EECS 1100 Laboratory Report Guidelines

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EECS: 1100 Digital Logic Design
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Introduction

At the beginning, we would like to suggest that it might be beneficial to reread these Guidelines before starting the preparation of each of the first three lab reports of the semester.

The professional quality of the lab reports must be insured by generating the reports using a word processor. This includes the generation of the lab report text, the tables, and the circuit diagrams, as well as the importing of the signal waveforms captured by the Mixed-Signal oscilloscope. The preparation of logic circuit diagrams will be greatly facilitated by using the **Altera MAX+2** schematic capture tool, and then importing the generated graphic file into the report document. For a full grade, the structure of all lab reports is expected to follow the suggested guidelines.

Text Font and Size

Suggested text font: Times. Suggested Font size: 12 or 10.

Cover Sheet

The required cover sheet template is available for downloading from the EECS 1100 web site. The lab reports are considered turned in only when covered by a completely filled out cover sheet.

Report Structure

The body of the report must cover the following four general areas:

1. Introduction
2. Preliminary Work
3. Experimental results and Discussion
4. Answers to Questions.

The first two areas should appear under the same headings as above. The third and fourth areas may appear under the above headings or, as modified by the pertinent Lab Assignment text. The expected contents of those sections are described as follows.

1. INTRODUCTION

A brief discussion of the objectives and theoretical background of the experiment. This part of the report should contain the information pertinent to the subject of the experiment.

2. PRELIMINARY WORK

This part of the report is devoted to the work performed prior to the hands on circuits experiments in the Lab. The detailed description of its contents for each specific Lab Assignment is to be found in Lab Assignment texts which are posted on the EECS1100 web site.

In particular, the Lab Assignment texts specify the required logic, and physical circuit diagrams and their appropriate figure captions. (The *logic circuit diagrams* show the interconnections of the logic elements such as logic gates, flip-flop, etc. The *physical circuit diagrams* include the physical layout of the integrated circuits and the wiring on the protoboard.)

3. EXPERIMENTAL RESULTS AND DISCUSSION

This section is the most important part of the lab report. It must include the complete analysis of the experiment, its results, and the relevant theoretical background.

The following items are particularly expected to be found in this section:

- explanation of the principles behind the operation of the circuits under investigation,
- description and analysis of the experimental results obtained in the lab,
- significance and analysis of the captured signal waveforms,
- personal comments, as well as description of unexpected problems encountered during the experiments,
- any new ideas and suggestions concerning the particular lab experiment, or general Lab procedures.

4. ANSWERS TO QUESTIONS

Complete answers to all the questions asked in the Lab Assignment text.

EECS 1100

Digital Logic Design

Laboratory Experiment #___

Student names Section

_____ ___

_____

Date due: _____

Date submitted: _____

Grade: ___ /10