



**Department of Physics**  
**Rishi Bankim Chandra Evening College**  
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Ref. No. ....

Date: 04.07.2023

**Course Distribution for B.Sc. Physics General Course 2023-24**

**Semester I (NEP) (July 2023 to December 2023)**

PHSMIN101T/PHSCOR101T - Mechanics

No. of Lectures: 45 Lectures

3 Credits

Course Matter

Resource Person

Vectors

Prof. Abhisek Adhikari

Oscillations

Particle Dynamics

Dr. Debojyoti Halder

Gravitation

Elasticity

**Semester II (NEP) (January 2024 to June 2024)**

PHSMIN202T/PHSCOR202T - Electricity and Magnetism

No. of Lectures: 45 Lectures

3 Credits

Course Matter

Resource Person

Vector Analysis

Prof. Abhisek Adhikari

Linear Network

Electrostatics

Dr. Debojyoti Halder

Magnetism

Electromagnetic Induction

### Semester III (CBCS) (July 2023 to December 2023)

#### PHSGCOR03T - Thermal Physics and Statistical Mechanics

No. of Lectures: 60 Lectures

4 Credits

Course Matter

Resource Person

Laws of Thermodynamics  
Thermodynamical Potentials

Prof. Abhisek Adhikari

Kinetic Theory of Gases  
Theory of Radiation  
Statistical Mechanics

Dr. Debojyoti Halder

### Semester IV (CBCS) (January 2024 to June 2024)

#### PHSGCOR04T - Waves and Optics

No. of Lectures: 60 Lectures

4 Credits

Course Matter

Resource Person

Superposition of Two Collinear Harmonic oscillations  
Superposition of Two Perpendicular Harmonic oscillations  
Fluids  
Sound

Prof. Abhisek Adhikari

Wave Motion – General  
Wave optics  
Interference  
Michelson's Interferometer  
Diffraction  
Polarization

Dr. Debojyoti Halder

## Semester V (CBCS) (July 2023 to December 2023)

### PHSGDSE02T - Perspectives of Modern Physics

No. of Lectures: 60 Lectures

4 Credits

Course Matter

Resource Person

Relativistic Dynamics  
Quantum Theory of Light  
Bohr's model  
Atomic Physics  
Nuclear Physics  
X-ray and Crystal Structure of Solids

Dr. Debojyoti Halder

Wave-particle Duality  
Wave-function Description  
Stationary State Problems

Dr. Suman Paul

## Semester VI (CBCS) (January 2025 to June 2025)

### PHSGDSE04T - Nuclear and Particle Physics

No. of Lectures: 60 Lectures

4 Credits

Course Matter

Resource Person

General Properties of Nuclei  
Nuclear Models  
Radioactivity decay  
Particle Accelerators  
Particle physics

Dr. Debojyoti Halder

Nuclear Reactions  
Interaction of Nuclear Radiation with matter  
Detector for Nuclear Radiations

Dr. Suman Paul



Head,  
Department of Physics