## EE 481/581 Microwave Engineering (Spring 2019)

## **Lab Policies**

- ➤ Undergraduates may work alone or in pairs (one logbook). Graduate students must work alone.
- Late laboratory assignments will incur up to a 10% /day penalty.
- > Students may discuss laboratory assignments in general terms with classmates. However, blatant copying, plagiarism, ... (without proper referencing) is not acceptable and will be penalized.

## <u>Laboratory logbook guidelines</u> (see Figure 1 for examples):

- Each person/group will keep and use a bound logbook (**NO** spiral bound notebooks) for lab work.
- > On cover, <u>prominently</u> put **EE 481L or EE 581L Microwave Engineering** (as appropriate), **Spring 2019**, and *your name(s)*. If multiple logbooks used, add **Logbook** *x* **of** *y*. It is a good idea to put some contact information on or inside the front cover in case you misplace your logbook.
- All entries should be in ink (black/blue preferred) and only on the fronts of pages (writing on the back of pages will be ignored). Backs of pages may be used as scratch paper. No pencil entries, erasing, obliterating, or using white-out to obscure any entries. Errors should simply be crossed out with a single line.
- Make a **Table of Contents** (TOC) on the first page with labeled columns- Lab number, Lab Title, Date(s), and Page numbers (**both** start-finish).
- ➤ **All pages**, whether used or not, in logbook should be consecutively numbered in upper right-hand corner.
- Never tear out pages, have loose pages/materials, have material overhanging logbook pages, or insert multiple pages that are not <u>individually</u> attached to logbook pages.
- > Start each lab by attaching the lab assignment sheet in the logbook.
- > Show all work completely in the logbook. For repetitive calculations a single sample is sufficient.
- For experimental work, **lab partner(s)**, **equipment list** (description, brand, & model #s), time & date ... should be listed, as applicable. Also, block diagrams of circuit(s) & test setups(s) used for measurements should be drawn/specified.
- > Writing/figures/graphs must be **legible** (spread out, don't squish lines together) and of a **readable** size (large)- if your work can not be read or is unclear, you will not receive credit.
- As applicable, figures/tables/graphs should be captioned (number and title), labeled (i.e., names & units on axes), scaled (i.e., numbers on axes), and clearly drawn. Figures, graphs, printouts can be electronically generated and taped/pasted into logbook. The bottoms of figure/graph/table(s) should be oriented toward the bottom or right-hand side of the page.
- ➤ Where applicable, use conventional engineering units & prefixes (i.e., MKS) as given in class and text. For example, 1.253 mW and 100 MHz *not* 0.001253 W and 10<sup>5</sup> kHz. Answers with missing or incorrect units are incomplete/incorrect.
- Answers should be <u>boxed</u>/<u>double underlined</u>, in **decimal** format if a number (no fractions) with variables, values & units (if any) included. Also, use lead zeros for fractional answers. For example,  $\sqrt[6]{V_x} = 0.4 \text{ V}$  " **not** " $V_x = .4$ " or " $V_x = 2/5 \text{ V}$ ". Typically, 4-5 significant digits are used.
- Logbooks are not supposed to be a mystery, just ask if you have questions!

EE 481L or 581L Microwave Engineering Spring 20yy Michael Microwave Wanda Waveguide

## Table of Contents Lab # Description/Title Date(s) Pages 1 Lossy Transmission Line mm-dd-yy 1-3 Datasheet & Parameters mm-dd-yy 4-8 . .

Cover

First sheet in logbook

1
EE 481/581 Microwave Engineering (Spring 2019) Laboratory 1 Lossy Transmission Line Datasheet & Parameters
Background
D
<u>Project</u> 1 2 3
· .
•

Sample of lab cover page

Figure 1 Laboratory Logbook examples