

University of Connecticut
Department of Computer Science and Engineering
CSE 243: Introduction to Computer Architecture and Hardware/Software Interface
Fall 2004

Lecture: Tu/Th 3:30-4:45pm, ITE 119

Lab: Section 1: M 1-2:50pm, ITE 134
Section 2: M 3-4:50pm, ITE 134

Instructor: Ion Mandoiu
Office: ITEB 261
Phone: x6-3784
E-mail: ion@engr.uconn.edu
Office hours: or by appointment

Teaching Assistant: Jeff Meunier
Office: TBA
Phone: TBA
E-mail: jeffm@engr.uconn.edu
Office hours: Tu/Th 1-2:30pm or by appointment

Prerequisites: [CSE 207](#) and [CSE 208W](#)

Course Goals: This course will give you an in-depth understanding of the structure and operation of modern digital computer systems and the tradeoffs present at the hardware-software interface.

Course Content: Topics to be covered in lectures include basic machine organization and abstractions, performance evaluation, integer and floating-point arithmetic, instruction set architectures, single and multiple cycle data path and control, pipelining, memory system organization, the I/O subsystem. The lab will cover MIPS assembly language programming using the SPIM simulator.

Textbook (required): David A. Patterson and John L. Hennessy. *Computer Organization and Design - The Hardware/Software Interface, Third Edition*, Morgan Kaufmann Publishers, 2004.

Grading: The final grade will be based on bi-weekly homework assignments (10%), two mid-term exams (30%), a comprehensive final exam (30%), bi-weekly lab assignments (30%).

Homework Policy: Homework assignments are due at the beginning of the lecture on the due date. Lab assignments are due by e-mail to jeffm@engr.uconn.edu by midnight of the due date. To allow timely grading and dissemination of solutions, *no late assignments will be accepted* except for documented medical emergencies.

WebCT: We have a WebCT website for the class. Check this site regularly for class materials, grades, changes in class schedule, and other announcements.

Collaboration and Academic Integrity: Discussions with other students on homework problems and lab assignments are strongly encouraged; you are particularly encouraged to use the discussion tool on the WebCT site for course related discussions. However, submitted solutions to the homework and lab assignments *must be your own work*. Violations will be reviewed and sanctioned according to the University Policy on Academic Integrity.