

Maulana Azad College
Department of Physics
Lesson Plan 2021-22
Undergraduate Physics (Hons. & General)

Semester	Period of Semester	Tentative Dates of University Exam* (*follow the latest notification by CU)	Name of the Faculty	Course Code	Paper Name	Brief Description of the Topics	No. of Lectures
Sem-1 (CC)	Sep'21- Dec'21	follow the latest notification by CU	Dr. Biswajit Maiti	CC-1-1-TH	Mathematical Physics I	Calculus (Recapitulation, Convergence of Infinite Series), Vector Algebra and Vector Calculus	
			Mrs. Indrani Roy	CC-1-1-P	Mathematical Physics I	Mathematical Physics I Practical – Python and GNUPLOT	
			Dr. Abhishek Dey	CC-1-1-TH	Mathematical Physics I	Calculus (1 st & 2 nd order Differential Equations) Matrices	
			Dr. Amitava Ghorai	CC-1-1-TH	Mathematical Physics I	Unit 1d (Calculus of functions of more than one variables)	
			Dr. Sanjay Chattopadhyay	CC-1-2-TH	Mechanics	Non-Inertial Systems, Rotational Dynamics, Fluid Motion	
			Mrs. Mina Mazumder	CC-1-2-TH	Mechanics	Fundamentals of Dynamics, Work and Energy, Gravitation and Central Force Motion	
			Dr. Sanjay Chattopadhyay	CC-1-2-P	Mechanics	Mechanics Practical	
			Dr. Sanjit Kr. Das	CC-1-2-P	Mechanics	Mechanics Practical	
Sem-1 (GE)		follow the latest notification by CU	Mrs. Mina Mazumder	GE1-1-Th	Mechanics	Mathematical Methods, Introduction to Newtonian Mechanics, Rotational Motion	
				GE1-1-P	Mechanics	Mechanics Practicals	
			Dr. Sanjay Chattopadhyay	GE1-1-Th	Mechanics	Central force and Gravitation, Oscillations, Elasticity, Surface Tension	
				GE1-1-P	Mechanics	Mechanics Practicals	
Sem-3 (CC+ SEC)	Sep'21- Dec'21	follow the latest notification by CU	Dr. Biswajit Maiti	CC-3-5-TH	Mathematical Physics II	Frobenius Method and Special Functions, Some Special Integrals, Introduction to probability	
			Mrs. Mina Mazumder	CC-3-5-TH	Mathematical Physics II	Fourier series, Integral Transforms, Partial Differential Equations	
			Dr. Sanjit Kr. Das	CC-3-5-P	Mathematical Physics II	Numpy-Scipy and Numerical Analysis	

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			Dr. Abhishek Dey	CC-3-5-P	Mathematical Physics II	Matplotlib				
			Dr. Pijush Kanti Ghosh	CC-3-6-TH	Thermal Physics	Introduction to Thermodynamics, Thermodynamic Potentials				
			Dr. Sanjay Chattopadhyay	CC-3-6-TH	Thermal Physics	Kinetic Theory of Gases, Conduction of Heat				
			Dr. Amitava Ghorai	CC-3-6-P	Thermal Physics	Thermal Physics Practicals				
			Mrs. Mina Mazumder	CC-3-6-P	Thermal Physics	Thermal Physics Practicals				
			Mrs. Indrani Roy	CC-3-6-P	Thermal Physics	Thermal Physics Practicals				
			Dr. Amitava Ghorai	CC-3-7-TH	Modern Physics	Lasers				
			Dr. Sanjit Kr. Das	CC-3-7-TH	Modern Physics	Radiation and its nature, Basics of Quantum Mechanics, Nuclear structure, Interaction with and within Nucleus				
				CC-3-7-P	Modern Physics	Modern Physics Practicals				
			Dr. Biswajit Maiti	CC-3-7-P	Modern Physics	Modern Physics Practicals				
			Dr. Amitava Ghorai	CC-3-7-P	Modern Physics	Modern Physics Practicals				
			Dr. Abhishek Dey	SEC A	Scientific Writing	Scientific Writing (Theory) LaTeX and Scientific Writing (P) Project				
			Sem-3 (GE)		follow the latest notification by CU	Mrs. Indrani Roy	GE-3-3-Th	Thermal Physics and Statistical Mechanics	Laws of Thermodynamics, Thermodynamic Potentials	
							GE-3-3-P	Thermal Physics and Statistical Mechanics	Thermal Physics and Statistical Mechanics Practicals	
Dr. Pijush Kanti Ghosh	GE-3-3-Th	Thermal Physics and Statistical Mechanics				Kinetic Theory of Gases, Theory of Radiation, Statistical Mechanics				
	GE-3-3-P	Thermal Physics and Statistical Mechanics				Thermal Physics and Statistical Mechanics Practicals				

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Sem-5 (CC+DSE)	Sep'21- Dec'21	follow the latest notification by CU	Dr. Sanjit Kr. Das	CC-5-11-TH	Electromagnetic Theory	Maxwell Equations, EM Wave Propagation In Unbounded Media, EM Wave in Bounded Media	
			Dr. Pijush Kanti Ghosh	CC-5-11-TH	Electromagnetic Theory	Polarization, Polarization in Uniaxial Crystals, Rotatory Polarization	
				CC-5-11-P	Electromagnetic Theory	Electromagnetic Theory Practicals	
			Dr. Biswajit Maiti	CC-5-11-P	Electromagnetic Theory	Electromagnetic Theory Practicals	
			Dr. Pijush Kanti Ghosh	CC-5-12-TH	Statistical Physics	Classical Statistical Mechanics, System of Identical Particles	
			Dr. Biswajit Maiti	CC-5-12-TH	Statistical Physics	Bose-Einstein Statistics, Radiation: Classical & Quantum Aspects, Fermi-Dirac Statistics	
			Dr. Abhishek Dey	CC-5-12-P	Statistical Physics	Statistical Physics Practicals	
			Dr. Sanjay Chattopadhyay	DSE-A1 (b)	Laser and Fibre Optics	Basic Properties of Laser, Resonators, Transient Effect, Basic Laser Systems, Practical properties & uses of Laser	
			Mrs. Mina Mazumder	DSE-A1 (b)	Laser and Fibre Optics	Einstein Coefficients & Rate Equations, Fiber Optics, Holography, Introductory Nonlinear Optics	
			Dr. Abhishek Dey	DSE-B1 (a)	Astronomy and Astrophysics	All Units	