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| Programme description | <p>Physics deals with the behaviour and composition of matter and its interactions at the most fundamental level. Its domain stretches from inside the tiny nucleus of an atom to the vast expanses of the universe.</p> <p>This course covers many aspects of technology and the world around you. It helps you to understand, relate and explain certain principles so that it makes sense. An exposure to modern physics will help you understand nuclear reactions, matter and light and its nature. Physics offers challenging, exciting and productive careers such as acoustics, astronomy, astrophysics, geophysics, engineering, medicine and many more. It opens the doors to employment opportunities throughout the world in government, industry, schools and private organisations.</p> <p>Here is the link to the programme: https://sites.google.com/melville-high.school.nz/volcanics/home</p> |
| Content | <p>Topics covered include:</p> <ol style="list-style-type: none"> 1. Practical investigation 2. Atomic and nuclear physics 3. Electricity and electromagnetism 4. Mechanics |
| Prerequisites | Algebra Level 1 - Achieved in any of the following standards: (91027, 91028 ,91029) Science - Achieved in AS90940. Both the requirements are important to have a great result. |
| Required | ESA study guide, Scipad |
| Assessment | Throughout the year there will be an opportunity of sitting 2 internal assessment standards and 2 external achievement standards. The course offers 19 credits. |
| Contact | Babu Ittyerah, Melville High School it@melville-high.school.nz Volcanics Cluster |

| Standards | | When assessed | Type | Credit value |
|----------------------------|--|------------------|------|--------------|
| AS91168 v2 | Carry out a practical physics investigation that leads to a non-linear mathematical relationship | Term 2 Week 9 | I | 4 |
| AS91172 v2 | Demonstrate understanding of atomic and nuclear physics | Term 1 Week 5 | I | 3 |
| AS91173 v2 | Demonstrate understanding of electricity and electromagnetism | Nov | E | 6 |
| AS91171 v2 | Demonstrate understanding of mechanics | Nov | E | 6 |

I = Internally Assessed | E = Externally Assessed