

Course Objectives/Course Outline
Spokane Community College

Course Title: Software Math

Prefix and Course Number: CIS 107

Course Learning Outcomes

By the end of this course, a student should be able to:

- Understand and apply basic computer math principles used in software development.

Course Outline:

I. Computer Arithmetic

- A. Approximate numbers/significant digits
- B. Truncating
- C. Floating-Point (Real) arithmetic
- D. Assignment vs. Equations
- E. Computer Operators vs. Algebra operators
- F. Precedence and ()'s
- G. Errors

II. Boolean Logic

- A. Understand and apply the Boolean operators XOR, AND, OR, NOT (Negative)
- B. Truth Tables
- C. Compound Logic Statements
- D. Debugging

III. Computer Programming Concepts relating to Math

- A. Variables
- B. Casting / Converting variables
- C. Control Structures
- D. Data Structures
- E. Concatenation
- F. String manipulation