EME 6414c Web-Based Instruction
Course Syllabus

Course Description
This course incorporates concept, theory, and research to the design, development, and evaluation of web-based instruction (WBI). Included in the course is the production of a WBI rapid prototype based on sound principles of learning theory and instructional design.

Purpose of the Course
Students in this course will acquire the skills necessary to design web-based instructional programs. In addition, students will develop the knowledge, skill, and abilities needed to provide leadership in the areas of web-based design, development, and delivery of instruction. Students will design and develop effective instruction, as well as identify and select other effective existing web-based instruction.

Major Topics/Goals
Upon completion of this course students will have the ability to plan for WBI; analyze and select effective WBI; design, develop and implement WBI; and be able to formatively evaluate and revise WBI lessons.

Topic: Creating a Framework for Web-Based Instruction
Goals:
A. To synthesize the current body of research in the field on the historical context of instruction through telecommunication protocols in public education.
B. To analyze the advantages and disadvantages of using WBI for teaching and learning.
C. To evaluate current instructional systems and products to determine characteristics of well-designed WBI.

Topic: The Impact of Computing on Public Education
Goals:
A. To summarize the use of telecommunications to form effective teaching systems.
B. To assess the strengths and weaknesses of teachers and barriers faced by teachers who attempt to use telecommunications systems for teaching and learning.
C. To conduct an analysis of the impact telecommunications instruction has made on education, teaching and learning.
D. To summarize journal articles and online documentation to ascertain how telecommunications instruction is be integrated systematically into teaching and learning.
E. To compare and contrast several methodologies for telecommunications in public education.

Topic: Incorporating Principles of Learning Theory into WBI Lessons
Goals:
A. To apply principles of learning theory in the systematic design on WBI.
B. To compare and contrast behavioral, cognitive, and constructivist learning theories as it relates to the application of WBI.
C. To describe implications for the design of WBI based on the principles of instructional design.
D. To review and summarize related research on the role of practice in designing WBI.
E. To synthesize the research on types of feedback and its role in the learning process through WBI.
F. To summarize the role of alignment in designing WBI.
G. To develop a testing strategy for assessing student knowledge when receiving instruction through WBI.
H. To compare and contrast the influence learner control will have on student learning outcomes.
I. To compare and contrast the influence navigational issues will have on student learning outcomes.

**Topic: Analyzing a Topic for the Design of WBI**

Goals:
A. To select appropriate mediums for the delivery of instruction based on the application of media selection models and approaches.
B. To conduct a learning task analysis that will be used in the design of WBI.
C. To synthesize the learning task analysis to suggest three component objectives for the design of WBI.

**Topic: Capturing the Capabilities of WBI in Design Documentation**

Goals:
A. To synthesize analysis information to develop a flowchart representation of the web-based product to be developed.
B. To compare and contrast the major classifications of WBI.
C. To apply strategies for directing student attention (cueing) to important information on WBI.
D. To compare and contrast levels of interactivity and describe how interactivity can be promoted in the WBI.
E. To describe strategies to manage and evaluate user input on a rapid prototype of a WBI lesson.
F. To apply all instructional design strategies and techniques to the design of storyboards to be utilized in the creation of a rapid prototype of WBI.

**Topic: Developing Effective WBI**

Goals:
A. To evaluate basic options available in available authoring languages.
B. To demonstrate the organizational features of writing for WBI.
C. To demonstrate several techniques when authoring the rapid prototype of WBI. Techniques may include interactivity, relevant practice and feedback, using orienting activities, and providing a framework for consistent screen design.
D. To demonstrate skill in using languages for WBI.

**Topic: Methods for Evaluating WBI**

Goals:
A. To compare and contrast alternative methods for formative evaluation of WBI.
B. To determine the implications for evaluating WBI at alpha and beta level testing.
C. To provide a rationale for instrumentation available for evaluation.
Evaluation and Feedback
Students must complete and achieve competency on the WBI authoring language tutorials prior to the third week of class. The following are course requirements:

- **Class Activities and Participation 30%**: Each student will complete assigned class projects and participate in online discussions.
- **Design Document 20%**: Each student will complete a design document for a WBI lesson based on assignment specifications.
- **WBI Rapid Prototype 35%**: Each student will produce a complete WBI rapid prototype on a selected topic. The WBI must be made available for all class members and instructor to view from a web browser.
- **Annotated Bibliographies (3) 15%**: Each student will review the research literature on specific elements related to the design of WBI and submit 3 annotations throughout the course. These articles should be in different areas of research and should not be those provided by the instructor. Articles should be of a substantive nature. Annotations should be in APA style.

Evaluation of all written assignments and web development is based upon instructor’s judgment of the knowledge of facts and conventions, legitimacy of reasoning, and rational processes used by students. Grading procedures vary by instructor and range from a letter grading of written work, class participation, and examinations to the amount of acceptable work completed above the minimum ("C") grade. Grade requirement minimum acceptable level includes, but is not limited to, thought processes, accuracy of information presented, and quality of expression.

Textbook

References/Bibliography:


Expectations for Academic Conduct/Plagiarism Policy: Academic Conduct Policy: [Web Format] | [PDF Format] | [RTF Format]

**Written Work:** All written work for the course is to be submitted in APA (5th Edition) format. Tutorials and links are provided with the course resources to assist with this formatting. Additionally, it is not required but you may choose to buy the most current APA Style Guide. APA is the format used throughout the education profession and will be required in most, if not all your courses, making this book a very good investment.

**Statement of the University policy on academic conduct:**
As members of the University of West Florida, we commit ourselves to honesty. As we strive for excellence in performance, integrity—personal and institutional—is our most precious asset. Honesty in our academic work is vital, and we will not knowingly act in ways which erode that integrity. Accordingly, we pledge not to cheat, nor to tolerate cheating, nor to plagiarize the work of others. We pledge to share community resources in ways that are responsible and that comply with established policies of fairness. Cooperation and competition are means to high achievement and are encouraged. Indeed, cooperation is expected unless our directive is to individual performance. We will compete constructively and professionally for the purpose of stimulating high performance standards. Finally, we accept adherence to this set of expectations for academic conduct as a condition of membership in the UWF academic community.

The Student Code of Conduct sets forth the rules, regulations and expected behavior of students enrolled at the University of West Florida. Violations of any rules, regulations, or behavioral expectations may result in a charge of violating the Student Code of Conduct. It is the student’s responsibility to read the Student Code of Conduct and conduct themselves accordingly. You may access the current Student Code of Conduct at [http://www.uwf.edu/judicialaffairs](http://www.uwf.edu/judicialaffairs).

**Plagiarism Policy:** [Word Format] | [PDF Format] | [RTF Format]

**Student Handbook:** [PDF Format]

**Assistance:** Students with special needs who require specific examination-related or other course-related accommodations should contact the Student Disability Resource Center (SDRC), sdrc@uwf.edu, 850.474.2387. SDRC will send an email to the instructor that specifies any recommended accommodations.

Academic honesty is highly valued at UWF online just as it is at each UWF campus. A student must always submit work that represents his or her own original words or ideas. If any words or ideas are used that do not represent the student's original words or ideas, the student must cite all
relevant sources. The student should also make clear the extent to which such sources were used.
Words or ideas that require citations include, but are not limited to, all hardcopy or electronic
publications, whether copyrighted or not, and all verbal or visual communication when the
content of such communication clearly originates from an identifiable source. online, all
submissions to any public meeting or private mailbox fall within the scope of words and ideas
that require citations if used by someone other than the original author. Academic dishonesty in
an online learning environment could involve:
- Having a tutor or friend complete a portion of your assignments
- Having a reviewer make extensive revisions to an assignment
- Copying work submitted by another student to a public class meeting
- Using information from online information sources without proper citation.