Career Cluster: Information Technology

Course: Multimedia & Image Management Techniques

Test Given: Adobe Photoshop CS4 (Brainbench), Fireworks (Brainbench), Adobe Illustrator (Brainbench), Media Production: Production Assistant (ODCTE)

Directions: The purpose of this curriculum map is to identify where the knowledge and skills for this outcome are currently being taught and addressed.

Competencies or Topics	Resources	Weeks
Specific Learning Competencies - *Upon successful completion of this course, the student will be able to:*		
Identify differences in platforms, browsers, display settings, etc., and related issues.	Textbooks Excel, word, access, publisher, power point, Internet Various project ideas Photoshop In-design	
Use scanning devices and software to properly scan reflective and transparent mediums.		
Demonstrate basic design procedures using photo-editing software that include photo enhancement, correction, restoration, and manipulation.		
Understand and employ design and color principles while creating visually appealing graphic images.		
Manipulate, troubleshoot, compress, publish, and export graphics and/or animations.		
Identify and employ design and color principles while creating visually appealing graphic images.		
Apply appropriate techniques for web and print publishing.		
Demonstrate sensitivity in communicating with a diverse workforce.		
Understand legal and ethical issues in the IT field.		
Prepare visual design specifications and evaluate visual appeal.		
Demonstrate proficiency in the use of digital imaging techniques and equipment.		
Select and utilize appropriate software and hardware tools.		
Produce or acquire graphics, animation, audio, and/or video content.		

Competencies or Topics	Resources	Weeks
If using Adobe Photoshop for image editing, apply the following features appropriately: color, efficiency and automation, file management, filters and effects, image properties, layers, masks and channels, text tools, and user interface.		
If using Macromedia Fireworks for image editing, apply the following features appropriately: animation, commands, effects, setup, web images, behaviors, drawing tools, exporting, and tools.		
Create and manipulate original digital images using the features of vector graphics software.		
If using Adobe Illustrator for vector graphics, apply the following software features appropriately: automation and customization, compiling objects, interaction with web and other applications, type tools, color, objects and shapes, interface, and enhancing artwork.		
BRAINBENCH TEST: Adobe PhotoShop CS4		
Automation • Actions • Batch Processing • Keyboard Shortcuts		
Color Management • Importing Images • Profiles • Settings		
Layers • Adjustment • Effects and Styles • Layer Comps • Managing • Masking		
Retouching • Artistic Filters • Healing • Image Correcting Filters • Transforming		
Text • Creating Type • Formatting • Special Effects • Type Effects		

Competencies or Topics	Resources	Weeks
Color Correction • Color Adjustment • Color Matching • Color Modes • Special Effects		
File Management • Camera Raw • Open and Place • Saving and File Info • Size and Resolution		
Painting and Drawing • Brushes • Clipping Paths • Objects • Painting Tools • Vector Shapes		
Selecting • Making Selections • Moving and Copying • Saving Selections		
Web • Optimizing • Output • Slicing		
Brainbench: Fireworks		
Animation • Animating Objects • Exporting for the Web • Onion Skinning		
Behaviors • Applying • Modifying • Pop-Up Menus • Types of Behaviors		
Buttons • Applying Effects • Creating Buttons • Using the Button Wizard		
Design Environment		

Competencies or Topics	Resources	Weeks
• Canvas Properties • Floating Panels • Modifying Canvas • Preferences • Visual Aids		
Effects • Extras • Live Effects		
General Tools • Selection/Sub Selection • Zoom/Positioning		
Layers and Frames • The Web Layer • Viewing • Working with Layers and Frames		
Masks • Blending Modes • Creating Vector and Raster Masks • Using Objects as Masks		
Production Techniques • Batch Processing • Commands • Sharing Styles with Other Designers • Styles and Swatches		
Raster • Creating • Editing • Image Characteristics		
Saving, Importing, and Exporting • Export Tools and Wizards • Exporting as HTML, Libraries, Flash, etc. • File Types • Other Export Options		
Slices and Hotspots • Adding Links • Applying a Hotspot • Applying Slices		
Symbols and Libraries • Converting to Symbols • Exporting Symbols from the Library		

Competencies or Topics	Resources	Weeks
• Types of Symbols • Using the Symbol Library		
Text • Creating • Modifying		
Vector • Creating • Editing • Image Characteristics		
Brainbench: Adobe Illustrator		
Automation and Customization • Actions • Keyboard Shortcuts • Linking and Embedding		
Color • Profiles and Separations • Swatches, Modes and Models • Tools		
Compiling Objects • Blends • Layers and Groups • Symbols		
Enhancing Artwork • Appearance • Brush and Pattern • Filter and Effects • Masking and Transparency		
Interaction With Web and Other Applications • File Formats • Illustrator with Photoshop and InDesign • Saving and Exporting for The Web • Slicing and Image Map		
Interface • Tools and Commands • User Preferences • Workspace		
Objects and Shapes • Complex Shapes • Tools		

Competencies or Topics	Resources	Weeks
• Transforming and Distorting		
Type • Palettes • Reshaping and Converting • Usage		
ODCTE: Media Production: Production Assistant		
DUTY ES: Demonstrate Employability Skills		
ES.01 Demonstrate personal characteristics desired by employers • Detail-oriented • Good communication skills • Good attendance • Neat appearance • Honest/ethical • High self-esteem • Flexible • Goal-oriented • Commitment • Cooperative • Initiative • Responsible • Positive attitude • Self management • Drug free/alcohol free		
ES.02 Demonstrate effective interpersonal skills		
ES.03 Demonstrate a positive attitude		
ES.04 Demonstrate customer service skills		
ES.05 Utilize proper telephone techniques		
ES.06 Use job-related terminology, symbols, and abbreviations		
ES.07 Interpret and follow oral and written directions		
ES.08 Recognize the importance of team work and participate as a team member		
ES.09 Use critical thinking skills in workplace situations		
ES.10 Demonstrate negotiation skills		

Competencies or Topics	Resources	Weeks
ES.11 Demonstrate leadership skills		
ES.12 Understand organization structure and employee roles		
ES.13 Develop and demonstrate public presentation skills		
ES.13 Develop and demonstrate public presentation skills		
ES.14 Understand cultural diversity in the workplace		
ES.15 Explore opportunities for advanced training		
ES.16 Participate in computer literacy training, when applicable		
ES.17 Perform self-evaluation to establish/modify career goals		
ES.18 Identify employment opportunities		
ES.19 Identify levels of training recommended for related careers		
ES.20 Understand salary, wages, and benefits packages		
ES.21 Complete an employment application		
ES.22 Prepare a resume		
ES.23 Complete an employment interview		
ES.24 Complete a W-4 form		
ES.25 Create an employment portfolio		
Safety		
ES.26 Explain the purpose for safety policies		
ES.27 Participate in safety training • Locate information in MSDS • Office safety • Ergonomics • Blood borne pathogens • Describe the types of fire hazards found in the workplace		

Competencies or Topics	Resources	Weeks
• Discuss electrical hazards • Demonstrate safe material handling techniques • Lifting • Transporting • Storing • Understand established first aid procedures • Practice good housekeeping • Comply with company safety policies		
ES.28 Explain the proper steps in reporting an accident or emergency		
ES.29 Explain the hazards associated with specific types of equipment and tools		
Academic Skills		
ES.30 Apply reading and writing skills		
ES.31 Apply mathematical operations involving whole numbers, fractions, decimals, percentages, mathematical word problems, formulas, ratios, etc., when necessary		
ES.32 Interpret charts, tables, and graphs		
Problem Solving		
ES.33 Utilize problem solving and critical thinking techniques to identify and solve problems • Brainstorming		
ES.34 Discuss data collection techniques for the problem solving process		
ES.35 Identify opportunities for applying problem solving skills		
Technology Skills		
ES.36 Demonstrate knowledge of basic computer concepts **ES.37 Demonstrate basic computer skills** • Word processing skills • Email • Accounting software • Spreadsheet applications • Database administration (as needed) • Presentation software • Internet research		
DUTY A: Planning		
A.01 Become familiar with production concepts and requirements		
A.02 Confer with production team concerning approaches needed to increase dramatic or entertainment value of productions		
A.03 Create/Approve storyboard		
A.04 Exhibit knowledge of the critical elements in designing a production in the stages		

Competencies or Topics	Resources	Weeks

of pre-production, production, and postproduction
    • Identify the activities associated with pre-production, production, and postproduction
    • Identify the linkage from each stage to the next in processes and activities
    • Design a concept, a short script, and identify the resources needed to begin the production		

A.05 Demonstrate knowledge of planning considerations:
    • Target audience
    • Content
    • Availability of hardware
    • Selection of software
    • Selection of format
    • Delivery mode
    • Set schedule
    • Obtaining media
    • Field testing
    • Evaluate budgetary constraints		

A.06 Demonstrate knowledge of how to structure the overall project
    • Establish communications objective, considering audience
    • Outline content
    • Conceptualize style and format
    • Develop storyboard
    • Create and check continuity
    • Compile needed media elements		

A.07 Locate and secure settings, properties, effects, and other production necessities		
A.08 Observe sets or locations for potential problems and to determine filming and lighting requirements		
DUTY C: Ethics		
C.01 Organize and maintain compliance, license, and warranty information related to the project		
C.02 Demonstrate knowledge of legal issues: copyright issues (use, fair use, and protection)		

C.03 Investigate how the First Amendment, Freedom of Information Act, libel, slander, and copyright laws affect video production
    • Describe copyright laws related to the use of text, images, and recorded, Internet, and oral materials
    • Describe issues related to libel and slander		

DUTY E: Sound		
E.01 Exhibit knowledge of audio formats		

Competencies or Topics	Resources	Weeks
E.02 Exhibit knowledge of the types of microphones, pick up patterns and techniques required for a variety of audio presentations • Types of microphones • Dynamic or condenser • Pickup patterns or directional response • Omni, cardioid, and directional • Describe the techniques to maximize sound performance		
E.03 Record speech, music, and other sounds with camcorder or microphone		
E.04 Regulate volume level and sound quality during recording sessions		
DUTY G: Lighting and Sets		
G.01 Apply knowledge of lighting requirements for a planned production • Identify types and placement of lighting fixtures for various lighting effects • On camera lighting • 3-point lighting • Ambient lighting • Demonstrate lighting techniques used for portable and studio productions		
G.02 Position properties, sets, lighting equipment, and other equipment		
G.03 Understand importance of facial makeup, wardrobe, and background		
DUTY H: Acquiring Stills and Video		
H.01 Exhibit knowledge of photo imaging using cameras and camcorders 2/2		
H.02 Identify the different media formats used by analog and digital camcorders • Analog camcorders • VHS – full size • VHS – compact • 8mm • Beta • SVHS • Hi8 • Digital camcorders • Digital8 • MiniDV • DVD • SD/MM card		
H.03 Demonstrate use of a tripod		
H.04 Set up, test, and adjust recording equipment for recording sessions; tear down		

Competencies or Topics	Resources	Weeks
equipment after event completion		
H.05 Demonstrate camera operations • Describe how to maintain picture composition (Rule of Thirds, balance, etc.) • Demonstrate focusing and adjusting images, performing pans and zooms • Switch camera angles in a scene to add interest		
H.06 Record and label contents of video tapes		
DUTY I: Production Equipment		
I.01 Perform routine cleaning of audio and video equipment		
I.02 Notify production team when equipment repairs are needed		
I.03 Demonstrate knowledge of positions and controls of cameras and related equipment in order to change focus, exposure, and lighting		
DUTY N: Evaluation		
Exhibit knowledge of the critical elements in designing a production in the stages of pre-production, production, and postproduction. Critique a production to determine how the various elements were coordinated or not to bring together a successful presentation.		

Assessment: Business & Information Technology Success Skills Exam
Available: Oklahoma Department of Career & Technology Education, Testing Division