UNIVERSITY OF UTAH DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING ECE 2280

A. Rasmussen 01/08

50 pts Lab #1 Notebook Grading

THE FOLLOWING ITEMS ARE REQUIRED:

- □ Student's work reproducible from notebook.
- □ Title and date for each lab section.
- □ Written in ink.
- □ Student signed every page.
- □ Student dated every page.

15 pts PRE-LAB:

- 3 pts 1. Transfer function Vo/Vs for circuit in **Fig. 1**.
- 5 pts 2. Hand-drawn Bode plot.
- 5 pts 3. Matlab Bode plot.
- <u>2 pts 4.</u> -3dB point marked on both Hand-drawn and Matlab Bode plots.

35 pts EXPERIMENT 1:

- <u>10 pts (3a)</u> Bode magnitude plot computed using the Brute-Force method.
- <u>8 pts 4.</u> Bode magnitude plot computed using the clever method.
- 10 pts 5. Bode phase plot computed using the clever method.
- <u>5 pts</u> <u>6.</u> Comparison of hand-calculated and Matlab Bode phase and magnitude plots.
- <u>2 pts</u> 7. Explanation of the importance of the -3dB point for the Bode magnitude plot.