

Course Physics		NESA Course Code: Preliminary 11310 HSC 15330
2 units for each of Preliminary and HSC year. Board Developed Course. DOES count in the 6 units of the Board Developed Courses required for the HSC. DOES count towards an ATAR		Course costs Yes
Success Criteria (what skills and aptitudes you need to have for success in this subject) Consistently above 70% in each assessment task for Year 10 Semester 1 Year 10 mathematics results of 60% or higher Thinking and writing skills to explain, analyse and evaluate Practical skills to plan and conduct investigations Strong organisational skills and good time management practices		
Course Description Physics investigates the mathematical theories related to natural phenomena and identifies patterns and applies these in a wide range of interesting contexts, models, principles and laws to explain their behaviour. The Preliminary course develops knowledge of waves, thermodynamics, motion, forces, fields, electricity and magnetism by focusing on increasing students' understanding of the nature of sound and light, the interrelationship between electricity and magnetism, and interactions between masses, including collisions such as car crashes.. The HSC course builds on the concepts of the Preliminary course by expanding on areas such as relativity, the motion in two dimensions, the motor effect, subatomic particles and the nature of light by focusing on projectiles, motors and generators and the scientific advances involved in quantum physics.		
Main Topics Covered		
Preliminary Course	HSC Course	
Kinematics Dynamics Waves and Thermodynamics Electricity and Magnetism	Advanced Mechanics Electromagnetism Nature of Light From the Universe to the atom	
Particular Course Requirements: Practical experiences will include no less than a 15 hour Depth Study in each of the Preliminary and HSC years. A Depth Study is any type of investigation/activity that a student completes that allows further development of one or more concepts found within or inspired by the syllabus. These studies may incur additional costs for field trips, incursions and excursions. A Skills and Assessment book is included in the course fees.		
Assessment for the HSC Course		
External Assessment	Internal Assessment	Weighting
A 3 hour written examination worth 100 marks, with equal weighting given to the four HSC content modules Working Scientifically Skills will be integrated. There will be 20 objective response questions worth 1 mark each and 20 to 25 longer response items, at least two of which will be worth 7 to 9 marks.	Knowledge and understanding physics Skills in Working Scientifically	40 60 100%

--	--	--