12.1d	
8. Principles and Elements of Design	**CTE - PS**	**CRP**	**CTE - AS**	**CCSS**	**ISTE**
a. **Describe and demonstrate elements and principles of visual design in a digital design.** b. **Create digital designs that demonstrate an effective use of the elements of art and principles of design.** c. **Analyze, assess, and identify effectiveness of digital designs based on elements and principles of design and professional standards.** d. Describe and demonstrate the unity, emphasis, and perceptual force principles of visual communications. e. Describe and demonstrate the eight elements of visual design (I.e., space, dot, line, shape, form, pattern, color, and texture). f. Compare and contrast seeing versus perception.Explain the role of content and form in visual communication.	A1.0 A1.3 A2.6 A4.0	1 2 5 10 11	1 2 5 11	**LS** 9-10 11-12.6 **WS** 11-12.7	
9. Drawing, Sketching, and 2-Dimensional Design	**CTE - PS**	**CRP**	**CTE - AS**	**CCSS**	**ISTE**
a. Demonstrate competency in the use of rapid visualization techniques. **b. Use patterns and illusions to create a design.** **c. Apply refined observation and drawing skills to solve an industry-relevant problem.** d. Describe and use rapid visualization techniques. e. Identify signs, symbols, and semiotics. f. Develop thumbnail sketches. g. Identify and list various typographical styles. h. Create a design using the elements of pattern and illusion.	A2.3	1 2 5 10 11	1 2 5 11	**LS** 9-10 11-12.6 **WS** 11-12.7	

10. Graphics	CTE - PS	CRP	CTE - AS	CCSS	ISTE
a. **Demonstrate various techniques to edit images.** b. **Describe image file formats and identify image sources.** c. Compare and contrast raster versus vector images and describe their uses. d. Perform image editing using scaling, resampling, cropping techniques, and anti-aliasing. e. Explain how image file compression can affect quality and download time. f. Demonstrate proper use of image editing software. g. Identify and list image file formats (e.g., GIF, JPG, BMP, TIF, PNG, PSD, SVG, and EPS). h. Identify and list image sources (e.g., clipart, illustrations, stock photography, scanning, and digital photography).	A2.1 A2.5 A2.8 A2.9 A8.0 A8.1	1 2 4 5 11	1 2 4 5 11	**LS** 9-10 11-12.6 **WS** 11-12.6 11-12.7	

11. Page Layout and Desktop Fundamentals	CTE - PS	CRP	CTE - AS	CCSS	ISTE
a. Identify and use software tools to design thumbnails to comprehensives designs. **b. Create a well-organized digital page layout with a variety of texts and graphics.** c. Identify and describe digital design software tools and procedures. d. Identify and describe commonly used multimedia page designs. e. Create a range of designs from thumbnails to comprehensives for specific types of publications. f. Employ assorted texts, fonts, and typography. g. Select, place, and modify graphics. h. Identify and list industry requirements for print publishing. i. Describe and demonstrate different output formats depending on project requirements.	A1.0 A2.1 A2.7 A2.9 A8.1	1 2 4 5 10 11	1 2 4 5 11	**LS** 9-10 11-12.6 **WS** 11-12.6 11-12.7	

12. Introduction to Screen Printing	CTE - PS	CRP	CTE - AS	CCSS	ISTE
a. Define common terminology related to screen printing. **b. Students will list and describe each step in the screen-printing process.** c. Select the proper fonts, designs, and size for transferring the design to silk screen. d. Accurately demonstrate darkroom procedures related to preparing screen. e. Use the washout booth and drying rack to prepare the screen for printing. f. Demonstrate the proper use of the screen-printing press.	A1.2 A2.0 A2.6 A2.9 A8.1 A8.2	1 2 5	1 2 5 11	**LS** 9-10 11-12.6 **WS** 11-12.7	

13. 3D Design and Print	CTE - PS	CRP	CTE - AS	CCSS	ISTE
a. Sketch floor plans using graph paper. **b. Use 3D design software to create a miniature model.** c. Transfer a sketch to 3D Design software to create a miniature. d. Demonstrate and understanding of size relationships, proximity, and placement of structures in relation to each other. e. Adhere to scale restrictions and export procedures required for 3D printable. f. Simplify visual cues to be modeled in 3D.	A1.7 A2.1 A2.5 A2.8	1 2 4 5 10	1 2 4 5 11	**LS** 9-10 11-12.6 **WS** 11-12.6 11-12.7	

14. Binding and Finishing	CTE - PS	CRP	CTE - AS	CCSS	ISTE
a. **Demonstrate safety and operating procedures for various print shop tools.** b. **Set guides, margins, and cutting lines needed for final production.** c. **Operate a hydraulic paper cutter, a padding press, and padding compound.** d. Use proper methods and procedures to fold, stitch, and drill printed products. e. Cut, stack, and clamp printed products to ensure good adhesion of the compound. f. Create and finish NCR carbonless duplicate forms. g. Package and label finished products for delivery.	A2.9	1 2 5	1 2 5 11	**LS** 9-10 11-12.6 **WS** 11-12.7	
15. Multimedia Authorizing and Digital Presentation	**CTE - PS**	**CRP**	**CTE - AS**	**CCSS**	**ISTE**
a. **Demonstrate digital imaging by designing and presenting multimedia projects.** b. **Explain the five components of multimedia: text, audio, graphics, video, and animation.** c. Define and correctly use electronic media terms in verbal, written, and authored multimedia presentations. d. Produce an approved multimedia presentation of original digital.	A1.1 A2.9 A8.1 A8.2 A8.3	1 2 4 5 10 11	1 2 4 5 11	**LS** 9-10 11-12.6 **WS** 11-12.6 11-12.7	

A-G Approved Key Assignments	
1.	Students will choose one Element or Principle of design that they understand the best and create a digital poster with examples, definitions, and information about it. The design of the poster should illustrate the student's understanding of the element or principle they chose (a good use of color in the poster if they chose color, contrast of elements throughout the poster if they chose contrast, use of vanishing points, diagonal lines or overlapping elements if they chose perspective, etc.) Student posters should include historical examples, famous or well-known uses, and modern, everyday examples. Posters will be presented to the class by their designers. *Unit(s) 7,8,9*
2.	Students will create a mythical hybrid animal by combining parts of multiple pictures of real animals. They will then place it into a scenic background of their choice to help illustrate the natural habitat of their new creation. This assignment introduces the use of layer masks and brush settings as a way to convincingly blend multiple layers together. Students will utilize more precise settings and methods of selecting parts of an image in order to fit precise parts together. An emphasis will be placed on the ability to work non-destructively through the use of layer masks. *Unit(s) 10*
3.	Students will use photo capture software to take and import a picture of their face into the computer. They will place their face onto a well-known movie poster and use layer masks, lighting effects, and texture effects to convincingly put themselves in place of the figure(s) on the original poster. This assignment places emphasis on lighting, color adjustments, texture, and layer masking in an effort to professionally blend and match skin tones and skin textures. Students will share their creations with the rest of the class. *Unit(s) 10, 11*
4.	Students will download a high-resolution image of a current magazine cover. They will use digital paint brushes, stamp brushes, and healing brushes to remove all of the text from the cover without damaging the background image(s). They will then use the text tool, character and paragraph inspectors, and layer effects to create their own headlines in order to generate a convincing magazine cover with their own words. *Unit(s) 10,11*
5.	Students will use design software to create an image out of only type elements and characters that spell the word of the image depicted (e.g., car would be created with only the letters C-A-R. The student's font selection will demonstrate their understanding of the impact of font on the overall mood of the project. To demonstrate knowledge of the parts of letters (e.g., serif, ascender, descender, x-height, axis, ear, terminal, shoulder, etc.) students will label those specific characteristics of the letters used in their project. *Unit(s) 9, 10, 11*
6.	Students will apply an understanding of measurements when generating digital layouts for products such as brochures, business cards, etc. that must follow sizing guidelines for proper output. An example assignment is a 5x7 folding Greeting Card. Students will use their understanding of measurements to create a document, place document guides, and place design elements in order to create a card that will be 5 inches wide by 7 inches tall after being cut and folded after printing. *Unit(s) 7*
7.	Students will create a tri-fold Vacation Brochure for a location of their choosing. Using desktop publishing software, students will create a two-page document, set guides for folds, and create the inside and outside of the brochure. Considerations for travel accommodations, things to do, and where to stay should be included as well as at least one image per panel. Emphasis will be placed on professionalism and grammar, as well as output and finishing (duplex printing and accuracy of folds and trimming). *Unit(s) 10, 11*
8.	Students will create a two-page magazine spread, which will include a student written article, photos related to their article. Students will create sketches and roughs for their layout. Once approved, students will use design software to design their magazine spread and lay out their text and photos. Standard magazine elements such as bylines, folios, bleeds, captions, etc. will be required. Spreads will be printed and folded before being posted alongside the roughs in class for discussion. *Unit(s) 9, 10, 11*
9.	Students will create an original t-shirt design using elements appropriate for the screen-printing process. Using this design students will demonstrate all required steps to produce a fully finished screen-printed T-shirt. *Unit(s) 10, 11, 12*

10.	Sketch and original 3D design using graph paper, transfer the sketch into 3D design software to create a miniature model. Adhering to scale and export restrictions required for 3D printables. *Unit(s) 9, 10, 13*
11.	Create an original multi-page product (e.g., calendar, note pad, etc...) from concept and design to finishing, and binding. The product should include graphics and text on each page that creates a theme, mood, and/or message. U*nit(s) 10, 11, 14*
12.	The final project for this course is a student created portfolio that is a collection of all their work from the course. The portfolio will digital and should include a title page, a contents page, a contact page, an about me page, and links to various sections and works within the portfolio. Students can select the digital platform they wish to use for their digital portfolio. Students will present the portfolio to the class. *Unit(s) 8, 10, 11. 15*

Standards Alignment

The curricula have been aligned with the CTE Model Curriculum Standards released in 2013. Each industry sector was updated to meet the increased rigor and relevancy requirements of the Common Core State Standards. The curriculum also includes the new Standards for Career Ready Practices.

Standards for Career Ready Practice

1. *Apply appropriate technical skills and academic knowledge.*
2. *Communicate clearly, effectively, and with reason.*
3. *Develop an education and career plan aligned with personal goals.*
4. *Apply technology to enhance productivity.*
5. *Utilize critical thinking to make sense of problems and persevere in solving them.*
6. *Practice personal health and understand financial literacy.*
7. *Act as a responsible citizen in the workplace and the community.*
8. *Model integrity, ethical leadership, and effective management.*
9. *Work productively in teams while integrating cultural and global competence.*
10. *Demonstrate creativity and innovation.*
11. *Employ valid and reliable research strategies.*
12. *Understand the environmental, social, and economic impacts of decisions.*

CTE Anchor Standards—Common Core English Language Arts Alignment

Anchor Standard 1: Academics

Analyze and apply appropriate academic standards required for successful industry sector pathway completion leading to postsecondary education and employment. Refer to the industry sector alignment matrix for identification of standards. Note: alignment listed within each sector.

Anchor Standard 2: Communications

Language Standard: Acquire and accurately use general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the (career and college) readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression. LS 9-10, 11-12.6

Anchor Standard 3: Career Planning and Management

Speaking and Listening Standard: Integrate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, orally) in order to make informed decisions and solve problems, evaluating the credibility and accuracy of each source and noting any discrepancies among the data. SLS 11-12.2

Anchor Standard 4: Technology

Writing Standard: Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments and information.

Anchor Standard 5: Problem Solving and Critical Thinking

Writing Standard: Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem, narrow, or broaden the inquiry when appropriate, and synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation. WS 11-12.7

Anchor Standard 6: Health and Safety

Reading Standards for Science and Technical Subjects: Determine the meaning of symbols, keywords, and other domain-specific words and phrases as they are used in a specific scientific or technical context. RSTS 9-10, 11-12.4

Anchor Standard 7: Responsibility and Flexibility

Speaking and Listening Standard: Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners, building on others' ideas and expressing their own clearly and persuasively. SLS 9-10, 11-12.1

Anchor Standard 8: Ethics and Legal Responsibilities

Speaking and Listening Standard: Respond thoughtfully to diverse perspectives; synthesize comments, claims, and evidence made on all sides of an issue; resolve contradictions when possible; and determine what additional information or research is required to deepen the investigation or complete the work. SLS 11-2.1d

Anchor Standard 9: Leadership and Teamwork

Speaking and Listening Standard: Work with peers to promote civil, democratic discussions and decision making; set clear goals and deadlines; and establish individual roles as needed. SLS 11-12.1b

Anchor Standard 10: Technical Knowledge and Skills

Writing Standard: Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information. WS 11-12.6

Anchor Standard 11: Demonstration and Application

Demonstrate and apply the knowledge and skills contained in the industry-sector anchor standards, pathway standards, and performance indicators in the classroom, laboratory, and workplace settings, and the career technical student organization. Note: no alignment evident for this standard. WS 11-12.6

CTE Model Curriculum Standards—Industry Sectors and Pathways

Arts, Media, and Entertainment

A. Design, Visual, and Media Arts Pathway

A1.0 *Demonstrate ability to reorganize and integrate visual art elements across digital media and design applications.*

A1.1 *View and respond to a variety of industry-related artistic products integrating industry appropriate vocabulary.*

A1.2 *Identify and use the principles of design to discuss, analyze, and create projects and products across multiple industry applications.*

A1.3 *Describe the use of the elements of art to express mood in digital or traditional artwork found in the commercial environment.*

A1.4 *Select industry-specific works and analyze the intent of the work and the appropriate use of media.*

A1.6 *Compare and analyze artwork done using electronic media with those done with materials traditionally used in the visual arts.*

A1.7 *Analyze and discuss complex ideas, such as distortion, color theory, arbitrary color, scale, expressive content, and real versus virtual in works of art.*

A2.0 *Apply artistic skills and processes to solve a variety of industry-relevant problems in a variety of traditional and electronic media.*

A2.1 *Demonstrate skill in the manipulation of digital imagery (either still or video) in an industry-relevant application.*

A2.3 *Apply refined observation and drawing skills to solve an industry-relevant problem.*

A2.5 *Compile a portfolio of multiple original two- and three-dimensional works of art that reflect technical skills in an industry-relevant application.*

A2.6 *Create an artistic product that involves the effective use of the elements of art and the principles of design.*

A2.7 *Create original works of art of increasing complexity and skill in a variety of media that reflect their feelings and points of view.*

A2.8 *Plan and create artistic products that reflect complex ideas, such as distortion, color theory, arbitrary color, scale, expressive content, and real versus virtual.*

A2.9 *Create a multimedia work of art that demonstrates knowledge of media and technology skills.*

A3.1 *Identify and describe the role and influence of new technologies on contemporary arts industry.*

A4.0 *Analyze, assess, and identify effectiveness of artistic products based on elements of art, the principles of design, and professional industry standards.*

A8.0 *Understand the key technical and technological requirements applicable to various segments of the Media and Design Arts Pathway.*

A8.1 *Understand the component steps and skills required to design, edit, and produce a production for audio, video, electronic, or printed presentation.*

A8.2 *Use technology to create a variety of audio, visual, written, and electronic products, and presentations.*

A8.3 *Know the features and uses of current and emerging technology related to computing (e.g., optical character recognition, sound processing, cable TV, cellular phones).*

ISTE Standards for Students

1. Empowered Learner- Students leverage technology to take an active role in choosing, achieving, and demonstrating competency in their learning goals, informed by the learning sciences.

a) Students articulate and set personal learning goals, develop strategies leveraging technology to achieve them, and reflect on the learning process itself to improve learning outcomes.

b) Students build networks and customize their learning environments in ways that support the learning process.

c) Students use technology to seek feedback that informs and improves their practice and to demonstrate their learning in a variety of ways

d) Students understand the fundamental concepts of technology operations, demonstrate the ability to choose, use and troubleshoot current technologies and are able to transfer their knowledge to explore emerging technologies.

2. Digital Citizen- Students recognize the rights, responsibilities, and opportunities of living, learning, and working in an interconnected digital world, and they act and model in ways that are safe, legal, and ethical.

a) Students cultivate and manage their digital identity and reputation and are aware of the permanence of their actions in the digital world.

b) Students engage in positive, safe, legal, and ethical behavior when using technology, including social interactions online or when using networked devices.

c) Students demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property.

d) Students manage their personal data to maintain digital privacy and security and are aware of data-collection technology used to track their navigation online.

3.Knowledge Constructor- Students critically curate a variety of resources using digital tools to construct knowledge, produce creative artifacts, and make meaningful learning experiences for themselves and others.

a) Students plan and employ effective research strategies to locate information and other resources for their intellectual or creative pursuits.

b) Students evaluate the accuracy, perspective, credibility, and relevance of information, media, data, or other resources.

c) Students curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions.

d) Students build knowledge by actively exploring real-world issues and problems, developing ideas and theories, and pursuing answers and solutions.

4. Innovative Designer- Students use a variety of technologies within a design process to identify and solve problems creating new, useful, or imaginative solutions.

a) Students know and use a deliberate design process for generating ideas, testing theories, creating innovative artifacts, or solving authentic problems.

b) Students select and use digital tools to plan and manage a design process that considers design constraints and calculated risks.

c) Students develop, test, and refine prototypes as part of a cyclical design process.

d) Students exhibit a tolerance for ambiguity, perseverance, and the capacity to work with open-ended problems.

5. Computational Thinker- Students develop and employ strategies for understanding and solving problems in ways that leverage the power of technological methods to develop and test solutions.

a) Students formulate problem definitions suited for technology-assisted methods such as data analysis, abstract models, and algorithmic thinking in exploring and finding solutions.

b) Students collect data or identify relevant data sets, use digital tools to analyze them, and represent data in various ways to facilitate problem-solving and decision-making.

c) Students break problems into component parts, extract key information, and develop descriptive models to understand complex systems or facilitate problem-solving.

d) Students understand how automation works and use algorithmic thinking to develop a sequence of steps to create and test automated solutions.

6. Creative Communicator- Students communicate clearly and express themselves creatively for a variety of purposes using platforms, tools, styles, formats, and digital media appropriate for their goals.

a) Students choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.

b) Students create original works or responsibly repurpose or remix digital resources into new creations.

c) Students communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models, or simulations.

d) Students publish or present content that customizes the message and medium for their intended audiences.

7. Global Collaborator- Students use digital tools to broaden their perspectives and enrich their learning by collaborating with others and working effectively in teams locally and globally.

a) Students use digital tools to connect with learners from a variety of backgrounds and cultures, engaging with them in ways that broaden mutual understanding and learning.

b) Students use collaborative technologies to work with others, including peers, experts, or community members, to examine issues and problems from multiple viewpoints.

c) Students contribute constructively to project teams, assuming various roles and responsibilities to work effectively toward a common goal.

d) Students explore local and global issues and use collaborative technologies to work with others to investigate solutions.