AEET 703: Design & Development Tools (II)

Spring 2006

I. Course Information

- A. Course Number and Title: AEET 703 Design & Development Tools (II)
- **B.** Course Description: This course provides in-depth development of skills using current and emerging technologies to create a multimedia or web-based project that includes instructional and multimedia elements (e.g., graphics, animation, audio and video).
- C. Course Credits: 3
- **D. Prerequisites**: AEET 603 Design & Development Tools (I)

Students who have not taken AEET 603 yet demonstrate competencies in working with various forms of hypermedia (i.e. text, graphics, audio, and video) through equivalent coursework or projects may be advised to take this course.

NOTE: Access to computer hardware and software outside class time is required.

- E. Intended Audience: M.Ed. students in Educational Technology
- F. Instructor:

Dr. Gary Senn

Office: RPSEC 302

E-mail: SennClass@usca.edu

Phone: 803-641-3558

G. Office Hours

Tuesday/Wednesday 10:00 a.m. - 12:00 p.m. or by appointment

H. Email correspondence:

Correspondence with the instructor that is related to this course should be directed to <u>SennClass@usca.edu</u>. The instructor uses this account for class activity. This account will be checked regularly throughout the course but it is likely that this account will not be checked every day. If there is time sensitive communication you may use the instructor's main address <u>SennG@sc.edu</u> or make contact via phone.

Many people use email addresses that are rather cryptic. Please set your email so that your name appears in the "from" field. Some people use a family account and might not want their complete name in the "from" field. That is acceptable but please set the "from" field to have some appropriate, identifying information in it.

Be specific in the subject of your email correspondence. A subject that states, "Question" is not helpful. A subject that briefly states the question or describes the content of the message would be better, "Did you receive my Flash 1 assignment?"

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

AETE 703 Syllabus

II. Statement of Course Goals and Objectives

A. Goals:

This course is intended to introduce the entire production process of designing web-based, interactive products. Students will gain basic skills and experience using web-authoring tools, graphic/interface design, scripting, prototyping, usability testing, quality assurance and complementary teamwork.

B. Objectives:

- 1. Demonstrate continual growth in technology knowledge and skills to stay abreast of current and emerging technologies.
 - Demonstrate proficiency in creating a website using either HTML or a web-authoring tool
 - Demonstrate proficiency in creating/integrating media elements (i.e. graphics, audio, and video) into web documents
 - Demonstrate proficiency in publishing web documents
- 2. Design developmentally appropriate learning opportunities that apply technology-enhanced instructional strategies to support the diverse needs of learners.
- 3. Design and develop components of an instructionally sound website to support teaching and learning
- 4. Identify and locate technology resources and evaluate them for accuracy and suitability.
- 5. Model and teach legal and ethical practice related to technology use.
- 6. Apply effective group process skills.

III. Required Course Textbooks

There are no required textbooks. Occasional readings will be prepared by the instructor and available online.

IV. Description of Course Assignments

A. Submission Guidelines for course assignments

<u>Identification</u>: Every item submitted for grading must be labeled at the top. This includes the body of an email message or a text document. If the purpose of an email message is to submit a file as an attachment, then the identification information does not need to be included in the body of the email message.

Identification information must be included in the attached document, however.

Sue Smith

AETE 703, Spring 2006

Flash Experience

January 17, 2006.

Email Submission: In the subject line, start with your last name and include an identifier. If there is another person with the same last name, also include your first initial. The subject line information should be included for every email, including those that contain attachments.

Subject: Smith Picture Subject: SmithS Picture

<u>File names</u>: Start with your last name and include an identifier. We will try to keep the files names short.

AFTF 703 Syllabus 2

SmithPic.jpg SmithTips.doc

<u>File Types:</u> Please submit text files in Microsoft Word. If you have a problem with this format, contact the instructor prior to submitting any documents.

<u>Document/Text format</u>: When submitting a text document, use the following attributes: One-inch margins all the way around the page.

Use a san-serif, 12-point font such as Arial or Helvetica.

Use single spacing between lines.

Use a footer on every page except the first. Put your full name on the left side and the page number on the right side. This syllabus document uses the required format.

Use a view of 100 percent. Do not make the view larger, smaller or the entire page.

<u>References</u>: Include a reference list whenever appropriate. It is important to identify the sources of information you use in your work. The reference list should be a separate page at the end of the document and does not count toward the specified number of pages required.

B. Introductory Activities

NOTE: Before submitting any of the activities, be sure to follow the submission guidelines.

- Your Picture: A class WWW page will be created with a picture of everyone in class. You must submit the picture of yourself. Do not insert the picture into a word file. The picture should be in a typical picture format such as jpg, gif or png. Submit the picture as an attachment to an email message. The file cannot be larger than 60K.
- **Update Blackboard**: Change the email address to match the one you will use for the course. Change your first and middle names so that the first letter of each is capitalized and the others are lower case. Use the name that you prefer to be called. Send the instructor an email message indicating that this is complete. The body of the message only needs to state, "Blackboard update complete."
- **Flash Experience**: Give a brief, narrative description of the Flash files you created in Design and Development Tools I. I expect this to be less than 1/2 of a page. Submit this as a Word file.

C. Class Activities/Labs

A wide variety of class activities will be assigned throughout the semester. Lab time will often be scheduled during class to work on these hands-on activities.

D. Individual Project (Creating a Personal Website)

Using a web-authoring tool, develop a personal website that includes a profile, online resume, and professional/personal interests (e.g. courses you teach, previous/current projects, hobbies, family). The website should include a picture of yourself, demonstrate command of basic HTML elements (titles, headings, lists, tables, embedded images, hyperlinks), a flash animation and contain navigation among pages.

E. Group Project (Creating a Web Tutorial)

Together with two other students from the class, develop a web tutorial that will provide instructional opportunities for students or teachers. Incorporate an original Macromedia Flash movie that includes relevant animation or user interaction. Be sure that your project

AETE 703 Syllabus 3

also includes appropriate instructional content, still graphics, appropriately designed page layouts, and links. The final project will be displayed on the USC Aiken WWW server.

Each group will be responsible, at designated intervals, for the following deliverables:

- **Design Plan:** As the first step of instructional design, complete an analysis of the learners, tasks, and context for his/her lesson and create a 2-3 page analysis report. The report should also provide a brief description of the processes used to complete the various analyses.
- Paper Prototype/Storyboard: The purpose of the prototype is to visualize in quite exact detail what the final product is intended to look like and how it works. The prototype should cover most of the different windows or pages to be included in the final product and be consistent with the placement and size of the components. Each window or page should be portrayed on its own sheet of paper and numbered accordingly. You may draw the prototype by hand or electronically.
- **Usability Test Report:** Conduct a usability test with at least 3-5 target users and submit a 5-7 page report. The report should include: 1) description of the prototype; 2) demographics of participants; 3) description of the test sessions; 4) authentic tasks; 5) summary of findings; and 6) list of revisions.
- **Group Report:** Submit a 1-page progress report regarding the project activities. The report should provide an accurate description of what the group activities have been and an assessment of what is going well and not going well on the project.
- Web Tutorial: Send an email message to the instructor to indicate that the tutorial is complete and ready for grading. Each team member is responsible for creating a Flash animation designed for the tutorial that is different than the Flash animations created for other class assignments. The email message should indicate each member of the team and the specific location of each individual's Flash animation.
- Self & Peer Evaluations: Send the instructor self and peer evaluations in the body of an email message. Include a description of individual roles in the group in completing the project (e.g. how tasks were divided in the group, about how much time each individual spent doing them) and ratings of the contribution of EACH group member, including you, on a scale from 0 to 5. Give a concrete summary of each member's contributions to the group along with numeric ratings.
- **Project Presentation:** On the final exam night, each team will make a class presentation outlining the main parameters of the project and demonstrating the tutorial itself in abbreviated form and thus provide a concise yet complete overview of the project. Each member of the team will be expected to present.

V. Evaluation and Grading

A. Assignment Table

Assignment	Due Date	Deliverable	Points
Introductory Activities	1/13	Picture of self	10
	1/13	Blackboard Update	10
	1/17	Flash Experience	10
Class	TBA	Word Processing	100
Activities/Labs	TBA	Graphic 1	100

AETE 703 Syllahus 4

	TBA	Graphic 2	100
	TBA	Graphic 3	100
	TBA	Flash 1	100
	TBA	Flash 2	100
Individual	TBA	Flash 3	100
Project	1/20	Mistakes in WWW design	100
	2/6	Personal Website	200
Group Project	2/28	Design Plan	40
	3/14	Paper Prototype/Storyboard	40
	3/31	Group Report	40
	4/11	Usability Test Report	60
	4/24	Web Tutorial	200
	4/28	Self & Peer Evaluation	40
Final Exam	5/2	Project Presentation	40
	4/26	Final Exam	200
		Total	1690

B. Grade Scale

Some grades will be assigned as letter grades. The first number after each letter below represents the numerical equivalent of a given letter grade. The range after each letter indicates the range of numerical values that will be assigned to the letter.

- A (95%) (93 100%) = Exceptionally thorough knowledge of the subject matter; outstanding performance and professional quality of work.
- B+(91.5%)(91-92%) = Signifies mastery and fulfillment of all course requirements; very good professional quality work.
- **B** (87.5%) (85 90%) = Good quality of work.
- C+ (83.5%) (83 84%) = Satisfactory, acceptable work.
- C (78.5%) (75 82%) = Minimally acceptable performance and quality of work; partial mastery.
- D(72%)(70 74%) = Not acceptable work.
- F(50%) (Below 70%) = Completely unacceptable work.
- A+ (100%) = Wow factor. This grade is only applied if the content of the assignment results in surprise, awe, amazement, astonishment, wonder and admiration.

AETE 703 Syllahus

C. Late Work

The expectation is that all assignments will be submitted prior to the due date and that late work is not accepted. If you have an exception that you would like to have considered, you must contact the instructor prior to the due date.

If an arrangement is made for late work, indicate the agreement on the submission. In the case of an email submission, include the agreement in the body of the email. Do not put the agreement in the assignment file.

VI. Major Topics of the Course

- A. Graphic Design
- **B.** Web environments
- C. Web-authoring tools
- D. Web design principles
- E. Flash Animation
- F. Creating paper and computer prototypes
- G. Web usability and accessibility
- H. Web publishing & maintenance

VII. Modes of Instruction

A. Course Delivery:

- A variety of instructional strategies will be used in the course, such as lectures, demonstrations, laboratory activities and student presentations.
- Online assignments and activities will be integrated throughout the course.
- Computer lab time will be scheduled as part of the course. Regular access to computer hardware and software outside class time is also required.

B. Communications:

- We will be using Blackboard (http://blackboard.sc.edu) for on-line discussion, document sharing, and other electronic communication. For other needs, contact the instructor via e-mail.
- Submission of assignments will be done via email messages to the instructor or through other electronic modes that will be described during classes. The storyboard can be submitted in person, in paper form.
- All the assignments in this class are time-sensitive and confirmed by the instructor when received. If you do not receive confirmation e-mails from the instructor within 24 hours, contact the instructor.

C. Group Process

• Group projects will be completed by teams that usually consist of three people. Each member of your team will choose a role based on the requirements of the project. There are a variety of roles to take at different phases of the project (e.g. subject matter expert, project manager, programmer, graphic designer, and usability tester). These roles are not exclusive -- you may negotiate with anyone else on your team to do part of the work that is associated with your role, or you may participate in the work associated with other roles.

AFTE 703 Syllabus

• Self & peer evaluations will consist of ratings from each team member. These ratings will be factored into the deliverable grades for the team as described in the Group Project section of this document, so that team members may receive different grades on team deliverables depending on their self/peer evaluations. Your ratings are kept confidential.

VIII. Bibliography

A. Recommended Readings

- Alessi, S. M., & Trollip, S. R. (2001). *Multimedia for learning: Methods and development* (3rd ed.). Boston, MA: Allyn and Bacon.
- Nielsen, J. (2000). Designing web usability. Indianapolis, IN: New Riders Publishing.
- Shneiderman, B. (1998). *Designing the user interface: Strategies for effective Human-Computer Interaction* (3rd ed.). Reading, MA: Addison Wesley Longman, Inc.

B. Web Resources

General Web Design Guidelines

- Webmaster Tips- Free, online, searchable, topic listing newsletter http://www.netmechanic.com/news/
- Evaluating Web Sites: Criteria and Tools (http://www.library.cornell.edu/okuref/research/webeval.html)

Web Usability & Accessibility Guidelines

- Web Page Backward Compatibility Viewer (http://www.delorie.com/web/wpbcv.html)
- Bobby Tools for ADA Compliance Testing (http://bobby.watchfire.com/bobby/html/en/index.jsp)
- W3C HTML Home Page (http://www.w3.org/MarkUp/)

Freehand Tutorials

• Dynodan Print Solutions. http://www.dynodan.com/tutorial/freehand/

Dream Weaver Tutorials

- Web design by Artmixer.com. http://www.artmixer.com/webdesign.htm
- http://www.sitebuilder.ws/dreamweaver/tutorials/

Flash Tutorials

- EchoEcho.com Flash Tutorial (http://www.echoecho.com/flash.htm)
- Flash 5 Tutorial (http://www.baycongroup.com/flash.htm)

AETE 703 Syllabus 7