

**Cal State University, San Bernardino**  
**CSE 313 -- Machine Organization Lab**  
**SYLLABUS**

Spring 2012

**This lab syllabus is an addendum to the class syllabus.**

Unless overwritten, all policies in the class syllabus apply.

**Objective:**

The objective of the laboratory is to provide the students with the skills necessary to solve problems by designing, coding, debugging, and testing assembly language programs using the LC-3 language.

**Instructor:**

Professor Taline Georgiou

**Email:**

tgeorgio@csusb.edu. Having "313" in the subject will label your email as non-spam.

**Office Hours:**

9:30am – 10:00am MW, 1:30pm - 2:00pm MW or you can make an appointment via email.

**Lab meeting times and place:**

**For Section 02:** M 11:30am—1:20pm, JB 360; **For Section 03:** W 11:30am—1:20pm, JB 360

**Class web page:**

[blackboard.csusb.edu](http://blackboard.csusb.edu)

**Lab Manual:**

"LC-3 Assembly Language: A Manual," by George M. Georgiou and Brian Strader, 2005. It will be available online.

**Grading:**

The lab grade makes 25% of the grade of the course. The grade for each lab will be based on 80% for correct results, 15% for comments, and 5% for technique. If the program does not assemble (compile), it will receive a grade of 0%.

**General Information:**

All programs should follow this header template, adjusted accordingly:

```
;Class:CSE 313 Machine Organization Lab
;Instructor: Taline Georgiou
;Term: Spring 2012
;Name(s): Student A and Student B
;Lab#1: ALU Operations (i.e the title)
;Description:(No less than two paragraphs. Describe what the
;program does,its legal inputs,outputs,side effects,how
;to run it,etc.)
```

The description should be detailed enough so that someone by reading it should be able to tell what the program does and how to use it. If a program does not adhere to this header, up to 15% of its grade will be deducted.

Students may work in groups of two.

Lab assignments are specified within the Lab Manual.

**What to turn in:**

In general, electronic copies of the source code and screenshots that show the results will be required for each lab. The requirements are specified at the end of each lab assignment in the Lab Manual.

Instructions of how to turn in the files via Blackboard will be provided. You should be ready to demonstrate the previous lab at the beginning of the session.

**Academic honesty:**

Please refer to the section with the same name in the class syllabus.

**Lab Schedule** (subject to change):

	Lab	Title
Week 1	0	Introduction to the LC-3 simulator
Week 2	1	ALU Operations
Week 3	2	Arithmetic functions
Week 4	3	Days of the week
Week 5	4	Fibonacci Numbers
Week 6	5	Subroutines: multiplication, division, modulus
Week 7	6	Faster Multiplication
Week 8	7	Compute Day of the Week
Week 9	8	Random Number Generator
Week 10	9	Recursive subroutines