Semester: 1 **2025 – 2026**

Grade Level	Grade 12 - AP PHYSICS	**Subject: PHYSICS**
Teacher(s) Name	SARANYA HAREESH	
Textbook	**AP Physics- WILEY + Calculus (college board 2025)**	

Week #	Dates		Lesson Title / Pages	CCSS / NGSS Code / MOE
1	Aug.25th	Aug.29th	**UNIT 1: Kinematics** 1.1 Scalars and Vectors 1.2 Displacement, Velocity, and Acceleration 1.3 Representing Motion 1.4 Reference Frames and Relative Motion 1.5 Motion in Two or Three Dimensions	1.1.A 1.2.A 1.2.B 1.2.C 1.3.A 1.4.A 1.4.B 1.5 A
2	Sept. 1st	Sept. 5th	**UNIT 2: Force and Translational Dynamics** 2.1 Systems and Center of Mass 2.2 Forces and Free-Body Diagrams 2.3 Newton's Third Law	2.1.A 2.1.B 2.2.A 2.2B 2.3.A
3	Sept.8th	Sept.12th	**UNIT 2: Force and Translational Dynamics** 2.4 Newton's First Law 2.5 Newton's Second Law	2.4.A 2.5A 2.6A

			2.6 Gravitational Force	2.6. B 2.6.C 2. .6. D 2.6.E
4	Sept. 15th	Sept.19th	**UNIT 2: Force and Translational Dynamics** 2.7 Kinetic and Static Friction 2.8 Spring Forces 2.9 Resistive Forces 2.10 Circular Motion	2.7.A 2.7 B 2.8.A 2.8 B 2.9 A 2.10 A 2.10 B
5	Sept.22nd	Sept.26th	**UNIT 3 Work, Energy, and Power** 3.1Translational Kinetic Energy 3.2 Work 3.3 Potential Energy 3.4 Conservation of Energy 3.5 Power	3.1 A 3.2.A 3.3.A 3.4.A 3.4 B 3.4.c 3.5 A
6	Sept. 29th	Oct.3rd	**Unit 4: Linear Momentum** 4.1 Linear Momentum 4.2 Change in Momentum and Impulse	4.1 A 4.2 A 4.2 B
7	Oct.6th	Oct.10th	**Unit 4: Linear Momentum** 4.3 Conservation of Linear Momentum 4.4 Elastic and Inelastic Collisions	4.3 A 4.3. B 4.4.A

8	Oct.13th	Oct.17th	**UNIT 5: Torque and Rotational Dynamics** 5.1 Rotational Kinematics **5.2 Connecting Linear and Rotational Motion** **5.3 Torque**	5.1.A 5.2.A 5.3.A 5.3.B 5.4.A 5.4.B
9	Oct.20th	Oct.24th **Oct 24 End of Quarter 1**	**UNIT 5: Torque and Rotational Dynamics** **5.4 Rotational Inertia** **5.5 Rotational Equilibrium and Newton's First Law in Rotational Form**	5.4.A 5.4.B 5.5 A 5.6 A
10	Oct.27th	Oct.31st	**UNIT 6 Energy and Momentum of Rotating Systems** 6.1 Rotational Kinetic Energy 6.2Torque and Work 6.3 Angular Momentum and Angular Impulse	6.1.A 6.2.A 6.3.A 6.3.B 6.3.C
11	Nov.3rd	Nov.7th	UNIT 6 Energy and Momentum of Rotating Systems 6.4 Conservation of Angular Momentum 6.5 Rolling 6.6 Motion of Orbiting Satellites	6.4.A 6.4.B 6.5.A 6.5.B 6.5.C 6.6. A
12	Nov.10th	Nov.14th	UNIT 6 Energy and Momentum of Rotating Systems 6.4 Conservation of Angular Momentum 6.5 Rolling	6.4.A 6.4.B 6.5.A 6.5.B 6.5.C

			6.6 Motion of Orbiting Satellites	6.6. A
13	Nov.17th	Nov.21st	UNIT 7 Oscillations 7.1 Defining Simple Harmonic Motion (SHM) 7.2 Frequency and Period of SHM 7.3 Representing and Analyzing SHM	7.1.A 7.2.A 7.3.A
14	Nov. 24th	Nov.28th	UNIT 7 Oscillations 7.4 Energy of Simple Harmonic Oscillators 7.5 Simple and Physical Pendulums	7.4.A 7.5. A
15	Dec.1st	Dec.5th	Unit 8: Electric Charges, Fields, and Gauss's Law 8.1 Electric Charge and Electric Force	8.1.A 8.1.B 8.1.C
16	Jan 5th	Jan 9th	**Unit 8:** **Electric Charges, Fields, and Gauss's Law** 8.2 Conservation of Electric Charge and the Process of Charging 8.3 Electric Fields 8.4 Electric Fields of Charge Distributions	8.2.A 8.3.A 8.3.B 8.4. A
17	Jan 12th	Jan 16th	**Unit 8:** **Electric Charges, Fields, and Gauss's Law** 8.5 Electric Flux 8.6 Gauss's Law	8.5.A 8.6. A

18	Jan 19th	Jan 23rd	**UNIT 9 Electric Potential** 9.1 Electric Potential Energy 9.2 Electric Potential 9.3 Conservation of Electric Energy	9.1.A 9.2.A 9.2.B 9.3. A
19	Jan 26th	Jan 30th	Semester 1 Exams: Jan 22nd to Jan 30th	
Winter Break for Students: Dec 8 to Jan 4				