

**J. Sargeant Reynolds Community College
Course Content Summary**

Course Prefix and Number: CSC 205

Credits: 4

Course Title: Computer Organization

Course Description: Examines the hierarchical structure of computer architecture. Focuses on multi-level machine organization. Uses a simple assembler language to complete programming projects. Includes processors, instruction, execution, addressing techniques, data representation, and digital logic. Prerequisite: CSC 202. Lecture 4 hours per week.

General Course Purpose:

Course Prerequisites and Co-requisites:

Prerequisite: CSC 202

Student Learning Outcomes:

Upon completing the course, the student will be able to

- a. Create a series of assembly language programs;
- b. Study registers, instruction sets, interrupts, and I/O;
- c. Examine logical, arithmetic, and control operations; and
- d. Understand macros and subprogram development.

Major Topics to Be Included:

- a. Registers
- b. Instruction set issues
- c. Representation of data, data storage, and processing
- d. Subprograms, parameter passing, and macros
- e. Control operations

Date Created/Updated (Month, Day, Year): January 23, 2019