

Southern Regional High School
Manahawkin, New Jersey

Course of Study
Introduction to Multimedia

Submitted by: Sharon Faith
Date: July 2008

Date Board Approved:

Southern Regional High School District Course of Study

Department__BUSINESS

Course Number-6046

**Course Title: Introduction to Multimedia
Written by Sharon Faith**

July 2008

Essential Questions of the Course:

- 1. What is multimedia?**
- 2. What is copyrighted material and when is it appropriate to use?**
- 3. How do you use the PAINT TOOLS and what can they do?**
- 4. What is meant by the term navigation and what is its purpose?**
- 5. How do you create an animation?**
- 6. What is digital imaging and what can to a photograph? How do find multimedia resources on the INTERNET?**
- 7. How do edit music for multimedia purposes?**
- 8. How do edit digital video?**
- 9. How do you put graphics, sound, animation and video together?**

Assessments:

- 1. The students' skills will be assessed by appropriate HANDS ON tests.**
- 2. Students will create projects using proper navigation, creative interfaces, appropriate graphics, sound and video and researched content.**
- 3. Students will create ten frame animations.**
- 4. Students will edit and create new graphics using digital imaging techniques.**
- 5. Students will create multimedia projects which will include sound effects, narrations and music.**
- 6. Students will create a digital movie with sound effects, narrations and music**

**Southern Regional High School District
Course of Study: Multimedia**

Unit One: Creating Multimedia

Essential Questions of Unit One:

- 1. How do you use the PAINT TOOLS and what can they do?**
- 2. What is meant by the term navigation and what is its purpose?**
- 3. How do you create an animation?**
- 4. What is digital imaging and what can do to a photograph? How do find multimedia resources on the INTERNET?**
- 5. How do edit music for multimedia purposes?**
- 6. How do edit digital video?**
- 7. How do you put graphics, sound, animation and video together?**

Assessments:

- 1. Projects using skills learned**
- 2. Hands-on test demonstrating ability to use all skills learned**
- 3. Student's time management**

Content:

- 1. Learning and refining use of the Paint tools.**
- 2. Creating visual content using Paint tools.**
- 3. Creating text and text boxes in the multimedia environment.**
- 4. Developing good navigation strategies using buttons to move around multimedia project.**
- 5. Creating user-friendly interactivity.**
- 6. Adding graphics, sound and video to multimedia projects**

Skills:

- 1. How to use paint tools**
- 2. Proper use of text tools**
- 3. Use proper navigation techniques**
- 4. Use buttons and scripting to create interactivity.**
- 5. Develop ability to import graphics, sound and video.**

Purpose / Rational of the unit:

To develop skills needed to create multimedia projects which are interesting and interactive.

New Jersey Core Curriculum Content Standards:

8.1 (Computer and information literacy) All students will use computer applications to gather and organize information and to solve problems.

A-Basic Computer Skills and Tools

A.5 Produce a multimedia project using text, graphics, moving images, and sound.

A.8 Discuss and/or demonstrate the capability of emerging technologies and software in the creation of documents or files.

B-Application of Productivity Tools

Social Aspects

B.1 Describe the potential and implications of contemporary and emerging computer applications for personal social, lifelong learning, and workplace needs.

B.2 Exhibit legal and ethical behaviors when using formation and technology, and discuss consequences of misuse.

B.3 Make informed choices among technology systems, resources, and services in a variety of contexts.

B.4 Use appropriate language when communicating with diverse audiences using computer and information literacy.

Problem-solving and Decision making

B.9 Create and manipulate information, independently and/or collaboratively, to solve problems and design and develop products.

B.12 Integrate new information into an existing knowledge base and communicate the results in a project or presentation

9.1 (Consumer Family, and Life Skills) All students will demonstrate critical life skills in order to be functional members of society.

A-Critical Thinking

A.1 Communicate, analyze data, apply technology, and problem solve.

B. Self-Management

B.2 Demonstrate responsibility for personal actions and contributions to group activities

C. Interpersonal Communication

C.1 Demonstrate respect and flexibility in interpersonal and group situations.

C.3 Work cooperatively with others to solve a problem.

C.4 Demonstrate appropriate social skills within group activities.

C.6 Participate as a member of a team and contribute to group effort.

Time Frame of Unit:

Ten weeks

Instructional Activities:

- 1. Exercise(s) using Paint Tool palette**
- 2. Text Techniques exercises(s): Gradients; Layering and cookie cutter.**
- 3. Exercises for Adding buttons to move through stack. (navigation)**
- 4. Invisible buttons exercises using maps as buttons.**
- 5. Interactivity exercises: ghostwriter, hide & show, roll credits and slide show.**
- 6. Multimedia project complete with buttons, graphics, sound and video.**

Materials and Resources:

- 1. Computer**
- 2. Projector**
- 3. Hyperstudio Software**
- 4. Handout - tools palette, color palette and button palette**
- 5. Exercise Instruction sheet(s)**
- 6. Multimedia project instructions and guidelines.**
- 7. Evaluation sheets for all exercises and final project.**

Unit of Study: MULTIMEDIA

Unit Two: CREATING FRAME ANIMATIONS

Essential Questions of the Unit:

- 1. What is a storyboard?**
- 2. What is the purpose of a storyboard?**
- 3. What are the steps in creating a frame animation?**
- 4. How do you RUN a frame animation?**

Assessments:

- 1. Computer generated animation projects**
- 2. Student time management**
- 3. Culminating animation project.**

Content:

- 1. Explanation of a storyboard and its benefits.**
- 2. Showing samples of storyboards.**
- 3. Explanation and samples of frame building.**
- 4. Exporting and saving screens.**
- 5. Running the animation.**

Skills:

- 1. Using the paint tools.**
- 2. Visual story telling.**
- 3. Creation of a storyboard.**
- 4. Creating a frame animation**
- 5. Running a frame animation**

Purpose / Rational of the unit:

Students will create a visual story and sketch it out into a storyboard. The storyboard will be used as a guide in creating a frame animation using the paint tools.

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B-Application of Productivity Tools

Social Aspects

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Problem-solving and Decision making

B.9 Create and manipulate information, independently and/or collaboratively, to solve problems and design and develop products.

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9.1 (Consumer Family, and Life Skills) All students will demonstrate critical life skills in order to be functional members of society.

A-Critical Thinking

A.1 Communicate, analyze data, apply technology, and problem solve.

B. Self-Management

B.2 Demonstrate responsibility for personal actions and contributions to group activities

C. Interpersonal Communication

C.1 Demonstrate respect and flexibility in interpersonal and group situations.

C.3 Work cooperatively with others to solve a problem.

C.4 Demonstrate appropriate social skills within group activities.

C.6 Participate as a member of a team and contribute to group effort.

Time Frame of Unit:

Seven weeks

Instructional Activities:

- 1. Simple 5 frame flower animation.**
- 2. Double animation – two objects animated**
- 3. A seasonal animation (Xmas, Easter)**
- 4. The storm animation – three objects animated**
- 5. Final project.**

Materials and Resources:

- 1. Computer**
- 2. Projector**
- 3. Animation software – Hyperstudio**
- 4. Storyboard template**
- 5. Idea sheets**
- 6. Sample animations**

Unit Three: DIGITAL IMAGING

Essential Questions of the Unit:

- 1. What is digital imaging?**
- 2. What tools/software are/is needed to do digital imaging?**
- 3. How do you digitally enhance a graphic?**
- 4. How do you change colors in a graphic?**
- 5. How do you add to an existing graphic?**
- 6. How do you extract unnecessary objects in a graphic?**
- 7. How do you combine objects from one graphic to another?**
- 8. What are the filtering techniques and when are they used?**
- 9. How do you create different text effects?**

Assessments:

- 1. Hands-on Digital Imaging Projects**
 - a. Using the cloning tool -Balloons**
 - b. Copying and pasting between 2 pictures -Skier**
 - c. Adding text and using proportion -Bottles**
 - d. Changing colors and adjusting facial tones - Artist**
 - e. Making a composite picture - Postcard**
- 2. Culminating Activity**
 - a. Self-Portrait**

Content:

- 1. Introduction to the tool palette.**
- 2. Understanding resolution and size of picture**
- 3. Learning to resize pictures**
- 4. Working with layers**
- 5. Copying and pasting objects within a picture and between pictures.**
- 6. Deleting objects: with eraser, rubber stamp, or selector tool.**
- 7. Enhancing pictures - Using tools to improve appearance of a picture.**
- 8. Techniques for changing colors in a picture.**
- 9. Creating different effects using filters.**
- 10. Creating a composite self-portrait.**

Skills:

- 1. Using layers to make composite layers.**
- 2. Copying and pasting objects into layers**
- 3. Changing colors in a picture.**
- 4. Adjusting skin tones**
- 5. Duplicating objects**
- 6. Using filters effectively**
- 7. Resizing photos**
- 8. Enhancing photos to improve appearance.**
- 9. Creating a composite picture.**

Purpose / Rational of the unit:

Students will be able to manipulate photos and make composite pictures which can then be used in a multimedia project.

New Jersey Core Curriculum Content Standards:

8.1 (Computer and information literacy) All students will use computer applications to gather and organize information and to solve problems.

A-Basic Computer Skills and Tools

A.5 Produce a multimedia project using text, graphics, moving images, and sound.

A.8 Discuss and/or demonstrate the capability of emerging technologies and software in the creation of documents or files.

B-Application of Productivity Tools

Social Aspects

B.1 Describe the potential and implications of contemporary and emerging computer applications for personal social, lifelong learning, and workplace needs.

B.2 Exhibit legal and ethical behaviors when using formation and technology, and discuss consequences of misuse.

B.3 Make informed choices among technology systems, resources, and services in a variety of contexts.

B.4 Use appropriate language when communicating with diverse audiences using computer and information literacy.

Problem-solving and Decision making

B.9 Create and manipulate information, independently and/or collaboratively, to solve problems and design and develop products.

B.12 Integrate new information into an existing knowledge base and communicate the results in a project or presentation

9.1 (Consumer Family, and Life Skills) All students will demonstrate critical life skills in order to be functional members of society.

A-Critical Thinking

A.1 Communicate, analyze data, apply technology, and problem solve.

B. Self-Management

B.2 Demonstrate responsibility for personal actions and contributions to group activities

C. Interpersonal Communication

C.1 Demonstrate respect and flexibility in interpersonal and group situations.

C.3 Work cooperatively with others to solve a problem.

C.4 Demonstrate appropriate social skills within group activities.

C.6 Participate as a member of a team and contribute to group effort.

Time Frame of Unit:

Ten weeks

Instructional Activities:

- 1. Introduction to the tool palette and layers: The balloon image**
- 2. Copying and pasting objects between two or more pictures: The Skier**
- 3. Deleting and adding objects and changing colors: The Artist**
- 4. Creating a composite picture: The postcard**
- 5. Final project – Self Portrait**

Materials and Resources:

- 1. Computer**
- 2. Projector**
- 3. Digital software**
- 4. Pictures for student exercises**
- 5. Photoshop 7 Reference book(s)**
- 6. Instruction sheets for student projects.**
- 7. Evaluation sheets for exercises and projects.**

Unit of Study

Unit 4 Title: SOUND EDITING

Essential Questions of the Unit:

- 1. What is sound editing?**
- 2. How do you create sound effects?**
- 3. How do you reduce noise in a recording?**
- 4. How do extract sound bytes from a recording?**
- 5. How do you narrate in a sound program?**
- 6. How do you use different tracks to create musical backgrounds?**
- 7. What are the different file formats and which is the right one?**
- 8. How do you add sound to a multimedia project?**

Assessments:

- 1. Hands-on sound editing projects**
- 2. Teacher created test**
- 3. Student's time management**

Content:

- 1. Discussion on digital vs. analog recording.**
- 2. Capturing a digital sound or recording.**
- 3. Editing sound or a recording**
- 4. Adding tracks when editing.**
- 5. Adding a voice to a sound track.**
- 6. Understanding file formats for saving and using in multimedia projects.**

Skills:

- 1. Recognizing digital sound formats**
- 2. Capturing sound from recording**
- 3. Editing sound (deletions, fades, noise removal)**
- 4. Adding tracks**
- 5. Adding a voice over**
- 6. Adding edited sound(s) into multimedia projects**

Purpose / Rational of the unit:

To create and edit sound effects and sound files that can be used in multimedia productions.

New Jersey Core Curriculum Content Standards:

8.1 (Computer and information literacy) All students will use computer applications to gather and organize information and to solve problems.

A-Basic Computer Skills and Tools

A.5 Produce a multimedia project using text, graphics, moving images, and sound.

A.8 Discuss and/or demonstrate the capability of emerging technologies and software in the creation of documents or files.

B-Application of Productivity Tools

Social Aspects

B.1 Describe the potential and implications of contemporary and emerging computer applications for personal social, lifelong learning, and workplace needs.

B.2 Exhibit legal and ethical behaviors when using formation and technology, and discuss consequences of misuse.

B.3 Make informed choices among technology systems, resources, and services in a variety of contexts.

B.4 Use appropriate language when communicating with diverse audiences using computer and information literacy.

Problem-solving and Decision making

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9.1 (Consumer Family, and Life Skills) All students will demonstrate critical life skills in order to be functional members of society.

A-Critical Thinking

A.1 Communicate, analyze data, apply technology, and problem solve.

B. Self-Management

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C. Interpersonal Communication

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Time Frame of Unit: Three Weeks

Instructional Activities:

- 1. Editing a sound clip to fit a multimedia project. (Sound-Flower)**
- 2. Editing noise and other unwanted objects out. (Noise Removal)**
- 3. Editing sound effects and adding them to a multimedia project.**
- 4. Sequencer project**
- 5. Adding a voice-over to a sound track. DJ exercise.**
- 6. Adding narration to an animation.**
- 7. Spiderman narration project.**

Materials and Resources:

- 1. Computer with sound card**
- 2. Projector**
- 3. Sound Editing software – Audacity.**
- 4. Headphones**
- 5. Microphones**
- 6. Instruction sheets for activities**
- 7. Evaluations sheets for activities**

Unit 5: DIGITAL VIDEO EDITING

Essential Questions of the Unit:

- 1. What is video editing?**
- 2. How do you create a storyboard as a guide to video storytelling.**
- 3. How do you edit video?**
- 4. How do use effects on video?**
- 5. How can you add text to video?**
- 6. How do you add narration to a video program?**
- 7. How do you add sound?**
- 8. What are the different file formats and which is the right one?**

Assessments:

- 1. Hands-on video editing projects**
- 2. Storyboarding**
- 3. Student's time management**
- 4. Cooperative learning**
- 5. Newsreel: Compilation of video footage.**
- 6. One minute commercial**

Content:

1. Discussion on digital vs. analog video.
2. The purpose of collections for projects.
3. Creating a movie with still pictures.
4. Adding a musical background for interest.
5. Adding titles, credits, and transitions.
6. Creating a movie with digital video.
7. Adding effects to video.
8. Learning video editing techniques
9. Adding narration to video.
10. Using a digital video camera.

Skills:

1. Creating and using a storyboard
2. Video editing techniques
3. Using video effects
4. Adding narration
5. Adding sound
6. Recognizing video formats
7. Creating a digital movie
8. Using a digital camera with sound

Purpose / Rational of the unit:

Students will use their multimedia skills to create, produce, shoot, and edit a 60 second commercial.

New Jersey Core Curriculum Content Standards:

8.1 (Computer and information literacy) All students will use computer applications to gather and organize information and to solve problems.

A-Basic Computer Skills and Tools

A.5 Produce a multimedia project using text, graphics, moving images, and sound.

A.8 Discuss and/or demonstrate the capability of emerging technologies and software in the creation of documents or files.

B-Application of Productivity Tools

Social Aspects

B.1 Describe the potential and implications of contemporary and emerging computer applications for personal social, lifelong learning, and workplace needs.

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Problem-solving and Decision making

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A-Critical Thinking

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B. Self-Management

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C.1 Demonstrate respect and flexibility in interpersonal and group situations.

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C.6 Participate as a member of a team and contribute to group effort.

Time Frame of Unit: Seven Weeks

Instructional Activities:

- 1. Create a video with still pictures and a musical background. (Landscapes)**
- 2. Add a voice over to the musical background. (DJ)**
- 3. Add a narration and sound effects to an animation. (Spiderman)**
- 4. Edit video; add titles. (Wildlife video)**
- 5. Newsreel: Compilation of video footage.**
- 6. One minute commercial**

Materials and Resources:

- 1. Computer with video and sound capabilities**
- 2. Projector**
- 3. Digital cameras**
- 4. Movie Editing software-Windows MovieMaker**
- 5. Microphone**
- 6. Headphones**
- 7. Still Photos**
- 8. Musical clips to be used as background**
- 9. Spiderman animation**
- 10. Wildlife videos**
- 11. Space videos**
- 12. Instructional activity sheets**
- 13. Evaluation sheets for each activity**