

# Digital Media II

# EXAM INFORMATION DESCRIPTION Exam Number

815 Items

items

40

**Points** 

48

**Prerequisites** 

DIGITAL MEDIA I

Recommended Course Length

**ONE SEMESTER** 

#### **National Career Cluster**

ARTS, A/V TECHNOLOGY, & COMMUNICATION

**INFORMATION TECHNOLOGY** 

#### **Performance Standards**

INCLUDED (OPTIONAL)

#### **Certificate Available**

YES

Digital Media II is a course designed to teach the process of planning, instructional design, development, and publishing of digital media and interactive media projects. Digital Media II is the second-year course within digital media pathway where students will focus on developing advanced skills to plan, design, and create interactive projects using the elements of text, 2D and 3D graphics, animation, sound, video, digital imaging, interactive projects, etc. These skills can prepare students for entry-level positions and other occupational/educational goals.

#### **EXAM BLUEPRINT**

## STANDARD PERCENTAGE OF EXAM

1-	Digital Media Design Skills	31%
2-	3D Graphics and Animation	17%
3-	Interactive Digital Media Projects	17%
4-	Team and Individual Interactive media	
	Projects	27%
5-	Interactive Digital Media Portfolio	8%

6- Work-Based Learning Experience (Optional)



#### **STANDARD 1**

Students will use and enhance skills learned in digital media design.

Objective 1 Apply skills learned in Digital Media I 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 animation.



#### Objective 1 Create a 3D model.

- 1. Create a 3D wire frame model.
- 2. Understand and create 3D composites.
- 3. Render a model using appropriate visual effects (background, textures, lighting, etc.).

#### Objective 2 Animate 3D objects.

- 1. Animate a 3D object using the key frame method.
- 2. Animate a 3D object using the path method.

#### **STANDARD 3**

Students will learn and follow the process of planning, designing, creating digital assets, evaluating, revising, and publishing of 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 project (target users, technology needed, sign-offs 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 approval for the project.

#### Objective 2 Create and develop the content for the project.

- 1. Create a project prototype 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. Develop 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 needed.
- 9. Get client approval and check-off.

#### Objective 3 Package and publish the project.

- 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 develop interactive media projects working on a team or as an individual (one project will be in a computer-based [CB] or web-based [WB] format. The other three projects will be student-designed projects.)

- Objective 1 Understand the different roles for those who work as members of a Digital Media project team.
  - 1. Explore personal interests and abilities related to working in the interactive media industry.
  - 2. Identify technical talents (i.e. programming, problem solving, algorithmic thinking, etc.).
  - 3. Identify organizational and leadership skills.
  - 4. Explore aptitude for innovation and creativity.
  - 5. Work and collaborate as an interactive project team member.
  - 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.
  - 7. Explore courses needed for a Digital Media Pathway.
  - 8. Explore careers and training opportunities, trends, and requirements for different roles in interactive media.
- Objective 2 (CB Option) Author a computer-based (CB) project that includes the following elements and skills:
  - 1. Use the planning and design process for interactive projects.
  - 2. Use appropriate texts and fonts.
  - 3. Use digital images when needed.
  - 4. Utilize animation and digital video.
  - 5. Include audio.
  - 6. Make the project interactive.



- 7. Provide analysis and feedback.
- 8. Use of appropriate pieces of software beyond "authoring" software.
- 9. Publish the interactive project.

# Objective 3 (WB Option) Create a web-based (WB) project with the following components and skills:

- 1. Use the planning and design process for interactive projects.
- 2. Use appropriate texts and fonts.
- 3. Include animation from rollovers, animated GIFs, and/or Flash, etc.
- 4. Optimized audio for Web delivery.
- 5. Create and optimize digital images for Web delivery.
- 6. Use digital video that is optimized for Web delivery.
- 7. Make it interactive using links, buttons, and/or image maps.
- 8. Provide analysis and feedback.
- 9. Use two or more pieces of software beyond the web authoring software.
- 10. Publish the finished interactive web project.

#### Objective 4 (Other Interactive Project Options) Create three other interactive projects.

- 1. Plan, develop, and publish an interactive video project.
- 2. Plan, develop, and publish a comprehensive digital audio project.
- 3. Plan, develop, and publish a 2D graphics project.
- 4. Plan, develop, and publish an interactive 2D animation project.
- 5. Plan, develop, and publish an interactive software game.
- 6. Plan, develop, and publish an interactive device specific application.
- 7. Plan, develop, and publish an interactive 3D project.
- 8. Plan, develop, and publish a teacher-approved interactive media project.

#### 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 completed interactive media projects.
  - 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, Video
  - 3. Include: finished projects (individual and/or group)
  - 4. Add other awards, contest projects, etc. (optional)
  - 5. Include your resume.
- Objective 3 Publish the project to CD, DVD, as a PDF Portfolio, or on the web.
  - 1. Make CD and DVD projects self-starting with menus and interactive.
  - 2. Make web portfolios interactive with menus and navigation.

Standard 5 Performance Evaluation included below (Optional)

#### **STANDARD 6 (Optional)**

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 a digital media company or as an independent digital media producer.

#### Objective 2 Participate in a digital media student competition (optional).

- 1. Enter a school digital media contest.
- 2. Prepare an entry in a company or organizational digital media contest.
- 3. Prepare and submit an entry for the Digital Multimedia Arts Festival.
- 4. Enter and compete in a CTSO competition in a digital media area.

Standard 6 Performance Evaluation included below (Optional)



### **Digital Media II**

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		D SKILLS 2 — 4 MODERATE SKILLS 6 — 8		10
U	LIMITED	D SKILLS 2 ———— 4 MODERATE SKILLS 6 ————— 8	HIGH SKILLS	10
STA	ANDA	ARD 1 - Digital Media Design	Score:	
	□ De	emonstrate basic operation system functions		
	□ De	emonstrate basic file commands		
		onvert and/or compress files to various formats when needed		
	□ De	emonstrate the ability to manage files on a PC and Network		
	□ Us	se appropriate documentation and help features when needed		
	□ Ut	tilize shortcut keys and quick-stroke commands when needed		
	□ Ac	dhere to the school's acceptable use policy		
	□ Ur	nderstand the process of producing a finished multimedia product		
	□ Cr	reate a keyframe and path animation		
	□ Ca	apture and edit digital video demonstrating proper filming technique	s	
	□ Ca	apture and edit digital audio		
	□ De	emonstrate selecting the appropriate medium to develop a	nd deliver	
	m	nultimedia projects		
	□ De	emonstrate knowledge of multimedia terminology and presentation	modes	
	□ Ol	btain permission to use copyrighted materials where required and cit	ted sources	
	□ De	emonstrate an understanding of fair-use guidelines		

## **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		
STAN	IDARD 4 - Interactive Media Projects Score:		
	Create, scan, and manipulate 2D bitmap (raster) graphics		
	Create, manipulate 2D vector graphics		
	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		
	Conduct an Alpha and Beta test of the project		
	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		
STAN	IDARD 6 - Work-Based Learning Experience Score:		
	Understand career opportunities in the multimedia industry		
	Demonstrate employability skills such as responsibility, dependability, ethics, respect, and cooperation		
	Perform with a positive work ethic and attitude		
PERFORMANCE STANDARD AVERAGE SCORE:			
Evalua	ator Name:		
Evaluator Title:			
Evaluator Signature:			
Date:			