Digital Media IB

EXAM INFORMATION	DESCRIPTION

Exam Number

811

Items

25

Points

40

Prerequisites

DIGITAL MEDIA IA

Recommended Course Length

ONE SEMESTER

National Career Cluster

ARTS, A/V TECHNOLOGY, & COMMUNICATION

INFORMATION TECHNOLOGY

Performance Standards

INCLUDED (OPTIONAL)

Certificate Available

YES

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- Proper Planning and Design	25%
2- Digital Audio	25%
3- 2D Animation	23%
4- Digital Video	12%
5- Team Activities	15%
6- Digital Portfolios (Optional)	

STANDARD 1

Students will demonstrate proper planning and design by utilizing an instruction design model such as addie, adobe professional design, rapid deployment model, and so forth in the development of digital media projects.

Objective 1   Understand and use the ADDIE Model.

1. Analyze: Gather and process contextual information affecting the goals, structure, purpose, content, audience, and design of a project.

2. Design: Plan the general look and scope of the application and the media it will use, along with the budget, tools, objectives, outline content, storyboard, and schedule.

3. Develop: Collect and create digital media content and testing of the application.

4. Implement: Publish the finished project and make it available to its audience.

5. Evaluate: Assess the effectiveness of the project with the target audience and make adjustments in future revisions.

Standard 1 Performance Evaluation included below (Optional)

STANDARD 2

Students will plan, produce, edit, and publish digital audio.

Objective 1   Plan and create digital audio.

1. Prepare a script and record digital audio.

2. Capture sound from an original or existing source.

3. Recognize and use appropriate types of sound (voice over/narration, music, sound effects, foley).

Objective 2   Understand and edit digital audio.

1. Edit sound.

2. Apply special effects to audio files.

3. Create audio envelops.

4. Understand and manipulate frequency, amplitude, decibel, pitch, sample rate, bit depth, and hertz.

Objective 3   Export and publish digital audio.

1. Identify quality differences and use different audio formats and containers (e.g., WAV, MIDI, MP3, AIFF, AAC, MP4, M4A, WMA, FLAC, DSD).

2. Add appropriate metadata.

3. Import, Export, and convert audio in different formats.

4. Publish an audio project.

Standard 2 Performance Evaluation included below (Optional)

STANDARD 3

Students will produce and utilize 2d animation.

Objective 1   Animations: Create, manipulate, and appropriately use animations.

1. Perform changes to position, scale, color, and properties of an animated object.

2. Utilize Timeline animation (Frame-by-frame, Tween).

3. Create Key frame animation.

4. Create Tween Animation (motion, shape, and path).

5. Utilize Symbol/Instances.

6. Utilize internal and external libraries.

7. Import/Export assets.

8. Publish/Packaging appropriately for delivery medium.

Objective 2   Animation Techniques: Effectively use animation techniques.

1. Create animation script and storyboard.

2. Recognize and apply major principles of animation (squash and stretch, anticipation, timing, staging). [See 12 principles of animation].

3. Effectively use the basic elements to create a story (setting, sequence and pacing, structure and plot, character and conflict, and resolution). What is the correct sequence?

Standard 3 Performance Evaluation included below (Optional)

STANDARD 4

Students will plan, create, edit, and publish digital video.

Objective 1   Pre-Production

1. Scripting

2. Storyboard.

3. Shot List

4. Equipment List

5. Production Schedule

6. Define team member roles

7. Role of the Producer

8. Role of the Director

9. Role of the Cinematographer

10. Role of the Editor

11. Crew Positions and Defined Roles

12. Role of the Production Assistant

13. Permits and Permissions

14. Fair Use Guidelines for Education

Objective 2   Production stage of creating digital video.

1. Correctly use video equipment (tripod, microphone, lights, camera).

2. Demonstrate proper shooting techniques (camera settings, composition, lighting, POV, FOV, Close-up, Medium, Wide, Extra Wide, Extreme Close-up).

3. Follow pre-production planning (production schedule and time management).

Objective 3   Post-production stage of creating digital video.

1. Capture video (downloading to computer).

2. Use appropriate codec, aspect ratio (16:9 and 4:3), and resolution settings.

3. Define asset management processes (naming conventions, cataloging, storage, and compression).

4. Edit video (transitions, audio/video effects, titling [safe area], aspect ratio, credits, clips, etc.).

5. Export in appropriate format for intended use.
6. Recognize and use appropriate video settings, i.e., resolution and regional standards such as NTSC or PAL (e.g., frame rates of film, TV, and slow motion, frame size, compression).

7. Identify video formats (e.g., SD, HD, AVI, MOV, SWF, WMV, MP4, m4v, FLV, VOB) and export and publish settings/codecs.

8. Publish a digital video project to appropriate outlets.

Standard 4 Performance Evaluation included below (Optional)

STANDARD 5

*Students will participate in individual and team (group) activities**.**

Objective 1   Demonstrate 21st Century Life and Career Skills in the ability to work individually in the completion of digital media projects.

1. Demonstrate oral, written, and/or technological communication skills. Apply management skills in finding solutions to project problems.

2. Monitor, define, prioritize and complete tasks without direct supervision. Adapt to varied roles, job responsibilities, schedules and context.

3. Work effectively in a climate of ambiguity and changing priorities. Complete projects according to specified deadlines.

Objective 2   Demonstrate 21st Century Life and Career Skills in the ability to work as a team member in the completion of digital media projects.

1. Demonstrate oral, written, and/or technological communication skills by knowing when it is appropriate to listen and when it is appropriate to speak. Demonstrate the ability to respond open-mindedly to different ideas and values.

2. Identify the advantages of working with a team.

3. Respect input and feedback from others.

4. Demonstrate the ability to leverage social and cultural differences to create new ideas and increase both innovation and quality of work.

5. Accept and complete tasks that need to be completed.

6. Apply management skills in finding solutions to project problems. Utilize organizational skills.

7. Demonstrate the ability to use integral and ethical behavior in using influence and power.

8. Demonstrate the ability to inspire and leverage strengths of others to accomplish a common goal.

9. Demonstrate the ability to conduct themselves in a respectable and professional manner.

10. Set goals with tangible and intangible success criteria. Balance tactical (short-term) and strategic (long-term) goals.

Standard 5 Performance Evaluation included below (Optional)

STANDARD 6 (Optional)

Students will design and develop various projects to add to a digital portfolio.

Objective 1   Create a digital portfolio adhering to copyright and Fair Use Guidelines of the student's best work.

1. Include 2D raster and vector digital graphics.

2. Include animation sequences.

3. Include digital video.

4. Include digital audio.

5. Include cross-curricular content (optional).

Objective 2   Output portfolio projects to an appropriate delivery medium.

1. Determine if appropriate for Computer-Based delivery (CB).

2. Determine if appropriate for Web-Based delivery (WB).

3. Determine if appropriate for delivery using DVD, Blu-Ray, MP3 Players, tablets, cell phones, and other portable digital devices.

Standard 6 Performance Evaluation included below (Optional)

Digital Media IB

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 - Proper Planning and Design   Score:

☐   Demonstrating understanding of a Planning, Design, and Development process

STANDARD 2 - Digital Audio   Score:

☐   Produce and edit digital audio

STANDARD 3 - 2D Animation   Score:

☐   Produce 2D animation with audio

STANDARD 4 - Digital Video   Score:

☐   Produce and edit digital videos

STANDARD 5 - Individual and Group Activities   Score:

☐   Demonstrate the ability to work as a team member to project completion

☐   Explore interactive and collaborative technologies

STANDARD 6 - Digital Portfolio   Score:

☐   Create an interactive digital portfolio

PERFORMANCE STANDARD AVERAGE SCORE:

Evaluator Name: _____

Evaluator Title: _____

Evaluator Signature: _____

Date: _____