Title

Give a clear, concise title that summarizes the experiment. Example: "Synthesis of Aspirin via Esterification of Salicylic Acid"

Name:

Your Full Name

Course:

Course Name and Code

Instructor:

Instructor's Name

Date of Experiment:

Date Performed

Date Submitted:

Submission Date

Abstract

A brief (100–200 words) summary of the entire experiment. Include:

- Purpose of the experiment
- Main methods used
- Key results obtained
- Final conclusion

Write this last but place it at the beginning.

Introduction

Explain the background and purpose of the experiment:

- Scientific concepts and reactions involved
- Why the experiment is important
- Hypothesis or aim of the experiment
- Balanced chemical equations (if applicable)

Materials and Methods

List all the materials, chemicals, and equipment used. Describe the procedure clearly and step-by-step:

- Use past tense and passive voice (e.g., "The solution was heated...
- Be precise enough for someone to replicate the experiment

Results

Present your data in a clear and organized way:

- Use tables, graphs, or figures where appropriate
- Include any observations (color change, precipitate, odor, etc.)
- State calculations with formulas and units
- Show raw data and final results

Discussion

Interpret and explain the results:

- Was the hypothesis supported?
- Compare your results with expected/literature values
- Discuss any errors or unexpected findings
- Discuss any errors or unexpected manage
 Explain the reaction mechanism or scientific reasoning
- Mention sources of experimental error

Conclusion

Summarize the outcome in 2–3 short paragraphs:

- State what was achieved
- Mention main findings and their significance

• Suggest improvements or further investigations



References

Use APA, MLA, or your instructor's preferred style:

- Textbooks
- Lab manuals
- Scientific journals or articles

Example (APA style):

Pavia, D. L., Lampman, G. M., Kriz, G. S., & Engel, R. G. (2014). *Introduction to organic laboratory techniques: A microscale approach* (5th ed.). Cengage Learning.

Appendices (Optional)

Include:

- Additional data tables
- Sample calculations
- Spectra or chromatograms
- Lab safety checklist (if required)

