

Programme: M. Sc. (Physics)

Course Code: PHS-629

Title of the Course: Documentation using Latex

Number of Credits: 1T + 1P

Effective from AY: 2023-24

<u>Prerequisites for the course:</u>	Nil	
<u>Course Objectives:</u>	This course provides an introduction to technical writing with Latex.	
<u>Content:</u>	Introduction Introduction and Installation of the software LaTeX. Understanding Latex compilation. Module 1. Basic Syntax of Latex, Writing equations, Matrix, Tables Module 2. Page Layout – Titles, Abstract, Chapters, Sections, References, Equation references, citation. List-making environments, Table of contents, generating new commands, Figure handling, numbering, List of figures, List of tables, Generating index. Module 3. Packages: Geometry, Hyperref, amsmath, amssymb, algorithms, algorithmic graphic, color, tiles listing Model 4. Classes: article, book, report, beamer, slides. Module 5. Applications to: Writing Resume Writing question paper Writing articles/ research papers Presentation using beamer. Preparing Poster.	5 hours 6 hours 7 hours 6 hours 3 hours 18 hours
<u>Pedagogy:</u>	lectures/ tutorials/ seminars/ assignments/ presentations/ etc. or a combination of some of these.	
<u>References/Reading s:</u>	1. Dilip Datta, LaTeX in 24 Hours: A Practical Guide for Scientific Writing, Springer, (2017). 2. Leslie Lamport, LaTeX: A Document Preparation System, Addison-Wesley Professional (1994). 3. Frank Mittelbach, Michel Goossens, Johannes Braams, David Carlisle and Chris Rowley, The LaTeX Companion, 2nd edition (TTCT series), Addison-Wesley Professional, 2004	
<u>Course Outcomes:</u>	Student will be able to 1. Create basic types of LaTeX documents (article, report, letter, book). 2. Format words, lines, and paragraphs, design pages, create lists, tables, references, and figures in LaTeX.	

	3. Create tables, typeset mathematical equations, import graphics, etc. 4. Develop large documents like books and thesis and professional presentations using LaTeX.	
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