

MEDIA TECHNOLOGY ACADEMY TECHNOLOGY SEMINAR 1

LENGTH OF TIME: every other day semester; every day semester

GRADE LEVEL: 9

COURSE STANDARDS:

Students will:

1. Troubleshoot and adjust problems in a production plan by using peer editing and by talking with experts in the various fields. (PA Academic Std 1.6, 1.8; ISTE 4, 5, 6, 8, 10)
2. Troubleshoot and repair faults in Desktop Publishing designs. (PA Academic Std 1.2, 3.7, 3.8; ISTE 8)
3. Make an oral presentation to the client and colleagues about plans for their project. (PA Academic Std 1.6, 1.8)
4. Make visual presentations to the client and colleagues about plans for their project. (PA Academic Std 1.8, 5.2, 5.4; ISTE 2, 5)
5. Research information about how to develop publications. (PA Academic Std 1.4, 1.5; ISTE 2, 7)
6. Research examples of different publication designs and publication development information. (PA Academic Std 1.2, 1.8; ISTE 6)
7. Research examples of different video production uses and video production development information. (PA Academic Std 1.8, 3.7, 3.8; ISTE 5, 7)
8. Use Microsoft Word to produce rough drafts of text and to produce reports of business/video communications, treatments, memos, interviews, resumes, letters of applications, proposals, research findings and text for publications. (PA Academic Std 1.4, 1.5; ISTE 2, 5)
9. Use Microsoft PowerPoint, equivalent software, and/or poster boards to create a storyboard. (PA Academic Std 3.7, 3.8; ISTE 5, 7, 8)
10. Use writing samples of model business/video publications. (PA Academic Std 1.4; ISTE 2, 7, 10)
11. Use time management schedules and practices to prioritize work for each job. (PA Academic Std 1.8)
12. Use peer editing to review designs, plans, production schedules and publications. (PA Academic Std 1.6, 3.7, 3.8)
13. Work in teams to do all major projects and/or publications. (ISTE 10)
14. Produce publications for the high school, the Palisades Academy, the community and/or business partners. (PA Academic Std 1.4, 1.5; ISTE 5)
15. Read and comprehend informational materials to develop understanding and expertise, and produce written or oral work that: (PA Academic Std 1.1, 1.2; ISTE 8)
 - restates or summarizes information
 - relates new information to prior knowledge and experience
 - extends ideas
 - makes connections to related topics of information
16. Prepare publications/productions by relating new information to prior knowledge and experience. (PA Academic Std 1.4, 1.5; ISTE 7)

17. Conduct interviews for newsletters, brochures and other video/business publications. (PA Academic Std 1.6)
18. Participate in group meetings for the purpose of making decisions, peer editing, and obtaining responses and positive feedback. (PA Academic Std 1.6; ISTE 10)
19. Demonstrate an understanding of rules of English language in every written piece. (PA Academic Std 1.1, 1.2, 1.4, 1.5)
20. Analyze and revise work to clarify it when they produce a variety of drafts that result in quality pieces of work. (PA Academic Std 1.1, 1.2, 1.8)
21. Write instructions, proposals, reports and news releases. (PA Academic Std 1.4, 1.5)
22. In teams, adopt a corporate identity and identify the skills needed for their company to succeed. (PA Academic Std 1.6, 1.8; ISTE 10)
23. Research the key features of the *Adobe PhotoShop*, *Microsoft Publisher* and other software deemed appropriate by the professional staff by advancing through tutorials and by applying these learned techniques, skills, and effects in the development of their productions. (ISTE 2, 3, 6, 7)
24. Research the basics necessary to understand the setup, function, and nature of web pages and digital communication. (ISTE 2, 3, 6, 7)
25. Go online and compare and contrast the elements that contribute to good and bad web page design, publication design, and video design. (ISTE 2, 3, 6, 7)
26. Prepare, edit, and import images into their web sites. (ISTE 6)
27. Produce a sample web site. This site will incorporate the principles and learning practiced in this course, document their progress, and serve as a portfolio for clients. (PA Academic Std 1.4; ISTE 2, 3, 6, 7)
28. Produce a sample video. This video will incorporate the principles and learning practiced in this course, document their progress, and serve as a portfolio for clients. (PA Academic Std 1.6; ISTE 6, 8)
29. Research the pertinent copyright laws associated with the production of multimedia products. (PA Academic Std 1.8; ISTE 4)
30. In teams, work with real world clients to produce and modify web sites as per the clients' specifications. (PA Academic Std 1.5, 1.6, 3.7, 3.8; ISTE 9, 10)
31. Complete a written evaluation of their project that describes the project they completed for their client, evaluates each member's contribution (including their own), and offers suggestions for improving the project and process. (PA Academic Std 1.4, 1.5)
32. Design and create a product, service or system to meet an identified need. (PA Academic Std 1.4, 1.5, 1.8; ISTE 9, 10)
33. Troubleshoot and adjust problems early in the plan by using peer editing, client feedback, and talking with experts in the field. (P Academic Std 1.6, 1.8; ISTE 8)
34. Troubleshoot and repair faults in the project. (ISTE 1, 8)
35. Use time management schedules to prioritize work for each job. (PA Academic Std 1.8)
36. Use peer editing to review designs, plans, and presentations. (PA Academic Std 1.6, 1.8; ISTE 10)
37. Use professionals in the field to review project/business plan designs. (PA Academic Std 1.6, 1.8; ISTE 10)
38. Read and comprehend information and professional materials to develop understanding and expertise and produce written and 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
39. Make connections to related technology topics by designing a multimedia piece for a particular area of focus. (PA Academic Std 1.6; ISTE 1, 2, 3)
 41. Participate in group meetings for the purpose of making decisions, peer editing, and obtaining responses. (PA Academic Std 1.6, 1.8; ISTE 10)

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

- 3.7 Technological Devices
- 3.8 Science, Technology and Human Endeavors

RELATED PA ACADEMIC STANDARDS FOR CIVICS AND GOVERNMENT

- 5.2 Rights and Responsibilities of Citizenship
- 5.4 How International Relationships Function

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. Writing these types of business letters: request, informative and thank you. (Course Standard 8, 10, 20, 41)
2. Writing a letter of application and a resume. (Course Standard 8, 10, 20, 41)
3. Writing memos, proposals, treatments, and short reports. (Course Standard 8, 10, 16, 17, 21, 33, 38, 41)
4. Designing a publication for a school department/club/sport team/organization. (Course Standard 1, 3, 4, 13, 14, 15, 16, 17)
5. Telephoning, writing to, and/or meeting with a client/business partner in the community. (Course Standard 3, 4, 5, 17, 33)
6. Designing a brochure for a community business or organization. (Course Standard 3, 4, 5, 17, 33)
7. Preparing an informative or persuasive presentation. (Course Standard 4, 15, 16, 30, 32, 38)
8. Choosing a product or service to benefit the community. (Course Standard 32)
9. Writing a proposal for the community product/service. (Course Standard 21)
10. Designing a presentation for the community product/service. (Course Standard 3, 28)
11. Utilizing the features of the *PhotoShop* and other applicable software to manipulate images and generate HTML for the purpose of creating web sites. (Course Standard 23)
12. Writing a report that compares and contrasts the elements that contribute to good and bad publication/production design. (Course Standard 5, 6, 25)
13. Preparing, editing, and importing images into their web sites. (Course Standard 24, 26, 27)
14. Developing a sample personal web site to serve as a portfolio for clients and a documentation of their progress in the course. (Course Standard 24, 26, 27, 29)
15. Using the *Adobe PhotoShop* software to produce original banners and buttons for use on their web sites. (Course Standard 23, 27, 29)
16. Using the *Final Cut Pro* software to produce original videos (various lengths) to serve as a portfolio for clients and documentation of their progress in the course. (Course Standard 7, 23, 28, 29)
17. Use of digital cameras and video equipment to capture images for use in publications/productions. (Course Standard 27, 28)
18. Producing a model of a storefront business site that is selling a product to the public, including a home page, catalog page, and submission form. (Course Standard 22, 32)
19. Forming a business team for the purpose of working with real world clients to produce and modify web sites as per the client's specifications. (Course Standard 32, 33, 34, 35, 36, 37, 40)
20. Employing effective telephone skills in communicating with clients. (Course Standard 17)
21. Employing effective electronic mail skills in communicating with clients. (Course Standard 8)
22. Completing a written evaluation of their project that describes the project they completed for their client, evaluates each member's contribution (including their own), and offers suggestions for improving the project and process.

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 focus in on a foundation of skills needed to be successful in the following courses and center on building skills in general purpose software like MS Office and Internet applications. Concepts will include team building activities, basic networking concepts, internet technologies and communication, introduction to digital imaging and video, introduction to web design, introduction to Top-Down and backward design.

TITLES OF UNITS: (no specific order)

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|---|---------|
| 1. Technology Assessment/Identifying Needs | 1 week |
| 2. Multimedia – An Overview | 1 week |
| 3. Multimedia Elements – Text and Graphics | 1 week |
| 4. Understanding Multimedia Elements – Sound, Animation, Video | 2 weeks |
| 5. Multimedia Authoring Programs | ongoing |
| 6. Development and Design of Multimedia Titles | ongoing |
| 7. Management and Distribution of Multimedia Titles | ongoing |
| 8. Case Study: Incorporating Multimedia into a Web Site | 4 weeks |
| 9. Case Study: Incorporating Video Production | 4 weeks |
| 10. Producing a product for a client | 9 weeks |
| 11. Final Project – producing a product identified and needed by a community member or business partner | |

SAMPLE INSTRUCTIONAL STRATEGIES:

1. All “final” documents produced at the computer.
2. Self-guided lessons/tutorials in applicable software applications.
3. Mini-lessons on specific functions of equipment and technologies.
4. Peer tutoring.
5. Research on advanced techniques in applicable software.
6. Field trips to talk to clients and experts, and to gather information for products.
7. Peer editing of writing pieces
8. Collaboration with businesspersons/professionals/administration for final projects.
9. All “final” writing and production occurs on computer and/or with the appropriate equipment.
10. Guest speakers to share information on design and technologies.
11. Field trips to businesses.
12. Web sites produced for clients or portfolio.
13. Cooperative teams to problem solve, produce projects, and simulate a business environment.
14. Interdisciplinary reading and writing activities
15. Collaboration with clients in the production of products that meet their specifications.

MATERIALS:

1. "State of the Art" Multimedia computers
2. Digital equipment (sound, video, imaging, scanning)
3. Microsoft Office Software Package
4. Adobe PhotoShop & PageMaker
5. Microsoft Publisher
6. Web authoring software
7. Final Cut Pro (video production software)
8. Lighting and sound equipment for video production
9. Production storage devices (tapes, diskettes)
10. Internet access
11. Networking ability and electronic mail capability
12. Teacher references/texts
13. Online reference and tutorial subscriptions
14. Relevant Web resources

METHODS OF ASSISTANCE AND ENRICHMENT:

1. Guest speakers
2. Field trips
3. Internet
4. Internet guided competitions
5. Professional Associations
6. Collaboration with community members
7. Business partners
8. Conferences with clients (in-house and on location)
9. Interdisciplinary teaching in areas relevant

PORTFOLIO DEVELOPMENT:

1. Samples of business communications
2. Resume (electronic and hardcopy versions)
3. Letter of application
4. Various publications produced individually and as a team member
5. Final project
6. Relevant printouts of products produced
7. Video tapes and electronic copies of presentations and productions
8. Written self evaluation of the projects

METHODS OF EVALUATION:

At the time each project or writing assignment is given, students receive detailed instructions (oral and/or written), and a scoring rubric. Each rubric is tailored to the specific task. In addition to scoring rubrics, peer editing and client editing are used to evaluate the students' projects and productions. Each student is also evaluated on a written portfolio maintained during the project. Also included are objective quizzes, tests, and self-evaluations.

INTEGRATED ACTIVITIES:

1. Concepts
 - Interactive activities to develop interpersonal communication skills:
 - message formation
 - listening for understanding
2. Communication
 - Writing business communication pieces
 - Oral presentations
 - Business presentation (visual elements)
 - Electronic communications
 - Telephone communication
3. Thinking/Problem Solving
 - Peer review of written documents and presentations
 - Critiquing of multimedia uses and examples
 - Developing projects to meet clients needs
4. Application of Knowledge
 - Oral presentations
 - Written documents
 - Videos
 - Web pages
5. Interpersonal Skills
 - Participation on work teams
 - Client work
 - Peer conferences
 - Teacher conferences