

CIS166 – Programming in Perl
Section: 5687 Day: Saturday Time: 8:30-11:10

| WEEK | DATE | CHAPTER | LESSON / SUBJECT | NOTES |
|------|-------|--|---|---|
| 1 | 8/28 | Course Syllabus. Ch. 1 Introduction | Intro & Orient. - Review Syllabus & Schedule. What is Perl What is "Code" A first program | Exercise 1 Assigned |
| 2 | 9/4 | Ch. 2 Scalar Data Ch. 3 Lists and Arrays Ch. 10 More Control Structures Ch. 5 Hashs | Scalars, Expressions, Lists, Contexts, References Flow of Control, Loops, Logical operators, Statement modifiers | Exercise 1 Due Exercise 2 Assigned |
| 3 | 9/11 | Ch. 6 I/O Basics Ch. 11 Filehandles and File Tests Ch. 4 Subroutines | File Handles, Pattern Matching, Split/Join, DATA Handle. Scope, Global Variables, Parameters, Return Values, Designing Functions | Exercise 2 Due Exercise 3 Assigned |
| 4 | 9/18 | References and aggregate data structures Documentation Debugging | Creating references, Scope and references, References to functions POD Command line options Debugging by hand, The Perl Debugger Project Proposal | Exercise 3 Due Exercise 4 Assigned Project Proposal |
| 5 | 9/25 | Ch. 7 Concepts of Regular Expressions Ch. 8 More about Regular Expressions Ch. 9 Using Regular Expressions Ch. 15 Strings and Sorting | The basic components, The character class, Simple anchors, Grouping, capturing, and backreferences, Other anchors: lookahead and lookbehind The match operator, The substitution operator, String within strings, Translation characters | Draft Project Proposal Due Exercise 4 Due Exercise 5 Assigned |
| 6 | 10/2 | Ch. 12 Working with Lists Ch. 13 Manipulating Files and Directories | Processing a list, Filtering a list, Sorting lists, Chaining functions, Reverse revisited Running external commands, Reading and writing from/to external commands, Working with directories, Filetest operators | Exercise 5 Due Exercise 6 Assigned |
| 7 | 10/9 | Using modules | Installing modules, Using modules, File::Basename MIDTERM Review | Final Project Proposal Due Exercise 6 Due |
| 8 | 10/16 | MIDTERM | Exam and Review | |
| 9 | 10/23 | Modular programming | Module and packages, Making a module, Why make modules? | Code Review Due Exercise 7 Assigned |
| 10 | 10/30 | Algorithms and data structuring | Searching, Sorting, Heap sort | Exercise 7 Due Exercise 8 Assigned |
| 11 | 11/6 | Object-oriented programming and abstract data structures | What is OOP? OOP in Perl, Abstract data structures, Stacks, queues, and linked lists | Code Review Due Exercise 8 Due Exercise 9 Assigned |
| 12 | 11/13 | More OOP examples | The heap as an abstract data structure Grades: an object example | Exercise 9 Due Exercise 10 Assigned |
| 13 | 11/20 | Ch. 16 Simple Databases Programming for the Web - CGI | DBM Pack/Unpack | Code Review Due Exercise 10 Due |
| | 11/27 | Thanksgiving | | |
| 14 | 12/4 | Class Presentations | | Project Due |
| 15 | 12/11 | FINAL EXAM | Exam and Review | |