

©2006 CSU, Chico Department of Electrical and Computer Engineering

EECE444: Microprocessor Systems Design
Spring Semester, 2006

Instructor: [Dr. Albert O. Richardson](#)

Contact information:

Office: O'CONNELL 309

Office Hrs: M,W. : 10:00AM – 11:50AM

FRI. 10:00M – 10:50 AM

Tel: 530-898-4958

Email: arichardson@csuchico.edu

Class Schedule:

Lecture	MWF	9:00AM-9:50 AM	LANG. 104
Activity	TBA		OCNL 346

Textbooks:

1. Alan Clements: “*Microprocessor Systems Design, 68000 Hardware, Software, and Interfacing*” ,3rd Edition, 1997, PWS Publishers.
2. John B. Peatman: “*Embedded Design with the PIC18F452*”, Prentice Hall 2003

Reverences:

Class Lecture Notes/Lab. Packet
Device Spec. Sheets from Manufacturers' Web Sites.
The Motorola MC68000 Microprocessor Family, Harman & Hein

Topics:

Number of Classes	Topic	Clements Text & Lect. Notes
7 Classes	Exception(Interrupt) Processing	Sec.6.1-6.4,6.6; Notes: 36-54
7 Classes	Dynamic Random Access Memory: Structure; Read, Write, Refresh Timing; Interfacing to CPU, DRAM Controller Design.	Sec.5.4; Notes: 8-17e
Week Six(Feb. 27—March 3)	Review and MIDTERM TEST #1	Notes, Homework Solutions
4 Classes	Programmable Parallel Ports & Timers; The MC68230 PIT	Sec.8.1,8.3; Notes: 18-35
3 Classes	PIT Design Examples & Homework Solutions	Notes: 18-35
Week 8(March	SPRING BREAK	

13-17)		
3 Classes	Direct Memory Access Controllers (DMA): Structure, Timing, Design	Sec.8.2; Notes: 55-70
3 Classes	Microcontrollers & Applications	Peatman, Chs. 1-7
Week 12 (April 10-14)	Review and MIDTERM TEST #2	Notes, Homework Solutions
6 Classes	Microcontrollers & Applications	Peatman, Appendix A1-A10
6 Classes	Specialized and Advanced Application Specific Microprocessors: Digital Signal Processors--- Architecture, Interfacing, Applications for Digital Audio and Communications.	Notes: 97-117
May 15-19	Project Demos & FINALS WEEK	

Homework: Late assignments will be discounted by 25

Grading Policy:

Two Midterm Tests	40% Total
Homework , Class/Lab. attendance and participation	20%
Activities/Lab. Projects	40%

Attendance Policy:

After three absences, each additional absence from class/lab will result in a 1.5% grade reduction.

Cheating Policy:

First offense in any course: Zero on the paper or exam being graded and a permanent entry describing the cheating entered into the student's file.

Second offense in any course: F in the course grade, a permanent entry describing the cheating entered into the student's file, and referral of the cheating to Student Judicial Affairs.