			Leo	cture Plan						
Name of the College: Government College of Arts, Science and Commerce. Sanquelim - Goa										
Name of Faculty:	Suvarna Patil(45)/V	idhita Parab(15)		Subject: Physics(Minor)						
Paper code: PHY-1	111 Everyday Phys	ics		Program: FYBSC	Program: FYBSC		Division:			
Academic year: 20	024-25			Semester: II	Semester: II		es: 60			
Course Objectives: This course aims to enhance the perception of physical concepts and develop deeper understanding of the world we interact with every day.										
 Describe the fu Apply fundame Correlate the co 	 Recall fundamental concepts in Physics and connect them in everyday life Describe the fundamental concept to understand the physical phenomena happening around us. Apply fundamental concepts in Physics to analyse these phenomena. Correlate the concepts of Physics in other branches of science 									
Student Learning Outcome: Student will be able to understand the basic phenomena that we see in our everyday life.										
Month	Lecture From	Lecture To	No. of lectures allotted	Topic, Subtopic to be covered	Exercise/ Assignment	ICT Tools	Reference books			
December	9-12-2024	14-12-2024	3L	The wonders of sound Wave motion, wave speed, wave interference, Doppler.	Solving Problems	Digital Board	P. G. Hewitt, Conceptual physics, 12th ed., Pearson, 2015.			
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	16-12-2024	21-12-2024	3L	Effect, Sound in air, forced vibrations, resonance, interference, Beats, Music		Digital Board	P. G. Hewitt, Conceptual physics, 12th ed., Pearson, 2015. P. G. Hewitt, Conceptual physics, 12th ed., Pearson, 2015. P. G. Hewitt, Conceptual physics, 12th ed., Pearson, 2015.
January	2/01/2025	4/01/2025	3L	Pitch, Sound intensity, Musical Instruments Fun with Electricity and Magnetism Electricity: electric charges, Coulomb's law Conductors and Insulators, electric field, electric energy storage	Solving Problems	Digital Board	P. G. Hewitt, Conceptual physics, 12th ed., Pearson, 2015. P. G. Hewitt, Conceptual physics, 12th ed., Pearson, 2015.
	6/1/2025	11/01/2025	3L	voltage sources, electrical Resistance, direct and alternating current, Electric power, Lamps. Magnetism: Magnetic poles, magnetic fields, Electric current and magnetic field, Electromagnets, Faraday's law, Electric Motors, Electric Generators, Power Production, Transformers.	Solving Problems	Digital Board	P. G. Hewitt, Conceptual physics, 12th ed., Pearson, 2015.
	13/11/2025	18/01/2025					

			The Magic of Light			
			Electromagnetic wave.			
			Electromagnetic			
			spectrum, transparent			
			materials onaque	Solving	Digital	
		21	materials, shadows	Problems	Board	P.G. Hewitt Concentual physics 12th ed Pearson 2015
		JL	Social Light colour	TTODICTTIS	Doard	
			selective reflection			
			selective reflection,			
			selective transmission,			
			mixing coloured light,			
			natural phenomenon			
			like why sky is blue?			
			Why Sunsets Are Red?			
			Why Clouds Are White?			
			Why Water Is Greenish	Solving	Digital	
20/01/2025	25/01/2025	3L	Blue	Problems	Board	P. G. Hewitt, Conceptual physics, 12th ed., Pearson, 2015.
27/01/2025	01/02/2025					
			Deflection Defrection			
			Reflection, Refraction,			
			Dispersion and			
			Kainbows, total			
			internal reflection,	Solving	Digital	
		3L	Lenses and Mirrors	Problems	Board	P. G. Hewitt, Conceptual physics, 12th ed., Pearson, 2015.

				Linkelying cogrets of an			1
				Unlocking secrets of an			
				atom Quantization of			
				energy, wave particle			
				duality,			
				complementarity,			
				predictability and	Solving		
January/February			3L	chaos.	Problems		P. G. Hewitt, Conceptual physics, 12th ed., Pearson, 2015.
	03/02/2025	8/02/2025		Bohr Model of the			
	03,02,2023	0,02,2023		atom concept of			
				electron waves,			
				Schrödinger s wave			
				equation. X-ray and			
				radioactivity, alpha,	Solving	Digital	
February			3L	beta and gamma rays,	Problems	Board	P. G. Hewitt, Conceptual physics, 12th ed., Pearson, 2015.
	10/02/2025	15/02/2025		environmental			
				radiation. doses of			
				radiation radioactive			
				traces The atomic			
				nuclous and the strong			
				force transmitted in of			
				force, transmutation of			
				elements, radioactive	Solving		
			3L	half-life.	Problems		P. G. Hewitt, Conceptual physics, 12th ed., Pearson, 2015.
	17/02/2025	22/02/2025		Dynamics of heat			
				Temperature, heat,			
				specific heat Capacity.			
				Thermal Expansion	Solving		
			31	Heat Transfer:	Problems		P.G. Hewitt Concentual physics 12th ed Pearson 2015
			JL		1100101113		
	24/02/2025			Conduction			
	24/02/2023	01/05/2025		Conduction,			
				Convection and			
				Radiation. Newtons law	Solving	Digital	
February/March			3L	of cooling.	Problems	Board	P. G. Hewitt, Conceptual physics, 12th ed., Pearson, 2015.

March	03/02/2025	8/03/2025	3L	Understanding Matter from solid to plasma Solids: Density, Elasticity, tension and compression, Scaling. Liquids: Pressure, Buoyancy,	Solving Problems	Digital Board	P. G. Hewitt, Conceptual physics, 12th ed., Pearson, 2015.
	10/03/2025	15/03/2025	3L	Flotation, Archimedes principle, what makes object sink and float, Surface tension, Capillarity, Gases: The Atmosphere, atmospheric pressure, Barometers, Bernoulli's Principal, Plasma.		Digital Board	P. G. Hewitt, Conceptual physics, 12th ed., Pearson, 2015.
	17/03/2025	22/03/2025	3L	The universal law of gravity, the universal gravitational constant, Inverse square law, weight and weightlessness, ocean tides, black holes.		Digital Board	P. G. Hewitt, Conceptual physics, 12th ed., Pearson, 2015.
	24/03/2025	29/03/2025				Digital Board	
	31/03/2025	5/04/2025				Digital	
March/April	, ,	, ,				Board	
	07/04/2025	11/04/2025		Revision		Digital Board	

	Component	Max Marks			
	ISA 1	10			
Assessment					
Rubrics	ISA 2	10			
	ISA3	10			
	Semester End				
	Exam	80			