

San Jose State University

Department of Electrical Engineering

Fall 2007

EE176 GREEN SHEET

HONOR CODE & IMPORTANT DATES

Faculty: Christopher H. Pham

Class Home Page: <http://www.engr.sjsu.edu/cpham/>, click on link to EE176, Fall 2007

COURSE TITLE

EE176 - Computer Organization

COURSE TOPICS

EE176. Computer Organization

(http://www.engr.sjsu.edu/electrical/bsee_course_descriptions.htm)

Design of instruction sets, addressing modes, and memory management. Data and control paths of the CPU. Microprogramming. Arithmetic units and I/O organization. **Prerequisite:** EE120. 3 units. *You will be responsible for fundamental material covered in the prerequisite courses. Some quick reviews may be given if the information is relevant to the class projects.*

Following is the lecture outlines:

1. Computer Abstractions & Technology
2. The Role of Performance
3. Instructions: Language of the Machine
4. Arithmetic for Computers
5. The Processor: Data Path & Control
6. Enhancing Performance with Pipelining
7. Large & Fast: Exploiting Memory Hierarchy
8. Interfacing Processors & Peripherals

The Basics of Logic Design and Mapping Control to Hardware will be covered as the supplement to the course topics. HDL training material will be available to provide a basic background.

CLASS MEETINGS:

Monday and Wednesday from 4:30 PM to 5:45 PM. Rm: EE232. Course ID: 46953, EE176-01.

Additional meetings (time & place TBD) will be required to provide more background training such as Hardware Descriptive Languages. These meetings are optional and only for those who need tutoring in their missing basic knowledge (i.e. HDL, IEEE standards, etc.).

CLASS FORUM

An on-line way to pass on latest information and a free speech forum. Please read the regulation when you logged in to this account: ee176f07@yahoogroups.com

To access this, access the following web site: <http://groups.yahoo.com/group/ee176f07>. You must first subscribe to this alias ee176f07@yahoogroups.com before you can send and receive emails or view the archived emails online. Your instructor will collect your email address and subscribe you to the class alias at the beginning of the semester. Remember that the email is broadcasted to all class members, so if you have personal issues, please send private emails to my personal email addresses below.

FACULTY

Christopher H. Pham phamc@email.sjsu.edu or chpham@cisco.com (please use this email account in *emergency only*, I will **not** reply your email to this address for non-emergency situation). Do not send emails to all three email addresses. I will check emails regularly. The fastest way to reach me is via the class email alias: ee176f07@yahoogroups.com

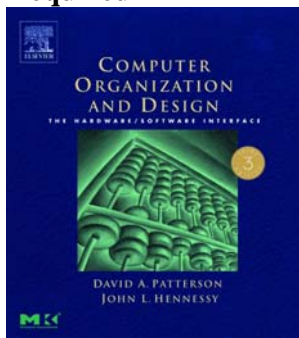
WWW: <http://www.engr.sjsu.edu/cpham/>

OFFICE HOURS

After class or via class email alias ee176f07@yahoogroups.com or private emails to phamc@email.sjsu.edu

TEXT

Required



Computer Organization and Design, 3rd edition

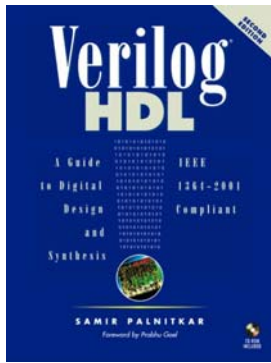
David Patterson and John Hennessy's

ISBN: 1-55860-604-1 Imprint: Morgan
Kaufmann

Recommended

Verilog HDL, A Guide to Digital Design and Synthesis,

by Samir Palnitkar, Prentice Hall, 1996.



READING MATERIALS

Reading materials will be handed out, on-line or available at SJSU Student Print Shop (located across the Student Union). Students are responsible for *all* reading materials. Homework, exams and projects are possibly based on the recommended texts and reading material.

Most lecture materials are available on-line for easy access and downloading.

HDL will be requested to complete the projects and homework. Please plan ahead to equip yourself with Verilog HDL. Some handouts and on-line material will be made available for you to learn the subjects. I will provide some basic training on Verilog HDL. Note: this is **not** an HDL class. For *profound* training in Verilog HDL, please take EE178 or EE279.

GRADING

>>>>>>> Missing any project or exam will result in grade F!!! <<<<<<<<

Midterm I	25%
Midterm II	25%
Final	25%
Quizzes	5%
Term projects	20%
Project 1=10%, Project 2=10%	

Extra Credit 5% - This will be optional and applicable towards total grading less than 100% as obtained from the above mandatory requirements. However, all students are urged to work on the extra credit assignments for your own career development.

HONOR CODE

The Electrical Engineering Department will enforce our Honor Code.

"I have read the honor code below and agree with its provisions. My continued enrollment in this course constitutes full acceptance of this code.

I will not:

- Take an exam in place of someone else, or have someone take an exam in my place
- Give information or receive information from another person during an exam
- Use more reference material during an exam than is allowed by the instructor
- Obtain a copy of an exam prior to the time it is given
- Alter an exam after it has been graded and return it to the instructor for re-grading"

Important Dates

http://www.sjsu.edu/academic_programs/calendars/academic_calendar/

FALL 2007

Tuesday..... August 21Academic Year Begins
Tuesday-Wednesday ... August 21-22.....Pre-Instruction Activities: Orientation, Advisement,
Faculty Meetings and Conferences
Thursday..... August 23First Day of Instruction
Monday..... September 3.....Labor Day - Campus Closed
Wednesday..... September 5.....Last Day to Drop Courses Without an Entry on
Student's Permanent Record
Wednesday..... September 12.....Last Day to Add Courses & Register Late
Thursday..... September 20.....Enrollment Census Date
Monday..... November 12.....Veteran's Day - Campus Closed
Wednesday..... November 21.....Classes that start at 5:00 PM or later will not meet.
Thursday-Friday November 22-23.....Thanksgiving Holiday - Campus Closed
Monday..... December 10.....Last Day of Instruction
Tuesday..... December 11.....Study/Conference Day (no classes or exams)
Wednesday-Friday, December 12-14,.....Final Examinations
Monday-Tuesday..... December 17-18.....Final Examinations
Wednesday..... December 19.....Final Examinations Make-Up Day
Thursday..... December 20.....Grade Evaluation Day
Friday..... December 21.....Grades Due From Faculty
December 22-.....WINTER RECESS
January 21