

# Computer Science (COMPSCI)

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## **COMPSCI 3L Introduction to Symbolic Programming 4 Units**

**Department:** Computer Science

**Course level:** Undergraduate

**Terms course may be offered:** Fall, spring and summer

**Grading:** Letter grade.

**Hours and format:** 1 hour of lecture and 6 hours of laboratory per week and approximately 5 hours of self-scheduled programming laboratory. 2 hours of lecture and 12 hours of laboratory per week for 8 weeks and approximately 10 hours of self-scheduled programming laboratory.

**Prerequisites:** High school algebra.

Introduction to computer programming, emphasizing symbolic computation and functional programming style. Students will write a project of at least 200 lines of code in Scheme (a dialect of the LISP programming language).

Students may remove a deficiency in 3 by taking 3L. Instructor: Clancy

## **COMPSCI 3S Introduction to Symbolic Programming (Self-Paced) 1 - 4 Units**

**Department:** Computer Science

**Course level:** Undergraduate

**Terms course may be offered:** Fall and spring

**Grading:** Letter grade.

**Hours and format:** 1 to 4 hours of discussion and 3 to 9 hours of laboratory per week.

**Prerequisites:** High school algebra.

The same material as 3 but in a self-paced format; introduction to computer programming, emphasizing symbolic computation and functional programming style, using the Scheme programming language. Units assigned depend on amount of work completed. The first two units must be taken together.

Course may be repeated for a maximum of 4 units. Refer to computer science service course restrictions. Course may be repeated up to 4 units. Instructor: Garcia

## **COMPSCI 9A Matlab for Programmers 2 Units**

**Department:** Computer Science

**Course level:** Undergraduate

**Terms course may be offered:** Fall and spring

**Grading:** Offered for pass/not pass grade only.

**Hours and format:** Self-paced.

**Prerequisites:** Programming experience equivalent to that gained in Computer Science 10; familiarity with applications of matrix processing. Introduction to the constructs in the Matlab programming language, aimed at students who already know how to program. Array and matrix operations, functions and function handles, control flow, plotting and image manipulation, cell arrays and structures, and the Symbolic Mathematics toolbox.

Course may be repeated for a maximum of 4 units. Refer to computer science service course restrictions. Instructor: Garcia

## **COMPSCI 9C C for Programmers 2 Units**

**Department:** Computer Science

**Course level:** Undergraduate

**Terms course may be offered:** Fall and spring

**Grading:** Offered for pass/not pass grade only.

**Hours and format:** Self-paced.

**Prerequisites:** Programming experience with pointers (or addresses in assembly language) and linked data structures equivalent to that gained in Computer Science 9B or 61A, or Engineering 7.

Self-paced course in the C programming language for students who already know how to program. Computation, input and output, flow of