

Lab book Guidelines for 493L

The lab book is the 'proof' that an experiment was carried out in the manner described in a lab report or in a scientific paper. If the details of an experiment are not in the lab book, the lab report cannot be verified, the paper shouldn't be published, and the work must be repeated with appropriate lab book entries. The lab book also acts as your long term memory. You may think that you will remember details about your experiment, but likely after a few week or two you will find that you can't remember. In addition to experimental details, notes to your future self or to others made in the lab book are extremely helpful. Your lab or employer may require a specific lab book format. For the 493L lab, follow the guidelines below.

Lab books must have a hard binding. Ring binders or loose leaf notebooks are not acceptable.

All lab book entries must be in pen. Entries to be discarded or ignored should be crossed out with a single line with a word or sentence indicating why this should be discarded or ignored.

Put your name, date, and class name on the front cover.

Leave the first two pages blank for a table of contents. The table of contents must list the page where each new lab experiment begins and can be further subdivided as desired.

Pages must be numbered. This can be done by hand.

Start a new page for each new date and write the date at the top of the page.

Start each day or experiment with a sentence or two describing the goals of the experiment.

For each experiment, write the manufacturer and model number of all the equipment used.

For each experiment, including calibration experiments, draw the experimental setup. Critical dimensions, angles, heights, etc. should be indicated in the drawing and noted in the lab book. Electronics can be drawn as simple block diagrams.

Write down any and all details that would be required to repeat your experiment.

If data are stored as electronic files, write down location and file name for the data collected in each experiment.

At the end of each day, write a short summary of the results including what worked well, what didn't and what needs to be done next.

Any other relevant notes, observations, calculations or thoughts can be included in the lab book.