

# ECE 238 Lab Notebook Format

## 1. Introduction

Lab and research notebooks are an important part of any work you will do in both the academic and private sectors. This notebook serves many purposes. It is a record of the research you performed and any results you found. It is your reference for any future work in that area. If there is a dispute over an item's discovery or methodology, the notebook can serve as vital legal proof. It is also a guide to help future researchers build on your work and avoid any of your mistakes. The more you become accustomed to keeping a lab notebook, the easier it will make your future research.

## 2. Notebook Format

We are requiring that all ECE 238 lab notebooks are maintained in the format shown below. This format is very typical; any advanced course of study you might take will require a notebook with a format similar to this one. ***The notebooks themselves will be three-ring binders, and only the current week's lab needs to be submitted. However, at the end of the term your TA and/or your Professor reserve the right to check your lab notebook to make sure it is organized, properly formatted, and up to date.***

### The Notebook Cover must include:

- Your name
- Class number and section (for example: ECE238-Monday 11:00-13:45)
- Professor's Name
- Semester and Year (for example: Summer 2007)

### The First Page:

The "Index". For each lab, add an entry to the index including lab number, lab title, and the number of the page where the lab begins.

ALL PAGES OF YOUR LAB NOTEBOOK MUST BE NUMBERED (BY HAND). THINK OF YOUR LAB NOTEBOOK AS A BOOK, WITH EACH LAB BEING A CHAPTER. FOR EXAMPLE, IF LAB 1 ENDS ON PAGE 4, LAB 2 WILL START ON PAGE 5.

### First Page of Each Lab (or chapter):

A loose leaf page with your name, your partner(s) name, lab number, and date the lab was started.

### Requirements for Lab Contents (lab report):

Each lab report has On loose leaf pages following your first lab page, you will have two sections: the "Objective" section and the "Procedure" section. The "Objective" section is a short paragraph indicating the objectives of the lab. The "Procedure" section is a diary of your work during the lab. This section must include the steps you followed through lab, any calculations or scratch work, any problems you encountered, and how those problems were resolved. If your lab work took place over multiple days, indicate which

work was done on which days.

**Following the objective and procedure sections, you must include your completed lab worksheet, along with a copy of any code created for the lab.** It is also highly recommended, though not required, that you include the lab lecture material with your lab so that it is readily available for reference.

### **3. Example**

The following pages show a lab notebook example.

Paul A. Salazar

ECE238-Monday 11:00-13:45

Instructor/Professor: Honggang Yu

Summer, 2007

LAB  
NUMBER

LAB TITLE

PAGE #

- |   |  |  |
|---|--|--|
| 1 | Introduction to Discrete Digital Logic, VHDL, ISE and ModelSim |  |
| 2 | Introduction to Arithmetic circuits                            |  |
| 3 | Introduction to Sequence Detectors and CPLDs                   |  |
| 4 | Introduction to Counters and more on CPLDs                     |  |
| 5 | Introduction to Accumulators, Adders and FPGAs                 |  |

LAB #1: Introduction to Discrete Digital Logic, VHDL, ISE and ModelSim

Paul A. Salazar

Lab Partners:

Alan Damian Garcia  
Ollanta Humala

Lab Start Date:

06/11/2007

## LAB #1: Introduction to Discrete Digital Logic, VHDL, ISE and ModelSim

### Objective:

The goal of this lab is ...

### Procedure:

The steps are ...

During the compilation, we found syntax errors that ...