Digital Media IA

EXAM INFORMATION

Exam Number

810

Items

37

Points

49

Prerequisites

COMPUTER TECHNOLOGY I

25 WPM

Recommended Course Length

ONE SEMESTER

National Career Cluster

ARTS, A/V TECHNOLOGY, & COMMUNICATION

INFORMATION TECHNOLOGY

Performance Standards

INCLUDED (OPTIONAL)

Certificate Available

YES

DESCRIPTION

Digital Media is the process of analyzing, designing, and developing interactive media. Digital Media I is the first-year digital media course where students will create and learn digital media applications while using elements of text, graphics, animation, sound, video, and digital imaging for various formats. These abilities will prepare students for entry-level multimedia positions and provide fundamental 21st Century Learning skills beneficial for other occupational/educational endeavors.

EXAM BLUEPRINT

STANDARD	PERCENTAGE OF EXAM
1- Digital Media Career Opportunities	8%
2- Digital Media Computer Functions	16%
3- Visual Design Concepts	35%
4- 2D Graphics	24%
5- Digital Technologies	17%

STANDARD 1

Students will develop an awareness of digital media career opportunities.

Objective 1   Develop 21st Century Life and Career Skills related to working in the digital media industry including Social Media.

1. Identify occupations related to digital media careers (graphic/commercial artist, project manager, technical writer, application programmer, A/V specialist, and subject matter expert, instructional designers, art director, copywriter, 3D animator, etc.).

2. Identify knowledge and skills necessary for specific digital media occupations.

3. Develop employability competencies/characteristics: responsibility, dependability, ethics, respect, and cooperation.

4. Exhibit high standards of personal performance with a positive work ethic and attitude.

5. Adapt to production issues as they occur.

6. Discuss the importance of soft skills when working with other people.

Objective 2   Communication – Demonstrate and being skillful.

1. Demonstrate oral communication skills.

2. Demonstrate written communication skills.

3. Utilize correct spelling and grammar.

Standard 1 Performance Evaluation included below (Optional)

STANDARD 2

Students will be able to demonstrate the ability to perform relevant computer functions on a standard platform (PC, MAC, Linux) as they apply to digital media while using 21st century skills.

Objective 1   Perform basic computer functions.

1. Utilize assets and file management using folders and naming conventions.

2. Convert and compress files using appropriate codec.

3. Create back-up files.

4. Monitor file size and disk space.

5. Utilize *Help* features on associate platform.

6. Utilize shortcut keys and quick-stroke commands where applicable in software applications and OS to improve performance (shift, alt, command)

7. Identify storage capabilities of Terabyte, Gigabyte, Megabyte, and Kilobyte.

Objective 2   Demonstrate Communication and Media Literacy Skills.

1. Collaborate with teammates.

2. Analyze how individuals interpret messages differently, how values and points of view are included or excluded, and how media can influence beliefs and behaviors.

3. Understand both how and why media messages are constructed, and for what purposes.

4. Search for online help and solutions.

5. Evaluate information critically and competently.

6. Reflect critically on learning experiences and processes.

7. Synthesize and draw a conclusion to determine an outcome.

Objective 3   Information and Communication Technologies (ICT)

1. Identify the components of a basic digital media computer system: processor, RAM, graphics card.

2. Access information efficiently (timely) and effectively (sources).

Objective 4   Media literacy ethics

1. Read and discuss the school's acceptable use policy (AUP).

2. Apply a fundamental understanding of the ethical/legal issues surrounding the access and use of media.

Objective 5   Fair Use Guidelines and Copyright Law

1. Understand Fair Use Guidelines as it applies to classroom use.

2. Plan ahead so you can follow appropriate copyright laws.

3. Explain and justify appropriate application of Fair Use Guidelines.

4. Understand copyright is held by the creator of company when ideas result in a tangible product.

5. Understand intellectual property.

6. Understand the process of registering a copyright.

7. Create an original content project while adhering to all copyright laws and not involving Fair Use Guidelines.

8. Understand Public Domain.

Standard 2 Performance Evaluation included below (Optional)

STANDARD 3

Students will recognize and apply effective visual design concepts.

Objective 1   Principles and Elements of Design – recognize and apply the following elements and principles:

1.   Identify and design using the principles of design (Balance, Contrast, Emphasis, Rhythm, Repetition, Scale, Proportion, Unity, Positive and Negative Space, Form)

2.   Identify the utilize the elements of design (line Shape, Value, Texture, Color, Space).

Objective 2   Color Theory:

1.   Recognize and apply Color Properties (Hue, saturation, value).

2.   Recognize and apply Color Schemes (complimentary, analogous, triadic, and monochromatic).

3.   Recognize and apply Symbolism/Emotion (Warm, cool colors).

4.   Recognize and apply Color depth/palettes (dithering).

5.   Recognize and apply Color modes for web-based graphics and printed graphics (Primary colors RGB & CMYK, Grayscale, Secondary, Tertiary).

Objective 3   Image Composition: recognize and use the following concepts:

1.   Recognize and use mergers, simplicity, leading lines, rule-of-thirds, point-of-view, field-of-view, golden mean, pyramid, and framing in image composition.

2.   Understand and apply resolution, anti-aliasing, lighting in image composition.

Objective 4   Typography – Know the history behind and apply the following concepts:

1.   Apply Font decisions (typeface/families, style/attributes, size)

2.   Apply Typeface Design (serif, sans-serif, script, decorative)

3.   Apply Text Layout Techniques (leading, kerning, tracking, symmetric and asymmetric alignment).

Standard 3 Performance Evaluation included below (Optional)

STANDARD 4

Students will produce raster (bitmap) and vector 2D graphics and apply the techniques appropriately to a project.

Objective 1   Raster Graphics: Students will create, manipulate, and appropriately use bitmap (pixel based) raster graphics.

1. Identify graphic formats and their appropriate use (e.g., JPG, GIF, TIF, BMP, PSD, PNG, PDF, EPS, etc.).

2. Acquire image assets (scanning, digital camera, internet search, stock sources, etc.).

3. Create photos/graphics with appropriate visual design and image composition techniques.

4. Utilize appropriate visual design and image composition techniques.

5. Export/import images for project requirements (compression, resolution).

6. Crop, resize, straighten image, and transform an image.

7. Utilize techniques to effectively edit an image.

8. Use layers, mask, and selections.

9. Apply filters and effects.

10. Adjust color, contrast.

11. Create gradient.

12. Apply and maintain transparency or Alpha Channels.

13. Restore images.

14. Utilize color selection techniques.

15. Use painting and drawing tools.

16. Exporting from Photoshop for use in HD Videos at 1920x1080

17. Utilize basic keystroke and shortcut keys

Objective 2   Vector Graphics: Understand, create, manipulate, and appropriately use vector graphics.

1. Identify graphic formats and their appropriate use (e.g., PDF, AI, SWF, PNG, EPS, etc.).

2. Convert images from bitmap to vector and vice versa.

3. Export/import images for project requirements (compression, resolution).

4. Utilize drawing tools to create and manipulate paths (lines and Bezier curves) using anchor points and direction handles.

5. Apply stroke and fill (solid and gradient).

6. Utilize appropriate selection tools.

7. Perform grouping and ungrouping of objects.

8. Apply styles and effects.

9. Transform objects.

10. Create and manage layers.

11. Apply and maintain transparency.

12. Utilize text tools.

13. Understand final output formats.

14. Utilize basic keystroke and shortcut keys.

Standard 4 Performance Evaluation included below (Optional)

STANDARD 5

Students will explore new and digital technologies.

Objective 1   Develop an awareness of digital and collaborative technologies.

1. Explore, identify and discuss emerging technologies.

2. Utilize document sharing and collaborating (Good Docs, Dropbox, Office 365).

3. Discuss the advantages and disadvantages of Cloud Storage and computing

4. Discuss the advantages and disadvantages of using social networking, blogs, vlogs, Wikis, video conferencing, podcasting, RSS feeds and webinars.

Digital Media IA

Performance assessments may be completed and evaluated at any time during the course. The following performance skills are to be used in connection with the associated standards and exam. To pass the performance standard the student must attain a performance standard average of 8 or higher on the rating scale. Students may be encouraged to repeat the objectives until they average 8 or higher.

Student's Name: _____

Class: _____

PERFORMANCE STANDARDS RATING SCALE

| 0 | LIMITED SKILLS | 2 | → | 4 | MODERATE SKILLS | 6 | → | 8 | HIGH SKILLS | 10 |

STANDARD 1 - Digital Media Career Opportunities   Score:

- ☐ Explore career opportunities
- ☐ Demonstrate understanding employability competencies

STANDARD 2 - Digital Media Computer Functions   Score:

- ☐ Perform basic computer functions
- ☐ Initiate computer problem solving

STANDARD 3 - Visual Design Concepts   Score:

- ☐ Demonstrate visual design concepts
- ☐ Color Theory concepts
- ☐ Demonstrate Typography concepts
- ☐ Demonstrate image/photo composition concepts

STANDARD 4 - Raster (Bitmap) and Vector 2D Graphics   Score:

- ☐ Produce 2D Raster Graphics
- ☐ Produce 2D Vector Graphics

PERFORMANCE STANDARD AVERAGE SCORE:

Evaluator Name: _____

Evaluator Title: _____

Evaluator Signature: _____

Date: _____