

MEDIA TECHNOLOGY 1

JUNE 2004

COURSE NUMBER 770

TEACHER: MR. JOSEPH PORTELLO

MR. DAN MULLER

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SUPERINTENDENT: DR. JOHN HANNUM

Name of Course: Media Technology 1

Level of Course: Modified

Prerequisites: None

Grades Levels Offered to: 9 through 12

Course Number: 770

Number of Credits: 5

Length: Eighteen Week Curriculum/ 90 days

Recommended Class Size: Maximum 18 (Equipment Restrictions)

Teacher Recommendation: Teacher of Television Production, Technology Education Teacher.

Revised Date and Teachers Names: Mr. Joseph Portello (June 2004)

Purpose:

The use of mass communications media touches everyone's life today. We are in instant contact with events that are happening all over the world. The number of television channels have increased from 13 to over 200 in the past twenty years. With the inclusion of web based broadcasts any one can produce their own show. This increase in broadcasting has created a demand for qualified personnel to work in this industry.

Media Technology 1 introduces students to the equipment and processes utilized in the television industry. The experiences of this course will give students a basic knowledge of terminology and introductory skills in using selected equipment.

In addition to technical skills the course will give students the opportunity to develop other skills such as researching a topic, keyboarding, writing, editing, teamwork and public speaking.

High Point Regional High School's curriculum and instruction are aligned to the State's Core Curriculum Content Standards and address the elimination of discrimination by narrowing the achievement gap, by providing equity in educational programs and by providing opportunities for students to interact positively with others regardless of race, creed, color, national origin, ancestry, age, marital status, affection or sexual orientation, gender, religion, disability or socioeconomic status.

Method of Instruction

This Media Technology 1 course will provide students with a basic knowledge in the use of equipment and processes utilized in the television industry. Through the use of lectures, demonstrations, guided practice and group and individual projects students will learn the terminology and steps used in the creation of television shows.

In each unit the instructor will introduce and demonstrate the rolls, procedures and operations covered in that unit. The instructor will then guide the students through a simulated practical hands on experience. The students will then be given a project that they will produce using the skills covered in that unit.

This course is intended to be both an academic and a hands on class. Whenever possible projects will be “Real Life’ practical experiences. This class will work with the Media 2 and Media 3 classes to provide materials for our cable show “The Wildcat Report”.

The Baldrige Process will be the means of addressing the personal relevance to the student enrolled in this course. This course concentrates on giving the students the opportunity personally and professionally to develop leadership skills. Team work is also emphasized. All students are given the opportunity to be the team leader.

General Objectives;

At the conclusion of this course students will be able to

1. Outline the safety procedures for this class.
2. Stress the proper care of the equipment used in the class.
3. Know the production process, elements and types of productions.
4. Develop an understanding of the relationships of the production crew.
5. Operate hand held and studio cameras.
6. Learn about light and it's use in television.
7. The use of different kinds of audio equipment.
8. Identify, differentiate and utilize the various formats and sizes of VTR's.
9. Recognize the importance of television as a visual art form.
10. Know the advantages and disadvantages of using a Television studio.
11. Write scripts for Television shows.
12. To enhance their productions using special effects.
13. Edit their productions.
14. Be aware of the proper maintenance of audio and video equipment.

Lecture/Discussion	Objectives 1,2,3,5,6,7,8
Class Projects	Objectives 3,4,7,11,12,13
Problem Based Learning	Objectives 2,4,7,8,9
Computer Based Learning	Objectives 11,12,13
Field Trips	Objectives 3,10

Measurement of success in meeting these general objectives will be carried out through the following methods of assessment;

Crew Work	Objectives 2,4,9,14
Quizzes/Tests/Final Exam	Objectives 1,3,5,6,7,8
Projects	Objectives 11,12,13

Standards Targeted Throughout the Curriculum

New Jersey Core Content Standards and Cumulative Progress Indicators.

- Demonstrate skills needed to effectively access and use technology based materials through keyboarding, troubleshooting, retrieving and managing information. (NJCCS 2.0, #3)
- Use technology and other tools to solve problems, collect data and make decisions. (NJCCS 2.0, #7)
- Identify and evaluate the validity of alternative solutions. (NJCCS 3.0, #11)
- Apply problem solving skills to original and creative/design projects. (NJCCS 3.0, #15)
- Use time efficiently and effectively. (NJCCS 4.0, #10)

New Jersey Core Curriculum Content Standards

Cross-Content Workplace Readiness Standards

- Standard 1: All students will develop career planning and workplace readiness skills
- Standard 2: All students will use technology, information and other tools.
- Standard 3: All students will use critical thinking, decision-making and problem-solving skills.
- Standard 4: All students will demonstrate self-management skills.
- Standard 5: All students will apply safety principles.

New Jersey Core Curriculum Content Standards

Visual and Performing Arts

- Standard 1.2: All students will refine perceptual, intellectual, physical and technical skills through creative dance, music, theater, and /or visual arts.
- Standard 1.3: All students will use arts elements and arts media to produce artistic products and performances.
- Standard 1.4: All students will demonstrate knowledge of the process of critique.

New Jersey Technology Standards (TEAN)

- Apply values and make rational decisions about technological issues. (NJTES 1.19)
- Create multimedia presentations to inform others about design concepts, products and events. (NJTES 4.17)
- Access and search the Internet for relevant information while conducting research. (NJTES 6.16)
- Generate original ideas based on previous knowledge and research.(NJTES 7.41)

Standards of Technological Literacy from the (TFAA) Technology for All Americans Project and the International Technology Education Association. (ITEA)

- In order to comprehend the scope of technology, students should learn that technology is closely linked to creativity which has resulted in innovation. (TFAA#1, H)
- In order to recognize the core concepts of technology, students should learn that systems thinking involves considering how every part relates to others. (TFAA #2, N)

Specific Behavioral Objectives and Timelines:

Current school structure: One day = One 42 minute period. Many units of study are woven together to simulate actual real world experiences.

Proficiencies-Measurable Objectives and Estimated Timelines:

Unit 1 Course Introduction and Safety Guidelines

Goal:

Time: 3Days/Ongoing

- To introduce the students to the course expectations, discipline policy, and safety guidelines

Objectives:

Students will be able to:

- Understand the course expectations and timeline for instruction
- Understand the discipline policy that relates to behavior in the class.
- Outline the safety procedures for the class.
- Stress the proper care of the equipment used in the class.

Assignments:

- Homework: Watch selected TV shows and fill in worksheet

Lab activities;

- None

Audio-Visual needs;

- Room 432 (TV Studio)

Computer Needs:

- None

Assessment Method:

- Authentic: Teacher Observation
- Traditional: Safety Quiz

Standards targeted via this unit:

- NJCCS 4.0, #10
- NJCCWRS 5.0

Unit 2: Introduction: What is Television Production

Goal:

Time:3Days/Ongoing

- Students will be made aware of the production process, elements and types of production.

Objective:

Students will be able to

- Understand the complexity of television production
- Develop an awareness of television production elements

Assignments:

- Class work: Baldrige in the classroom process

Lab Activities;

- None

Audio-Visual Needs

- 1950's, 60's and 70's TV show tapes
- Room 432 (TV Studio)

Computer Needs:

- None

Assessment Method

- Traditional: Test
- Authentic: Student Demonstrations

Standards targeted via this unit:

- NJTES 1.19
- TFAA #1, H
- TFAA #2, N
- NJCCS 1.4

Unit 3: The Production Process:

Goal:

Time: 2 Days

- Students will develop an understanding of the relationships of production crew.

Objectives:

- Students will know the functions and duties of the production crew to include
- Executive Producer, Floor Manager, VCR Operator, Producer, Audio Engineer, Videotape Editor, Director, Script Writer, Switcher, Graphic Artist
Make-up Artist, Grip, Gaffer, Camera, Lighting Director

Students will develop an understanding of the various types of television productions to include:

- Commercial Broadcast
- Closed Circuit Educational
- Video Entrepreneur
- Industrial
- Home Video
- Cable
- Surveillance

Assignments:

- Class work: In-put Out-put types of cables worksheet
- Homework: Write a 30 second radio script for a consumer product

Lab Activities:

- A/V set up system project
- Produce radio script on air in classroom

Audio-Visual Needs;

- Room 432 (TV Studio)

Computer Needs;

- None

Assignment Method;

- Traditional: Test/Quizzes
- Authentic: Student demonstrations, student observations, oral exams

Standards targeted via this unit:

- NJCCS 2.0, #7
- NJCCS 3.0, #11

- NJCCS 4.0, #10
- NJCCWWRS Standards 2,4,5

Unit 4: The Television Camera:

Goal:

Time: 1Week/Ongoing

- The students will be introduced to the studio and portable video cameras. Through hands on experience they will become proficient in their use.

Objectives:

- Students will learn camera shots and the use of camera angles to include the following:
- Zoom, Headroom, Nose Room, Basic Shots, Camcorders, Dolly Lines of Interest, Tri-Pods, Truck, Focus, Framing, Pan Balance of Symmetry

Assignments:

- Class work: Set up and white balance studio cameras
- Class work: Demonstration of camera shots

Lab Activities:

- Tour of High Point video project

Audio/Visual needs:

- Room 432 (TV Studio)

Computer Needs:

- None

Assessments Methods:

- Authentic: Student demonstrations, teacher observations, class participations
- Traditional: Unit test

Standards targeted via this unit:

- NJCCS 2.0, #7
- NJCCS 3.0, #11
- NJCCS 3.0, #15
- NJCCS 4.0, #10
- NJCCWRS Standards 1,2,3,4,5

Unit 5: Camera Lenses:

Time 3 days:

Goal:

- Students will learn how the use of different lenses can affect the style of the shot.

Objectives:

- Students will become proficient in the use and operation of lenses to include:
Focal Length Depth of Field F-Stops Back Light Focus

Assignments:

- Class work: Demonstration of types of lenses
- Class work: Research Internet on uses of lenses

Lab Activities:

- None

Audio Visual Needs:

- None

Computer Needs:

- Room 432 Computer Lab

Assessment Method:

- Traditional: Quiz

Standards targeted via this unit;

- NJTES 7.41
- TFAA #1,H
- NJCCS 2.0, #3
- NJCCS 2.0, #7
- NJTES 6.16

Unit 6: Lighting:**Goal:**

Time: 3 Days/Ongoing

- Students will learn how the use of light can affect the mood of the production.

Objectives:

- Students will be able to set up, recognize and demonstrate the following lighting procedures and terminology.

Hard Light	Kelvin Temp	Soft Light	Contrast	Light Meter
Spot Light	Cross	Flood Light	Dimmers	Back Light
Light Limits	Fresnel	Diffusion	Barn Doors	Bounce
Grid	Lighting People		Skin	Three Point
Four Point	Fill Light			

Assignments:

- Class work: Lighting Board

Lab Activities:

- Set lighting project

Audio/Visual Needs.

- Room 432 (TV Studio)

Computer Needs:

- None

Assessment Method:

- Authentic: Student demonstrations and teacher observations
- Traditional: Quizzes

Standards targeted via this unit:

- NJCCS 2.0, #9
- NJCCS 3.0, #11
- NJCCS 3.0, #15

Unit 7: Audio:

Goal

Time: 1 Week/ Ongoing

- Students will learn the use of different audio equipment.

Objectives:

- Students will be able to identify and utilize the following audio equipment and functions.

Voice Tract	Unidirectional	Omni directional	Shot-Gun	Ribbon
Room Tone	Sound Effects & Music	Hand Held	Floor Stand	
Wireless	Table Stands	Dynamic	Ceramic	Crystal
Lavalier	Mixer	Copyrights		

Assignments:

- Class work: Microphone Mixer demonstration
- Class work: Identification of types of microphones

Lab Activities:

- Use of different microphones by students
- Sound recording project using wireless microphones

Audio/Visual Needs:

- Room 432 (TV Studio)

Computer Needs:

- None

Assessment Method:

- Authentic: Student project on use of audio
- Traditional: Test, class participation

Standards targeted via this unit:

- NJCCS 2.0, #7
- NJCCS 3.0, #11
- NJCCS 4.0, #10
- NJTES 4.16
- NJTES 7.14

Unit 8: The Videotape Recorder:

Goal:

Time: 2 Days/ Ongoing

- Students will be able to identify, differentiate, and utilize the various formats and sizes of machines and tapes.

Objective:

- Students will show competency in the following.

Recording the audio signal	Tracking	Recording the video signal
VTR Formats	Tension Control	Inter manufacturer formats
Audio Level	Video Level	Videotape Sizes
Maintenance	Environment and Care	Test Recording

Assignments:

- Class work: Practice using slate on character generator
- Class work: Demonstration of switcher/fader unit

Lab Activities:

- Slate and color project

Audio/Visual Needs:

- Room 432 (TV Studio)

Computer Needs:

- None

Assessment Method:

- Authentic; Student demonstrations, class participation, crew work
- Traditional: Test/Quizzes

Standards targeted via this unit;

- NJCCS 2.0, #3
- NJCCS 3.0, #11
- NJCCS 3.0, #15
- NJCCS 4.0, #10
- NJCCWRS Standards 1,2,4
- NJTES 7.41

Unit 9: Visual Materials:**Goal:**

Time: 4 Days/Ongoing

- Students will recognize the importance of television as a visual art form.

Objective:

- Students will be expected to recognize the value of using the following materials in their productions.

Visualization	Photographs	Switcher Effects	Film & Tape	Digital Effects
Artwork	Dimensional	Contrast	Talent	Props
Scenery				

Assignments:

- Class work: Chroma Key demonstration
- Class work: Mat Key demonstration

Lab Activities:

- Set design project

Audio/Visual Needs;

- Room 432 (TV Studio)

Computer Needs:

- None

Assessment Method:

- Authentic: Student set creation, student demonstrations, student observations
- Traditional: None

Standards targeted via this unit:

- NJTES 1.19
- TFAA #1, H
- TFAA #2, N

- NJCCS 3.0, #15
- NJCCS 4.0, #10
- NJCCWRS Standards 1&2

Unit 10: Script Writing for Television:

Goal: Time: 1 Week/Ongoing

- Students will learn to write scripts for television with the understanding that television is a visual medium.

Objective:

- Students will learn to plan, develop, research and visualize their script.
- Students will learn the value of rewrites in their work.
- Students will work with the director in the interpretation of the script.

Assignments:

- Homework: Create an outline script
- Class work: Create a word for word TV commercial script

Lab Activities:

- Production of 30 second TV commercial

Audio/Visual Needs:

- Room 432 (TV Studio)

Computer Needs:

- Room 431 Computer Lab

Assessment Method:

- Authentic: Student written portfolios, teacher observations, student self-assessment
- Traditional: Student participation, crew work on productions

Standards targeted via this unit:

- NJTES 4.16
- NJTES 6.16
- NJTES 7.41
- TAFF #1, H
- NJCCS 2.0, #3
- NJCCWRS Standards 1,2,3,4,5

Unit 11: Studio Production Techniques:

Goal: Time: 3 Days/Ongoing

- Students will learn the advantages and disadvantages of using a Television studio.

Objective:

- Students will experience various studio techniques and elements involved in studio production to include:

Physical Space	Acoustics	Props	Traffic Lighting
Scenery	Control Room		

Assignments:

- Class work: Interview Demonstration

Lab Activities:

- Interview Show Project

Audio/Visual Needs

- Room 432 (TV Studio)

Computer Needs:

- None

Assessment Method:

- Authentic: Student presentations
- Traditional; Test/quizzes

Standards targeted via this unit;

- NJTES 4.16
- TFAA #1, H
- TFAA #2, N
- NJCCS 2.0, #7
- NJCCS 3.0, #11

Unit 12: Electronic Special Effects:

Time: 2 Days/Ongoing

Goal:

- Students will learn to enhance their productions using special effects.

Objective:

- Students will develop an understanding of various video techniques using the following equipment.

Switcher	Split Screen	Fader	Corner Insert	Wipes
Superimposition	Chroma			

Assignment:

- Class work: Demonstration of Switcher/Fader
- Class work: Character Generator
- Class work: Special Effects Generator

Lab Activities

- Blue Screen Project

Audio/Visual Needs:

- Room 432 (TV Studio)

Computer Needs:

- None

Assessment Method:

- Authentic: Student demonstrations, teacher observation, student presentations
- Traditional: None

Standards Targeted via this unit:

- NJTES 4.16
- NJTES 7.41

- NJCCS 2.0, #3
- NJCCS 2.0, #7
- NJCCS 3.0, #15
- NJCCS 4.0, #15
- NJCCS Standard 1.3
- NJCCS Standard 1.4

Unit 13: Electronic Videotape Editing:

Time: 1 Day/Ongoing

Goal:

- Students will learn to put together various video scenes to tell a story.

Objective:

- Students will be able to:
 - Assemble raw footage
 - Insert Video into a finished tape
 - Insert Audio into a finished tape
 - Add a voice over to a finished tape

Assignments:

- Classwork: Demonstration of Linear Editing System
- Class work: Demonstration Cuts, Fades, Dissolves, Takes

Lab Activities:

- Tour of High Point Project

Audio/Visual needs:

- Room 432 (TV Studio)

Computer Needs:

- None

Assessment Method:

- Authentic: Student demonstrations
- Traditional: Unit Test

Standards targeted via this unit:

- NJCCWRS Standards 1,2,3,4
- NJCCSVPA Standards 1.2, 1.3, 1.4
- NJCCS 2.0, #3
- NJCCS 2.0, #7
- NJCCS 3.0, #15
- NJCCS 4.0, #10

Unit 14: Unusual or Specialized TV Equipment and New Products:

Goal:

Time: 1 Day/Ongoing

- Students will be exposed to advances in the technology of Television

Objective:

- Students will cover the basics of new products to include:
 - Laser Disk DVD's Quick Time Movies CD-Rom
 - Video Projectors HDTV

Assignments:

- Class work: Research New Products

Lab Activities:

- New Equipment Research Project

Audio/Visual Needs

- None

Computer Needs:

- Computer Lab Room 431

Assessment Method:

- Authentic: Student Portfolio on New Products

Standards targeted via this unit:

- NJTES 7.38
- NJTES 7.41
- TFAA #1, H
- NJCCS 2.0, #3
- NJCCS 2.0, #7

Unit 15: Video Maintenance:

Goal:

Time: 2 Days/Ongoing

- Students will be aware of proper maintenance of video and audio equipment.

Objective:

- Students will be able to
- Properly Store Equipment
- Battery Care
- Protection of Video Tape
- Cleanness of Studio

Assignments:

- Class work: Lecture on Maintenance

Lab Activities:

- Ongoing Maintenance and /care of Equipment

Audio/Visual Needs:

- Room 432 TV Studio)

Assessment Method;

- Authentic; Teacher observation

Standards targeted via this unit;

- NJCCS 4.0, #10
- NJCCSWRS Standard 5

Unit 16: Other Proficiencies and Requirements:

Time: 2 Weeks/Ongoing

- Control Room: This course will also include a hands-on experience with Production switching and Electronic Effects. More extensive training and experience in this area will take place the second year.
- Directing: Students will gain organizational and leadership skills by acting as the Director for various productions.
- Ethics: Students will understand the ethics of copying productions and the legalities and responsibilities of copyrights
- Projects: Activities are designed to have students experience use of A/V equipment in various production experiences, Students will work on various project through the semester to include:

Sporting Events
Concerts

News Show
Plays

School Events
Community Activities.

Assignments:

- Class work: Ethics Lecture
- Class work: Releases and Copyrights

Lab Activities:

- Directing Project (Wildcat Report)

Audio/Visual Needs:

- Room 432 (TV Studio)

Computer Needs:

- None

Assessment Method:

- Authentic: Crew Work, Student Observation, Student Demonstrations
- Traditional: Tests/Quizzes

Standards targeted via this unit:

- NJCCS 2.0, #7
- NJCCS 3.0, #11
- NJCCS 3.0, #15
- NJTES 1.19
- TFAA #1, H
- TGAA #2, N

Assessment:

A significant portion of the evaluation process is “performance based” as observed by the instructor. In each unit the student is expected to be able to demonstrate the roles, skills, procedures and operations covered in the unit. Grades are computed a **Total Points** basis. Grades are given for Tests, Projects and Crew Work. The points given divided by the total possible gives the student their average. A final exam is given.

Evaluation Tools
Measures of student progress

The assessment of student progress in the objectives cited on the previous pages will be primarily by, but not limited to, the following criteria.

Video Portfolios & Presentations
CrewWork
Tests
Class Participation/Code of Conduct
Knowledge Logs/Notebooks

Observation

Systematic, wherein the observer gathers data on one or more precisely defined behaviors;
Nonsystematic, in which the observer watches the child at school in the setting of concern and notes the behaviors, characteristics, and personal interactions that seem significant;

Authentic Assessment Measures Progress in Applied Skills

Authentic assessment rates students' performance on real world tasks. To perform successfully on these tests, students must know the subject area and be able to use that knowledge to perform problem solving tasks. Activities used in authentic assessments may include:

Conducting research; Designing a solution to a problem;

Writing and recording a news article, or short story

Performing an oral presentation based on a project or analysis; and collaborating with others

Mid-Term Exam revised 1-19-08

Final Exam revised 6-07

Homework, Extra Credit Policy:

Extra credit will be given to all student projects worked on outside of the normal curriculum. Special credit will be given to community based projects. Projects that cross the curriculum will be encouraged and the production facilities will be made available to students who work on these projects. Little or no homework will be given in this course but students will be held to timelines for the completion of their projects.

Special Course Policies:

DUE TO THE NATURE OF EQUIPMENT AND ACTIVITIES, ANY INFRACTIONS OF SAFETY OR CLASSROOM RULES MAY RESULT IN THE IMMEDIATE REMOVAL FROM THE CLASS.

Periodic evaluation of objectives and this curriculum guide;

Curriculum will be evaluated every five years.

Lab/Classroom set up and special needs:

The recommended maximum class size is eighteen students. This course will be taught implementing a variety of different and state of the art technologies such as:

- I-Mac computers
- I-Movie editing programs
- Final Cut Pro editing programs

- Adobe premier editing programs
- Pinnacle Studio editing programs
- Digital cameras
- Classroom space
- A full Television studio
- Supplies necessary to create and edit programs

Materials/Resources:

- **Text: Television Production: A Vocational Approach and Video Users Handbook**
- **Text: Making Digital Video**
- **Text: Multimedia and Image Management**
- Teacher Handouts
- Various Web Sites
- Various Video Supplies
- NJ-TEC Guest Speakers

Field Trips/Visitations

- .New Jersey Network
- WNBC Studios
- News 12 New Jersey
- Various Collages With TV Programs

