



Year 11 Science

Curriculum Leader: Mr Kosta Karantzis

Exam Board: Edexcel

The course is designed to help students engage with the fundamentals of science and fulfil their potential. They will study areas that are at the forefront of science as well as more established key concepts and ideas. Students will gain analytical, numerical, evaluative and communication skills that will make them very confident learners and professionals. Science and the Gilbert will give them the ability to think conceptually about abstract ideas and bring this complex thinking into practical situations.

Topics to be covered in Year 11

Topics to be covered	↓	Combined Science		
		Biology	Chemistry	Physics
		CB8 Exchange and Transport in Animals	CC13 Groups in the periodic Table CC14 Rates of Reaction CC15 Heat Energy changes in Chemical reactions	CP10 Magnetism and the Motor Effect
		CB9 Ecosystems and Material Cycles	CC16 Fuels	CP11 Electromagnetic Induction
		Mock Exams – Paper 1 (Dec)		
		Review Mock	Review Mock	Review Mock
		CB9 continued	CC17 Earth and Atmospheric Science	CP12 Particle Model CP13 Forces and Matter
		Mock Exams – Paper 2 (March)		
		Review Mock	Review Mock	Review Mock
		Preparation for GCSEs		
		Separate Science		
		Sept	↓	Biology
SB8 Exchange and Transport in Animals	SC20 Fuels			SP12 Magnetism and the Motor Effect
	SC21 Earth and Atmospheric Science			
SB9 Ecosystems and Material Cycles	SC22 Hydrocarbons			SP13 Electromagnetic Induction
	SC23 Alcohols and carboxylic acids			
Mock Exams – Paper 1 (Dec)				
Review Mock	Review Mock			Review Mock
SB9 continued	SC24 Polymers			SP14 Particle Model
	SC25 Qualitative analysis			SP15 Forces and Matter
	SC26 Nanoparticles			
Mock Exams – Paper 2 (March)				
Review Mock	Review Mock			Review Mock
Preparation for GCSEs				
Key vocabulary		Please find word sheet on VLE and within SOW Students will be provided with a Topic checklist to outline content and key ideas in each topic		
Skills to be developed		- Describing patterns - Drawing conclusions - Risk assessment - Writing and evaluating methods - Applying maths to scientific concepts - Understanding variables - Exam skills - Collecting data - Understanding relationships between science and society - Modelling - Graph drawing - Assessing impact of scientific progress - Analysis of secondary data - IDEAL – Identify, describe, evaluate, apply and link		

Opportunities for revisiting previous learning	The topics in Year 11 builds on the work completed at KS2 & KS3, developing these skills further and deepening understanding. At the start of every topic there is a transition exercise to aid with retrieval of previous knowledge. We use Flashback activities every lesson throughout the scheme of work. These comprise of quick quizzes to recap over work learnt in previous lessons. Every topic has an end of unit test. These tests may be taken every 3-4 weeks. Time and support will be given in class to revisit content. Interleaving takes place at relevant points to support student progress. Revision techniques and sessions may be delivered close to large assessment to guide students Use of Seneca, revision guides and active learn is encouraged.
When will formal assessment of progress take place?	<u>Formal assessments</u> w/b 30th November - Year 11 Mocks Paper 1s (Topics B1 - B5, C1 - C12 and P1 - P6) additional topics for Separate w/b 8th March - Year 11 Mock Paper 2s Students are assessed regularly both informally through questioning in lessons and formally via end of unit, and mock examinations which include topics studied from the scheme of work. Each assessment is analysed and feedback given to assist students to be more targeted in their efforts for further improvement. The student is responsible for acting upon the feedback given. Feedback is used continually in lessons in many forms, predominantly modelling, discussion, highlighting misconceptions and suggestions for improvement or extension.

Year 11 Useful Resources

Website Links:

<http://www.bbc.co.uk/schools/gcsebitesize/science/>

<http://www.my-gcscience.com/>

<https://www.qualifications.pearson.com> (Edexcel)

<https://app.senecalearning.com/courses?Price=Free&Subject=Combined+Science>

Marking, Assessment and Feedback

Over the course of an academic year students will complete a number of formal assessments, these will be used to assess where students are in their learning journey.

Information from these assessments could be used when making decisions regarding setting of students, reporting progress home and predicting outcome. During lessons we evaluate students' learning through a range of activities including quizzes, class discussions, detailed questioning and other strategies. Through this, students will know where they are in their learning journey and what they need to do next to make further progress.

Teachers will continue to provide planned written feedback on selected pieces of work.

Homework

Homework will be set using the online platform Go 4 Schools. The completion of Tassomai daily goals will make up the majority of the homework set during Year 11.

Homework tasks are designed to prepare students for future learning or consolidate work completed in the classroom. It will be clear what should be handed in, when it should be handed in and how it should be handed in.

Contact Information:

If you would like to contact the Science Department, please email: science@gilberd.com or contact your child's teacher.

Mr Karantzis, Curriculum Leader for Science - kka@gilberd.com

Mrs Watts	ewa@gilberd.com	Mrs Maples	rma@gilberd.com	Mrs Mocock	emo@gilberd.com
Mr Barker	cbr@gilberd.com	Mr Best	lbe@gilberd.com	Mrs Blofield	mbl@gilberd.com
Mrs Chase	kch@gilberd.com	Dr Fahey	jfa@gilberd.com	Mrs Gibbs	sgi@gilberd.com
Ms Hughes	khu@gilberd.com	Mrs Pearce	spe@gilberd.com	Mrs Percival	vpe@gilberd.com
Mr Wilby	mwi@gilberd.com	Mr Wilkinson	cwi@gilberd.com	Mrs Womenor	swo@gilberd.com
Mrs King	eki@gilberd.com				

The Gilberd School

Brinkley Lane, Colchester, Essex CO4 9PU

Tel: 01206 842211

