Overview

This is the second of the two introductory courses in Physics. It is a calculus based course. The course is examined at two levels, with Physics 1A being the lower of the two levels. Electricity and Magnetism: electrostatics, Gauss's law, electric potential, capacitance and dielectrics, magnetic fields and magnetism, Ampere's and Biot-Savart law, Faraday's law, induction and inductance. Physical Optics: light, interference, diffraction, gratings and spectra, polarization. Introductory quantum theory and the wave nature of matter. Introductory solid state and semiconductor physics: simple energy band picture.
**Faculty**
Faculty of Science

**School**
School of Physics

**Study Level**
Undergraduate

**Offering Terms**
Term 1, Term 3

**Campus**
Kensington

**Indicative contact hours**
8

**Timetable**
Visit timetable website for details
Conditions for Enrolment

Prerequisite: PHYS1121 or PHYS1131 or DPST1023 or PHYS1141; Corequisite: MATH1231 or DPST1014 or MATH1241 or MATH1251
## Exclusion Courses

<table>
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<tr>
<th>Course Code</th>
<th>UOC</th>
<th>Course Name</th>
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<tbody>
<tr>
<td>PHYS9130</td>
<td>6</td>
<td>Electromagnetism for Teachers</td>
</tr>
<tr>
<td>DPST1024</td>
<td>6</td>
<td>Higher Physics 1B</td>
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<tr>
<td>PHYS1231</td>
<td>6</td>
<td>Higher Physics 1B</td>
</tr>
<tr>
<td>PHYS1241</td>
<td>6</td>
<td>Higher Physics 1B (Special)</td>
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Course Outline

To access course outline, please visit:

PHYS1221 Course Outline
**Fees**

**Commonwealth Supported Students** $1191  
**Domestic Students** $5970  
**International Students** $5970

**DISCLAIMER**  
Please note that the University reserves the right to vary student fees in line with relevant legislation. This fee information is provided as a guide and more specific information about fees, including fee policy, can be found on the [fee website](#).

For advice about fees for courses with a fee displayed as "Not Applicable", including some Work Experience and UNSW Canberra at ADFA courses, please contact the relevant Faculty.

Where a Commonwealth Supported Students fee is displayed, it does not guarantee such places are available.
Pre-2019 Handbook Editions

Access past handbook editions (2018 and prior)
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Authorised by Deputy Vice-Chancellor (Academic)
CRICOS Provider Code 00098G
ABN: 57 195 873 179