CS-355: Server Side Web Application Development (Summer 2015)

Instructor	George Corser (www.georgecorser.com)
Email/Phone	gpcorser@svsu.edu / Office: (989) 964-2756
Class Hours	8:00 am – 12:10 pm MW, Room SE-135
Office Hours	12:30 pm – 2:30 MW, or by appointment, Room SE-179

Course Description

This course focuses on the server side of web application development technologies. Topics include understanding, installing and configuring various server side technologies such as web servers, scripting engines and databases. Students will also learn PHP to address server side scripting and its interplay with the client side response. Students will produce a large scale, dynamic web application to illustrate their application of the course topics. Examinations of database connectivity, web service models and the importance of XML will be provided. *Prerequisite: CS-216, CIS-255. Credits: 4.* (From: Undergraduate Academic Catalog listing.)

Course Goals

By the time you finish this course you will be able to design, code, test and maintain PHP/MySQL web services in Linux. You will prove this by building a real application. We will also discuss current topics of concern to professional web developers. You will be expected to speak with some authority regarding current topics in web development. See also: Student Learning Goals. Specifically, you will be able to:

- Code programs using PHP, including object-oriented PHP
- Access databases in MySQL
- Demonstrate familiarity with web server administration by answering questions on written examinations
- Develop Create-Retrieve-Update-Delete (CRUD) Applications
- Implement data binding security to prevent SQL injection attacks and implement session control to ensure only authorized users have database access
- Implement application using Laravel 5 MVC framework

Textbook (optional): Fundamentals of Web Development.
Textbook (optional): PHP Programming and Web Development (Fourth Edition).
Reference (optional): Programming PHP (Third Edition).

Technology Components

You will host your files at csis.svsu.edu.

List of Assignments and Exams

This class consists of 6 programming assignments and 2 exams.

Assignment	*Points*	*Percent*	*Comments*
Programs	60	60%	Programs are due the week after they are assigned.
Midterm Exam	20	20%	This will be a 20-question open book, open note, open internet exam in Canvas
Final Exam	20	20%	This will be a 20-question open book, open note, open internet exam in Canvas
Total	**100**	**100%**	

Class Policies

Attendance: Mandatory.
Make-up assignments, exams: None.
Extra credit: Possible. See section below: Assessment Measures and Grading Scale.

Academic Integrity

Cheating means submitting someone else's work and claiming it was your own. Cheating also includes giving work for someone else to use in such a way. Unless otherwise stated explicitly in an assignment, students must do their work independently. University and departmental policies on academic dishonesty apply. Publicly-available sources for code or other material may be freely used if appropriately attributed. Similarly, code that is obtained from others must be appropriately attributed. However, using substantial amounts of code obtained from someone else will probably not yield full credit for the assignment. Students are responsible for protecting their files from access by others. Work that is essentially the same and submitted without proper attribution may be a violation of academic dishonesty policies by all those submitting the work, regardless of who actually did the work.

Punishment for cheating: First offense will be reported to university administration and will result in zeros for that assignment for all parties involved. Second offense will also be reported to university administration, and will result in a failing grade for the entire course for all parties involved. The university may impose additional penalties.

Assessment Measures and Grading Scale

Letter grades will be based on the number of points awarded, as follows:

A	93 or above	A-	90 to < 93		
B+	87 to < 90	B	83 to < 87	B-	80 to < 83
C+	75 to < 80	C	70 to < 75		
D	60 to < 70	F	0 to < 60		

For programming assignments, the following rubric applies. Note that the "maximum" number of points is supposed to be 10 per assignment. However it is possible to get 15 points (5 points extra credit) by going above and beyond what the assignment requires.

Criterion (max points)	***Excellent (15)***	***Above Avg. (10)***	***Average (8)***	***Below Avg. (6)***	***Poor (4)***
Design	Elegantly logical flow	Reasonably logical flow	Arguably logical flow	Awkward logical flow	Incoherent logical flow
Execution	Flawless	Bug-free, mostly	1,2 obvious bugs	3,4 obvious bugs	5+ obvious bugs
Satisfies Specs	Exceeds specs	Satisfies all specs	Satisfies most specs	Satisfies some specs	Does not satisfy specs
Comments	Clear and meaningful	Thorough, but wordy	Thorough, not always clear	Not thorough or not clear	Missing or meaningless
Extra Credit	*Added new functionality*	*Significant enhancement*	*Cosmetic enhancement*	*Insignificant enhancement*	*Attempted, no success*

Specs: specifications; requirements; the things the program is supposed to do.

Other extra credit will be in the form of in-class assignments.

Disability Statement

Students with disabilities who seek accommodations must make their request by Contacting the Office of Disability Services located at Curtiss 112, or call 964-7000. All accommodations must be approved by The Office of Disability Services. (Verbatim from: Syllabus Statement.)

Non-discrimination Statement

SVSU does not discriminate based on race, religion, color, gender, sexual orientation, national origin, age, physical impairment, disability or veteran status in the provision of education, employment and other services. (Verbatim from: Faculty Handbook.)

Syllabus Change Statement

This syllabus is subject to change if class needs warrant. (Verbatim from: Faculty Handbook.)