

Global Learning Semesters

Course Syllabus

Course: COMP-335 Computer Organization and Architecture

Department: Computer Science

Host Institution: University of Nicosia, Nicosia, Cyprus



Course Summary		
Course Code	Course Title	Recommended Credit Hours
COMP-335	Computer Organization and Architecture	3
Semester Offered	Contact Hours	Prerequisites
Fall	42	COMP-254 or CENG-280: Assembly Language
Department	Level of Course	Language of Instruction
Computer Science	Upper Division	English

Course Description

Study the software/hardware boundary as defined in the Von Neumann architecture. Review of the technological framework. Study machine instructions and formats, addressing techniques, performance evaluation, design of an ALU, advanced memory hierarchy and I/O practices. Discussions include pipelined machines, RISC machines and multiprocessor architectures.

Instructor

Dr.Charalambos Christou

Course Aims and Objectives

To introduce students to concepts of computer organization and architecture which constitute the basis for current computers. To show students the relationship between hardware and software.

Teaching Methods

The course is delivered through lectures and assignments.

Course Teaching Hours

42 hours. The course is delivered during the Fall semester in 14-weeks (3 hours/week).

Evaluation and Grading

Participation, Quizzes, Homework, Project:	20%
Test(s):	30%
Final Exam:	50%

Readings and Resources

Required Textbook

D. A. Patterson, J. L. Hennessy, and Computer Organization & Design: The Hardware/Software Interface, 2nd Edition, 1998, Morgan Kaufmann Publishers, (ISBN: 1-55860-428-6)

Recommended Reading

D. A. Patterson, J. L. Hennessy, Computer Architecture; a Quantitative Approach, 2nd ed., 1996, Morgan Kaufmann Publishers Inc. (ISBN: 1-55860-329-8)