Digital Media, Advanced

Exam Information

Exam number
815

Items
29

Points
31

Prerequisites
Digital Media 1
Digital Media 2

Recommended course length
One semester

National Career Cluster
Arts, A/V Technology, & Communication

Information Technology

Performance standards
Included (Optional)

Certificate available
Yes

Description

The Digital Media Advanced industry certification exam assesses the process of planning, instructional design, development, and publishing of digital media and interactive media projects. Learners demonstrate advanced skills in planning, designing, and creating interactive projects using elements such as text, 2D and 3D graphics, animation, sound, video, and digital imaging. The exam evaluates their ability to develop and apply these skills for entry-level positions and other occupational or educational goals.

Exam Blueprint

Standard	Percentage of exam
1. Digital Media Design Skills	58%
2. 3D Graphics & Animation	23%
3. Interactive Digital Media Projects	3%
4. Team & Individual Interactive Media	13%
5. Interactive Digital Media Portfolio	3%
6. Work-Based Learning Experience	0%

Standard 1

Students will use and enhance skills learned in Digital Media 1 and Digital Media 2.

Objective 1 Apply skills learned in Digital Media 1 and Digital Media 2 and new advanced techniques.
1. Create and manipulate 2D graphics using a variety of advanced techniques
2. Create and manipulate 2D animations using a variety of advanced techniques
3. Create and manipulate digital video using a variety of advanced techniques
4. Create and manipulate digital audio using a variety of advanced techniques

Objective 2 Review and apply principles and elements of visual design.
1. Utilize visual design elements in all interactive projects.
2. Apply concepts of color theory in designing and building interactive media projects.
3. Utilize image composition in digital media projects.

Objective 3 Follow AUP, Fair Use guidelines, and copyright law.
1. Follow and adhere to the school's Acceptable Use Policy.
2. Understand when copyrighted material can be used under Fair Use guidelines.
3. Understand and adhere to all applicable copyright laws.

Standard 1 Performance Evaluation included below (Optional)

Standard 2

Students will create a 3D graphic and be introduced to 3D animation.

Objective 1 Create a 3D model.
1. Know the process of and create a 3D wire frame model
2. Add surface materials (textures)
3. Set cameras and lighting (key, fill, and back)
4. Render a model
5. Modify vertices, faces, and edges

Objective 2 Animate 3D objects.
1. Animate a 3D object using the key frame method
2. Animate a 3D object using the path method on a Cartesian Coordinate System

Standard 2 Performance Evaluation included below (Optional)

Standard 3

Students will learn and follow the process of planning, designing, creating digital assets, evaluating, revising, and publishing interactive digital media projects.

Objective 1   Pre-planning for an interactive media project.
1. Conceptualize ideas and do the initial planning for a project
2. Write a project proposal including objectives, goals, overview of the project, costs, timeline, etc.
3. Define the specs for the project (target users, technology needed, signoffs needed, etc.)
4. Explore the content needed, development schedule, team member assignments, voice, and review options for the project
5. Create an outline/storyboard for the project flow, directories, naming conventions, navigation, and relationships between segments
6. Create your script and asset list
7. Get approval for any copyright material that will be used
8. Plan your user interface and screen shots along with design standards
9. Make any revisions needed and get approvals for the project

Objective 2   Create and develop the content for the project.
1. Create a project prototype (working model) and make any needed revisions
2. Create and organize the digital media objects needed for the project with appropriate naming conventions
3. Assemble the project using the storyboard, script, and flowchart to drive the project
4. Add any scripting or programming needed
5. Development internal documentation for the project
6. Follow copyright and fair use guidelines
7. Monitor time and cost progress of the project
8. Test the project, check for quality assurance, and make any revisions need
9. Get client approval and check off

Objective 3   Package and publish the project.

1. Design packaging and other materials needed for publishing and distribution
2. Write needed documentation for the use of the project
3. Set a launch date
4. Provide plan for continued maintenance of the project
5. Publish/launch the interactive project

Standard 3 Performance Evaluation included below (Optional)

Standard 4
Students will know how to develop interactive media projects by understanding the team dynamics or as an individual.

Objective 1   Understand different roles for those who work as members of a Digital Media

project team.

1. Understand different roles for those who work as members of a Digital Media project team
2. Explore personal interests and abilities related to working in the interactive media industry
3. Identify technical talents (i.e., programming, problem solving, algorithmic thinking, etc.)
4. Identify organizational and leadership skills
5. Explore aptitude for innovation and creativity
6. Work and collaborate as an interactive project team member
7. Identify and understand the interactive digital media team roles: Graphic Artist, Designer, Programmer, Digital Media Designer, Digital Media Developer, Subject Matter Expert, Media/Instructional Designer, Web Designer/Specialist, etc.
8. Explore courses needed for completion of the Digital Media Pathway
9. Explore careers and training opportunities, trends, and requirements for different roles in interactive media

Standard 4 Performance Evaluation included below (Optional)

Standard 5
Students will create an interactive digital media portfolio for digital delivery which showcases a student's projects, work, and skills. Projects included can be created individually or as a team member.

Objective 1   Plan an interactive portfolio of interactive media projects completed in all digital media courses.
1. Use the process for planning and designing interactive projects
2. Include examples of the whole planning, design, creation, and publishing process

Objective 2   Create a menu-driven digital portfolio including the following elements with strict adherence to copyright and fair use guidelines:
1. Add: Project Designs (storyboards and concept drawings)
2. Include: Animations, Audio, 2D Graphics, 3D Graphics, and Video
3. Include finished projects(individual and/or group)
4. Add other awards, contest projects, etc. (optional)
5. Include your resume

Objective 3   Plan, Develop, and Publish Projects such as:
1. Video project
2. Comprehensive digital audio project
3. 2D graphics project
4. Interactive 2D animation project
5. Interactive software game
6. Interactive device specific application

7. Interactive 3D project
8. Teacher approved interactive media project

Standard 5 Performance Evaluation included below (Optional)

Standard 6
Students will participate in a work-based learning experience and/or student competition.

Objective 1   Participate in a work-based learning experience (optional).
1. Take a field trip to a software or interactive design business
2. Do a job shadow for someone in a digital media career
3. Intern at a digital media business
4. Listen to an industry or post-secondary guest speaker
5. Work for digital media company or as an independent digital media producer

Objective 2   Participate in a digital media student competition (optional).
1. Enter a school, district, or state level digital media contest
2. Prepare and submit an entry for the Digital Media Arts Festival
3. Enter and compete in a CTSO competition in a digital media area

Standard 6 Performance Evaluation included below (Optional)

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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 Design Skills   Score:

- Demonstrate basic operation system functions
- Demonstrate basic file commands
- Convert and/or compress files to various formats when needed
- Demonstrate the ability to manage files on a PC and Network
- Use appropriate documentation and help features when needed
- Utilize shortcut keys and quick-stroke commands when needed
- Adhere to the school's acceptable use policy
- Understand the process of producing a finished multimedia product
- Create a keyframe and path animation
- Capture and edit digital video demonstrating proper filming techniques
- Capture and edit digital audio
- Demonstrate selecting the appropriate medium to develop and deliver multimedia projects
- Demonstrate knowledge of multimedia terminology and presentation modes
- Obtain permission to use copyrighted materials where required and cited sources
- Demonstrate an understanding of fair-use guideline

Standard 1 - 3D Graphics and Animation   Score:

- Students will create a 3D model with animation

Standard 3 - Interactive Digital Media Projects   Score:

- Utilize interaction and navigational tools including menus, buttons, timer events and user-driven event where needed
- Demonstrate the ability to work individually in the completion of multimedia projects applying communication and problem-solving skills
- Create original media and interfaces for the project

Standard 4 - Interactive Media Projects   Score:

- Demonstrate the ability to work as a contributing member of a team in the completion of multimedia projects applying communication, management, organizational leadership, and compromise skills to meet team objectives
- Complete the project within the predetermined deadline meeting the client's specifications

Standard 5 - Interactive Digital Media Portfolio   Score:

- Create a personal archive of work/projects

Standard 6 - Work-Based Learning Experience   Score:

- Students will use the Strands & Standards in this course to create an interactive project and final portfolio

Performance standard average score:

Evaluator Name: _____

Evaluator Title: _____

Evaluator Signature: _____

Date: _____