THE UNIVERSITY OF BRITISH COLUMBIA Department of Electrical and Computer Engineering

ELEC 391 - Electrical Engineering Design Studio II

Radio Project

This lab consists of free-form experiments that build upon the results of the previous lab assignments to yield a working low-power radio with superior performance.



(a) Low power radio. (b) Modulated RF at antenna. (c) Rectified RF at diode output without C2 filter capacitor. (d) Demodulated audio to headphones.

We propose that you and your group will:

- Demonstrate a basic working radio that can reliably tune at least two AM BCB stations from Vancouver.
- Propose, implement and assess the performance of at least two improvements to the basic radio that will improve one or more of the following: sensitivity, selectivity, and distortion.

The one-page proposal is due on Friday, 27 July.

The formal demonstration will take place on Wednesday, 1 August.

The final report is due at midnight on Saturday, 4 August.

30% of your mark will be based on your success in realizing and demonstrating a basic working radio.

70% of your mark will be based on your success in realizing and demonstrating at least two improvements to the basic radio.