LIS5364 - WEB DEVELOPMENT AND ADMINISTRATION
Day | time

MODE OF INSTRUCTION: Online

All students will meet with an instructor for class weekly, synchronously, using a multimedia conferencing system such as Collaborate, at a specific class time indicated in the University's course schedule for each semester. Since this course requires hands-on coding, the instructor will make use of live screencasting through the conferencing system, in such a way as to facilitate students' typing/coding simultaneously with the instructor. Additional asynchronous actions among students and with the instructor are strongly encouraged, and may be facilitated through email or another communications framework.

Instructor:
Email:
Office: Phone:
Course Location/Website:
Office Hours

COURSE PREREQUISITES (REQUIRED, UNLESS PRIOR INSTRUCTOR APPROVAL):

All students taking LIS5364 are required to have previously taken and passed (with a C- or higher final grade) LIS5362.

COURSE DESCRIPTION:
This course follows a step-by-step introduction to topics concerning client- and server-side programming (including data interfacing and security). Topics include acquiring domain names and Web hosting agencies, introduction to server-side programming, working with data types and operators, building functions and control structures, manipulating strings, accessing files and directories, manipulating data in arrays and strings, connecting to and manipulating data resources, managing state information, object-oriented design, debugging and error handling. In addition, more advanced topics using templates and jQuery may be included as well.

COURSE OBJECTIVES:

This course is primarily intended for College of Communication and Information students, or related areas, and focuses on the fundamental concepts of client- and server-side development, while connected to data repositories. Lastly, with time-permitting, we will explore XML, as well as an introduction to mobile application development. Upon successful completion of the course, the student should be able to:

- Demonstrate a basic understanding of computer concepts, including software and hardware;
- Implement techniques related to the planning, production, and management of medium to large World Wide Web sites, including information organization and design, hardware and software, and cutting-edge development tools.
- Solve computing problems using a top-down approach in a well-structured design using procedural-, and object-oriented programming techniques;
- Design, implement, test, and debug a client/server programs to solve a given problem;
- Demonstrate knowledge and use of control structures used in procedural-, and object-oriented programming, including sequence, selection, iteration, and functions;
- Make use of data types and data structures, including integer and floating point types, arrays (one-dimensional, two-dimensional, strings) and arrays. Have a rudimentary-level understanding of object-oriented classes and object-oriented programming;
- Utilize algorithms studied to perform common tasks, such as finding the max and min of a data set, counting, summing, tracking a previous value, searching and sorting, reading until EOF, etc;
- Consider, compare, and evaluate code segments or simple algorithms for relative efficiency in a basic fashion;
- Code refactoring;
- Utilize client-, server-side design and data sources to build professional quality, database- driven Web sites, primarily using open source software;
- Design rudimentary databases.

COURSE MATERIALS:

- The **Textbook (required)**: <u>Murach's PHP and MySQL</u>. Authors: by Joel Murach and Ray Harris. ISBN 978-1-890774-56-1

The following <u>optional</u> reference books are sanctioned for this course:

- Authors: Zak Ruvalcaba and Anne Boehm; Murach's HTML5 and CSS3 ISBN: 978-1-890774-66-0.
- HTML and XHTML Interactive Movie Tutorials, Starter Scott McLeod, Patrick Carey, ISBN 10: 1-4188-3938-8
- Cameron, D., Rosenblatt, B., and Raymond, E. (1996). *Learning GNU Emacs, 2nd Edition*. Sebastopol, CA: O'Reilly & Associates, 1996. ISBN 1-56592-152-6

COURSE ASSIGNMENTS AND EVALUATION:
The cumulative grade consists of the following graded items: Assignments, Projects, Comprehension Exercises, and a Presentation. Two Comprehension Exercises consist of <u>Comprehension Exercise 1</u> (counting 20%) and <u>Comprehension Exercise 2</u> (counting 25%), respectively. Assignments consist of <u>five homework assignments</u> (counting 5% each), <u>two larger projects</u> (counting 10%, and 15% each, respectively), and a <u>presentation</u> (counting 5%).

GRADE CALCULATION:

Assignment 1	5%
Assignment 2	5%
Assignment 3	5%
Assignment 4	5%
Assignment 5	5%
Presentation	5%
Project 1	10%
Project 2	15%
Comprehension Exercise 1	20%
Comprehension Exercise 2	25%

GRADING SCALE:

A	93 - 100		C	73 – 76
A-	90 – 92		C-	70 – 72
B+	87 – 89		D+	67 – 69
B	83 – 86		D	63 – 66
B-	80 – 82		D-	60 – 62
C+	77 – 79		F	0 – 59

COURSE SCHEDULE

WEEK	TOPICS TO BE COVERED
1	Course Introduction and Overview, Expectations, and Discussion Topics. Getting Started with PHP
2	Review HTM5/XHTML, CSS, JavaScript, and PHP
3	More advanced HTML5 and CSS3, and Databases
4	PHP and MySQL
5	Model/View/Control – MVC Architecture
6	Testing and Debugging
7	Form Data
8	Control Structures
9	Strings and Numbers
10	Dates
11	Arrays
12	XML (time-permitting)

13	Mobile App Dev (time-permitting)
14	Mobile App Dev (time-permitting)
15	Putting It All Together!

Note: Additional topics may include: Templates, jQuery, Concurrent Versioning Systems (CVS), Frameworks, Security Issues, as well as others.

SCHOOL OR DISCIPLINARY POLICIES:

Copyright Statement

Some of the materials in this course are possibly copyrighted. They are intended for use only by students registered and enrolled in this course and only for instructional activities associated with, and for the duration of, the course. They may not be retained in another medium or disseminated further. They are provided in compliance with the provisions of the *Technology, Education, And Copyright Harmonization* (TEACH) Act (refer to the 3/7/2001 TEACH Act at www.copyright.gov/legislation/archive/).

Sexual Harassment Policy

It is the policy of the University that its employees and students neither commit nor condone sexual harassment in any form. http://registrar.fsu.edu/bulletin/graduate/information/university_notices/

iSchool Hardware and Software Requirements

A list of all hardware and software requirements for students participating in the School of Information (iSchool) courses can be found at the following location: http://ischool.cci.fsu.edu/academics/online/requirements/

Student Eligibility for an Incomplete Grade

Incomplete ("I") grades will not be assigned, except in the case of exceptional unforeseen circumstances that occur within the last three weeks of the semester and your work has otherwise been satisfactory (C average).

University Attendance Policy:

Excused absences include documented illness, deaths in the family and other documented crises, call to active military duty or jury duty, religious holy days, and official University activities. These absences will be accommodated in a way that does not arbitrarily penalize students who have a valid excuse. Consideration will also be given to students whose dependent children experience serious illness.

Academic Honor Policy:

The Florida State University Academic Honor Policy outlines the University's expectations for the integrity of students' academic work, the procedures for resolving alleged violations of those expectations, and the rights and responsibilities of students and faculty members throughout the process. Students are responsible for reading the Academic Honor Policy and for living up to their pledge to "...be honest and truthful and...[to] strive for personal and institutional integrity at Florida State

University."⬚ (Florida State University Academic Honor Policy, found at http://fda.fsu.edu/academic-resources/academic-integrity-and-grievances/academic-honor-policy.)

Americans With Disabilities Act:

Students with disabilities needing academic accommodation should:

(1) register with and provide documentation to the Student Disability Resource Center; and

(2) bring a letter to the instructor indicating the need for accommodation and what type.

Please note that instructors are not allowed to provide classroom accommodation to a student until appropriate verification from the Student Disability Resource Center has been provided.

This syllabus and other class materials are available in alternative format upon request.

For more information about services available to FSU students with disabilities, contact the:

Student Disability Resource Center
874 Traditions Way
108 Student Services Building
Florida State University
Tallahassee, FL 32306-4167
(850) 644-9566 (voice)
(850) 644-8504 (TDD)
sdrc@admin.fsu.edu
http://www.disabilitycenter.fsu.edu/

Syllabus Change Policy

"Except for changes that substantially affect implementation of the evaluation (grading) statement, this syllabus is a guide for the course and is subject to change with advance notice.