

**Course Outline**

**COURSE:** CSIS 54L                      **DIVISION:** 50                      **ALSO LISTED AS:**

**TERM EFFECTIVE:** Spring 2016    **CURRICULUM APPROVAL DATE:** 04/27/2015

**SHORT TITLE:** PERL PROGRAMMING LB

**LONG TITLE:** Perl Programming Lab

| <u>Units</u> | <u>Number of Weeks</u> | <u>Type</u> | <u>Contact Hours/Week</u> | <u>Total Contact Hours</u> |
|--------------|------------------------|-------------|---------------------------|----------------------------|
| 1            | 18                     | Lecture:    | 0                         | 0                          |
|              |                        | Lab:        | 3                         | 54                         |
|              |                        | Other:      | 0                         | 0                          |
|              |                        | Total:      | 3                         | 54                         |

**COURSE DESCRIPTION:**

Supplemental practice in coursework associated with this course is provided. Concurrent enrollment in CSIS 54 is required. **COREQUISITE:** CSIS 54 Perl Programming

**PREREQUISITES:**

**COREQUISITES:**

CSIS 54

**CREDIT STATUS:** D - Credit - Degree Applicable

**GRADING MODES**

L - Standard Letter Grade

P - Pass/No Pass

**REPEATABILITY:** N - Course may not be repeated

**SCHEDULE TYPES:**

04 - Laboratory/Studio/Activity

72 - Dist. Ed Internet Delayed

**STUDENT LEARNING OUTCOMES:**

1. Create Perl programs using calculations, decision statements

Measure: Homework, Lab exercises.

PLO: 1,2,3,4

ILO: 3,2,7

GE-LO:

Year assessed or anticipated year of assessment: 2016

2. Create Perl programs using loops and arrays

Measure: Homework, Lab exercises

PLO: 1,2,4

ILO: 3, 2, 7, 5

GE-LO:

Year assessed or anticipated year of assessment: 2016

3. Create Perl programs using procedures and functions

Measure: Projects, homework, lab work, exams, quizzes.

PLO: 1,2,4

ILO: 2, 3, 7

GE-LO:

Year assessed or anticipated year of assessment: 2016

#### PROGRAM LEARNING OUTCOMES:

- 1) Student will code, debug, document, test, and run programs.
- 2) Student will write programs in at least three different programming languages, and compare and contrast the philosophies and comparative advantages of each these languages.
- 3) Students will demonstrate professional conduct by meeting project deadlines, and participating in self-managed teams.
- 4) Student will create algorithms to solve programming problems, and implement those algorithms.

#### **CONTENT, STUDENT PERFORMANCE OBJECTIVES, OUT-OF-CLASS ASSIGNMENTS**

Curriculum Approval Date: 04/27/2015

Students repeating this class will learn new programming techniques and Web capabilities, and will expand previous knowledge. Both the Web HTML language and the Windows are changing once a year.

WEEKS HOURS CONTENT:

1-2 6 Running Perl on Windows.

Standard Input and Output.

Creating, saving and printing files.

ASSIGNMENTS:

Do assignments that use basic Perl statements.

Do assignments that use scalars and do arithmetic.

Read class chapters. Do exercises at the end of these chapters.

3-4 6 Write programs that cover material covered in class and assigned chapters.

Write programs using different types of scalars and strings.

Write programs that use arithmetic and string operations.

ASSIGNMENTS:

Write programs using more types of scalars.

Write program using strings and numbers interchangeability.

Write programs using exponentiation, remainder and unary negation operators.

Write programs using integer and string comparison.

Read class chapters. Do exercises at the end of these chapters.

5-6 6 Write programs that cover material covered in class and assigned chapters.

Write programs that use other arithmetic operations, bits, list and array variables.

ASSIGNMENTS:

Write programs that use if auto-increment and decrement.

Write programs that use bit manipulation.

Write programs that use conditional expression.

Write programs that use, list and array variables.

Read class chapters. Do exercises at the end of these chapters.

7-8 6 Write programs that cover material covered in class and assigned chapters.

Write programs that use array functions and files.

ASSIGNMENTS:

Write programs that use list ranges, list expressions and array slices.

Write programs that use array functions.

Write programs that use input and output files.

Read class chapters. Study and use list and arrays. Do exercises.

9-10 6 Write programs that cover material covered in class and assigned chapters.

Write programs that work with files, pattern matching and structures.

ASSIGNMENTS:

Write a program that checks the status and permissions for files.

Write programs that use pattern-matching operators and pattern-matching options.

Read class chapters that cover files. Do programs with structures.

11-12 6 Write programs that cover material covered in class and assigned chapters.

Write programs that use pattern-matching and translation.

ASSIGNMENTS:

Write programs that use pattern-matching

substituting and translations.

Write programs that use extended pattern matching.

Write programs that use all the new control structures.

Read class chapters. Do exercises at the end of this chapter.

13-14 6 Write programs that cover material covered in class and assigned chapters.

Write programs that use subroutines.

**ASSIGNMENTS:**

Write programs that use subroutines.

Write programs that use recursive subroutines.

Read class chapters. Do exercises at the end of the chapter.

15-16 6 Write programs that cover material covered in class and assigned chapters.

Write programs that use associative arrays and data structures.

**ASSIGNMENTS:**

Write programs that use associative arrays.

Write programs that copy and modify associative arrays.

Write programs that create data structures using associative arrays.

Read chapters on topics covered. Do programs.

17-18 6 Review course.

Finish-up programs and final projects.

Final programs.

**ASSIGNMENTS:**

See Content Section of Course Outline,

### **METHODS OF INSTRUCTION:**

Lecture, computer demonstration, hands-on exercises and practices.

### **METHODS OF EVALUATION:**

The types of writing assignments required:

Written homework

The problem-solving assignments required:

Homework problems

Quizzes

Exams

The types of skill demonstrations required:

Class performance

Performance exams

The types of objective examinations used in the course:

Multiple choice

True/false

Matching items

Completion

Other category:

None

The basis for assigning students grades in the course:

Writing assignments: 5% - 20%

Problem-solving demonstrations: 20% - 60%

Skill demonstrations: 5% - 20%

Objective examinations: 10% - 40%

Other methods of evaluation: 0% - 0%

### **REPRESENTATIVE TEXTBOOKS:**

Required:

Ellei Quigley. Perl by Example. Prentice Hall, 2014. Or other appropriate college level text.

Reading level of text, Grade: 12+ Verified by: ev, MS Word

### **ARTICULATION and CERTIFICATE INFORMATION**

Associate Degree:

CSU GE:

IGETC:

CSU TRANSFER:

Transferable CSU, effective 200630

UC TRANSFER:

Transferable UC, effective 200630

### **SUPPLEMENTAL DATA:**

Basic Skills: N

Classification: Y

Noncredit Category: Y

Cooperative Education:

Program Status: 1 Program Applicable

Special Class Status: N

CAN:

CAN Sequence:

CSU Crosswalk Course Department: CSIS

CSU Crosswalk Course Number: 54L

Prior to College Level: Y

Non Credit Enhanced Funding: N

Funding Agency Code: Y

In-Service: N

Occupational Course: B

Maximum Hours:

Minimum Hours:

Course Control Number: CCC000142526

Sports/Physical Education Course: N

Taxonomy of Program: 070710