

# **MEDIA TECHNOLOGY ACADEMY TECHNOLOGY SEMINAR 3**

**LENGTH OF TIME:** every other day for one semester

**GRADE LEVEL:** 11

## **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
- 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

#### 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.

In this year of the program, the focus will be on advancing skill levels from the previous two years and moving forward into the global network, internet technologies and design, scripting languages with web development, advance image design and editing, understanding the complete hierarchy and purpose of the Top-Down Model, and advanced community inclusion and activity.

#### TITLES OF UNITS:

- |  |                        |
|--|------------------------|
| 1. The Academy Product Development Process<br>(graphic organizers, treatment writing, storyboarding, material identification, hardware/software identification, scheduling, production, presentation, distribution evaluation) | On-going and as needed |
| 2. MS Office   | On-going and as needed |
| 3. Adobe CS  | On-going and as needed |
| 4. Macromedia Studio MX  | On-going and as needed |
| 5. Portfolio Development   | On-going and as needed |
| 6. Understanding self and teamwork   | On-going and as needed |
| 7. Product, process and audience   | On-going and as needed |
| 8. Original work expectation/copyright   | On-going and as needed |
| 9. File identification/manipulation  | On-going and as needed |
| 10. Associated English Projects  | On-going and as needed |
| 11. Associated Social Studies Projects   | On-going and as needed |
| 12. Restorative Practices  | On-going and as needed |
| 13. Interpersonal Communication Skills   | On-going and as needed |

#### SAMPLE INSTRUCTIONAL STRATEGIES:

1. Direct Instruction
2. Modeling
3. Viewing and analyzing professional work in all areas
4. Use of peer instruction, on-line instructional sites, computer help menus, instructional texts and software/hardware user manuals.
5. Guest speakers
6. Student generated lessons/presentations
7. Student/teacher development process/instructional methods.
8. Teacher and student generated feedback

#### MATERIALS:

1. Software: MS Office, Adobe CS Premium, Macromedia Studio MX, Internet Applications.
2. Hardware: computers, scanners, printers, still cameras, digital video/audio mixing.
3. Instructional texts as needed for all software/hardware applications.
4. Journals, newspapers, and magazines (digital and/or print)

#### METHODS OF ASSISTANCE AND ENRICHMENT:

1. Guest Speakers
2. Field Trips
3. Technology Integration

#### 4. Community Collaboration

#### PORTFOLIO DEVELOPMENT:

1. Resume
2. Letter of Application
3. IT products
4. Web design

#### 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.

#### INTEGRATED ACTIVITIES:

1. Concepts
  - Product development
  - Team projects
2. Communication
  - Writing letters, proposals
  - Oral presentations using PowerPoint
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
  - Presentations
  - Written documents
  - Product development
  - Teamwork
  - Performance tasks
  - Curricular Integration with Social Studies and English
5. Interpersonal Skills
  - Teamwork
  - Community communication
  - School/Peer communication