

**MULTIMEDIA BASICS**  
**ACTIVITY/COURSE CODE: 5010**

**COURSE DESCRIPTION:** This course covers basic multimedia concepts and applications utilizing text, graphics, animation, sound, video, and various multimedia applications in the design, development, and creation of multimedia presentations and publications in an interactive environment.

**OBJECTIVE:** Given the necessary equipment, supplies, and facilities, the student will be able to successfully complete all of the following standards.

**RECOMMENDED GRADE LEVELS:** 7-9

**COURSE CREDIT:** .5 Carnegie unit

**PREREQUISITE:** None

**COMPUTER REQUIREMENT:** One computer per student; Internet access required

**RECOMMENDED SOFTWARE:**

*Microsoft PowerPoint	*Adobe Photoshop	*CamStudio (Freeware)
*Medi@Show	*Microsoft MovieMaker	*Adobe Fireworks
*Adobe Flash	*Apple iLife Suite	*Audacity (Freeware)
*Microsoft Gif Animator (Free w/Windows)		
*Apple iWork Suite		
*Microsoft PhotoStory (Freeware)		
*Gimp (Freeware)		
*Animoto (Freeware)		
*Scratch (Freeware)		
*XtraNormal		
*GoAnimate		
*Jing (Freeware)		
*Pivot Stick Animator		

**RESOURCES:**

[www.mysctextbooks.com](http://www.mysctextbooks.com)

**A. SAFETY AND ETHICS**

1. Identify major causes of work-related accidents in offices.
2. Describe the threats to a computer network, methods of avoiding attacks, and options in dealing with virus attacks.
3. Identify potential abuse and unethical uses of computers and networks.

4. Explain the consequences of illegal, social, and unethical uses of information technologies (e.g., piracy; illegal downloading; licensing infringement; inappropriate uses of software, hardware, and mobile devices).
5. Differentiate between freeware, shareware, and public domain software copyrights.
6. Discuss computer crimes, terms of use, and legal issues such as copyright laws, fair use laws, and ethics pertaining to scanned and downloaded clip art images, photographs, documents, video, recorded sounds and music, trademarks, and other elements for use in Web publications.
7. Identify netiquette including the use of e-mail, social networking, blogs, texting, and chatting.
8. Describe ethical and legal practices in business professions such as safeguarding the confidentiality of business-related information.

## **B. EMPLOYABILITY SKILLS**

1. Identify positive work practices (e.g., appropriate dress code for the workplace, personal grooming, punctuality, time management, organization).
2. Demonstrate positive interpersonal skills (e.g., communication, respect, teamwork).

## **C. STUDENT ORGANIZATIONS**

1. Explain how related student organizations are integral parts of career and technology education courses.
2. Explain the goals and objectives of related student organizations.
3. List opportunities available to students through participation in related student organization conferences/competitions, community service, philanthropy, and other activities.
4. Explain how participation in career and technology education student organizations can promote lifelong responsibility for community service and professional development.

## **D. INTRODUCTION TO MULTIMEDIA**

1. Define terms related to multimedia.
2. Identify the multimedia components.
3. Identify uses of multimedia.
4. List multimedia design principles.

## **E. MULTIMEDIA EQUIPMENT**

1. Identify multimedia equipment.
2. Discuss multimedia development equipment, including video capture cards, scanners, digital and video cameras, web cameras, projection systems, etc.

## **F. BASICS FOR MULTIMEDIA PROJECTS**

1. Distinguish between presentation and authoring software.
2. Compare/Contrast features of presentation, authoring, graphics, 2-D animation, and 3-D animation software programs.
3. Describe the process of planning, organizing, and storyboarding a multimedia project.

## **G. VISUAL DESIGN PRINCIPLES**

1. Demonstrate effective use of color.
2. Demonstrate effective use of type fonts.
3. Demonstrate effective use of clip art and other graphics in multimedia.
4. Explain the term "effective white space."

## **H. DIGITAL IMAGING AND GRAPHICS**

1. Define various types of graphic files including bitmap/raster and vectors.
2. Acquire digital image from sources such as scanner, digital cameras, camcorder, Internet, etc.
3. List factors that affect quality imaging (e.g., image resolution, color mode).
4. Edit a digital image.

## **I. AUDIO**

1. Define various types of audio files.
2. Create vocal and music files.
3. Convert audio files.
4. Insert audio files from various media in a thematic multimedia presentation.

## **J. VIDEO**

1. Define various types of video files.
2. Create video files.
3. Edit digital video files.
4. Insert digital video files into a thematic multimedia presentation.

## **K. MULTIMEDIA PRESENTATION**

1. Determine the appropriate type of multimedia presentation based upon purpose, intended audience, life of the presentation, cost limits, time restraints, and equipment availability.
2. Create an outline/storyboard for a presentation.
3. Create a thematic presentation using text, charts, tables, graphics, drawing tools, audio and video capabilities, etc.

4. Deliver a multimedia presentation using appropriate media based upon audience, room size, room setup, and environment using professional standards and techniques.
5. Use rubrics to evaluate your own presentations and the presentations of others.

**L. ANIMATION**

1. Define various types of animation files.
2. Create animated objects and clip art.
3. Create original graphic images.
4. Create 2-D animation.
5. Insert animation in a thematic multimedia presentation.

**M. CAREERS**

1. Identify careers in the multimedia creation and publishing industry.
2. Identify education and training requirements for a career in multimedia creation and publishing.
3. Research a career related to the field of multimedia.
4. Create a multimedia presentation using the results of the career research.