

ECE 272 Computer Organization

Fall 2008

Objective

This course introduces the principles of computer architecture. The student is expected to enter this class with an understanding of binary arithmetic, logic, Boolean algebra, and some experience programming in a high level language (such as C or Java). Using these fundamentals, this course describes how computers are constructed and operated, from the bottom-up. A concurrent set of lab exercises introduces the student to assembly-level programming.

Instructor

Tarek Taha
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Office Hours

You are welcome to meet me at my office any time. If you are unable to get hold of me, send me an email or give me a call to set up an appointment.

Course Web Site

<http://www.ces.clemson.edu/~tarek/ece272/>

Required Materials

- *Structured Computer Organization*, 5th Ed, by Tanenbaum, McGraw-Hill, 2006.
- **ECE 272 Online Lab Manual**, Clemson University, by ECE Faculty, 2002.
Online at <http://parlweb.parl.clemson.edu/ullab/>

Prerequisites

ECE 201, CP SC 101, 111 (157) or 210 or 211.

Topics Covered

History of Computing	Computer Components	Computer Circuits
Microarchitecture	Microprogramming	Instruction Sets
Addressing	Data Types and Memory	Assembly Language

Attendance Policy

Attendance is mandatory. You will be responsible for all material covered in class and assigned in the textbook. If an instructor does not arrive within 15 minutes of the scheduled start of class, you may leave.

Grading Policy

Your final grade for this course will be determined by the following averaging procedure:

Tests	≈ 40 %
Short Quizzes/Homework/Class Participation	≈ 10 %
Lab	≈ 20 %
Final Examination	≈ 30 %

Tests

Nothing will be allowed on your desks during tests except a writing implement and a piece of scratch paper (provided by instructor) unless otherwise stated in writing by your instructor. No one will be allowed to visit the restroom during a test; therefore, it is recommended that each student visit the restroom prior to taking a test.

Makeup Tests

All makeup tests will be *cumulative* and given at the time of the Final Exam.

Academic Integrity

"As members of the Clemson University community, we have inherited Thomas Green Clemson's vision of this institution as a 'high seminary of learning.' Fundamental to this vision is a mutual commitment to truthfulness, honor, and responsibility, without which we cannot earn the trust and respect of others. Furthermore, we recognize that academic dishonesty detracts from the value of a Clemson degree. Therefore, we shall not tolerate lying, cheating, or stealing in any form."

Students with Disabilities

Clemson policy states that students with disabilities needing accommodations should contact the Office of Student Disability Services in 707 University Union, 656-0515, prior to contacting instructor during office hours.

Legal Disclaimer

Any portion of this syllabus may be changed during the semester. Adequate notice will be given in class when necessary.