

MEDIA TECHNOLOGY ACADEMY TECHNOLOGY SEMINAR 2

LENGTH OF TIME: every other day for one semester

GRADE LEVEL: 10

COURSE STANDARDS:

Students will:

1. Become efficient in areas of Information Technology including web design, image design, desktop publishing, and data communications. (PA Academic Std 1.6, 1.8; ISTE 10)
2. Design, write, and produce professional documents. (PA Academic Std 1.4, 1.5, 1.8; ISTE 9, 10)
3. Choose software applications based on need and efficiency. (PA Academic Std 1.4, 1.5; ISTE 2, 5, 9)
4. Use time management schedules to prioritize work for each job. (PA Academic Std 1.8)
5. Use peer editing to review designs, plans and presentations. (PA Academic Std 1.6)
6. Read and comprehend informational materials to develop understanding and expertise and produce written or oral work that: (PA Academic Std 1.1, 1.2, 1.6)
 - Restates or summarizes information
 - Relates new information to prior knowledge and experience
 - Extends ideas
 - Makes connections to related topics of information
7. Meet and interview with the community and industry professionals (PA Academic Std 1.6; ISTE 10)
8. Participate in group meetings for the purpose of making decisions, peer editing, and obtaining responses. (PA Academic Std 1.6; ISTE 10)
9. Design a project based on a process. (PA Academic Std 1.1, 1.2, 1.8)
10. Study and discuss copyright laws and the technical legal environment. (PA Academic Std 1.8; ISTE 4)
11. Present portfolio and personal strengths in a one-on-one interview with school/community adult. Improve communication skills, social responsibility and ethics. (PA Academic Std 1.6; ISTE 10)
12. Discover how to interact more effectively with adults, people from the business community, and each other (PA Academic Std 1.6, 1.8)
13. Develop awareness of career options and methods for success (PA Academic Std 1.6, 5.2, 5.4; ISTE 7)
14. Develop awareness of the differences among the people with whom we work (PA Academic Std 1.6, 1.8; ISTE 10)
15. Learn and practice the importance of public relations to an organization. (PA Academic Std 1.6, 1.8)

RELATED PA ACADEMIC STANDARDS FOR READING, WRITING, SPEAKING AND LISTENING

- 1.1 Learning to Read Independently
- 1.2 Reading Critically in All Content Areas

- 1.4 Types of Writing
- 1.5 Quality of Writing
- 1.6 Speaking and Listening
- 1.8 Research

RELATED PA ACADEMIC STANDARDS FOR SCIENCE AND TECHNOLOGY

- 3.1 Unifying Themes
 - A. Systems
 - B. Models
 - C. Patterns
 - D. Scale
 - E. Change
- 3.2 Inquiry and Design
 - A. Nature of Scientific Knowledge
 - B. Process Knowledge
 - C. Scientific Method
 - D. Problem Solving in Technology
 - D. Hydrology and Oceanography
- 3.7 Technological Devices
 - A. Tools
 - B. Instruments
 - C. Computer Operations
 - D. Computer Software
 - E. Computer Communication Systems
- 3.8 Science, Technology and Human Endeavors
 - A. Constraints
 - B. Meeting Human Needs
 - C. Consequences and Impacts

RELATED PA ACADEMIC STANDARDS FOR CIVICS AND GOVERNMENT

- 5.2 Rights and Responsibilities of Citizenship
 - A. Civic Rights, Responsibilities and Duties
 - B. Relationship Between Rights and Responsibilities
 - C. Sources and Resolution of Conflicts
 - D. Political Leadership and Public Service
 - E. Ways Citizens Influence Decisions and Actions of Government
 - F. Consequences of Violating Rules and Laws
 - G. Competent and Responsible Citizen
- 5.4 How International Relationships Function
 - A. How Customs and Traditions Influence Governments
 - B. Role of United States in World Affairs
 - C. Impact of United States on the Political Ideals of Nations
 - D. How Foreign Policy is Developed and Implemented
 - E. Purposes and Functions of International Organizations

ISTE NATIONAL EDUCATIONAL TECHNOLOGY STANDARDS FOR STUDENTS

1. Identify capabilities and limitations of contemporary and emerging technology resources and assess the potential of these systems and services to address personal, lifelong learning, and workplace needs.
2. Make informed choices among technology systems, resources and services.
3. Analyze advantages and disadvantages of widespread use and reliance on technology in the workplace and in society as a whole.
4. Demonstrate and advocate for legal and ethical behaviors among peers, family and community regarding the use of technology and information.
5. Use technology tools and resources for managing and communicating personal/professional information (e.g., finances, schedules, addresses, purchases, correspondence).
6. Evaluate technology-based options, including distance and distributed education, for lifelong learning.
7. Routinely and efficiently use online information resources to meet needs for collaboration, research, publication, communication, and productivity.
8. Select and apply technology tools for research, information analysis, problem solving and decision making in content learning.
9. Investigate and apply expert systems, intelligent agents and simulations in real-world situations.
10. Collaborate with peers, experts, and others to contribute to a content-related knowledge base by using technology to compile, synthesize, produce, and disseminate information, models, and other creative works.

PERFORMANCE ASSESSMENTS:

Students will demonstrate achievement of the standards by:

1. Technology products for class, school, district, local and/or national community, incorporating and demonstrating level appropriate skills in word processing, spreadsheet, slide-production, audio, photography, desktop publishing and/or video production technology. (Course Std 1, 2, 3, 10, 12, 13, 14)
2. The successful completion of projects both individually and in production teams. (Course Std 1-31)
3. Demonstrates academic, technical, interpersonal and self-management skills through the development of an individual portfolio. (Course Std 1, 2, 3, 4, 7 -13)
4. Demonstrating time management skills in meeting deadlines and solving problems. (Course Std 7, 16)
5. Demonstrating software and hardware technical knowledge through the generation of appropriate multimedia production materials such as audio clips, video clips, still pictures, text and special effects. (Course Std 1, 2, 3, 5, 10, 14)
6. Interview and present portfolio to community professional and/or college admissions personnel. (Course Std 1-15)
7. Demonstrating knowledge of original work expectations in all products. (Course Std 1-15)
8. Demonstrating the ability to plan using life cycle processes. (Course Std 1-15)

DESCRIPTION OF COURSE:

The purpose of this course is to integrate and build technology skills across the full spectrum of technology including web development, networking, wireless communication, web communication, desktop publishing, graphic design, scripting language, and office/multimedia programs. This course is designed to help students learn about the world of technology and how to integrate and adapt processes into the business world and their education. In addition, this

course will offer students the opportunity to learn about the global internet infrastructure and the foundations of all communications.

Students will participate in “hands-on” community development where class projects will be designed to assist community organizations, educational entities, and businesses. Students will learn to integrate technology using the Top-Down Model of technology integration originally developed by IBM. Students will be given the opportunity to work directly with the community to experience and develop best practices and integrate cross-curricular skills including business math, public relations, marketing, project management, and technical reading/writing.

The course will build on a foundation of skills previously developed. Concepts will include networking concepts and topologies, internet technologies and voice/data communication, web design, full life cycle development, image editing and manipulation, animation and small scale community inclusion, MS Office applications.

TITLES OF UNITS:

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| 1. The Academy Product Development Process
(graphic organizers, treatment writing, storyboarding, material identification, hardware/software identification, scheduling, production, presentation, distribution evaluation) | On-going and as needed |
| 2. PowerPoint | On-going and as needed |
| 3. Adobe Photoshop | On-going and as needed |
| 4. Microsoft Excel | On-going and as needed |
| 5. Microsoft Publisher | On-going and as needed |
| 6. Associated English Projects | On-going and as needed |
| 7. Associated Social Studies Projects | On-going and as needed |
| 8. Restorative Practices. | On-going and as needed |
| 9. Interpersonal Communication Skills | On-going and as needed |
| 10. Informative Presentation | On-going and as needed |

SAMPLE INSTRUCTIONAL STRATEGIES:

1. Direct Instruction/Notetaking
2. Rubric Development/Analysis
3. Modeling through action and discussion
4. Viewing and analyzing professional work in all areas
5. Use of peer instruction, on-line instructional sites, computer help menus, instructional texts and software/hardware user manuals.
6. All writing done at the computer
7. Guest speakers
8. Student generated lessons/presentations
9. Student/teacher development process/instructional methods.
10. Teacher and student generated feedback.
11. Feedback supplied from outside professional sources (client, college, other teacher, etc.)
12. Collaboration with businessperson from community for final project

MATERIALS:

1. Software: MS Office (Word, Excel, PowerPoint, Publisher), MS Front Page, Adobe Photoshop, Acrobat and Premiere and Final Cut Pro.
2. Hardware: computers, scanners, printers, still cameras, video cameras, audio capture/mixing, digital video/audio mixing, digital video decks and professional lighting.
3. Video studio lighting and sound control.
4. Instructional Texts as needed for all software/hardware applications.
5. Instructional texts as needed for applied learning and English standard skill delivery.
6. Multimedia trade journals and magazines.
7. Local and national newspapers and magazines.
8. Reference texts (dictionaries, thesaurus, school to work, etc.)

METHODS OF ASSISTANCE AND ENRICHMENT:

1. Guest Speakers
2. Field Trips
3. Internet
4. Collaboration with Communication students at Bucks County Community College, Perkasie Campus, Lehigh-Carbon Community College and Northampton Community College.

PORTFOLIO DEVELOPMENT:

1. Samples of business correspondence
2. Resume
3. Letter of Application
4. Written work including project, evaluation and reflection pieces.
5. Multimedia Projects.

METHODS OF EVALUATION:

At the time each project or letter writing assignment is given, students receive detailed instructions, together with a scoring rubric. Each rubric is tailor-made to the assignment. In addition to scoring rubrics, peer evaluation is used to analyze written and presentation pieces before they are graded.

INTEGRATED ACTIVITIES:

1. Concepts
 - Product development
 - Team projects
2. Communication
 - Writing letters, proposals
 - Oral presentations using PowerPoint
 - Using the telephone to speak with businessperson in the community
3. Thinking/Problem Solving
 - Peer review of written documents and presentations
 - Software self-instruction/problem solving
 - Hardware self-instruction/problem solving
 - Teamwork

4. Application of Knowledge

Oral presentations

Written documents

Multimedia presentations

Multimedia product development

Working in teams

Working for a client

Completion of English and Social Studies Projects

5. Interpersonal Skills

Working together with peers

Working with clients

Communicating with class and school in gathering and disseminating

Using the telephone to speak with businessperson in the community