ADD-ON COURSE

(Department of Physics)

1. **Title of the Course:** "*The Research Methods for Beginners*"

2. **Year:** 2023

3. **Course Duration**: 15 hrs

4. **Contact Hours**: 1hr daily

5. **No. of students who registered for the course**: 10

6. **No. of students who attended the course**: 07

7. **No. of students who completed the course**: 07

8. **Course Coordinator**: Dr. M. Lyndem.

9. **Course Instructors**: Dr. M. Lyndem, Dr. M. Ram and Mr. L. K. Nongbet

10. **Course Fee**: NIL

Course Objectives:

✓ To prepare the undergraduate students for a new adventure of learning which is through a research work

✓ To introduce students to the concept of research and its different processes and equips them with tools and skills to conduct research.

✓ To teach the methods and techniques of data collection, data analysis, research design and results interpretation.

✓ To help students develop the skills for writing research articles and learns the process of publishing a research finding.

✓ To give a hands-on training in *Gnuplot* and *Xmgrace* for data analysis and *Latex* software for editing and writing a research paper.

Course Outcomes:

1. Students will fully understand the difference between the regular normal learning process and learning from doing research and the importance of research in an academic life.

3. The course will enable students to learn the skills of identifying a research problem, data analysis; and to make reliable inferences, as well as interpret results.

4. Students will learn techniques and skills of writing a research paper and the publication process involves.

5. As a result of the course, students will be able to prepare a research plan on the research topic of their own.

6. Over all, the course will prepare the students mentally and instil confidence in them to take any minor research assignments in their future lines of study or in their workplace thereby giving them hope and satisfaction in their future career.

Course Structure:

1st Module: Introduction

    I.   Meaning of Research

   II.   Types of Research

  III.   Research Process

2nd Module: Research process-I

    I.   Formulation of Research Problem

   II.   Review of Literature

  III.   Research design and Sampling design

3rd Module: Research Process-2

    I.   Data Collection

   II.   Data analysis

  III.   Data interpretation

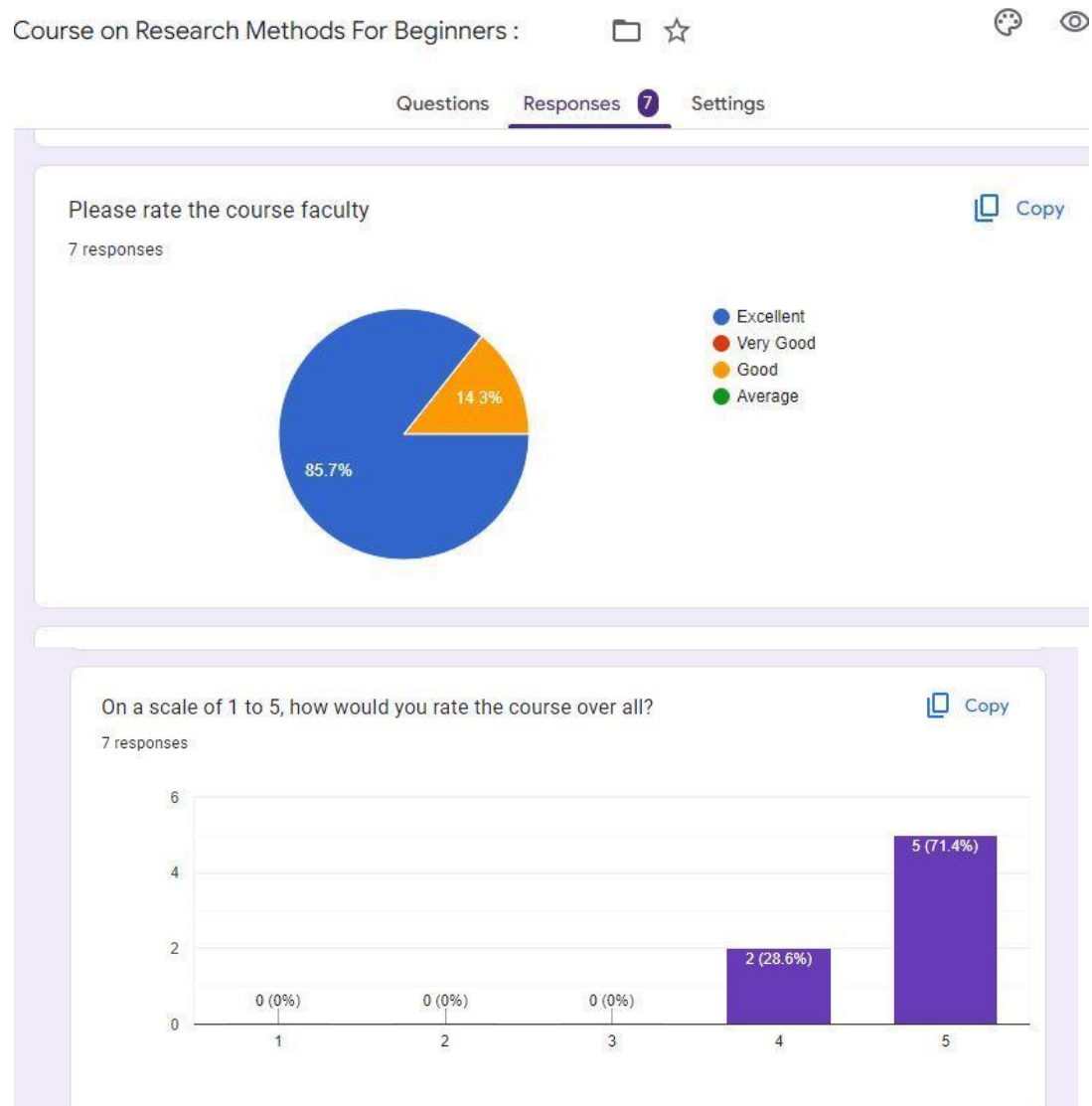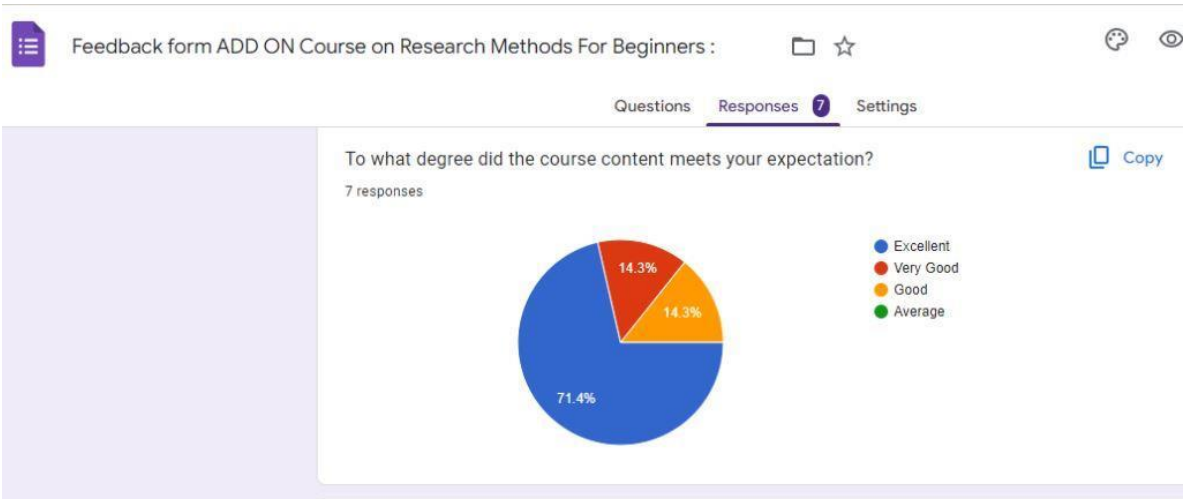 IV.   Research Report

4th Module: Practicals (Softwares)

    I.   Latex

   II.   Gnuplot

  III.   Xmgrace

Participants' Details:

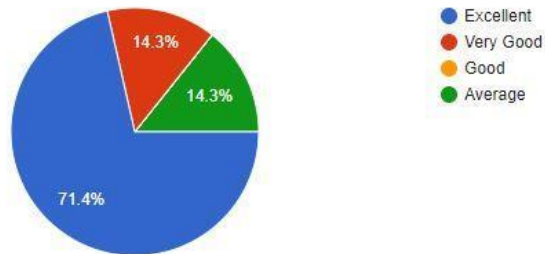| Students' Name	Roll. No	Department
Sumana Sarkar	21/COMP/173	Computer Science
Arnab Nath	21/PHYS/065	Physics
Amit Saharia	21/PHYS/090	Physics
Partha Pratim Barman	21/PHYS/086	Physics
Miguel Sebastian Myrthong	21/GEOG/170	Geography
L. Kennedy Vaiphei	21/GEOG/133	Geography
Neha Konwar	21/EVSS/459	Environmental Science

Course feedback:

All the student participants had given a positive feedback on the course as gauged from the responses given to the questioners in the feedback form as shown below:-

To what degree did the course content meets your expectation?

7 responses

□ Copy

- ● Excellent
- ● Very Good
- ● Good
- ● Average

14.3%

14.3%

71.4%

Please rate the course faculty

7 responses

□ Copy

- ● Excellent
- ● Very Good
- ● Good
- ● Average

14.3%

85.7%

On a scale of 1 to 5, how would you rate the course over all?

7 responses

□ Copy

6

4

2

0

0 (0%)   0 (0%)   0 (0%)   2 (28.6%)   5 (71.4%)

1   2   3   4   5

Please rate the level of gain of new knowledge and practice you received ?

7 responses

Copy

- Excellent
- Very Good
- Good
- Average

14.3%
14.3%
71.4%

Copy

Was the course relevant to you?

7 responses

Copy

- Very much
- To some extent
- Not at all

100%

Do you feel the course can help you to prepare for future research work?

7 responses

Copy

- Very much
- To some extent
- Not at all

14.3%
85.7%
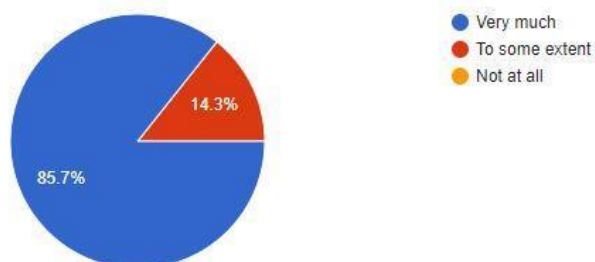
Please rate the course contents

7 responses

- ● Excellent
- ● Very good
- ● Good
- ● Average

85.7%
14.3%
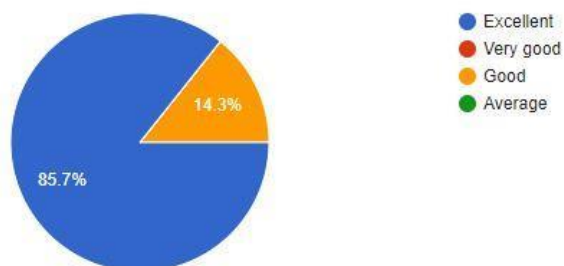
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The learning experience you had in this course was

7 responses

- ● Excellent
- ● Very good
- ● Good
- ● Average

71.4%
14.3%
14.3%

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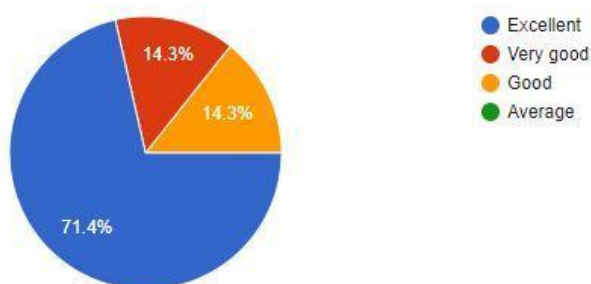
If you have any comments or suggestions, please write in few sentences

2 responses

No

It was a very informative course. I got to learn many new things. Thank you teachers.

Photos: Some of the photos taking during the course are presented below:-