

English Language School



SIXTH FORM Curriculum Booklet 2018/2019

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We follow a curriculum that is designed to stimulate the mind and equip them to think. Courses are structured around learning rather than assessment, but in a way that enables pupils to achieve the best possible examination results.

The curriculum is sufficiently flexible to give all pupils the opportunity to excel. The examined and non-examined strands of the curriculum are complementary and mutually reinforcing. Through the curriculum we wish to ensure satisfactory progression to further education.

All courses are examined by Edexcel, Pearson, UK.

Entry Requirements

Following is the criteria to get a place in Year 12:

- **a minimum of seven subjects at O Level (GCSE/International GCSE) at grade B or above.**
- a pass at grade C or above in Mathematics and English.
- a grade B or above at GCSE/International in the equivalent subject you wish to study at AS Level

In offering admission, School will also consider the discipline, behaviour and attendance.

Following is the criteria to get a place in Year 13:

- **Should have passed AS Level (Year 12)**
- Minimum one 'C' in subjects studied at AS Level (Year 12).

A personal (one-on-one) interview may be scheduled with the concerned teacher if needed. The teacher then may recommend the applicant a skills test to pass before getting admission offer.

Mathematics

Course code: Mathematics AS Level: XMA01, Mathematics A2 Level: YMA01

Duration: 2 years (full A level) or 1 year (AS level)

Aims of the course:

- To develop students' understanding of mathematics and mathematical processes in a way that promotes confidence and fosters enjoyment
- To develop abilities to reason logically and recognise incorrect reasoning, to generalise and to construct mathematical proofs
- To extend their range of mathematical skills and techniques and use them in more difficult, unstructured problems
- To develop an understanding of coherence and progression in mathematics and of how different areas of mathematics can be connected
- To recognise how a situation may be represented mathematically and understand the relationship between 'real-world' problems and standard and other mathematical models and how these can be refined and improved
- To use mathematics as an effective mean of communication
- To read and comprehend mathematical arguments and articles concerning applications of mathematics
- To acquire the skills needed to use technology such as calculators and computers effectively, recognise when such use may be inappropriate and be aware of limitations
- To develop an awareness of the relevance of mathematics to other fields of study, to the world of work and to society in general
- To take increasing responsibility for their own learning and the evaluation of their own mathematical development.

Topics covered: AS level Mathematics
C12:

Algebra and functions; coordinate geometry in the (x, y) plane; sequences and series; trigonometry; exponentials and logarithms; differentiation; integration.

M1: Mathematical models in mechanics; vectors in mechanics; kinematics of a particle moving in a straight line; dynamics of a particle moving in a straight line or plane; statics of a particle; moments.

A2 level Mathematics

C34: Algebra and functions; trigonometry; exponentials and logarithms; differentiation; numerical methods; coordinate geometry in the (x, y) plane; sequences and series; differentiation; integration; vectors.

M2: Kinematics of a particle moving in a straight line or plane; centres of mass; work and energy; collisions; statics of rigid bodies.

Assessed:	AS	A2
	C12	C34
	& M1 (Mechanics 1)	& M2/S1

Assessment details: C12 forms 66.7% of AS and M1/S1 makes 33.3%

Leads to: An A-level mathematics course provides not only an 'in depth' study of mathematics but also aims to develop those skills essential for a successful university career in mathematics, physics, actuarial science, statistics, engineering, operations research, computer science, business and industrial management, economics, finance, chemistry, geology, life sciences, behavioural sciences and cryptography. Mathematicians are highly employable due to their strong analytical and reasoning skills.

Both universities and employers hold an A level qualification in Mathematics in high regard. With the appropriate combination of other AS and A levels, A level Mathematics can lead to a wide variety of options when choosing higher education courses. Typical examples include Medicine, Engineering, Law, Business, Social and Political sciences, Natural sciences, and of course Mathematics itself. Similarly the employment opportunities are equally diverse.

Further Mathematics

Course: AS Level Further Mathematics

Course code: Further Maths AS Level: XFM01

Duration: 1 year (AS level)

Aims of the course:

- To develop students' understanding of mathematics and mathematical processes in a way that promotes confidence and fosters enjoyment
- To develop abilities to reason logically and recognise incorrect reasoning, to generalise and to construct mathematical proofs
- To extend their range of mathematical skills and techniques and use them in more difficult, unstructured problems
- To develop an understanding of coherence and progression in mathematics and of how different areas of mathematics can be connected
- To recognise how a situation may be represented mathematically and understand the relationship between 'real-world' problems and standard and other mathematical models and how these can be refined and improved
- To use mathematics as an effective means of communication
- To read and comprehend mathematical arguments and articles concerning applications of mathematics
- To acquire the skills needed to use technology such as calculators and computers effectively, recognise when such use may be inappropriate and be aware of limitations
- To develop an awareness of the relevance of mathematics to other fields of study, to the world of work and to society in general
- To take increasing responsibility for their own learning and the evaluation of their own mathematical development.

Topics covered:

AS level Further Mathematics

FP1: Series; complex numbers; numerical solution of equations; coordinate systems, matrix algebra, proof.

FP2: Inequalities; series, first order differential equations; second order differential equations; further complex numbers, Maclaurin and Taylor series.

S2: Further kinematics; elastic strings and springs; further dynamics; motion in a circle; statics of rigid bodies.

Assessed: AS
FP1
FP2 & S2

Assessment details: All units equally weighted at 33 1/3% of the complete AS level
Each examination paper lasts 1 hour and 30 minutes

Calculators may be used in all units

Leads to: Mathematics course provides not only an 'in depth' study of mathematics but also aims to develop those skills essential for a successful university career in mathematics, physics, actuarial science, statistics, engineering, operations research, computer science, business and industrial management, economics, finance, chemistry, geology, life sciences, behavioural sciences and cryptography. Mathematicians are highly employable due to their strong analytical and reasoning skills.

Both universities and employers hold an A level qualification in Further Mathematics in high regard. With the appropriate combination of other AS and A levels, A level Further Mathematics can lead to a wide variety of options when choosing higher education courses. Typical examples include Medicine, Engineering, Law, Business, Social and Political sciences, Natural sciences, and of course Mathematics itself. Similarly the employment opportunities are equally diverse.

Further Mathematics is strongly recommended for those students who wish to apply to those universities listed in the “top ten” for such subjects as Engineering, Economics, Mathematics or Physics.

Physics

Course AS & A Level Physics (XPH01, YPH01)

Duration: 2 years (full A level) or 1 year (AS level)

- Aims of the course:**
- To develop student's interest in, and enthusiasm for, the subject including developing an interest in further study and careers in physics.
 - To appreciate how societies make decisions about scientific issues and how the sciences contribute to the success of the economy and society.

Topics covered:

AS level
Motion and mechanics, material science and fluids, wave theories, electricity, and the nature of light.

A2 level
Further mechanics and particle physics, nuclear physics and cosmology.

Assessed:

AS January & May/June	A2 January & May/June
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Assessment details:

AS WPH01 1hr30min examination, structured questions (40%) WPH02 1hr30min examination, structured questions (40%) WPH03 Exploring Physics (20%), 1 hr 20 min examination,	A level WPH04 1hr35min examination, structured questions (40%) WPH05 1hr35min examination, structured questions (40%) WPH06 Experimental Physics (20%) 1 hr 20 min examination,
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Leads to: A level Physics provides a stimulating and challenging platform upon which suitably motivated students can achieve real success. The course offers opportunities for discussion work, independent study and practical investigation. A level physics leads to careers in engineering, Architect, finance, law, medicine, computing, energy services and many more.

Biology

Course: AS and A Level Biology

Course code: AS Level: XB101, A2 Level: YB101

Duration: 2 years (full A level) or 1 year (AS level)

Aims of the course: The aims of the IAL in Biology are to enable students to:

- develop their interest in, and enthusiasm for, biology including developing an interest in further study and careers in the subject
- appreciate how society makes decisions about biology-related issues and how biology contributes to the success of the economy and society
- develop and demonstrate a deeper appreciation of the skills, knowledge and understanding of How Science Works
- develop essential knowledge and understanding of different areas of biology and how they relate to each other.

Topics covered: **AS level** Cell biochemistry. DNA and inheritance. Mutations. Social and ethical issues. Plant cell structure, products and uses. Biodiversity and taxonomy. Practical biology and research skills.

A2 level Photosynthesis, global warming. Evolution and natural selection. DNA profiling. Bacteria and viruses. Immunology. Respiration. Impact of exercise on the body. Homeostasis, hormones, nervous system. Human genome project. Practical biology and research skills.

Assessed:	AS January, May/June	A2 January, May/June
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Assessment details:	AS Unit 1 (Lifestyle, Transport, Genes & Health): 1 hr 30 min Unit 2 (Development, Plants & the Environment): 1 hr 30 min Unit 3 (Practical Biology and Research skills): 1 hr 30 min	A level Unit 4 (The Natural Environment and Species Survival): 1 hr 30 min Unit 5 (Energy, Exercise and Coordination): 1 hr 45min Unit 6 (Practical Biology and Investigative Skills): 1 hr 30 min
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Leads to: Students of biology frequently attend university courses leading to employment in:
Medicine, Agriculture, Pharmacology, Food Industry, Genetic Engineering, Biostatistics and Biomathematics, Ocean Science / Marine Science, Fish Farming, Forensics, Medical Labs, Drug Research and Development

Chemistry

Course AS & A Level **Chemistry**

Course code: AS Level: XCH01, A2 Level: YCH01

Duration: 2 years (full A level) or 1 year (AS level)

Aims of the course:

- To develop students' interest in, and enthusiasm, for chemistry;
- An appreciation of how society makes decisions about scientific issues;
- To develop skills for the safe and competent manipulation of chemical apparatus and identifying unknown compounds.

Topics covered: AS level

Unit 1: The core principles of chemistry – moles, bonding and atomic structure

Unit 2: The core principles of chemistry – shape, intermolecular forces, organic and green chemistry

Unit 3: Chemistry laboratory skills I

A2 level

Unit 4: General principles of chemistry I – rates, equilibria and further organic chemistry

Unit 5: General principles of chemistry II – transition metals and organic nitrogen chemistry

Unit 6: Chemistry laboratory skills II

Assessed: AS
January & May/June

A2
January & May/June

Assessment details: AS
Paper 1 (20%)
Multiple choice and structured questions
1 hour 30 minutes
Paper 2 (20%)
Multiple choice and structured questions and questions on

A2
Paper 4 (20%)
Multiple choice and structured questions and data book questions
1 hour 40 minutes
Paper 5 (20%)
Multiple choice and structured

contemporary contexts

1 hour 30 minutes

Paper 3 (10%)

Chemistry laboratory skills I

questions and questions on contemporary contexts

1 hour 40 minutes

Paper 6 (10%)

Chemistry Laboratory Skills II Alternative
1 hour 15 min

Leads to: You could use chemistry in most fields, but it's commonly seen in the sciences and in medicine. Chemists, physicists, biologists, and engineers study chemistry. Doctors, nurses, dentists, pharmacists, physical therapists, and veterinarians all take chemistry courses. Science teachers study chemistry. Fire fighters and people who make fireworks learn about chemistry. Some more options are food industry, Metallurgy, Oceanography, Perfume industry, space exploration, Nanotechnology, Textile Industry, Geo Chemistry and Environmental chemistry, etc.

Business Studies

Course code: **Business Studies AS Level: XBS01,**
Business Studies A2 Level: YBS01

Duration: 2 years (full A level) or 1 year (AS level)

Aims of the course:

- develop an interest in and enthusiasm for the study of business
- gain a holistic understanding of business
- develop a critical understanding of organisations and their ability to meet society's needs and wants
- understand that business behaviour can be studied from a range of perspectives
- generate enterprising and creative solutions to business problems and issues
- be aware of the ethical dilemmas and responsibilities faced by organisations and individuals
- acquire a range of relevant business and generic skills, including decision making, problem solving, the challenging of assumptions and the quantification and management of information.

Topics covered: **AS & A level**

Unit 1:

This unit covers the characteristics students would need to develop to be successful in business and how new or existing businesses generate their product or service ideas and test them through market research. Students should also consider the competition in the market; the economic climate; how the business might be financed and how much revenue the idea might generate.

Unit 2:

This unit covers key activities which students may be involved in if they were to set up and/or manage a business whether small, medium-sized or large. It also introduces students to some basic management tools and models which will be developed in the A2 qualifications.

Unit 3:

The aim of this unit is to introduce the student to the world of international business and issues which a company trading internationally would have to consider

Unit 4:

In this unit, students will be able to assess the current competitiveness of a business through performance and non performance indicators. They will analyse corporate objectives and strategy on the basis of these indicators and on external influences to the business. Students will be required to assess the causes and effects of change on a business and examine how the company could manage risk effectively.

Assessment AS**details: Paper 1 (25%)**

Examination of 1 hour 15 minutes in two sections.

Section A: supported multiple-choice questions.

Section B: questions based on data.

Paper 2 (25%)

Examination of 1 hour 15 minutes in two sections.

Section A: supported multiple-choice questions.

Section B: questions based on data.

A2**Paper 3 (25%)**

Examination of 1 hour 30 minutes in two sections.

Section A: questions based on data.

Section B: case study and questions

Paper 4 (25%)

Examination of 1 hour 30 minutes in two sections.

Section A: questions based on data.

Section B: decision-making report and questions. (Context of decision-making report pre-released on www.edexcel.com in June of the previous year.)

Leads to:

Various specializations are available to students at university level after passing Business Studies at A Level. The choice of Business Studies will lead the students to many job options after completing their university education.

Some of them are

- Chartered accountant
- Chartered certified accountant
- Chartered management accountant
- Corporate investment banker
- Management consultant
- Retail banker
- Human resources officer
- Logistics and distribution manager
- Marketing executive
- Retail manager
- Operations Manager

Economics

Course code: AS Economics – Edexcel (XEC01)
A2 Economics – Edexcel (YEC01)

Duration: 2 years (full A level) or 1 year (AS level)

Aims of the

course: This course will be of interest if you want background knowledge of how markets work and the economic reasoning behind Government Policy. By providing you with some theoretical ideas that you then apply to topical areas of interest, like employment, trade policy and inflation, we hope a critical understanding of the UK economy will be developed. The subject can be studied at both AS and A level. Economics also requires some ability in interpreting statistical data, graphs and diagrams, with more subtle interpretation needed at A level. The first year of the course involves studying the principles that underpin economic thinking, developing a ‘toolkit’ of economic ideas, and then practicing these on a wide range of practical issues, using as sources current periodicals, newspapers and the internet.

Topics covered: AS level & A2

Unit 1:

This unit covers the characteristics students would need to develop to be successful in business and how new or existing businesses generate their product or service ideas and test them through market research. Students should also consider the competition in the market; the economic climate; how the business might be financed and how much revenue the idea might generate.

Unit 2:

This unit covers key activities which students may be involved in if they were to set up and/or manage a business whether small, medium-sized or large. It also introduces students to some basic management tools and models which will be developed in the A2 qualifications.

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In this unit, students will be able to assess the current competitiveness of a business through performance and non performance indicators. They will analyse corporate objectives and strategy on the basis of these

indicators and on external influences to the business. Students will be required to assess the causes and effects of change on a business and examine how the company could manage risk effectively.

The specification followed is the one offered by Edexcel. The course at all levels is assessed entirely by a final examination. At both the AS and A2 level microeconomics and macroeconomics are studied. The modules studied are as follows:

Assessment UNIT 1

details:

Competitive Markets

A written paper of 1 ½ hour's duration with supported multi-choice questions and questions based on data.

UNIT 2

Managing The Economy

A written paper of 1 ½ hour's duration consisting of one question based on data.

UNIT 3

Business Economics & Economic Efficiency

A written paper of 1 ½ hours duration with supported multi-choice questions and questions based on data.

UNIT 4

The Global Economy

A written paper of 2 hours duration with questions based on data and one essay style question

Leads to: An Economist researches and analyses economic trends, issues and data. Uses this research to produce forecasts & reports and as the basis for advising clients (companies, financial institutions, & public bodies) and providing them with economic information for use in forming policy or strategy

RELATED JOBS: Investment Banker; Financial Analyst; Accountant; Lecturer HE; Journalist. Financial Broker, Policy Makers for Economic Development Department of a Country. Stock Exchanges, Treasury Market Broker, Forex Trader and Broker.

Accounting

Course code: AS Level: XAC11, A2 Level: YAC11

Duration: 2 years (full A level) or 1 year (AS level)

Aims of the course: The syllabus aims are to develop:

1. a knowledge and understanding of the purposes of accounting, of accounting concepts and techniques and to develop the application of those techniques;
2. the skills of numeracy, communication, presentation, analysis and evaluation of accounting information;
3. the ability to compile accounting reports in good format and to use them as the basis of informed and rational decision-making;
4. a capacity for logical and objective thought which will serve as an end in its own right, as well as a basis for further study in accounting.

Topics covered: AS level

Unit 1 – THE ACCOUNTING SYSTEM AND COSTING

Principles of accounting and double entry book-keeping

Control procedures

Final Accounts of organizations

Introduction to costing and decision making

Evaluation of accounting statements

A2 level

Unit 1 &

Unit 2 – CORPORATE AND MANAGEMENT ACCOUNTING

1. Limited companies

2. Investment Evaluation

3. Cash flow statements

4. Budgeting

5. Standard costing

6. Capital budgeting and appraisal

7. Cost behaviour and break-even

8. Marginal and absorption costing

Assessed:	AS May/June	A2 May/June
Assessment details:	Unit 1 The accounting system and costing 3 hours 100%	Unit 1 The accounting system and costing 3 hours 50% Unit 2 Corporate and management accounting 3 hours 50%
Leads to:	<p>Students who take accounting go on to university and become qualified accountants, working for accountancy practices or within an organisation. With a few years' experience, some accountants then decide to start their own practice.</p> <p>Your financial acumen can also support a wide number of other careers. For example, you could work in local government if you like politics or for a phone company if you like communications technology. If you'd like to work in general management, banking, retail or leisure. With accounting skills you could end up working in just about any area you choose.</p>	

Information Technology

Course code: AS Level: XIT11, Mathematics A2 Level: YIT11

Duration: 2 years (full A level) or 1 year (AS level)

Aims of the course:

Content Review:

Unit 1:
Students must study all of the following topics: • Topic 1: Hardware and software • Topic 2: Networks • Topic 3: The online environment • Topic 4: IT systems • Topic 5: Data and databases • Topic 6: Wider issues.

Unit 2:
• Topic 7: Understanding the functionality of HTML • Topic 8: Understanding the functionality of CSS • Topic 9: Understanding the functions of Javascript • Topic 10: Designing web pages • Topic 11: The semantic web.

Unit 3:
• Topic 12: Manipulating data • Topic 13: Enabling technologies • Topic 14: Using IT systems in organisations • Topic 15: Systems development • Topic 16: Emerging technologies..

Unit 4:
• Topic 17: Use of features of database solutions • Topic 18: Relational database concepts • Topic 19: Database solutions..

Assessed:	AS WIT11, WIT12	A2 WIT13, WIT14
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Assessment details:

Leads to:

Assessed:	AS May/June	A2 May/June
Assessment details:	WIT11 Externally assessed Written	WIT13 Externally assessed Written

examination: 2 hours
50% of the total IAS
25% of the total IAL
80 marks

WIT12

Externally assessed Written
examination: 3 hours
50% of the total IAS
25% of the total IAL
80 marks

examination: 2 hours
80 marks
50% of the total IA2
25% of the total IAL

WIT14/01

Externally assessed practical
examination Written examination:
3 hours
80 marks
50% of the total IA2
25% of the total IA