EME 6209: Designing Integrated Media Environments 2

Educational Technology Program

School of Teaching and Learning · College of Education · University of Florida

CREDIT HOURS

3-credits hours

PREREQUISITE

Completion of EME 6208 with a passing grade or instructor permission.

COURSE DESCRIPTION

Study of development and problem-solving as applied to real-world educational problems with solutions designed and implemented in various programming and scripting languages. Topics include data types, logic, relational operations, flowcharting, sequence, selection, repetition, functions, arrays, file i/o, object-orientation, relational database design, entity-relationship diagrams, design principles, testing, and debugging. Prior programming experience is neither assumed nor required.

INSTRUCTOR INFORMATION

Name: Albert Ritzhaupt, Ph.D., PMP, CCP, CDMP

Email: aritzhaupt@coe.ufl.edu

Website: http://www.aritzhaupt.com/ (Links to an external site.)

Office Phone: (352) 273-4180

Cell Phone: (904) 859-9799

CLASS MEETING TIMES AND VIRTUAL OFFICE HOURS

Please schedule an appointment with me via email or visit me during my office hours. I encourage you to always email before coming to my office to check availability. We will have alternating bi-weekly synchronous meetings on:

Wednesdays from 5:10 PM - 8:10 PM

TEXTBOOK INFORMATION

There is not a required textbook for this course. However, there are several online readings that are clearly outlined on the syllabus and in the Canvas shell. These online readings include interactive tutorials to illustrate programming concepts. Students are strongly encouraged to use these interactive tutorials to master the course learning objectives.

REQUIRED SOFTWARE/HARDWARE

You will need access to a variety of software packages this semester that will include integrated development environments, programming, and scripting language compilers/interpreters, database management systems, software modeling tools, web browsers, and various plug-ins, web servers, and various operating systems. The software tools include PHP, HTML/XHTML, HTML 5, CSS, Bootstrap, JavaScript, jQuery, MySQL, and AJAX. You will also need a robust text editor, such as NotePad++ or jEdit, or BBEdit for Mac. For designing software diagrams, you can use either Microsoft PowerPoint 2007/10/13/16 or Microsoft Visio 2007/10/13. You will also be able to use a web-authoring package or integrated development environment for some of the deliverables, like Dreamweaver or Visual Studio. Finally, you will need access to a web server space supporting a LAMP (Linux, Apache, MySQL, and PHP) stack. The instructor uses the services provided by: https://www.startlogic.com (Links to an external site.). You are encouraged to use this provider; however, you can choose any provider think will meet your needs (e.g., GoDaddy). You will need to create your domain and pay the fee for at least one year of service.

COURSE DELIVERABLES

There are three primary forms of deliverables in this course: software assignments, research experiment software, and discussions. Each of the items has a hard deadline that will be posted in advance and will not be adjusted.

Software Assignments

There will be eight software assignments that you are to complete during the semester. The software assignments are designed to provide you an opportunity to apply the skills and concepts you have learned. You are welcome to share ideas, help each other debug source code, and compare results. However, the submissions should be your individual work. Do not plagiarize in this course. Your submissions must be representative of your intellectual work.

Research Experiment Software

The research experiment software project requires the implementation of software products using web technologies to manifest a research experiment and the data collection procedures for this research experiment. Pairs of two will collaboratively create the research experiment software and fully execute the research design. More details about the research experiment software are provided within the specifications.

Discussions

Aside from the first discussion, all discussion prompts are the same for each module of the course. The discussion prompt focuses on having students reflect upon the learning experience of completing the assignment in the previous module, and sharing an active hyperlink to that assignment for peers to observe and comment on in their responses. All students are expected to post the initial thread of their reflection addressing the prompt by the first Sunday in the two-week module by 11:59pm. Students are required to provide feedback on at least two of their peers' assignment submissions. The initial threads must address the questions posed by the prompt, include an active hyperlink to the assignment, and be at least 300+ words written in a concise writing style.

GRADING SCALE

	Grade	Scale
Final course grades will be determined using scores from the following:	А	90-100
 60% - Assignments (8) 20% - Research Experiment Software (1) 20% - Discussions (8) 	В	80-89
	С	70-79
	D	60-69

E 0-59

Note: A grade of an 'I' will not be awarded unless there are extenuating circumstances.

The only grades that will be given for this class are: A, B, C, D, and E. No plus or minus grades will be given.

LEARNING OBJECTIVES

Upon successful completion of this course, the student will be able to:

- 1. Define the protocols and systems used on the Web.
- 2. Explain the functions of clients and servers on the Web.
- 3. Connect to a webserver to upload files.
- 4. Use flowcharts to illustrate problem-solving logic and entity-relationship diagrams to illustrate a database design.
- 5. Implement static websites using HTML, HTML 5, and CSS.
- 6. Implement interactive websites using client-side scripts (JavaScript) and server-side scripts (PHP).
- 7. Design and implement an interactive instructional web site with regard to issues of usability and accessibility using both client-side and server-side technology.
- 8. Demonstrate the ability to insert, update, delete and retrieve data to and from a MySQL relational database.

COURSE POLICIES

Attendance

Students are expected to attend all of their scheduled classes and to satisfy all course objectives as outlined by the instructor. The effect of absences upon grades is determined by the instructor, who reserves the right to deal with individual cases of nonattendance. It is the student's responsibility to give the instructor notice prior to any anticipated absence, and within a reasonable amount of time after an unanticipated absence. Furthermore, it is the student's responsibility to catch up on all missed assignments and information covered in class. Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found in the online catalog

at: http://gradcatalog.ufl.edu/content.php?catoid=5&navoid=1054#attendance

Late Work

In order to receive full credit for work, students must turn in required deliverables on the specified due date. Late work will not be accepted unless you fall under the special circumstances (e.g., religious holidays, military duty, etc.). Read the link above under attendance. You are welcome, however, to submit work early.

Accommodations for Students with Disabilities

If you require classroom accommodation because of a disability, you must first register with the Dean of Students Office (<u>http://www.dso.ufl.edu/drc</u>). The Dean of Students Office will provide documentation to you, which you then give to the instructor when requesting accommodation. The College is committed to providing reasonable accommodations to assist students in their coursework.

Counseling and Student Health

Students with academic concerns related to this course should contact the instructor in person or via email. Students also may occasionally have personal issues that arise in the course of pursuing higher education or that may interfere with their academic performance. If you find yourself facing problems affecting your coursework, you are encouraged to talk with an instructor and to seek confidential assistance at the UF Counseling & Wellness Center, 352-392-1575. Visit their web site for more information: <u>http://www.counseling.ufl.edu/</u>. Also, crisis intervention is always available 24/7 from: Alachua County Crisis Center: (352) 264-6789.

Academic Integrity and Academic Honor Code

As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity." You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: <u>http://www.dso.ufl.edu/SCCR/honorcodes/honorcode.php.</u>

Course Evaluation

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at <u>https://gatorevals.aa.ufl.edu/students/</u>. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <u>https://ufl.bluera.com/ufl/</u>. Summaries of course evaluation results are available to students at <u>https://gatorevals.aa.ufl.edu/public-results/</u>.

Acceptable Use Policy

Please read the <u>University of Florida Acceptable Use Policy</u> that can be found at <u>http://www.it.ufl.edu/policies/aupolicy.html</u>. You are expected to abide by this policy.

Software Use

All faculty, staff, and students of the University of Florida are required and expected to obey laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against the University policies and rules, disciplinary action will be taken as appropriate.