

Pellissippi State Community College  
Master Syllabus

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**PERL PROGRAMMING  
CSIT 2665**

Class Hours: 3  
Credit Hours: 4  
Lab Hours: 0  
Date Revised: 5/5/2009

Instructor:  
Office:  
Phone:  
Email:

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**Catalog Course Description:**

A study of the Perl programming language including regular expressions, objects from Perl library, file handling and networking. Perl and its use in CGI scripts with HTML Web pages are included. On Demand

**Prerequisite(s):** One programming course

**Entry-Level Standards:**

The entering student should have a familiarity with the DOS and Windows operating systems and should be competent in at least one high-level programming language. CSIT students should have had one programming course and CIW students should have had CIW Foundations.

**Pre-requisite(s):** CST 1510 for CSIT students, CIW Foundations for CIW students or Department approval

**Textbooks and Other Related Materials Basic to the Course:**

1. *Perl Fundamentals*, published by Computer PREP/ProsoftTraining.
2. *Fundamentals of CGI Using Perl*, published by Computer Prep/ProsoftTraining.

**Recommended References:**

- *Learning Perl*, Fifth edition, by Randal L. Schwartz, Tom Phoenix. O'Reilly and Associates.

**I. WEEK/UNIT/TOPIC BASIS:**

(PF = Perl Fundamentals, CGI = Fundamentals of CGI Using Perl)

Week	Chapters	Topics Covered
1	PF: 1, 2	Introduction, Flow Control
2	PF: 2, 3	Flow Control, Regular Expressions
3	PF: 3, 4	Regular expressions, Arrays
4	PF: 5, 6	Hashes, Subroutines
5	PF: 6, 8	Subroutines, Environment Variables
6	PF: 9, 10	Packages, Object-Oriented Perl

7	PF: 10; CGI: 1	Object-Oriented Perl; CGI Programming
8	CGI: 2, 3, 4	CGI Programming
9	CGI: 2, 3, 4	CGI Programming
10	PF: 7; CGI 5	File I/O
11	CGI: 6, 7, 8	File I/O
12	PF: 11; CGI: 9	Databases
13	CGI: 9, 10	Databases
14	CGI: 11; PF: 12	Security; Debugging
15	→	Final exam period

## II. COURSE OBJECTIVES:

- A. Use the syntax of the Perl language. II III IV VI VII VIII IX XI XII
- B. Use structured programming concepts developed in earlier courses. I III V VI VII IX X X
- C. Use search tools, inquiries, Email, FTP, TELNET and other available resources found on the Internet to locate, use, download, upload and communicate effectively. II III IV
- D. Write programs that meet written requirements. II III IV VII
- E. Demonstrate individual and/or teamwork standards to accomplish given tasks within established timeframes. I
- F. Develop an environment that serves customer and/or market needs. V VII IX X XII
- G. Write Perl programs to solve a wide variety of problems. II III IV VI VII VIII IX XI XII

## III. INSTRUCTIONAL PROCESSES: Students will:

1. Produce Perl programs as standalone scripts and CGI scripts. *Mathematics Outcome, Technological Literacy Outcome, Active Learning Strategy*
2. Produce a set of Web pages that include the use of Perl CGI scripts as part of a collaborative effort for sharing with other class members. *Communication Outcome, Transitional Strategy, Mathematics Outcome, Technological Literacy Outcome, Active Learning Strategy*
3. Use the Internet as a medium for obtaining documentation and instruction and for submitting assignments. *Communication Outcome, Technological Literacy Outcome*
4. Participate in a software development team. *Transitional Strategy, Active Learning Strategy*
5. Use professional tools to produce software components and documentation. *Technological Literacy Outcome, Transitional Strategy*
6. Practice elements of the work ethic such as punctuality, professionalism, dependability, cooperation, and contribution. *Communication Outcome, Active Learning Strategy*

7. Participate in a peer review of term projects. *Communication Outcome, Active Learning Strategy*
8. Use professionally accepted methods and materials in completion of program development. *Technological Literacy Outcome, Transitional Strategy, Communication Outcome, Active Learning Strategy*

#### **IV. EXPECTATIONS FOR STUDENT PERFORMANCE:**

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

1. Recognize Perl data types and operators. A, G
2. Use Perl program control structures. A, B, C
3. Use Perl arrays and hashes. A, B, C
4. Use Perl subroutines and functions. A, B, C
5. Use and write Perl development tools prevalent in the industry. A, B, C
6. Use regular expressions in Perl. A, B, C
7. Read from/write to files in Perl. A, B, C
8. Use Perl reference variables. A, B, C
9. Use graphic user interfaces to perform specific tasks. C, E, F
10. Find resources and information to perform specific tasks. C, D, E
11. Use Web pages and search tools effectively. D, E, F
12. Use communication tools effectively. D, E, F
13. Show effective operational use of available utilities, products, software and hardware. C, D, E
14. Produce documentation, evaluations, performance data, sources of information, results of tasks and tests in a timely, well-organized manner. C, D, E
15. Participate in a team that provides Perl/Web consulting services for an organization. A, B, C, D, E, F, G

#### **V. EVALUATION:**

A. Testing procedures:

At least 4 tests/quizzes will be given. Tests may only be made up for excused absences. An excused absence is one that can be verified by supporting documentation. Failure to make a passing test average will result in a grade of F for the course. Test make up 40% of the grade.

B. Laboratory expectations:

At least 4 graded lab assignments will be assigned during the course of the semester. Failure to make a passing lab average will result in a grade of F for the course. At least one lab assignment is a team project. At least one lab assignment is a CGI script with one or more web page(s). Labs make up 60% of the grade.

C. Field work: NA

D. Other evaluation methods: None

E. Grading scale:

93 - 100	A
88 - 92	B+
83 - 87	B
78 - 82	C+
73 - 77	C
65 - 72	D
0 - 64	F

**VI. POLICIES:**

A. Attendance Policy:

Pellissippi State Community College expects students to attend all scheduled instructional activities. As a minimum, students in all courses (excluding distance learning courses) must be present for at least 75 percent of their scheduled class and laboratory meetings in order to receive credit for the course. Individual departments/programs/disciplines, with the approval of the vice president of Academic and Student Affairs, may have requirements that are more stringent. In very specific circumstances, an appeal of the policy can be addressed to the head of the department in which the course was taken. If further action is warranted, the appeal can be addressed to the vice president of Academic and Student Affairs (Pellissippi State Catalog)

B. Academic Dishonesty:

Academic misconduct committed either directly or indirectly by an individual or group is subject to disciplinary action. Prohibited activities include but are not limited to (Pellissippi State Catalog):

- Cheating, including but not limited to unauthorized assistance from material, people, or devices when taking a test, quiz, or examination; writing papers or reports; solving problems; or completing academic assignments
- Plagiarism, including but not limited to paraphrasing, summarizing, or directly quoting published or unpublished work of another person, including online or computerized services, without proper documentation of the original source
- Providing others with information and/or answers regarding exams, quizzes, homework or other classroom assignments unless explicitly authorized by the instructor
- Taking an exam for another student

C. Accommodations for Disabilities:

Students who need accommodations because of a disability, have emergency medical information to share, or need special arrangements in case the building must be evacuated should inform the instructor immediately, privately after class or in her or his office. Students must present a current accommodation plan from a staff member in Services for Students with Disabilities (SSWD) in order to receive accommodations in this course. Services for Students with Disabilities may be contacted by going to Goins 134 or 126 or

by phone: 694-6751(Voice/TTY) or 539-7153. More information is available at [www.pstcc.edu/departments/swd/](http://www.pstcc.edu/departments/swd/)

D. Computer Usage Guidelines:

College-owned or –operated computing resources are provided for use by students of Pellissippi State. All students are responsible for the usage of Pellissippi State's computing resources in an effective, efficient, ethical and lawful manner. (Pellissippi State Catalog)

E. Emergencies:

In the event that you have an emergency beyond your control, you must notify the instructor as soon as possible.