Course syllabus CPSC4125 – Server-Side Web Development – Fall 2019

Instructor Information

INSTRUCTOR NAME	Jose Canedo
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PHONE	706-507-8170
OFFICE HOURS AND LOCATION	By appointment
MEETING TIME AND PLACE	TR 6:00 – 7:15 pm in CCT408

Course Information

CPSC4125 SERVER-SIDE WEB DEVELOPMENT CRN 81149
3 CREDIT HOURS/ CPSC 2125 and CPSC 3131 with grades of "C" or better

Course Description

This course is a continuation of CPSC 2125. Topics include: server-side scripting languages, interfacing web applications with databases, advanced topics in hypertext markup languages and client-side scripting. Modern software tools for the server-side web application development will be introduced. Students will develop a functional web site that makes use of database connectivity.

Required Textbook and Materials

PHP & MySQL for Dynamic Web Sites, 5th Edition
Author: Ullman
ISBN: 9780134301846
Copyright Year: 2018
Publisher: Peachpit Press

Learning Outcomes

The following are this course's outcomes:

- Students will be able to analyze the requirements for and design a software application.
    - Strategies and actions used to produce the outcome:
        - Study of SDLC (Software Development Lifecycle) models.
        - Study of techniques for creating, validating, and eliciting software requirements.
        - Practice of techniques for using requirements to create software design
    - ABET criteria covered: A, B, C, D, F, G, I, J and K.
    - Program objectives covered: 2, 3, 6 and 8.
    - Assessment methods: exams, programming assignments, and project topic presentation, requirements analysis, design creation, documentation and presentation.

- Students will be able to analyze the requirements for and create server-side scripting using a variety of server-side scripting languages.
    - Strategies and actions used to produce the outcome:
        - Study of various server-side scripting languages and techniques for implementing them in a Web-based and cloud-based environment.
    - ABET criteria covered: A, B, C, D, F, G, I, J and K.
    - Program objectives covered: 2, 3, 6 and 8.
    - Assessment methods: exams, programming assignments, and project implementation, documentation and presentation.
- Students will analyze the requirements for, connect to and use MySQL or SQL Server or Oracle or Access databases.
    - Strategies and actions used to produce the outcome:
        - Study of Web-based database connection techniques.
    - ABET criteria covered: A, B, C, D, F, G, I, J and K.
    - Program objectives covered: 2, 3, 6 and 8.
    - Assessment methods: exams, programming assignments, and project implementation, documentation and presentation.

- Students will use computer-based and cloud-based repositories to implement version control and collaborate on a software project.
    - Strategies and actions used to produce the outcome:
        - Require students to use git and cloud repositories to store and distribute code.
    - ABET criteria covered: A, B, C, D, F, G, I, J and K.
    - Program objectives covered: 2, 3, 6 and 8.
    - Assessment methods: exams, programming assignments, and project implementation, documentation and presentation showing use of repositories.

COURSE ASSESSMENT

LEARNING ACTIVITIES

Learning activities to produce these outcomes include online eBook chapter readings, in-class labs to let students practice new concepts, in-class discussion or Q&A sessions, quizzes, internet research, hands-on web development assignments, and a large individual website project. Students must have access to computers for doing assignments.

The ACM recommends the following: “As a general guideline, the amount of out-of-class work is approximately three times the in-class time. Thus, a unit that is listed as requiring 3 hours typically entails a total of 12 hours (3 in class and 9 outside).” Students will be expected to spend this time outside class reading the book, online materials and other materials; writing solutions to homework exercises and programming projects.

For CPSC4125 we will have a day of lecture and discussion as well as a day of hands-on lab each week. Hands-on labs should be completed on-campus. Three take-home hands-on web programming assignments will be given.

Class Project: in this class you will work on a class project all through the semester. You will follow the stages of the Software Development Life Cycle (SDLC) to conceive of a project problem, gather the complete requirements for a solution to the problem, then design the solution (planning stage), and finally complete the implementation. Your design will include a database.

COURSE EVALUATION

GRADED LEARNING ACTIVITIES	**Percentage**
Assignments	30%
Group Project	40%
Midterm Exam	15%
Final Exam	15%
TOTAL	**100%**

Percentage Range	**Final Grade**
90-100%	A
80-89%	B
70-79%	C
60-69%	D
59% and below	F

ADMINISTRATIVE POLICIES AND ACADEMIC RESOURCES

ADA AND 504 STATEMENT

If you have a documented disability as described by the Americans with Disabilities Act (ADA) and the Rehabilitation Act of 1973, Section 504, you may be eligible to receive accommodations to assist in programmatic and/or physical accessibility. We recommend that you contact the Center for Accommodation and Access located in Schuster Student Success Center, Room 221, 706-507-8755 as soon as possible. The Center for Accommodation and Access can assist you in formulating a reasonable accommodation plan and in providing support. Course requirements will not be waived but accommodations may be able to assist you to meet the requirements. Technical support may also be available to meet your specific need.

CAMPUS CARRY

For information regarding HB 280 (Campus Carry), please refer to www.usg.edu/HB280. It is the permit holder's responsibility to know and comply with the law.

ACADEMIC INTEGRITY

All students are expected to recognize and uphold standards of intellectual and academic integrity. As a basic and minimum standard of conduct in academic matters that students be honest and that they submit for credit only the products of their own efforts. Both the ideals of scholarship and the need for fairness require that all dishonest work be rejected as a basis for academic credit. They also require that students refrain from any and all forms of dishonorable or unethical conduct related to their academic work.

Students are expected to comply with the provisions of Section III, "Student Responsibilities," of the Columbus State University Student Handbook. This specifically includes the sections on "Academic Irregularity," and "Conduct Irregularity." In particular, the Columbus State University Student Handbook states:

“No student shall give or receive assistance in the preparation of any assignment, essay, laboratory report, or examination to be submitted as a requirement for any academic course in such a way that the submitted work can no longer be considered the personal effort of the student submitting the work.”

Examples of Academic Dishonesty include but are not limited to: Plagiarism (see definition below), giving or receiving unauthorized assistance on exams, quizzes, class assignments or projects, unauthorized collaboration, multiple submissions (in whole or part) of work that has been previously submitted for credit.

Plagiarism is any attempt to represent the work or ideas of someone else as your own. This includes purchasing or obtaining papers from any person and turning them in as your own. It also includes the use of paraphrases or quotes from a published source without properly citing the source. All written assignments may be submitted for textual similarity review to Turnitin.com for the detection of plagiarism.

Any work turned in for individual credit must be entirely the work of the student submitting the work. All work must be your own. You may share ideas but submitting identical assignments (for example) will be considered cheating. You may discuss the material in the course and help one another with debugging, however, I expect any work you hand in for a grade to be your own. A simple way to avoid inadvertent plagiarism is to talk about the assignments, but don't read each other's work or write solutions together. Keep scratch paper and old versions of assignments until after the assignment has been graded and returned to you. If you have any questions about this, please see me immediately.

For assignments, access to notes, textbook, books and other publications is allowed. Stealing, giving or receiving any code, diagrams, drawings, text or designs from another person (CSU or non-CSU) is not allowed. Having access to another person's work on the system or giving access to your work to another person is not allowed. It is your responsibility to keep your work confidential.

No cheating in any form will be tolerated. Please be aware that anyone caught cheating or plagiarizing in this class will receive a "0" for the assignment/exam and may receive a "0" for the course. A second instance of Academic Dishonesty may result in immediate dismissal from the Computer Science programs and expulsion from Columbus State University.

See https://cs.columbusstate.edu/resources/academic-dishonesty-policy.php for more details.

Please be aware that anyone caught cheating or plagiarizing in this class will receive a "0" for the assignment/exam and may receive a "0" for the course.

STUDENT COMPLAINT PROCESS

Information and resources for student complaints and academic appeals are located at the following link on the Columbus State University website http://aa.columbusstate.edu/appeals/.

COURSE ATTENDANCE POLICY

Class attendance is the responsibility of the student, and it is the student's responsibility to independently cover any materials missed. Class attendance and participation may also be used in determining grades. It is your responsibility to sign a roll sheet for every class meeting. At my discretion, I may drop you from the course for more than ***six (6)*** absences. Missing an exam or quiz is considered an absence. Missed classes caused by participation in documented, formal, University-sponsored events will not count as absences provided you notify me of such anticipated absences in advance and as soon as possible.

You are responsible for all class work missed, regardless of the reason for the absence(s). Late assignments will **not** be accepted, so if you are absent on the day an assignment is due, it is your responsibility to make alternate arrangements. No makeup exams or quizzes will be given, so please make sure you are present for all exams/quizzes. Refer to the CSU Catalog (**http://ace.columbusstate.edu/advising/a.php#AttendancePolicy**) for more information on class attendance and withdrawal.

TECHNICAL RESOURCES

HARDWARE REQUIREMENTS
How do I know if my computer will work with D2L?

SOFTWARE REQUIREMENTS
An office suite such as Microsoft Office or Open Office

- To open PDF files you might need Acrobat Reader
- Github, Bitbucket, Cloud9, Heroku, AWS, Azure accounts (we will set these up in class)
- Browser Plugins (Pdf files, QuickTime files, Mp4 files) can be usually be obtained at the browsers website.

Google Chrome
Firefox
Safari

If you need technical support or need assistance configuring your computer, you can refer to the link located in the "Support Resources" widget located on your "My Home" and your "Course Home" pages. If you cannot solve your problem after reviewing the knowledge base help pages, you can call help center 24-7 and talk to a Help Center agent. The number is 1-855-772-0423.

COLLEGE SPECIFIC SECTION

Tutoring Lab

Student assistants in the public Computer Center labs / Library can help you with basic computer-related problems such as logging on to the network, saving your work, etc., but they are not obligated to help you with your assignments. There are several tutors in the School of Computer Science lab (CCT450) who can help you with the assignments. Their schedule is posted in the Computer Science School. You can always contact me during my posted office hours, by e-mail, or by appointment.

Discussion Etiquette

- CSU is committed to open, frank, and insightful dialogue in all of its courses. Diversity has many manifestations, including diversity of thought, opinion, and values. Students are encouraged to be respectful of that diversity and to refrain from inappropriate commentary. Should such inappropriate comments occur, I will intervene as I monitor the dialogue in the discussions. I will request that inappropriate content be removed from the discussion and will recommend university disciplinary action if deemed appropriate. Students as well as faculty should be guided by common sense and basic etiquette. The following are good guidelines to follow:
  - Never post, transmit, promote, or distribute content that is known to be illegal.
  - Never post harassing, threatening, or embarrassing comments.
  - If you disagree with someone, respond to the subject, not the person.

Never post content that is harmful, abusive; racially, ethnically, or religiously offensive; vulgar; sexually explicit; or otherwise potentially offensive.

Student Responsibilities

- As a student in this course, you are responsible to:
- manage your time and maintain the discipline required to meet the course requirements,
- come to class prepared to ask questions to maximize your understanding of the material,
- complete all readings,
- complete all assignments,
- complete all quizzes and exams,
- actively participate in discussions,
- submit the "one-minute paper" after each class, and
- read any e-mail sent by the instructor and respond accordingly.

"I didn't know" is **NOT** an acceptable excuse for failing to meet the course requirements. If you fail to meet your responsibilities, you do so at your own risk.

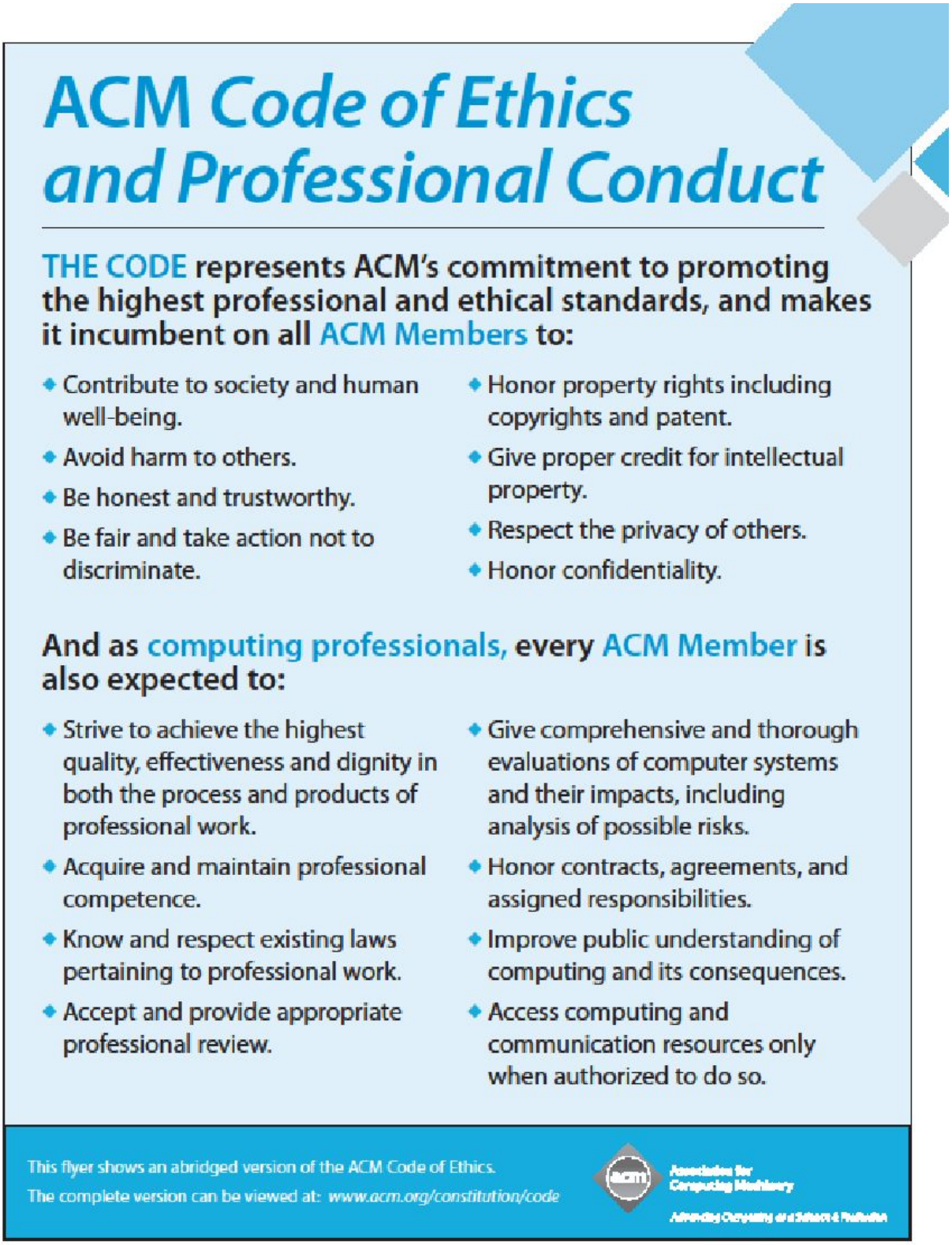
Instructor Responsibilities

- As your instructor in this course, I am responsible to:
- lead the class discussion and answer students' questions,
- post weekly lessons outlining the assignments for the week,
- read all responses to discussion questions and comments to responses,
- actively participate in discussions when necessary,
- respond to students questions and concerns expressed in the "one-minute paper",
- grade assignments, quizzes, and exams, and post scores within one week of the end of the week in which they are submitted, and
- read any e-mail sent by the you and respond accordingly within 48 hours.

Although I will read every posted discussion question and response, I will not necessarily respond to every post.

Please find our schedule of assignments below and in CougarView. Each week starts on Monday and ends on Sunday. The due dates will always fall on Sunday at midnight.

Please note our final exam date of Tuesday, December 5, 2019, in CCT408. We will start at 7:00 pm.



See Course Schedule below – also refer to Schedule published in CougarView.

WEEK	DATE	TOPIC	ASSIGNMENT
1	Aug. 13-15	Syllabus, orientation Introduction to Dynamic Web Development, MVC, and Version Control	
2	Aug. 20-22	Software Development Life Cycle	
3	Aug. 27-29	Server Side Scripting Languages Introduction to PHP and Environment configuration, Cloud 9, Heroku,	Group Project 1
4	Sep. 3-5	PHP Cont.	Assignment 1 Due
5	Sep. 10-12	Relational Databases Configure Database Environment	
6	Sep. 17-19	PHP and Databases	Group Project 2
7	Sep. 24-26	PHP and Databases	Assignment 2 Due
8	Oct. 1-3	**MIDTERM on Tuesday, October 1**	
9	Oct. 8	JavaScript	
10	Oct. 15-17	ASP.Net	Assignment 3 Due
11	Oct. 22-24	ASP.Net	
12	Oct. 29-31	Additional Server Side Scripting Languages (Go, Node, Ruby)	Assignment 4 Due
13	Nov. 5-7	Additional Server Side Scripting Languages (Go, Node, Ruby) Introduction to Docker. Deploying your application.	
14	Nov. 12-14	Deploying your application	Assignment 5 Due
15	Nov. 19	Group Project Presentations	Group Project Due
16	**Nov. 26 and 28**	**Thanksgiving Holiday Break (no classes)**	
17	Dec.	**Final Exam - comprehensive** **TIME:**	
	Dec. 13 & 14	GRADUATION CEREMONIES	Lumpkin Center