

Design Project Grading

EE 562 Fall 00

This document describes the guidelines used for assigning grades to design project reports. Grades are based on 100 points which are distributed over the five categories explained below.

Report Checklist:

Completed ?: checklist that factors into grade under *Completeness of Report* category.

Score: relates quality of each section -factors into grade under *Completeness of Report* and *Report Quality*.

Project Overview	briefly describe purpose of the project and general function and specifications/goals of the circuit
Design Methodology	initial approach, equations and calculations that relate design specifications to design parameters
Circuit Description	schematic and list of specified transistor parameters, may also include discussion of which transistors or transistor blocks perform each function of the circuit.
Design Discussion	design issues, choices, difficulties and critical relationships/tradeoffs of the circuit, especially as they relate to tuning the circuit during simulations to meet design goals
Simulation Results	discuss how each design specification was simulated, show simulation results (plots, operating points, etc.), use appendix for additional simulation outputs and refer to them in this section
Conclusion	summary of circuit function, comparison of simulation results to design specifications, statement of how well the circuit meet design goals
Analysis	your comments on the value, difficulty, etc. of the project
Teamwork Summary	statement of how you worked as a team, comments about partners contributions to the project
Appendix	SPICE netlists, additional simulation outputs, etc.

Results Checklist:

Result: list of your results, factors into grade under *Achievement of Design Goals*.

Simulation Discussion and Output: checklist of your discussion and presentation of simulation results for each design specification, factors into grade under *Simulation Technique and Discussion*.

Explanation of Grading Categories:

Report Quality:

Grading in this category includes:

- report formatting –did you follow the specified format
- English –spelling, sentence structure, etc.
- general quality issues –report text, figures, schematics, etc. should look professional
- thoroughness of each report section

Completeness of Report:

Scores the completeness of your reports. (Did you include all the necessary sections and all the necessary information within each section?)

Design Approach and Discussion:

Scores the technical quality of the sections Design Methodology and Design Discussion, and to a lesser degree Circuit Description. (Did you show the relevant equations, discuss your approach, discuss tradeoffs and difficulties, and support your design decisions?)

Simulation Technique and Discussion:

Scores your discussion of the required SPICE analyses and presentation of simulation results. (Did you explain how each parameter was measured, and did you show the appropriate simulation output for measuring each parameter.)

Achievement of Design Goals:

Scores how closely you were able to come to design goals with your final circuit. Based purely on your simulation results.