

**Department of Physics, Harimohan Ghose College**  
**Lesson Plan 2023-24: Undergraduate Physics (Multidisciplinary & General)**

<b>Semester</b>	<b>Period of Semester</b>	<b>Tentative Dates of University Exam*</b> (*follow the latest notification by CU)	<b>Name of the Faculty</b>	<b>Course Code</b>	<b>Paper Name</b>	<b>Brief Description of the Topic</b>	<b>No. of Lectures</b>
Sem-1 (CCF)	Sep. 2023 to Apr. 2024	Follow the latest notification by CU	Dr. Ambaresh Sahoo	MDC-1/ MDC Minor-1	BASIC PHYSICS-I (Theory)	<ol style="list-style-type: none"> <li>1. Mathematical Physics</li> <li>2. Classical Mechanics</li> </ol>	
					BASIC PHYSICS-I (Practical)	Classical Mechanics Practical	
				SEC - 1	Introduction to Computer Programming and Graph Plotting (Practical)	<ol style="list-style-type: none"> <li>1. Introduction to Graph Plotting (2D only, using GNU PLOT)</li> <li>2. Introduction to programming in python (Version 3.x)</li> </ol>	
Sem-3 (CBCS)	Sep. 2023 to Mar. 2024	Follow the latest notification by CU	Dr. Ambaresh Sahoo	PHS-G- CC-3-3-TH	Thermal Physics and Statistical Mechanics (Theory)	<ol style="list-style-type: none"> <li>1. Thermodynamics, Kinetic Theory of Gases Theory of Radiation</li> <li>2. Statistical Mechanics</li> </ol>	
				PHS-G- CC-3-3-P	Thermal Physics and Statistical Mechanics (Practical)	Thermal Physics Practical	

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Sem-5 (CBCS)	Aug. 2023 to Feb. 2024	Follow the latest notification by CU	Dr. Ambaresh Sahoo	PHS-G- DSE - A(2)	Modern Physics (Theory)	<ol style="list-style-type: none"> <li>1. Radiation and its nature</li> <li>2. Foundation of Quantum Mechanics</li> <li>3. Special Theory of Relativity</li> <li>4. Lasers</li> </ol>	
				SEC - A-2	Renewable Energy and Energy Harvesting (Theory)	<ol style="list-style-type: none"> <li>1. Fossil fuels and Alternate Sources of energy</li> <li>2. Solar, Wind, Ocean, Geothermal, Hydro, and Piezoelectric Energy harvesting</li> <li>3. Fuel Cell</li> </ol>	
Sem-2 (CCF)	Apr. 2024 to Sep. 2024	Follow the latest notification by CU	Dr. Ambaresh Sahoo	MDC-2/ MDC Minor-2	BASIC PHYSICS-II (Theory)	<ol style="list-style-type: none"> <li>1. Basic Electricity and Magnetism</li> <li>2. Introduction to Thermodynamics</li> </ol>	
					BASIC PHYSICS-II (Practical)	Electrical devices & Thermal Properties Practical	
				SEC - 1	Introduction to Computer Programming and Graph Plotting (Practical)	<ol style="list-style-type: none"> <li>1. Introduction to Graph Plotting (2D only, using GNU PLOT)</li> <li>2. Introduction to programming in python (Version 3.x)</li> </ol>	

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Sem-4 (CBCS)	Mar. 2024 to Aug. 2024	Follow the latest notification by CU	Dr. Ambaresh Sahoo	PHS-G- CC-4-4-TH	Waves and Optics (Theory)	<ol style="list-style-type: none"> <li>1. Accoustics, Superposition of Vibrations, Vibration of String</li> <li>2. Introduction to Wave Optics, Interference, Diffraction, and Polarization</li> </ol>	
				PHS-G- CC-4-4-P	Waves and Optics (Practical)	Sound and Optics Practical	
Sem-6 (CBCS)	Mar. 2024 to Jul. 2024	Follow the latest notification by CU	Dr. Ambaresh Sahoo	PHS-G- DSE – B(2)	Nuclear & Particle Physics (Theory)	<ol style="list-style-type: none"> <li>1. General Properties of Nuclei, Nuclear Models, Radioactivity, Nuclear Reactions, Detector for Nuclear Radiations, Particle Accelerators</li> <li>2. Particle Physics</li> </ol>	
				SEC – B-2	Electrical Circuits and Network skills (Theory)	<ol style="list-style-type: none"> <li>1. DC Generator, Transformer, AC Motor</li> <li>2. Measurements and Faults</li> </ol>	