

Lab Syllabus ECE 1315 Fall 2007

Lab Schedule

Labs will be given out in class and/or posted on the course webpage at:

<http://www.d.umn.edu/~pjweber/ece1315f07/ece1315f07labs.html>

Grading

-Lab reports are graded on a 10 point scale with 4 points coming from the lab report as described in the grading matrix at the end of this document. In general, designs with fewer components will receive higher grades. Fully functional designs will receive more credit than designs that are missing some functionality.

-Lab reports are due in class (or by the start of class if submitting electronically) on the Friday of the same week as the lab is performed. As stated in the class syllabus, students are allotted 3 late days per semester to use for lab reports or homework (weekends do not count as days—e.g. if you turn your report in on Monday, only one late day is used). Beyond these 3 late days, **no late work will be accepted** unless it is for a reason the instructor deems suitable as defined in the course syllabus.

-Material that you submit for grading is expected to reflect your own ideas and work. Any work that is not yours that is used as background information must be cited. Any plagiarized work will receive no credit for all students involved and will be referred to University officials. Repeated plagiarism will result in a course grade of an F for all students involved.

-Lab reports must be submitted as a **word processed document** with all figures and calculations included *within* the document's content (calculations and figures can be hand-written/drawn if done neatly).

-Students must obtain the signature(s) of the lab instructor/teaching assistant in order to receive credit for the lab work (without signatures the maximum points possible is 4 for the lab report).

Report Content

Reports will be graded according to the grading matrix at the end of this document. Each of the following should be included in all reports:

Report Header

-Each lab report must contain a header or title page that specifies the following:

- Student name, Course number, Lab number and title, Date of lab exercise.

Introduction

-An introduction must be presented at the beginning of the report that introduces the objectives of the experiment and details **at least one assumption/abstraction** about the lab (e.g. the output voltages are within a given range as specified by the manufacturer).

Procedure and Equipment

-The student should next briefly describe the steps taken to complete the experiment. This should include circuit diagrams (NOT the physical wiring layout), truth tables, Karnaugh maps, state diagrams, count sequences, etc.

-The student should also list all chips used (including the specific part numbers).

-The student should use standard symbols for circuit elements and label all signals.

-The diagram should show exactly how the circuit was built. For example, if a 4-input NAND gate was used when only needed 3 inputs were needed, the what was done with the 4th *input* must be noted (unused *gates*, however, do not need to be shown if using TTL chips).

Conclusion

-Students should include a few brief sentences about what was accomplished in the lab and what was learned. Any comments or suggestions for future improvements of the labs can be included here.

Signature(s)

-A sheet with the instructor's/TA's signature(s) should be attached to the report.

ECE 1315 Fall 2007 Laboratory Report Grading Matrix

Attribute (1 pt each)	0/0.25 – Unacceptable	0.5/0.75 – Below Expectations	1.0 – Meets or Exceeds Expectations	Points Awarded	
Report Mechanics					
Format and Organization (F&O)	Inappropriate content in most sections of report, tables and figures cannot be read/understood, fonts difficult to read, so many format errors as to make the report useless	Some portions are sloppy, difficult to read, contain some format errors or are attached at the end of the report	Content appropriate in all sections of report, text, tables, figures are readable and understandable.		
Grammar, Punctuation, Spelling (GPS)	Excessive spelling, grammar, and punctuation errors	Some spelling, grammar, and punctuation errors	Few (if any) spelling, grammar, and punctuation errors		
Content					
Introduction and Conclusion (IC)	Problem not stated, assumption not explained, conclusions omitted	Problem stated poorly, limited discussion assumption, conclusions do not include what was learned or what was accomplished	Problem clearly stated, impact of constraints and assumptions clearly discussed, procedure well stated including deviations from provided document, conclusions complete		
Procedure (P)	Procedure not included or is so minimal that what was done is not readily understood	Procedure missing portions such as chips used, work in designing circuit, etc., wiring is shown rather than symbols	Procedure is complete, all work is shown in an orderly fashion		
				(R) Report Total (4 pts)	
				(S) Signature(s)	
				(C) Deductions for # of Components	
				(T) Total Pts (10 pts)	