

Zool-4601 Research Review Report

A Research Review report at the graduate level involves a comprehensive evaluation of existing research on a specific topic. This report is usually part of a course or a requirement for a graduate degree. The purpose of the Research Review report is to:

1. **Summarize existing research:** Provide an overview of the current state of knowledge on the chosen topic.
2. **Identify gaps:** Highlight areas where further research is needed.
3. **Critically analyze:** Evaluate the methodologies, findings, and conclusions of previous studies.
4. **Synthesize information:** Combine insights from various sources to present a coherent understanding of the topic.

The report typically includes sections such as an introduction, literature review, methodology, data analysis, findings, discussion, and conclusion. It follows a specific format and guidelines provided by the university, which may include aspects like font size, type style, page margins, and referencing style. Here are the key guidelines:

1. Title Page:

- a. Title of the thesis/synopsis
- b. Name of the student
- c. Registration number
- d. Department and faculty
- e. Name of the supervisor and co-supervisor (if any)
- f. Date of submission

2. Margins:

- a. Top: 1 inch
- b. Bottom: 1 inch
- c. Left: 1.5 inches
- d. Right: 1 inch

3. Font and Spacing:

- a. Font: Arial
- b. Font Size: 12 pt for the main text, 14 pt for headings
- c. Line Spacing: 1.5

4. Sections:

- a. **Declaration:** A statement declaring the originality of the work.
- b. **Plagiarism Undertaking:** A signed statement ensuring no plagiarism.
- c. **Acknowledgments:** Optional, but recommended.
- d. **Abstract:** A brief summary of the research.
- e. **Table of Contents:** List of chapters and sections with page numbers.
- f. **List of Figures and Tables:** If applicable.
- g. **Main Body:** Divided into chapters (Introduction, Literature Review, Methodology, Results, Discussion, Conclusion).
- h. **References:** Follow a specific citation style (e.g., APA, IEEE).
- i. **Appendices:** If any additional material is included.

These are general guidelines and may vary based on the specific requirements of your department or supervisor.

Specific Instructions:

1. The student in the form of groups (3-5 student/group) should be supervised by the instructor e.g., if there are 8 students in a class, the instructor should make two groups consisting of either 5+3 students or 4+4 students.
2. The Research Review report is not a theory or lab course, it is a project based activity which will be followed by a viva exam at the end of the semester.
3. The students should make a project or a product, the comprehensive report of which should be presented before the external examiner at the time of viva exam.

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KHWAJA FAREED
UEIT
RAHIM YAR KHAN

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Working together in the Classroom: An Analytical Approach

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Master of Science in Physics

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Name: XYZ
Registration No: PHYS1815XXXX
Session: XXXX-XXXX

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Department of Physics
Faculty of Natural Sciences
Khwaja Fareed University of Engineering
and Information Technology
Rahim Yar Khan

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Add Space Before Paragraph

May, 2020

Month, Year

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Working together in the Classroom: An Analytical Approach

Equal Space

By

Equal Space

Name:

XYZ

Registration No:

PHYS1815XXXX

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A thesis submitted in partial fulfillment of the requirement for degree of

Centralized, Unbold, Style Arial, Size 12px

Centralized, Unbold, Style Arial, Size 14px

Master of Science in Physics

Centralized, Unbold, Style Arial, Size 14px

Supervisor:

Dr. Muhammad Aslam Khan

Co-Supervisor:

Engr. Muhammad Arslan Yousaf

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Department of Physics
Faculty of Natural Sciences
Khwaja Fareed University of Engineering
and Information Technology
Rahim Yar Khan

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May, 2020

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space

Straight line on
the header

One line
space

Declaration

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XYZ hereby state that my MS thesis titled "*Working Together In The Classroom: An Analytical Approach*" is my own work and has not been submitted previously by me for taking any degree from Khwaja Fareed University of Engineering and Information Technology, Rahim Yar Khan or anywhere else in the country/world. At any time if my statement is found to be incorrect even after my graduation the university has the right to withdraw my MS degree.

Unbold, Style Arial, Size 12px

Rahim Yar Khan, on May 13, 2020

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the footer

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the header

Plagiarism Undertaking

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I solemnly declare that research work presented in the thesis titled "*Working Together in the Classroom: An Analytical Approach*" is solely my research work with no significant contribution from any other person. Small contribution/help wherever taken has been duly acknowledged and that complete thesis has been written by me.

I understand the zero tolerance policy of the HEC and Khwaja Fareed University of Engineering and Information Technology, Rahim Yar Khan towards plagiarism. Therefore, I as an Author of the above titled thesis declare that no portion of my thesis has been plagiarized and any material used as reference is properly referred/cited.

I undertake that if I am found guilty of any formal plagiarism in the above titled thesis even after award of MS degree, the University reserves the rights to withdraw/revoke my MS degree and that HEC and the University has the right to publish my name on the HEC/University Website on which names of students are placed who submitted plagiarized thesis.

Rahim Yar Khan, on May 13, 2020

XYZ

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Certificate of Approval

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This is to certify that the research work presented in this thesis, entitled “*Working Together in the Classroom: An Analytical Approach*” was conducted by **XYZ** under the supervision of **Dr. Muhammad Aslam Khan** and **Engr. Muhammad Arslan Yousaf**.

This thesis is submitted to the Department of Physics, Khwaja Fareed University of Engineering and Information Technology, Rahim Yar Khan in partial fulfillment of the requirements for the degree of Master of Science in field of Physics.

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External Examiner

Signature and Date

Co-Supervisor

Signature and Date

Supervisor

Signature and Date

Head of Department

Signature and Date

Dean of Faculty

Signature and Date

Acknowledgments

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The help, guidance and sponsorship of the mentor (s), teacher(s), colleague(s), relative(s) for the conduct of research and composition of thesis / dissertation may be acknowledged by the author. It shall not be exceeded than a page.

XYZ

Abstract

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This section is a summary of a research report/ thesis/dissertation which is developed with an objective to give the reader a quick overview of the problem, thesis/dissertation objectives, methodology, and the findings. Abstract should contain at least 250 words and a maximum of 300 words.

Keywords: Keywords1, Keywords2, Keywords3

Contents

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Headings
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List of Figures

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1.1 **CHP system**..... 3

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List of Tables

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1.1 ICE specifications 3

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1 Introduction

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Chapter should clearly state motivation, explain significance and describe the theoretical aspect of the study. Avoid repetition or duplication of ideas.

At the end of the chapter describe the outline of thesis.

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1.1 General Instructions About Thesis Template

1.1.1 Page format and page limit

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Space Before
Paragraph to
start new
section, sub
section

3 character
spacing

Left margin 1.5 while top, bottom and right margins 01 inch each. The text shall be fully justified and the paragraph should not be indented. The heading and sub-heading of each word except prepositions and articles shall be capital. The sub-heading of first word shall be capital and rest all in small case.

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The page limit for MS/MPhil thesis is minimum 60 pages altogether.

1.1.2 Font size and style

12pt text font size, Arial

Use Add Space Before
Paragraph between
two paragraphs

1.1.3 Tables and figure legends

The legends of the tables should be written on the top of the table, while figure legends at the bottom of the figure.

Use Add Space Before Paragraph
between sub section and paragraph

1.1.4 Paper size and quality

Thesis shall be submitted on A-4 size paper weighing not less than 85 grams. Use only one side of the page for printing.

No bottom line on the start of the chapter

1.1.5 Thesis Building

Top line on header till end of the chapter

Thesis binding (colour title page) will be on art paper. The art paper weight will be finalized in the upcoming meeting of the GPC (25th meeting).

Spine of the thesis should display “MS Major” (i.e MS PHYSICS) on top along the length of spine, candidate’s name in the middle along the length of spine, and year of submission at the bottom along the length of thesis. It should be in capital letters with 16 fonts bold (Arial).

1.1.6 Reference Style

The approved reference style is American Psychological Association (APA) 6th edition. APA requires that information be cited in 2 different ways citation in the text and in a reference list at the end of the thesis. Citation of one reference with one author within or at the end of sentence is like this (Volokitin, 2020). Start of Sentence is like this. Volokitin (2020) has presented this study. One reference by two authors: Within or End of Sentence: In this study the authors (Bramberger & De Vega, 2020) has reported. Start of Sentence is like this. Bramberger and De Vega (2020) has presented this study. One reference by three to five authors is like this (Huang, Yin, Zhu, Zhang, & Guo, 2019). Start of the Sentence: Huang et al. (2019) has presented this study. One reference by six or more authors is like this (Wang et al., 2019). Start of the Sentence: Wang et al. (2019). has presented this study. Multiple references is like this. All citation: In these studies the authors (Volokitin, 2020; Bramberger & De Vega, 2020; Huang et al., 2019) have presented.

1. Internal Combustion
2. External Combustion
3. Fuel Cells

Or

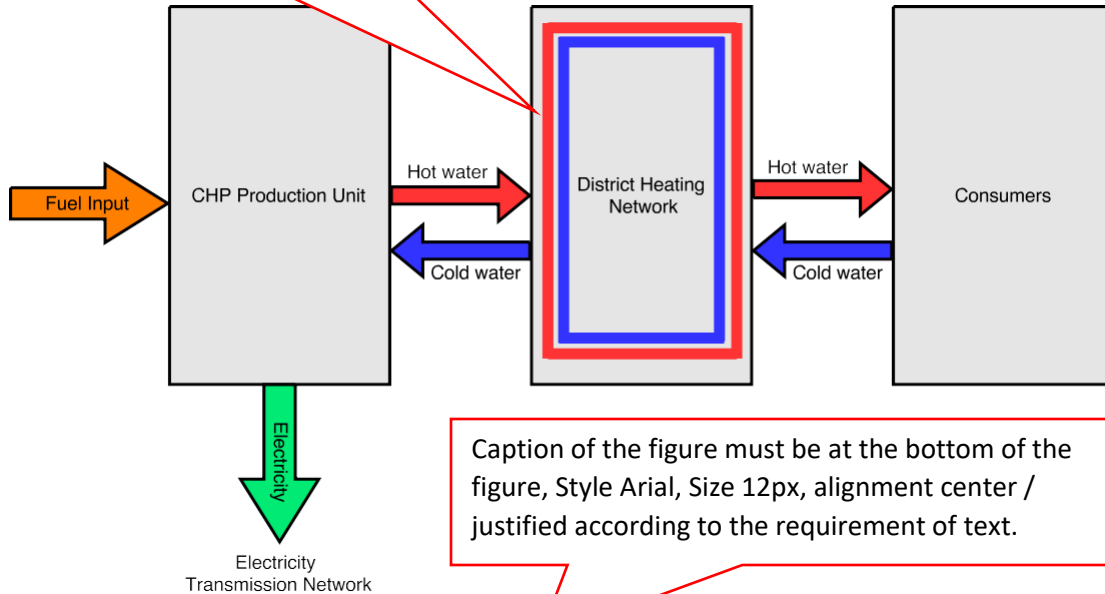
- Internal Combustion
- External Combustion
- Fuel Cells

As given in equation 1.1

Figure Center Aligned, Height of the Figure Varies but Width must be within Page Working Limits (i.e. not exceeding paragraph width).

1 General Instructions About Thesis Template

Style Arial, Size 12px, *Italic*, Section of Chapter on every odd page



Caption of the figure must be at the bottom of the figure, Style Arial, Size 12px, alignment center / justified according to the requirement of text.

Figure 1.1 CHP system

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Caption of the table must be at the top of the table, Style Arial, Size 12px, alignment center / justified according to the requirement of text.

Table 1.1 ICE specifications

Engine specification	Units	Value
Gas engine	Manufacturer	Toyota
	Engine type	1KS
Operation		4 stroke
Number/arrangements of cylinders		3/in line
Bore/Stroke	mm	72/78
Cubic capacity	l	1
Speed	rpm	1500
Compression ratio		12:1
Lubricating oil pan capacity	l	15
Lubricating oil consumption	Average g/h	1.5
Gas flow pressure	mbar	20-50

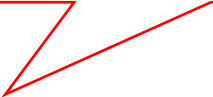


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2 Literature Review

This chapter should describe the relevant literature review of the study.

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3 Material and Methods/Model and Equations/Modelling

The title of the chapter 3 may be defined as per study requirements. The chapter should describe the detail experimental set-up, methodology and procedure. However experimental set-up may be replaced by suitable title where-ever applicable.

4 Results and Discussion

This chapter should explain all results obtain in the study followed by point to point discussion supported with the literature.

5 Conclusion

This chapter describes concise statement of research which includes methodology, results, conclusion drawn.

References

- Bramberger, M., & De Vega, I. (2020, Jan). Dephasing dynamics of an impurity coupled to an anharmonic environment. *Phys. Rev. A*, *101*, 012101. Retrieved from <https://link.aps.org/doi/10.1103/PhysRevA.101.012101> doi: 10.1103/PhysRevA.101.012101
- Huang, W., Yin, S., Zhu, B., Zhang, W., & Guo, C. (2019, Dec). Population transfer via a dissipative structural continuum. *Phys. Rev. A*, *100*, 063430. Retrieved from <https://link.aps.org/doi/10.1103/PhysRevA.100.063430> doi: 10.1103/PhysRevA.100.063430
- Volokitin, A. I. (2020, Jan). Retraction: Blackbody friction force on a relativistic small neutral particle [phys. rev. a 91, 032505 (2015)]. *Phys. Rev. A*, *101*, 019901. Retrieved from <https://link.aps.org/doi/10.1103/PhysRevA.101.019901> doi: 10.1103/PhysRevA.101.019901
- Wang, K., He, X., Guo, R., Xu, P., Sheng, C., Zhuang, J., ... Zhan, M. (2019, Dec). Preparation of a heteronuclear two-atom system in the three-dimensional ground state in an optical tweezer. *Phys. Rev. A*, *100*, 063429. Retrieved from <https://link.aps.org/doi/10.1103/PhysRevA.100.063429> doi: 10.1103/PhysRevA.100.063429

Reference should be in APA Style 6th Edition.
Recommended: Use citation software (ENDNOTE, Mendeley, JABREF, etc).

