Los Angeles Valley College - Fall 2004

CSIT-816 Introduction to Computer Architecture and Organization

Prerequisites: CSIT 802, or the combination of CSIT 806 and 807

Description: Fundamentals of information representation, storage organization, and instruction sets in computer systems. Topics include assembly language instruction formats, addressing modes, the instruction execution cycle, stacks, optimizing complies, system interrupts and virtual memory.

Section: 3105

Meetings: Wednesday 5:45pm - 9:55pm in BJ103

Instructor: Zare Agazaryan

Email: zare_agazaryan@yahoo.com

Etudes: http://lavc.etudes.fhda.edu/

Web: http://www.csun.edu/~hbcsc311/csit816.html

Text: Assembly Language for Intel-Based Computers
by Kip R. Irvine
Publisher: Prentice Hall; 4th edition (July 25, 2002)
ISBN: 0130910139

Additional (optional) Resources:
Computer Organization and Architecture by William Stallings, Publisher: Prentice Hall; 6th edition (July 15, 2002), ISBN: 0130351199

Computer Systems by J. Stanley Warford, Stanley Warford, Publisher: Jones & Bartlett Pub; 2nd edition (May 2002), ISBN: 0763716332

Schedule:

Week	1	-	September 1, 2004	Introduction. Historical Perspective on Computer Architecture. Introduction to PC Architecture.
Week	2	-	September 8, 2004	Numbering Systems. Data Representation. Computer Arithmetic.
Week	3	-	September 15, 2004	Digital Logic. Boolean Algebra. Gates. Combinational Circuits. Sequential Circuits.
Week	4	-	September 22, 2004	Microprocessor Architecture. CPU Structure and Functions.
Week	5	-	September 29, 2004	Instruction Sets. Operations. Operands. Addressing Modes and Formats.
Week	6	-	October 6, 2004	Assembly Language Fundamentals.
Week	7	-	October 13, 2004	Data Types. Defining Data. Data Transfers. Addressing Modes.
Week	8	-	October 20, 2004	**Midterm Exam.**
Week	9	-	October 27, 2004	Arithmetic Operations.
Week	10	-	November 3, 2004	Procedures.
Week	11	-	November 10, 2004	Conditional Processing.
Week	12	-	November 17, 2004	Integer Arithmetic.
Week	13	-	November 24, 2004	Advanced Procedures.
Week	14	-	December 1, 2004	Strings and Arrays.
Week	15	-	December 8, 2004	Strings and Arrays.
Week	16	-	December 15, 2004	**Final Exam.**

Grading Policy:

Grading Policy:	Class attendance and participation	15%
	Quizzes	10%
	Projects and Homework	20%
	Midterm	25%
	Final	30%
	Total	100%