Physics

Year 12 at Walford Her Way

The study of Physics uses qualitative and quantitative models, laws, and theories to better understand matter, forces, energy, and the interaction among them. Physics seeks to explain natural phenomena, from the subatomic world to the macrocosmos, and to make predictions about them. The models, laws, and theories in physics are based on evidence obtained from observations, measurements, and active experimentation over thousands of years. Studying this course will enable you to explain many everyday observations and help you better understand the world around you. You will study motion and relativity, electricity and magnetism and light and atoms.

SACE Stage 2 20 Credits

Engage	Extend	Enrich
Skills	Knowledge	Experiences
 Apply science inquiry skills to deconstruct a problem and design and conduct physics investigations, using appropriate procedures and safe, ethical working practices Obtain, record, represent, analyse, and interpret the results of physics investigations Evaluate procedures and results, and analyse evidence to formulate and justify conclusions Develop and apply knowledge and understanding of physics concepts in new and familiar contexts Explore and understand science as a human endeavour Communicate knowledge and understanding of physics concepts, using appropriate terms, conventions, and representations. 	 Motion and relativity Electricity and magnetism Light and atoms. 	 Uni SA STEM opportunities - STEM Girls on Campus – others as they arise via STEM Girls Academy Science Olympiads (Optional) Oliphant Science Awards (Optional) National Youth Science Forum (Optional) STEM Tour (Optional - offered every two years)

	Assessments/Outcomes	Pathways		
Investigations Fol	lio (30%)	Career Pathways: Physicist, Engineering, Medicine, Dentistry, Physiotherapy, Geo	ology,	
Skills and Applications Tasks (40%)		Architect, Meteorologist, Software Developer, Data Analyst, Astronomer, Climate	Architect, Meteorologist, Software Developer, Data Analyst, Astronomer, Climate	
External Examination (30%).		Change Scientist, Medical Physicist, Biophysicist, AI and Robotics Scientist	Change Scientist, Medical Physicist, Biophysicist, AI and Robotics Scientist	

