

# Lab xx - Lab Title

## Hardware Design - ECE 311

January 14, 2019

Partners: Name1 LastName1  
Name2 LastName2

### **Abstract**

Describe briefly the problem statement, the procedure, and key findings

## **Introduction**

Describe the overall objective and the purpose of the experiment or the sequence of experiments. Provide a brief background on importance and potential applications. Discuss how the rest of the document is organized or how you are presenting the information.

## **Procedure**

For each part within the experiment, perform the following:

### **1 Title- Part xx**

Here, provide a schematics of the circuit you implemented with exact component values that you used, a description of what the circuit does and how it works, and the purpose of this part of the experiment. Mention your expectations based on theoretical analysis (when possible). State any assumptions you made.

### **Simulation Results**

Show waveforms, explain and comment on the validity of the test performed.

### **Synthesis Results**

Show the synthesized design in a schematic view.

### **Implementation Results**

Show the project summary and comment on the estimated LUTs and IOs that are used and utilization. Show the schematic of the implemented design

### **Timing Simulations Results**

Show simulation results waveforms answering any timing related questions.

### **Summary and Discussion**

In this section, summarize the results for this part of the experiment through tabulation when possible.

Experiment	Simulation	Theoretical

Here you provide an insightful discussion of results and address questions that I asked you to look at in class.

### **Overall Conclusions**

**Appendix A Main File**

**Appendix B Module 1**

**Appendix C Module 2**

**Appendix D Constraint File**

**References**