Curriculum Map: Multimedia I

Course: TECHNOLOGY ELECTIVE Sub-topic: General

Grade(s): 9 to 12

Course Description: Students will be introduced to professional production techniques and equipment used within the communications industry. Students learn how to utilize HD video cameras, professional editing software, and hardware. Another large part of this class focus will be film analysis. Students will learn the industry techniques used to create multimedia video. Students will have the opportunity to create commercials, documentaries, short films, and other projects related to the Communications industry. Students looking to seek careers in Business Marketing, Film, Communications, Journalism, or any related career would greatly benefit from this class.

Unit: Unit 1

Unit Description: Understanding television

- Live
- Taped
- Improvisational

Television

- Types of programs
  - News (General Sports, Weather, Traffic)
  - Sports
  - Promotional
  - Advertisements
  - Animation (Cartoons, Commercials)

- Documentaries

Film

- Types of movies
  - Documentary
  - Entertain
  - Promotional
  - Instructional
  - Medical

STANDARDS:

STANDARDS

State: Pennsylvania STEELS K-12 - Science (2022)

3.5.9-12.K (Advanced)	Use a computer simulation to model the impact of proposed solutions to a complex real-world problem with numerous criteria and constraints on interactions within and between systems relevant to the problem.	
3.5.9-12.P (Advanced)	Apply a broad range of design skills to a design thinking process.	
3.5.9-12.U (Advanced)	Evaluate and define the purpose of a design.	

Topic: Types of Television Programs

Topic: Types of Movies

Unit: Unit 2

Unit Description: Camera Usage

- Sign in – out procedures
- Correct handling / storage
- Correct usage

SD CARDS

- Handling
- Storage
- Marking cassette and case
- Pre roll
- Backspacing
- Glitches

Functions:

- White Balance
- Focus
- Shutter speed

Lens Types

- Wide Angle
- Fish Eye

- Regular lens
- Uses of each

Press Passes
Guidelines

STANDARDS:

STANDARDS

State: Pennsylvania STEELS K-12 - Science (2022)

3.5.9-12.CC (Advanced)	Analyze how technology transfer occurs when a user applies an existing innovation developed for one function for a different purpose.	
3.5.9-12.EE (Advanced)	Connect technological and engineering progress to the advancement of other areas of knowledge and vice versa.	
3.5.9-12.GG (Advanced)	Evaluate how technology and engineering have been powerful forces in reshaping the social, cultural, political, and economic landscapes throughout history.	
3.5.9-12.LL (Advanced)	Analyze the stability of a technological system and how it is influenced by all of the components in the system, especially those in the feedback loop.	

Topic: Video Production Equipment

Unit: Unit 3

Unit Description: Moving the camera

- Dolly
- Trucking
- Panning
- Tilting
- Zooming
- Tripod correct uses
- Vertigo Shot

Shot Rules

- Cut off points

- Depth of field
- Framing
- 1/3 rule,
- lead room
- head room

Shot Names

- Extreme Close up
- Profile
- Close up
- Medium shot
- Long Shot
- Extreme Long Shot
- Establishing shot
- CANT
- Camera Right angle
- Camera Left angle

- Low angle (Inferior Shot)
- High angle (Superior shot)

STANDARDS:

STANDARDS

State: Pennsylvania STEELS K-12 - Science (2022)

3.5.9-12.U (Advanced)	Evaluate and define the purpose of a design.	
3.5.9-12.X (Advanced)	Implement the best possible solution to a design using an explicit process.	
3.5.9-12.AA (Advanced)	Safely apply an appropriate range of making skills to a design thinking process.	
3.5.9-12.OO (Advanced)	Use project management tools, strategies, and processes in planning, organizing, and controlling work.	
3.5.9-12.PP (Advanced)	Demonstrate the use of conceptual, graphical, virtual, mathematical, and physical modeling to identify conflicting considerations before the entire system is developed and to aid in design decision making.	

Topic: Camera Movements

Topic: Shot Rules

Topic: Camera Shots

Unit: Unit 4

Unit Description: In Camera Transitions

- Cut
- Swish pan
- Through the camera
- Cutting on the action
- Color matching
- Psychological Cutting on the action
- Matching the action

Sequence Shots for interviews

- Establishing shot (introduction)

- Medium shot interviewer (Question)
- Medium / close up of interviewee
- Establishing shot with reaction
- Medium / close up interviewer
- Medium / Close up interviewee
- (Repeat if needed)
- Establishing shot (Signing off) Closure
- Point of view

In Camera Transitions

- Cut
- Swish pan
- Through the camera
- Cutting on the action
- Color matching
- Psychological Cutting on the action.

STANDARDS: **STANDARDS**

State: Pennsylvania STEELS K-12 - Science (2022)

3.5.6-8.G (Advanced)	Analyze how an invention or innovation was influenced by the context and circumstances in which it is developed.	
3.5.6-8.J (Advanced)	Use tools, materials, and machines to safely diagnose, adjust, and repair systems.	
3.5.6-8.K (Advanced)	Use devices to control technological systems.	

Topic: Camera Transitions

Topic: Interview Sequence

Topic: In Camera Transitions

Unit: Unit 5

Unit Description: Microphones

- Importance of sound
- Sets mood, Changes, sequences, psychological

Microphone Types

- Omni Directional
    - Camera microphone
- Unidirectional
    - Boom Microphone
    - Lavalier

STANDARDS: **STANDARDS**

National: ITEEA Standards - Technological & Engineering Literacy (2020)

AT.11.A (Advanced)	Brainstorm people's needs and wants and pick some problems that can be solved through the design process.	
AT.11.B (Advanced)	Build or construct an object using the design process.	
AT.11.C (Advanced)	Investigate how things are made and how they can be improved.	
AT.11.D (Advanced)	Identify and collect information about everyday problems that can be solved by technology, and generate ideas and requirements for solving a problem.	
AT.12 (Advanced)	Students will develp the abilities to use and maintain technological products and systems.	
AT.12.D (Advanced)	Follow step-by-step directions to assemble a product.	

Topic: Importance of Audio

Unit: Unit 6

Unit Description: Importing Clips to Computer

- Project naming / saving
- Naming
- Correct camera usage
- Correct saving directory
- Reviewing before recording / Less Waste of HD space.
- USING TIME WISELY

Importing Audio to Computer

- Copy write laws
- Ripping Music
- Where does it go?
- How do I Import the Audio into my project?

STANDARDS: **STANDARDS**

National: ITEEA Standards - Technological & Engineering Literacy (2020)

AT.12.P (Advanced)	Use computers and calculators to access, retrieve, organize, process, maintain, interpret, and evaluate data and information in order to communicate.	
AT.13.D (Advanced)	Investigate and assess the influence of a specific technology on the individual, family, community, and environment.	
AT.13.H (Advanced)	Idenify trends and monitor potential consequences of technological development.	
AT.13.J (Advanced)	Collect information and evaluate its quality.	
AT.13.L (Advanced)	Use assessment techniques, such as trend analysis and expectation, to make decisions about the future development of technology.	
NT.2.B (Advanced)	Systems have parts or components that work together to accomplish a goal.	
NT.2.C (Advanced)	Tools are simple objects that help humans complete tasks.	
NT.2.D (Advanced)	Different materials are used in making things.	

Topic: Importing information from external device

Unit: Unit 7

Unit Description: Editing in a Non Linear Environment

STANDARDS: **STANDARDS**

National: ITEEA Standards - Technological & Engineering Literacy (2020)

AT.13.H (Advanced)	Idenify trends and monitor potential consequences of technological development.	
AT.13.J (Advanced)	Collect information and evaluate its quality.	
AT.13.L (Advanced)	Use assessment techniques, such as trend analysis and expectation, to make decisions about the future development of technology.	
DW.17 (Advanced)	Students will develop an understanding of and be able to select and use information and communication technologies.	
DW.17.B (Advanced)	Technology enables people to communicate by sending and receiving information over a distance.	
DW.17.C (Advanced)	People use symbols when they communicate by technology.	

Topic: Non Linear Editing

Unit: Unit 8

Unit Description: Persuasive Commercial Project

STANDARDS: **STANDARDS**

National: ITEEA Standards - Technological & Engineering Literacy (2020)

AT.13.A (Advanced)	Collect information about everyday products and systems by asking questions.	
AT.13.D (Advanced)	Investigate and assess the influence of a specific technology on the individual, family, community, and environment.	
AT.13.J (Advanced)	Collect information and evaluate its quality.	
AT.13.K (Advanced)	Synthesize data, analyze trends, and draw conclusions regarding the effect of technology on the individual, society, and the environment.	
AT.13.L (Advanced)	Use assessment techniques, such as trend analysis and expectation, to make decisions about the future development of technology.	

Topic: Marketing for Persuasion

Unit: Unit 9

Unit Advance Editing

Description: Adobe Premiere Pro
 a) browser
 b)viewer
 c) canvas
 d)timeline
 e) menus
 f) Sequences
 g) tools
 h) effects

Use of tools and commands
blade tool
selection tool
uses of right click
importing
file management
using audio
  a) video audio / music audio
       a) usable formats

Correct hookup of DV cameras
  a) procedures
Director Roles

leading the group for a given outcome
planning
utilizing: proposal screenplay and storyboards to produce a given outcome

STANDARDS: **STANDARDS**

National: ITEEA Standards - Technological & Engineering Literacy (2020)

AT.11.O (Advanced)	Redefine a design by using prototypes and modeling to ensure quality, efficiency, and productivity of the final product.	
AT.11.Q (Advanced)	Develop and produce a product or system using a design process.	
AT.12.D (Advanced)	Follow step-by-step directions to assemble a product.	
NT.1.B (Advanced)	All people use tools and techniques to help them do things.	
NT.1.D (Advanced)	Tools, materials, and skills are used to make things and carry out tasks.	
NT.1.E (Advanced)	Creative thinking and economic and cultural influences shape technoligical development.	

Topic: Adobe Premiere Pro

Unit: Unit 11

Unit Description: Advanced Editing

-Greenscreening
-keyframing
-Special Effects
-After Effects
-Cropping

STANDARDS: **STANDARDS**

National: ITEEA Standards - Technological & Engineering Literacy (2020)

AT.12.H (Advanced)	Use information provided in manuals, protocols,or by experienced people to see and understand how things work.	
AT.12.J (Advanced)	Use computers and calculators in various applications.	
AT.12.K (Advanced)	Operate and maintain systems in order to achieve a given purpose.	
AT.12.L (Advanced)	Document processes and procedures and communicate them to different audiences using appropriate oral and written techniques.	
AT.13.A (Advanced)	Collect information about everyday products and systems by asking questions.	
AT.13.J (Advanced)	Collect information and evaluate its quality.	
AT.13.K (Advanced)	Synthesize data, analyze trends, and draw conclusions regarding the effect of technology on the individual, society, and the environment.	

AT.13.L (Advanced)	Use assessment techniques, such as trend analysis and expectation, to make decisions about the future development of technology.	

Topic: Advanced Editing Techniques

Unit: Unit 12

Unit Description: Students will work to create a real world projects 3-5 minutes displaying their technical knowledge.

STANDARDS:

STANDARDS

National: ITEEA Standards - Technological & Engineering Literacy (2020)

AT.12.I (Advanced)	Use tools, materials, and machines safely to diagnose, adjust, and repair systems.	
AT.12.N (Advanced)	Troubleshoot, analyze, and maintain systems to ensure safe and proper function and precision.	
AT.13.A (Advanced)	Collect information about everyday products and systems by asking questions.	
AT.13.F (Advanced)	Design and use instruments to gather data.	
AT.13.H (Advanced)	Idenify trends and monitor potential consequences of technological development.	
AT.13.J (Advanced)	Collect information and evaluate its quality.	
NT.1.B (Advanced)	All people use tools and techniques to help them do things.	
NT.1.D (Advanced)	Tools, materials, and skills are used to make things and carry out tasks.	

Topic: Video Production - Completion of Sequence of Proposal, Screenplay, Storyboard, Film, Edit.