Curriculum Overview

Academic Year: **2017 - 2018** Year: **13**

Subject	Term 1	Term 2	Term 3
English Literature	POETRY: 'W.B. Yeats collection of poems' Analysing for answering passage and essay questions. Literary techniques – review terms and how to annotate. SHAKESPEARE: "Measure for Measure" Dramatic techniques, Shakespeare's language, and how to write well for analysing passage and essay questions Students are to gain the ability to write clearly and persuasively together with expanding their ability to use appropriate styles and registers for different contexts. In addition, students will analyse a variety of complex texts in different forms and styles.	PROSE: Novel - 'Great Expectations' by Charles Dickens - Literary techniques, elements and devices Analysing for passage and essay questions Develop a critical and informed response to writing in a range of forms, styles and contexts. Students will also refine their interdependent skills of reading, analysis and communication. Effective and appropriate communication.	REVISION Analysing for answering passage and essay questions, Past Papers. Students will also refine their interdependent skills of reading, analysis and communication. Effective and appropriate communication. A Level EXAMS
Mathematics (Pure Math)	Work on algebra of the modulus function, remainder and factor theorems, partial fractions and binomial expansions with negative powers; logarithms and exponentials; numerical solution of equations by iterative methods. Use of trigonometric identities involving the six trig functions. Differentiation and integration of products and quotients, rational, trigonometric, exponential and logarithmic functions as well as differentiation of functions defined implicitly and parametrically. Integration by partial fractions, by substitution and by parts. Use the trapezium rule to estimate the value of a definite integral and solve differential equations in which the variables are separable.	The work on vectors in P1 is extended to a study of the vector equation of a line and of a plane. These equations are used to solve geometrical problems involving angles, distances, lines and planes. The work on complex numbers looks at the simple algebra of complex numbers, including polar representation and the representation of points, lines and regions by complex equations and inequalities.	Review the whole curriculum to ensure full coverage of the topical work followed by revision of key topics and preparation for the final examination.
Mathematics (Statistics)	Representation of data, involving stem-and-leaf diagrams, histograms, cumulative frequency	The Normal distribution and begin to Review the whole curriculum followed by Mock examinations.	Intensive revision using various sources especially past exam paper questions

Curriculum Overview

Academic Year: **2017– 2018** Year: **13**

Subject	Term 1	Term 2	Term 3
	graphs, box plots, measures of location and dispersion; Permutations and Combinations; Probability; Discrete Random Variables; The Binomial distribution.	The revision programme will continue after the Mock exams to prepare the students for the final exams.	under exam conditions.
Physics	**Circular Motion, Gravitational and Electric Fields** This topic looks at circular motion, in particular orbital motion of planets and stars. We will also compare gravitational fields and electric fields. Finally this is used to look at capacitance. **Simple Harmonic Motion and Communications** This topic covers oscillations, in particular simple motion. We will then apply this knowledge to communication. **Thermal Physics** This topics looks at ideal gases and at the relationship between heat and matter.	**Medical Imaging & Electronics** This topic covers the various methods used in medicine to image the human body as well as other methods of sensing the environment. **Electromagnetism and A.C.** This topic looks at the phenomenon of electromagnetic induction, the generator effect, AC electricity and transformers. **Quantum and Nuclear Physics** This topic looks at the wave-particle duality nature of both light and matter in quantum physics. We will then look at nuclear fission and fusion.	Exams – In term 3 Students will be sitting their external exams
Chemistry	Students cover the following topics: Lattice energy; Enthalpy change of atomisation, Born-Haber cycles and Ion polarisation. Electrode potentials; cells and batteries and quantitative electrolysis. Ionic Equilibria; pH calculations, indicators and acid base titrations, and buffer solutions. Reaction kinematics; kinetics and reaction mechanisms. Entropy and Gibbs Free Energy.	Students cover the following topics: Transition elements, redox reactions, Ligands and complex formation. Benzene and its compounds; reactions with arenes and reactions of phenal. Carboxylic acids and acyl compounds. Organic nitrogen compounds; Amines, Amides, Amino acids, Peptides and Proteins. Polymerisation; polyamides, polyesters and polyester deductions. The reaction of amides and electrophoresis. Mock exams.	Students will cover Analytical Chemistry including chromatography, Proton NMR, Carbon-13 NMR, and mass spectroscopy. Organic synthesis – the method of designing new medicinal drugs. Exams
ICT	ICT systems including portable communication devices, how organisations use ICT–Part1-uses of different software and hardware in all types of organisations. Exam period June 2014	Impact of ICT on society–Part1 of home-based ICT applications, the effects of the use of online services on society. Exam period June 2014	Systems life cycle (as introducing a new system or upgrading an existing system in a typical ICT application). Exam period June 2014

Curriculum Overview

Academic Year: **2017– 2018** Year: **13**

Subject	Term 1	Term 2	Term 3
History	Students develop the ability to analyse and evaluate how aspects of the past have been interpreted and represented in different ways. They particularly focus on the over-arching Key Question 'The Origins and Development of the Cold War, 1941–1950'. Students also study themes such as 'The Cold War, 1950–1975' and 'The Cold War, 1975–1991'. Evaluation techniques and extended writing skills are also emphasized.	Students continue their study of International History. Themes covered include: 'China, 1945–1991' and the 'Conflict in the Middle East, 1948–1991'. Practice on evaluating historical interpretations and extended writing skills continue.	Revision leading to the final exams using past papers and stressing exam techniques. Emphasis on a "one to one" consultation process.
Geography	Students focus on wave, marine and sub-aerial processes with emphasis on wave generation and characteristics, braking waves, high and low energy waves. They are also introduced to the global distribution of hazardous environments resulting from crustal movements and their effects on lives and property. Further, renewable and non-renewable energy resources are discussed as well as the environmental impact of energy production, transport and usage at global and local scales.	Global interdepemdence is studied in detail and the focus is on global inequalities in trade flows as well as factors affecting global trade. The work of the World Trade Organisation (WTO) is examined. Some revision and examination practice.	Revision of the key theories and models as well as intensive examination practice form the cntre piece of the work covered during this term.
Biology	**Energy** ,**Respiration** as an energy transfer process, **Photosynthesis** as an energy transfer process **Regulation and control:** Importance of homeostasis, excretion, control of water and metabolic waste, Nervous and hormonal communication, responses to changes in the external environment, regulation of the internal environment, Communication and control in flowering plants, plants and growth hormones	**Inherited Changes**: passage of information from parents to offsprings, nature of genes, alleles and their role in determining the phenotype, Monohybrid and dihybrid crosses**, Selection and evolution:** natural and artificial **Biodiversity and conservation, Gene technology, Biotechnology, Crop plants, Aspects of human reproduction**	Revision
French	Human relationships/family/generation gap/young	Work/leisure, equality of opportunity, employment/unemployment, sport, free time,	Political, social, regional issues of the country where the language is spoken.

Curriculum Overview

Academic Year: **2017– 2018** Year: **13**

Subject	Term 1	Term 2	Term 3
	people, Patterns of daily life/urban and rural life/the media/food and drink/law and order/philosophy and belief/health and fitness.	travel/tourism, education, cultural life/heritage, war/peace, medical advances, environment	Revision.
Economics	The Student have requested to go over some aspects of AS material covered parallel to A2 material to enable him gain a good understanding of the concepts to prepare for both AS and A2 exam. Unit one is concerned with the basic economic ideas and resource allocation. Unit two is about the price system and the micro-economy. Unit three covers the government microeconomic intervention. All the units mentioned above are assessed through class exams and past papers. Pupils are required to review last year's work and build upon the theory into a deeper understanding of the concepts reintroduced or introduced for the first time.	The fourth unit is about the macro economy and covers aspects such GDP, GNP, GNI, BRICS and employment/ unemployment. The fifth unit to be covered is about government macro intervention discussing further about policies and conflicts that are likely to arise. The last two units are assessed through class exams and past papers, as any other unit previously. Pupils are required to review last year's work and build upon the theory into a deeper understanding of the concepts reintroduced or introduced for the first time.	The final term of the school year is short due to exams and therefore pupils are required to work hard to complete any incomplete syllabus content and review all the units that they have had to cover throughout the year. Revision classes, clinics and one to one sessions will encourage pupils to open and discuss any issues they might have regarding understanding the syllabus. Students will additionally, be assessed through summative exam techniques to improve their confidence on sitting external exams. Past papers, mark schemes and examiners reports will be used to equip them with exam writing skills.
Business Studies	Students concentrate on in-depth study of the units 'Business and its environment', 'People in organisations', 'Marketing' and 'Operations Management'.	Continued in-depth study of units 'Finance and accounting' and 'Strategic management' will be carried out in this term.	Revision and exam