

Pierce College
Los Angeles Community College District
Computer Science 516
Computer Architecture, Organization, &
Assembly Language Programming

Prerequisites

**Experience with computer programming
in either the Java, C, or C++ language**

Instructor

C. Robert Putnam
cputnam@csun.edu

Grades in all prerequisite courses must be at least at the “C” level

Textbook

Computer Systems, 4th. ed.
J. Stanley Warford
Jones & Bartlett 978-0-7637-7144-7

Office Hours

<http://www.csun.edu/~sgs/faculty/putnam.html>

Course Description

Computer Architecture. Information representation and storage organization in computer systems. Computer hardware components. Selected computer architectures. Information formats, addressing modes, subprograms, parameter passing, stacks. Instruction Execution Cycle. Assembly Language Instruction Formats. Disassemblers. Loaders and Simulators. System Interrupts. Memory allocation process with virtual memory. Overview of boolean algebra, logic gates, combinatorial and sequential devices, circuit design.

Course Objectives

Introduce computer systems architecture and organization. Develop and test computer programs in machine and assembly language. Introduce operating systems, runtime events, and hardware components.

Evaluation

Midterm Examinations (2)			A	90%-100%
125 points @ exam	250 points	25%	B	80%-89%
Programming Projects (Lab)	500 points	50%	C	70%-79%
Final Examination	<u>250 points</u>	<u>25%</u>	D	60%-69%
	1000 points	100%	F	0%-59%

Homework assignments are due at the **beginning** of the class period on the assigned due date. **Late homework assignments will not be accepted.**

Programming assignments are due at the **end** of the class period on the assigned due date; at least 70% of the lab assignments **must** be completed with a passing grade to receive a passing grade in the course.

No makeup examinations will be given. Examinations must be taken on the assigned dates at the assigned time.

Students will be expected to attend each scheduled meeting; students with three absences before the first census will be dropped from the course. If you are absent and you have a valid reason for the absence, see the instructor as soon as possible. Students are responsible for all lectures and handouts even if absent from, or late to, class.

Attendance records will not be maintained after the first census period; students will be responsible for submitting official drop slips after this period. Any student who stops attending class and neglects to submit a drop form will be given an "F" grade for the course.

Students are expected to do their own work on all class assignments and examinations. Any student who violates this requirement will be given a failing grade for the course!