St. John's Senior School

Subject: Physics **Form: Upper 6**
Teacher: T. Vrionides **Term: Autumn 2025**

WEEK	WEEK BEGINNING	TOPIC
1	8th September	• Circular motion; 3.6.1.2 Simple harmonic motion
2	15th September	• Simple harmonic systems; 3.6.1.4 Forced vibrations and resonance
3	22nd September	• Thermal energy transfer
4	29th September	• deal gases; Molecular kinetic theory model
5	6th October	• **MINI TEST**
6	13th October	• Newton's law; Gravitational field strength
7	20th October	• Gravitational potential
		HALF - TERM
8	3rd November	• Orbits of planets and satellites
9	10th November	• Coulomb's law
10	17th November	• Electric field strength; Electric potential
11	24th November	• Capacitance; Parallel plate capacitor
12	1st December	• Energy stored by a capacitor; Capacitor charge and discharge
13	8th December	• Magnetic flux density; Moving charges in a magnetic field

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WEEK	WEEK BEGINNING	TOPIC
1	6th January	• **MOCK EXAMINATIONS**
2	12th January	• **MOCK EXAMINATIONS**
3	19th January	• α, β and γ radiation;
4	26th January	• Nuclear instability; Nuclear radius
5	2nd February	• Mass and energy; Induced fission
6	9th February	• Safety aspects; Concept of moment of inertia
		HALF - TERM
7	23rd February	• Mass and energy; Induced fission
8	2nd March	• Rotational kinetic energy; Rotational motion
9	9th March	• Torque and angular acceleration; Angular momentum
10	16th March	• Non-flow processes; The p–V diagram
11	23rd March	• Engine cycles; Second Law and engines

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WEEK	WEEK BEGINNING	TOPIC
1	20th April	• Revision and exam practice
2	27th April	• Revision and exam practice
3	5th May (Tuesday)	• Revision and exam practice
4	11th May	• External examinations
5	18th May	• External examinations
HALF - TERM		
6	1st June	• External examinations
7	8th June	• External examinations
8	15th June	• External examinations
9	22nd June	• External examinations
10	29th June	• External examinations
11	6th July	• External examinations completed