

# CMPS COURSES

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Opposite each course title are three numbers such as 3-2-4. The first number indicates the number of regular classroom hours for the course each week; the second number indicates the number of laboratory hours per week; and the third number indicates the hours of credit awarded for the successful completion of the course. Listed in parentheses at the end of each course description is the term(s) that the course is normally offered. F=Fall, S=Spring, and M=Summer.

The college reserves the right to cancel or delete any course with insufficient enrollment.

## Courses

### **CMPS 1130. Computer Concepts/Programming. 2-2-3 Units.**

Introduces the concepts of computer hardware, operating systems, and programming. Programming topics require creating well designed interfaces and well written code using simple data types, control structures, and loops. Students will gain hands on experience using a modern programming language.(F,S,M)

### **CMPS 1301. Principles of Programming I. 3-0-3 Units.**

Introduces the principles of computer programming. Emphasis is on the design and teaching of correct well-structured algorithms using appropriate control structures with simple data types and data structures.(F,S)

Prerequisites: MATH 1111.

### **CMPS 1302. Principles of Programming II. 3-0-3 Units.**

This course continues the development of program design using a modern object-oriented language.(S)

Prerequisites: CMPS 1301.

### **CMPS 1371. Computing for Scien & Engineer. 3-0-3 Units.**

Introduces skills and concepts which are needed to use the computer in scientific and engineering work. Topics include design and analysis of algorithms, methods and techniques of scientific computation, and the organization of software.(F,S)

Corequisites: MATH 2253.

### **CMPS 2313. Intro to Software Engineering. 3-0-3 Units.**

This course will develop students' ability to apply a systematic, engineering approach to the development of software systems. Software development process will explore software development life cycles, requirements elicitation, architectural design, design decomposition, implementation, and testing. The course teaches students about modern techniques available for performing activities in each of these areas.(S)

Prerequisites: CMPS 1302.

### **CMPS 2720. Data Structures. 3-0-3 Units.**

The design, analysis, implementation and evaluation of the fundamental structures for representing and manipulating data. Structures include collections, lists, linked lists, stacks, queues, trees, heaps, tables.(F)

Prerequisites: CMPS 1301.

### **CMPS 2900. Special Topics in Comp Science. 0-0-1-3 Unit.**

Variable 1-3 hours. Special topics in computer science are presented, the content varies with the topic. This course may be repeated for credit when topic differs. (Offered As Needed) Prerequisite: Permission of Instructor