

**DEPARTMENT OF PHYSICS  
CITY COLLEGE**

**LESSON PLAN FOR THE UNDERGRADUATE COURSE  
ACADEMIC YEAR 2020-2021 [Odd Semesters]**

**Dr. Mitali Middya**

<b>Class</b>	<b>Topics to be covered</b>	<b>No. of lectures</b>	<b>Examination</b>
B.Sc. Hons. Semester 1 CBCS 2019	Core Course: CC2 Mechanics: Central Force Motion, Rotational Dynamics	1/week	As assigned by the University
B.Sc. Hons. Semester 3 CBCS 2019	Core Course: CC6 Thermal Physics: Kinetic Theory of Gases, Conduction of Heat	1/week	
B.Sc. Hons. Semester 5 CBCS 2018	Core Course: CC11: Quantum Mechanics: Schrodinger Equation, General discussion of bound states in an arbitrary potential, Quantum mechanics of simple harmonic oscillator, Quantum theory of hydrogen-like atoms	2/week	

**Dr. Mita Mondal**

<b>Class</b>	<b>Topics to be covered</b>	<b>No. of lectures</b>	<b>Examination</b>
B.Sc. Hons. Semester 1 CBCS 2019	Core Course: CC2 Mechanics: Gravitation, Fluid Motion	1/week	As assigned by the University
B.Sc. Hons. Semester 3 CBCS 2019	Core Course: CC6 Thermal Physics: Introduction to Thermodynamics, Thermodynamic Potentials	2/week	
B.Sc. Gen. Semester 1 CBCS 2019	General Course: GE1 Mechanics: Central force and Gravitation, Elasticity	1/week	

**Dr. Samapti Pal**

Class	Topics to be covered	No. of lectures	Examination
B.Sc. Hons. Semester 1 CBCS 2019	Core Course: CC1 Mathematical Physics I: Matrices	1/week	As assigned by the University
B.Sc. Hons. Semester 3 CBCS 2019	Core Course: CC7 Modern Physics: Radiation and Its nature	1/week	
B.Sc. Hons. Semester 5 CBCS 2018	Core Course: CC12 Solid State Physics: Crystal Structure, Elementary Lattice Dynamics, Elementary Band Theory	2/week	

**Dr. Kausik Mukhopadhyay**

Class	Topics to be covered	No. of lectures	Examination
B.Sc. Hons. Semester 1 CBCS 2019	Core Course: CC1 Mathematical Physics I: Calculus	1/week	As assigned by the University
B.Sc. Hons. Semester 3 CBCS 2019	Core Course: CC5 Mathematical Physics II: Frobenius Method and Special Functions, Some Special Integrals, Partial Differential Equations	2/week	
B.Sc. Hons. Semester 5 CBCS 2018	Core Course: CC11 Quantum Mechanics: Generalized Angular Momenta and Spin, Spectra of Hydrogen atom and its structure, Atoms in Electric & Magnetic Fields, Many electron atoms	2/week	
B.Sc. Gen. Semester 1 CBCS 2019	General Course GE1: Mechanics Introduction to Newtonian Mechanics, Rotational Motion	1/week	

**Dr. Anshuman Nandy**

Class	Topics to be covered	No. of lectures	Examination
B.Sc. Hons. Semester 3 CBCS 2019	Core Course: CC7 Modern Physics: Basics of Quantum Mechanics, Nuclear Structure, Interaction with and within nucleus, Lasers	2/week	As assigned by the University
B.Sc. Hons. Semester 5 CBCS 2018	DSE-B1 Detector for Nuclear Radiations, Particle Accelerators, Particle Physics	3/week	
B.Sc. Gen. Semester 1 CBCS 2019	General Course: GE1 Mathematical Methods	1/week	
B.Sc. Gen. Semester 5 CBCS 2018	General Course: DSE-A2 Radiation and its nature, Foundation of Quantum Mechanics	2/week	

**Dr. Somdeb Chakraborty**

Class	Topics to be covered	No. of lectures	Examination
B.Sc. Hons. Semester 1 CBCS 2019	Core Course: CC1 Mathematical Physics I Vector Algebra and Vector Calculus	2/week	As assigned by the University
B.Sc. Hons. Semester 3 CBCS 2019	Core Course: CC5 Mathematical Physics II Fourier Series, Integrals Transforms, Introduction to probability	1/week	
B.Sc. Hons. Semester 3 CBCS 2019	SEC A1 Scientific Writing	1/week	
B.Sc. Hons. Semester 5 CBCS 2018	DSE-A1 Fiber optics, Holography, Introductory Nonlinear Optics	2/week	

**Dr. Arindam Midya**

Class	Topics to be covered	No. of lectures	Examination
B.Sc. Hons. Semester 1 CBCS 2019	Core Course: CC2 Fundamentals of Dynamics, Work and Energy, Non-Inertial Systems	2/week	As assigned by the University
B.Sc. Hons. Semester 5 CBCS 2019	DSE A1 Einstein coefficients and Rate equations, Basic properties of laser, Resonators, transient effect, Basic Laser Systems, Practical properties and uses of laser	3/week	
B.Sc. Gen. Semester 5 CBCS 2018	General Course: DSE A2 Laser, Special relativity	2/week	
B.Sc. Gen. Semester 5 CBCS 2018	SEC A-1: Circuit Theory	1/week	

**Ms. Debasmita Samanta**

Class	Topics to be covered	No. of lectures	Examination
B.Sc. Hons. Semester 5 CBCS 2019	Core Course: CC12 Solid State Physics Magnetic Properties of Matter, Dielectric Properties of Materials, Ferroelectric Properties of Materials, Superconductivity	2/week	As assigned by the University
B.Sc. Gen. Semester 3 CBCS 2019	General Course: GE3 Laws of Thermodynamics, Thermodynamical Potentials, Kinetic Theory of Gases, Theory of Radiation	2/week	

**Ms. Devdali Banerjee**

<b>Class</b>	<b>Topics to be covered</b>	<b>No. of lectures</b>	<b>Examination</b>
B.Sc. Hons. Semester 5 CBCS 2018	DSE-B1 Introduction, Nuclear Reactions, Interaction of Nuclear Radiation with matter	2/week	As assigned by the University
B.Sc. Gen. Semester 1 CBCS 2019	General Course: GE1 Oscillations, Surface tension	1/week	
B.Sc. Gen. Semester 3 CBCS 2019	General Course: GE3 Statistical Mechanics	1/week	