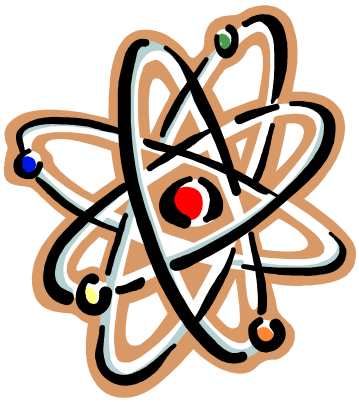
Second Year A Level Physics

Physics Department



Second Year A level Physics Student Guide

This guide is intended as a supplement to that for the first year course.

It provides an overview of the second year. Schemes of work and the full AQA Specification can be found on Godalming Online. For some other aspects you may need to refer to the first year guide.

Contents

The Aims of the Department

The aims of the department can be found in the first year student guide.

The Course Staff

Joe McCarthy-Holland B.Sc.	Head of Department
Josh Duddy B.Sc	
Philip Morgan M.A.	
Anne Lancaster M.A. B.Sc.	Teacher / Technician
Angela Luddington	Technician

Course details

AQA Physics A level specification code: 7408

Just like the first year, the second year has a mixture of theory and practical work. Topics covered include circular motion, oscillations and fields (gravitational, electric and magnetic), nuclear and thermal physics. There is also an option topic in either astrophysics, medical physics, engineering physics, turning points in physics or electronics. In addition you will continue to have a practical session each week.

Each group will continue to be taught by two members of the department. The first tutor will take the practical session, which will also be used to further develop and monitor the CPAC competences for the practical endorsement. There will be three or four groups in the second year, and although you might remain in the same group, the need to re-allocate courses at a College level may result in a change of group.

You should already have covered some work on thermal physics and circular motion in the summer half term after the first year examinations. In September, you will consolidate this with a test on each topic and then continue with the second year scheme of work.

The examinations

There are 3 papers for the A level examination, each of 2 hours duration:

Paper 1	Multiple choice & structured questions, mostly on the first year content and periodic motion	(34%)
Paper 2	Multiple choice & structured questions, mostly on the second year content with assumed knowledge from the first year	(34%)
Paper 3	Section A: Practical skills & data analysis Section B: Option topic	(32%)

There will also be a separate assessment of the practical endorsement (this does not count towards the main A level grade).

Skills needed for the study of Physics

These are the same as those listed in the first year student guide.

Charging Policy and Learning Resources

There is no charge for any of the essential learning resources to complete this course. The recommended textbook for the course is 'Hodder' AQA A level Physics Student Book 2 (ISBN: 9781471807763). Copies of this will be available to use in class and it will be available in the ILC (library) and as a dawsonera eBook, however you may find it more convenient to purchase your own copy. The A2 volume of the Nelson Thornes AQA book, written for the modular AQA course, may also be issued. You should have access to all the experiment sheets through Godalming Online. You will continue to be provided with laboratory notebooks to write up your experimental reports. Graph paper will continue to be available in the lab and we will issue some more past question books for the new topics.

Expectations of Students

The approach to the course is the same as in the first year, as are the expectations of students.

Assessment and Monitoring Policy

This is the same as for the first year. Practical work will continue to be monitored closely, with colour coded recording on the wall charts and targets set for improvement. Regular departmental tests or mocks will continue to be set every half term. Your target A level grade will mostly be based on your ARG from the first year, however this will be confirmed following the induction tests. Your progress towards this will be monitored at the first review.

Health & Safety

The Department endorses the College Health & Safety Policy. The tutors will carry out risk assessments to maintain a safe working environment with minimum risk to the students and themselves. The presentation of the course topics is not normally associated with specific hazards but your tutors will brief you should the need arise. Any visits associated with your course are also covered by risk assessments.

Students have a duty of care and are expected to follow the general College Health & Safety Guidelines displayed in each room and in the student diary, to ensure their own safety and that of others.

Equal Opportunities

The Department will follow the College Equal Opportunities Policies which aim to:

- treat everyone with respect as an individual;
- create a climate in which students feel valued and are encouraged to develop their skills, abilities, qualities and interests;
- value the race, colour, gender, sexual orientation, social class, religion, culture, ability and age of every student;
- develop a community in which tolerance, respect, courtesy, sensitivity and understanding are encouraged;
- encourage students to achieve their potential and to raise their level of achievement.

Disability Equality

Information on students with disabilities is taken from the application form and notes from interviewers. This will be added to in the course of the academic year. An Inclusion register is produced by Learning Support and distributed to all staff. The College's Equal Opportunities Committee has responsibility for establishing and implementing the Disability Equality Scheme.

For more information about all the key Godalming College policies, visit www.godalming.ac.uk/about_us/publications/

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