

## Technical Physics I – ULI Lab Reports Requirements

Each numbered section below should have an underlined title and start on a separate page. Please assemble in this order. Use one side of the page only, stapled in the upper left corner (no folders), typed or computer generated. Each report is an individual effort.

TITLE PAGE: See sample online. Fill in the  $x$ 's with the appropriate course and section numbers.

I. INTRODUCTION: The INTRODUCTION is meant to give an overview of the theme presented in the experiment. It should basically answer two main questions: WHAT do you want to show (your theme/theory), and HOW are you going to show it (what measurements will you make, what general equipment will you use...how will you test the theory). This should not contain any results (you are “introducing” the lab). In this section, you should explain any theory, significant variables to be measured, and/or important equations.

II. GRAPHS: Include the ULI graphs (or Excel graphs) printed in the lab. All graphs must be scaled to show the important information – this means you should try to reduce the ‘white space’ – zoom in on the important parts of the graph. The graphs must be **labeled properly** with a descriptive title (don't just use “Distance vs. Time”, for example, because that can be seen from the axes).

III. SAMPLE CALCULATIONS: Show one sample calculation of each different type of calculation done. 1) Write down the formula; 2) show the numbers used, and 3) the final results. This should be displayed in a vertical format. **Remember the units.**

IV. CONCLUSION: The CONCLUSION section is a summary of the ideas presented, along with some of the final numerical results (NOT in tabular form). This is a great place to put a few of the final % differences or % errors. Also, if you read the introduction, and then read the conclusion, you should be able to determine specifically how successful the experiment was. The conclusion section should be SHORT, with FINAL NUMERICAL RESULTS and any general conclusions that can be drawn.

V. DATA/QUESTION SHEETS: Must be turned in with every lab report. This set of sheets must be signed by the instructor BEFORE you leave the lab and will only be done after all equipment is replaced in its proper place. These sheets have the data you will use to make your calculations and draw your conclusions.

**DUE DATE**: Each report is due one, 1, week after the date the experiment is done. You have one, 1, additional week during which the report may be turned in without penalty. After that, the report is no longer accepted. The reports are to be turned in at the BEGINNING of the lab period. You are urged, and strongly encouraged, to have the report ready by the end of the first week.

**SAMPLE TITLE PAGE**

COURSE: PHY1100  
SECTION: 01

LAB XX: TITLE  
INSTRUCTOR'S NAME

YOUR NAME  
STUDENT NUMBER  
LAB DAY OF THE WEEK  
DATE/TIME LAB WAS DONE  
NAMES OF PARTNERS