

CSCI 297 Scripting Languages

Fall 2019

Department of Computer Science and Quantitative Methods
College of Business Administration
Winthrop University

Instructor:

Stephen Dannelly, PhD
Thurmond 315
dannellys@winthrop.edu

Instructor's Office Hours:

Mondays and Wednesdays 1:00-4:00

Course Resources:

Textbook - recommended but not required
PHP and MySQL Web Development, 4th Edition
by Welling and Thomson
Addison-Wesley Inc.

Web Site

faculty.winthrop.edu/dannellys/csci297

Prerequisites:

- grade of C- or better in CSCI 208 CS2
- basic knowledge of HTML, including forms and tables

Credit Hours:

1 credit hour

Catalog Description:

A course that covers a web-oriented scripting language. The one-hour courses CSCI 291, 292, 293, and 297 provide students with a vehicle for learning a specific programming language. Each student must write a series of programs in the language, and be knowledgeable in the details of the language. The language is chosen by the instructor.

Learning Objectives:

After successfully completing this course each student will

- have the ability to create simple web-based applications using PHP and MySQL
 - PHP control constructs
 - HTML Form processing
 - web-based database access
- understand the strength, weaknesses, and appropriateness of PHP and MySQL

Content Notes

- Because this 1-credit course overviews three programming languages, none will be covered in significant depth. Many aspects of the languages will not be covered. For example, a working knowledge of PHP objects is essential for a professional PHP programmer, but receives only minor attention in this course.
- This course is a pre-req for CSCI 441 Web Application Design. Also, some content overlaps with CSCI355 Database Processing, e.g. writing SQL statements.

Cheating

When working in a professional software development environment it is expected that you will frequently consult with your colleagues regarding problems you encounter. But in an educational environment, each student is expected to do his/her own work. You are allowed to discuss problems at a high level, but sharing code, pseudo-code, or algorithms is not acceptable. For example, you are allowed to tell a classmate, "I couldn't determine if my app was writing into my data file in the correct location, so I wrote a separate app to simply display the entire data file." But showing a classmate your code to dump a data file to the screen, or helping debug his/her code, is considered cheating. Also, if you use or modify code that you found online, appropriately cite that content.

Topics and Class Meeting Schedule - see course web site for details

weeks 1 and 2 basic PHP constructs: iteration, selection, data types
weeks 3 - 9 creating a significant PHP integrated suite of scripts, file IO with PHP,
HTML form processing with PHP, form validation with JavaScript
weeks 10 - 14 basic MySQL database programming
week 15 review for final exam

Final Exam -- Thursday December 5, 2019 at 8:00am

Course Grades

Final grades for this course will be based on a 10-point scale. In other words,

90.00 to 100 is an A,
80.00 to 89.99 is a B,
etc...

This course heavily emphasizes the practical application and implementation of advanced programming concepts. Hence the course grade is heavily based on programming assignments.

Programming Assignments: 85%
Final Exam: 15%

Some assignments are more complex than others, and so not all assignments will count the same number of points. There will be approximately ten programming assignments.

Closely follow instructions for submitting programming assignments!!!!

Work submitted late will lose 10%, plus 10% for every 12-hours submitted late. For example, if an assignment is due Thursday at 2:00pm and is submitted at 2:10pm, it loses 10%. Work submitted at 12:30am on Friday would lose 20%.

Grades for programming assignments will be assigned using the following rubric:

	Excellent	Good	Fair	Unsatisfactory
Functionality 40%	The program works and meets or exceeds all specifications.	The program works and produces the correct results and displays them correctly. It also meets most of the other specifications.	The program produces correct results but does not display them correctly.	The program performs tasks that it was not supposed to perform.
Efficiency 20%	The code is extremely efficient without sacrificing readability and understanding.	The code is fairly efficient without sacrificing readability and understanding.	The code is brute force and unnecessarily long.	The code is huge, inefficient, or appears to be patched together.
Robustness 20%	Program correctly handles all specified test cases and additional special cases. Program contains error checking code.	Program executes without errors and correctly handles most special cases. Thorough testing has been completed.	Program executes without errors for pre-specified test cases.	Program does not execute due to errors. No evidence of testing.
Documentation 20%	Clear and complete documentation. The purpose and constraints of every variable and subroutine are described. Comments for code segments make the code easy to follow.	The purpose of all variables is clearly explained. The purpose of each subroutine is described.	Most variables and subroutines are commented. Comments provide some assistance with understanding the code.	No comments are included or other documentation provided.

COLLEGE OF BUSINESS EXPECTATIONS REGARDING PROFESSIONALISM IN THE CLASSROOM

The College of Business Administration is a professional organization with a well-defined and widely disseminated mission of student development. Accordingly, each class represents a gathering of professionals and professionals-in-training. The instructor's job as a professional is to deliver quality instruction in each class, to start and end each class on time, to be responsive to student perspectives, issues and questions, and to treat each student respectfully. The student's job, as a professional-in-training is to be prepared for class, to be on time, to attend all classes, and to be respectful of others in the classroom.

In accordance with and pursuant to these roles the following guidelines were established to specify to students (both present and prospective) faculty expectations regarding their behaviors

1. **Students will attend all class meetings.** There are no automatically "excused" absences. In the event that you will be unable to attend a class session, you should inform your professor in advance as a matter of professional courtesy just as you would/should with an employer.
2. **Students will arrive in advance of the beginning of the class session.** Late arrivals are disruptive, inconsiderate and unprofessional. Professors may make arrangements for delinquents, but are not obliged to do so. Those not present at the beginning of the classroom period will be considered absent.
3. **Students will not converse among themselves during class except when instructed to do so.** When a student creates a disturbance in the classroom, instructors will either ask the student to desist immediately or speak to the student at the conclusion of class. Repeat offenders will be sanctioned.
4. **Students will not leave class before its conclusion.** Early departures are disruptive, inconsiderate and unprofessional. Professors may make arrangements under some circumstance, but are not obliged to do so. Those not present at the conclusion of the classroom session will be considered absent.
5. **Students will have procured textbook/materials prior to the first class.** Instruction will begin with the first class meeting and consume the remainder of the class period.

STUDENTS WITH DISABILITIES

Winthrop University is committed to providing access to education. If you have a condition which may adversely impact your ability to access academics and/or campus life, and you require specific accommodations to complete this course, contact the Office of Accessibility (OA) at 803-323-3290, or, accessibility@winthrop.edu. Please inform me as early as possible, once you have your official notice of accommodations from the Office of Accessibility.

SYLLABUS CHANGE POLICY

The grading and attendance policies for this course, as described above, will not change and are adhered to strictly. The schedule of class meetings may change due to unexpected events such as class cancellation due to weather.

ATTENDANCE POLICY

Because programming assignments and the final exam will be based on the content of lectures, not a textbook or the web lecture notes, it will very difficult for students to successfully complete the graded work without coming to class.

ASSESSMENT

No student performance metrics from this course are used to assess any degree program.