General Physics Laboratory I

Week 13: Report Guideline

Experiment 14. Geometrical Optics

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General Report Guideline

- 1. You can use either Korean or English.
- 2. I suggest you to write a report with a language with which you can write rigorously. (There is no need to be shy about writing in Korean)
- 3. However, do not mix two languages. (ex: newton's law는 다음과 같이... → X)
- 4. No more than 5 pages. The font size must be greater than 9 pts.
- 5. Only *.doc, *.docx, *.hwp extensions are allowed.
- 6. Do not make a cover page.
- 7. Do not repeat the details in the manual.
- 8. Make the report simple but it should contain rigorous answers. / You should merge different data in one plot.
- 9. If you suggest the origin of the error, please show your systematic justification. (No explanation → No points)
- 10. You have to cite every source of theory and information beyond the manual.
- 11. Clarify a theme and a purpose of each part.

14. Geometrical Optics

- 1. Abstract (5pts, < 300 words)
- 2. Introduction (10pts): Show your conceptual understanding about the subject.
- 3. Theoretical Background (10pts)
 - ✓ (5pts) Give general equations for a concave mirror and lens. (relationship between focal length and object distance, magnification)
 - √ (5pts) Give general equations for three experimental situations.
- 4. Methods (5pts): Please write down the experimental parameters which you used in the report.
- 5. Results (20pts)
 - ✓ (10pts) Summarize "Part I" (Concave Mirror) data + Calculate focal length (Object at Infinity)
 - ✓ (5pts) Summarize "Part II" (Telescope) data
 - √ (5pts) Summarize "Part III" (Microscope) data
 - ✓ Each graph should include **the axis labels**. When you introduce trendlines, you should show **equations and R square values**.
- 6. Discussion (30pts)
 - ✓ (10pts) Answer to the "Part I: Analysis Part A, B".
 - √ (10pts) Answer to the "Part II: Analysis"
 - ✓ (10pts) Answer to the "Part III: Analysis"
 - ✓ (Additional) Discuss about your own question and analysis.
- 7. Conclusion (10pts): Summarize the report effectively.
- 8. References (10pts)