

AEET/EDET 603 - Design and Development Tools I Syllabus - Fall 2008

I - Descriptive Information

A. Course number and title: AEET/EDET 603 - Design and Development Tools I

B. Bulletin description: Study of multimedia elements (e.g., graphics, animation, audio and video) including the creation and editing of materials. Instructional applications, copyright issues, and technology limitations will be explored.

C. Course credit: 3 credit hours

D. Prerequisite or co-requisite courses: Candidates in the M.Ed. in Educational Technology program may be advised to take this course in conjunction with AEET/EDET 722 : Instructional Design and Assessment.

E. Intended Audience

This course is one of the required core courses in the M.Ed. in Educational Technology program. Others who might want to take the course include pre-service and in-service educators and others who are interested in exploring, modifying, and developing multimedia materials for instruction or training. Please note that this is *not* an introduction to technology course; *participants are expected to have previous experience using personal computers* .

Note: Alternative Accessibility to Course Materials

Aiken Campus : If you have a physical, psychological, and/or learning disability that might affect your performance in this class, please contact the Office of Disability Services, B&E 126, (803) 641-3609, as soon as possible. The Office of Disability Services will determine appropriate accommodations based on medical documentation.

Columbia Campus: Any student with a documented disability should contact the Office of Student Disability Services at 777-6142 to make arrangements for appropriate accommodations.

F. Instructor:

Thomas J. C. Smyth, Ph.D.
University of South Carolina Aiken
471 University Parkway, Aiken, SC 29801
803.641.3527 (office) or 641.3483
[M. Ed. in Educational Technology Program](#)
smyth@usca.edu

G. Meeting

This is an online, web-based course. Information about the course is provided on this page, on the schedule page, and on the course Blackboard site. Students should check these locations **daily** throughout the semester.

II - Statement of Course Goals and Objectives

A. Goal

The goal of this course is to gain experience identifying and using a variety of techniques and tools to design, develop, evaluate and modify educational/training materials, presentations, and other materials that can be used for instructional or administrative purposes. Issues related to current and emerging technologies and the use of technology tools with learners will be explored. The candidates will plan and collect a portfolio of work related to the field of educational technology to demonstrate their growth.

B. Objectives (based upon AECT Standards for Educational Technology Specialists)

- 2.0.1 Select appropriate media to produce effective learning environments using technology resources.
- 2.0.2 Use appropriate analog and digital productivity tools to develop instructional and professional products.
- 2.0.3 Apply instructional design principles to select appropriate technological tools for the development of instructional and professional products.
- 2.0.4 Apply appropriate learning and psychological theories to the selection of appropriate technological tools and to the development of instructional and professional products.
- 2.0.5 Apply appropriate evaluation strategies and techniques for assessing effectiveness of instructional and professional products.
- 2.0.6 Use the results of evaluation methods and techniques to revise and update instructional and professional products.
- 2.0.7 Contribute to a professional portfolio by developing and selecting a variety of productions for inclusion in the portfolio.
- 2.1.3 Use presentation application software to produce presentations and supplementary materials for instructional and professional purposes.
- 2.1.4 Produce instructional and professional products using various aspects of integrated application programs.
- 2.2.1 Apply principles of visual and media literacy for the development and production of instructional and professional materials and products.
- 2.2.2 Apply development techniques such as storyboarding and or scriptwriting to plan for the development of audio/video technologies.
- 2.2.3 Use appropriate video equipment (e.g., camcorders, video editing) to prepare effective instructional and professional products.
- 2.2.4 Use a variety of projection devices with appropriate technology tools to facilitate presentations and instruction.
- 2.3.1 Design and produce audio/video instructional materials which use computer-based technologies.
- 2.3.2 Design, produce, and use digital information with computer-based technologies.
- 2.3.3 Use imaging devices (e.g., digital cameras, video cameras, scanners) to produce computer-based instructional materials.
- 2.4.1 Use authoring tools to create effective hypermedia/multimedia instructional materials or products.
- 2.4.2 Develop and prepare instructional materials and products for various distance education delivery technologies.
- 2.4.3 Combine electronic and non-electronic media to produce instructional materials, presentations, and products.
- 2.4.4 Use telecommunications tools such as electronic mail and browsing tools for the World Wide Web to develop instructional and professional products.
- 2.4.5 Develop effective Web pages with appropriate links using various

- technological tools (e.g., print technologies, imaging technologies, and video).
- 2.4.6 Use writable CD-ROMs to record productions using various technological tools.
 - 2.4.7 Use appropriate software for capturing Web pages, audio wave files, and video files for developing off-line presentations.
 - 3.1.1 Identify key factors in selecting and using technologies appropriate for learning situations specified in the instructional design process.
 - 3.1.2 Use educational communications and instructional technology (SMETS) resources in a variety of learning contexts.
 - 3.3.1 Use appropriate instructional materials and strategies in various learning contexts.
 - 3.3.2 Identify and apply techniques for integrating SMETS innovations in various learning contexts.
 - 3.4.3 Identify and apply copyright and fair use guidelines within practice.
 - 4.1.1 Apply project management techniques in various learning and training contexts.

III - Required Texts and Software

This course requires the use of specific software for multimedia and HTML production. Consider this a textbook cost; as the need arises, you may want to purchase relevant texts to accompany specific software. You may need to purchase the following:

Adobe CS3 (We will use Dreamweaver and Flash.)
Adobe Photoshop Elements

You may consider using open source alternatives to this software (see below), but you will be responsible for learning the software without instructions and tutorials from your instructor.

Here are some examples of software that non-ET majors might consider:

Graphics Production

1. Consider using [GIMP or GIMPShop](#) instead of Photoshop. There also are some worthwhile online apps that can be used (we will look at those early in the course).
2. Download the 30-day free trial of Photoshop Elements, but do not install it until you are ready to use it!

Web Page Production

1. Consider using [KompoZer](#) or [SeaMonkey Composer](#) instead of Dreamweaver.
2. Download the 30-day free trial of Dreamweaver, but do not install it until you are ready to use it!

Flash Production

1. There really isn't a viable open-source alternative to Flash, but you can take a look at [these](#).
2. Download the 30-day free trial of Flash, but do not install it until you are ready to use it!

You also will need to download and install a variety of freeware

and shareware as needed. Be sure your virus protection is up to date!

IV - Academic Course Requirements

(see "Assignments" on Blackboard for detailed instructions **as they are made available**)

1. Tool Shed

Explore a variety of Web 2.0 tools that may assist you and others in the field of educational technology and as general computer users. Evaluate these tools and share the information with your classmates.

Due Dates:

15 September (5 tools)

6 October (5 tools)

2. Teach a Lesson

Arrange with your instructor to teach to the class a lesson on a specific software tool from among those identified in #1 above. You will get to know the specific tool thoroughly and will demonstrate its use. This project will include the following:

- a presentation using Adobe Connect presenter;
- relevant handouts,
- web resources, and
- a rubric for evaluation of your presentation.

Due Dates: As Assigned

3. Critiques

One of the skills that you will develop in this course is the ability to critique others' work. You will have several opportunities to provide written critiques for your classmates' and your own multimedia projects and the final project. You will develop this skill over time as part of the evaluation component of good instructional design.

Due Dates: As Assigned

4. Final Independent Multimedia Project (choose one):

- Public Service Announcement (PSA)
- Training or Instructional Module
- Other practical use of multimedia

Plan, design and develop a multimedia project which will take the form of a public service announcement (PSA) relevant to your particular audience. The final product should be in a video format that can be broadcast on the web. Share the project with your classmates. The Final Project will include the following:

- Progress through planning steps which include design, development, and evaluation of the project.
- Develop the project using presentation, web-creation, or hypermedia software or other appropriate technology, and create a video file for broadcast via CD, DVD, web, or other media.
- Include multimedia elements such as graphics, animation, voice, music, photographs, and motion video that you have gathered, created, and/or edited .
- Create support materials (electronic and/or print) for the PSA as necessary.
- Share your project with your classmates by doing a Final Student Presentation (online).

This project may be collaboratively developed in teams of 2-3 students!

Due Dates:

See *Assignments* for due dates

Final - 8 December

6. Course Portfolio

Plan and begin to collect a course portfolio of evidence of the growth of your technology skills. Your course portfolio will include your work on the activities and projects in AEET 603. This electronic portfolio will include artifacts from the projects and a reflection on each.

Due Date: 8 December

7. Activities

A wide variety of activities will be assigned throughout the semester. These will address the primary topics of graphics production, Flash animation, web page development, video production and instructional design generally.

Due Dates: As Assigned

8. Quizzes and Exams

Several announced quizzes will provide you and your instructor with an assessment of your progress in the course. These assessments will include objective and subjective questions so that you may demonstrate your knowledge, skills, and understanding of the content of the course.

Due Dates: As Assigned

9. Class Participation and Dispositions

Class participation and dispositions may include, but are not limited to, the following: signing up for projects, using the class web site, participating in class discussions, sharing information and materials with classmates through demonstrations and

postings to the class web site, communication, collaboration, exhibiting a willingness to learn new things, completing assignments at a level appropriate to his or her experiences and abilities, completing work in a legal and ethical manner, submitting assignments on time, and exhibiting professional behavior in all communication and work.

V - Administrative Course Requirements

Candidates are responsible for all assigned work. Candidates are responsible for work announced on the class web site and for announced changes/additions/deletions to the syllabus. Assignments are due to the instructor by midnight of the due date; late assignments are penalized a letter grade for each day they are late.

VI - Evaluation and Grading

Evaluation of student performance in this course is holistic. "A" represents superior, exceptional work; "B" represents very good performance in completing all assignments; "C" represents average work overall; "D" represents below average performance. Your assignments will be evaluated on their overall quality and thoroughness.

VII. Major Topics of the Course

1. Using Appropriate Instructional and Training Materials
2. Planning and Designing Original Instructional and Training Materials
3. Developing Web-based Materials
4. Web-based Learning
5. Assessment/Evaluation of Instruction and Learning Design
6. Creating and Editing Multimedia Assets (Graphics, Animations, Audio, and Video)
7. Online Teaching and Learning

VIII. Modes of instruction

Please note that this course uses a project-based approach to learning. The role of instructor is primarily as a facilitator (rather than purely an information-dispenser); the role of the student is as active participant who builds knowledge by participating in a dynamic learning community. We will work collaboratively (in groups) on several assignments for this course. This can be a challenge at first, but I believe strongly that everyone benefits through such collaborative efforts. We will use a collaborative work skills rubric to guide you in your success with this endeavor.

All assignments are due by midnight of the assigned date. It is important that you submit assignments on time; late assignments can adversely affect your final grade for the course. Also, be sure to check your email, the syllabus, and Blackboard frequently (at a minimum once per day). While most

of the course interaction is asynchronous, I can be available via IM and Skype (username: tsmythusca); just contact me to set up a time for synchronous communication. I also check email and the Blackboard discussion forum frequently, so that is another efficient medium for asynchronous communication.

IX. Bibliography

Current lists of resources will be maintained on the class web site. A few recommended resources include the following:

Alessi, S. M. & Trollip, S. R. (2001). Multimedia for learning: methods and development (3rd ed.). Boston: Allyn and Bacon.

Alexander, J. E. & Tate, M. A. Web Wisdom: How To Evaluate and Create Quality Information on the Web. Mahwah, NJ: 2006.

Beggs, J. & Thede, D. Designing Web Audio. Sebastopol, CA: 2001

Bittner, G. G., Pierson, M. E. (1999). Using Technology in the Classroom. Boston, MA: Allyn & Bacon.

Chapman, N. (2005). Digital Multimedia (2nd Rev Ed). New York: John Wiley and Sons Ltd.

Geisert, P. G., Futrell, M. K. (2000). Teachers, Computers, and Curriculum: Microcomputers in the Classroom. Needham Heights, MA: Allyn & Bacon.

Ivers, K. S. & Barron, A. E. (2002) Multimedia Projects in Education: Designing, Producing, and Assessing (2nd ed.). Westport, CT: Libraries Unlimited.

Newby, T. J., Stepich, D. A., Lehman, J. D., Russell, J. D. (1999). Instructional Technology for Teaching and Learning (2nd ed.). Upper Saddle River, NJ: Merrill/Prentice Hall.

Roblyer, M. D., Edwards, J., Havriluk, M. A. (1997). Integrating Educational Technology into Teaching. Upper Saddle River, NJ: Merrill/Prentice Hall.

X. Blackboard

The University of South Carolina offers the course management program, *Blackboard*. To access the course using Blackboard, point your browser to <http://blackboard.sc.edu>. You will need a Network Username and password to access all areas within a specific course.

Instructions for using *Blackboard* can be found on the "Blackboard Tips for Students" handout available online through USC Computer Services at <http://www.sc.edu/ars/handouts/bb.html> NOTE: A useful site for

information about Information Technology (IT) services for students at USCA is available at <http://www.usca.edu/helpdesk/> and for USC Columbia from Computer Services at <http://www.sc.edu/studentIT>