

EE3376 – Microprocessors I, Spring 2008 UTEP

Department of Electrical and Computer Engineering

Basic Information

Instructors	Eric MacDonald
Office	A310 – new engineering annex
Phone	747-6959
EMAIL	emac@utep.edu
Office hours	9:30- 11 MTWRF
Text	“Designing with Microcontrollers -- The 68HCS12” by Tom Almy.
Lecture notes and lab reference	Bound edition – from Paper Chase on Mesa (across from the Don Haskin) Notes and CPU reference manual are all that will be allowed during exams. CPU reference manuals are free and in my office.
Optional Software	Metrowerks Code warrior special edition
Prerequisites	EE2372, EE2351
Web page	http://www.ece.utep.edu/courses/web3376/
Course objectives	Students will be able to write an assemble program, understand a basic software development environment, understand the fundamentals of computer architecture and organization, understand system integration and interfacing of electronics and demonstrate effective technical communications.

Grading EE3376

Element	Weight	Comment
Exams 1,2, and 3	20% each	Open lecture notes only. Lowest grade may be replaced by final exam.
Home works	10%	Can be worked as teams, each student should turn in own copy. Will not be accepted late.
Final Exam	30%	Comprehensive, Open lecture notes only.

Grading EE3176

Element	Weight	Comment
Weekly labs	70%	Total of 8 labs 20% pre-lab assigned required to enter lab 40% for correctly executing lab 40% for oral exam, code style and approach
Final project	30%	Any hint of borrowed code will be reported to the Dean of Students and is easily identified. Check academic dishonesty policy on website. This is an essential project in your undergrad experience and cheating will not be tolerated.

General Policies

If a student requests a deviation from this syllabi for any specific reason (and I agree), the student should send via email a description of the modifications to me for the records.

American Disabilities Act: If you feel you may have a disability that requires accommodations, contact the Disabled Student Services Office at 747-5148 or go to room 106E of the Union.

Final lab project in EE3176 must be done from scratch. Discussions about concepts between students is permitted but code suspected of being copied (other than from the webpage) will be reported to the Dean of Students. No exceptions.

If you have 3 finals on the same day, you can ask for a reschedule of the middle final. If EE3376 is the test, you can request to have the final on dead day after showing printed proof of the three tests on one day.

Academic Dishonesty – See course website for details.

Grading Scale for lab and lecture

100% to 90% = A, 89% to 80% = B, 79% to 70% = C, 69% to 60% = D, <60% = F

No curve will be used, however 3 total points of extra credit will be offered throughout the course.

Homework is not accepted late (see exceptions below). If you miss class, contact the professor or a classmate to find out what work was assigned or if any important announcements were made. The only exceptions for accepting late assignments include a medical emergency requiring hospitalization, jury duty, attendance of a funeral of an immediate member of you family, or official UTEP business. *Documentary proof of any of the above **must be provided before or immediately after the fact.***

Two grading options for EE3376:

- 1) lowest of three exams is replaced by final, so final exam counts for %50 of total. Other two tests count for 20% and replaced exam is 0%.
- 2) if final is the lowest grade of the four exams, no exam is dropped and final counts for only %30.

There are no make-up exams and any missed exam becomes the replaced exam as described in option 1.

Students with 90 or above in the final project of the EE3176 (i.e. no cheating, projects work and students can describe the code operation) have the option of locking in their grade and exempting themselves from the final. However, only option 2 above applies here.

Week	Tentative Reading Assignments	Homework
1	Chapter 1 – Microcontroller Overview	
1	Chapter 2 – Binary Number Representation	#1
2	Chapter 3 – Central Processing Unit	
3	Chapter 5 – Instruction Overview	#2
3	Chapter 6 and 7 – Load/Store Arithmetic Ins	
4	Chapter 8, 11 – Branching and the Stack	#3
5	Chapter 12 Input / Output Overview	
5	Chapter 14 GPIO	#4
6	Chapter 21 PWM	
7	Chapter 24 – SCI	
8	Chapter 17 and 18 – Interrupts	
9	Chapter 19 and 20 – Timer and RTI	
10	Chapter 22 – A2D	
11	Chapter 25 – SPI	
12	Appendix D – State Machines	