

Qualification: **A Level**

Why study this course?

- If you want to follow a creative course that combines practical and intellectual skills
- You want to specialise in the Art and Design field and are passionate about your study
- You would like to prepare for courses in further and higher education

Potential careers:

- Photography
- Illustration
- Fine Art
- Architecture
- Theatre
- Interior Design

Course content

You may study some/all of the following:

A Level

- You will be introduced to a variety of experiences exploring a range of Fine Art media, processes and techniques. You will be made aware of both traditional and new media. During the course you will also study and analyse relevant artists and designers in your chosen pathway.

The course is comprised of two Components:

- Personal Investigation
- Externally set Controlled assignment

Students will develop work based on an idea, issue, concept or theme leading to a finished outcome. Practical work will make connections with some aspect of contemporary or past practise of artists, designers, photographers or craftspeople and include a written element to support their practical work. You will have the opportunity to work with a wide range of materials and techniques including:

- Drawing and Painting
- Collage
- Photography
- Printmaking
- 3D

Staff contact:

Mrs S Bogacki or Mrs C Keary

BTEC Art



Qualification: **BTEC National Diploma**

Why study this course?

- If you want to specialise in the Art and Design field and are passionate about your study
- If you wish to follow careers in the Art and Design disciplines
- If you would like to prepare for courses in Further and Higher Education
- If you would like opportunities to develop work in drawing and painting, textiles, fashion, photography, interior, graphics, 3D design, craft and ceramics and sculpture

Potential careers:

- Photography
- Graphics
- Fashion
- Textiles
- Architecture
- Fashion marketing and visualisation
- 3D Design
- Fine Art
- Theatre
- Costume Design
- Print Assistants
- Window display designer

Assessment

This course comprises of 8 Units, which include four compulsory core units, two optional units that will allow you to either specialise in one area or keep your learning varied and two units are tested based on pre release materials.

Course content

You may study some/all of the following:

This course is equivalent to two A Levels

Core Units:

- Visual Recording in communication
- Materials, Techniques and Processes in Art and Design
- The Creative Process
- Visual Communication in Art and Design
- Contextual References

Optional Units:

Optional units will be selected according to your chosen specialism.

- Photography materials, techniques and processes
- Graphic materials, techniques and processes
- 3D design craft materials, techniques and processes
- Fashion materials, techniques and processes
- Fine Art materials, techniques and processes
- Textile materials, techniques and processes

Staff contact:

Mrs S Bogacki or Mrs C Keary

Aspire and Achieve

Chemistry



Qualification: **A Level**

Why study this course?

- If you have an interest in, and enjoy, Chemistry
- If you enjoy problem solving both on paper and by practical work
- If you wish to progress into higher education or enter Chemistry – based employment
- If you have a natural aptitude for the subject

Potential careers:

- Banker
- Accountancy
- Law
- Doctor
- Dentist
- Forensic Scientist
- Veterinary
- Teacher
- Pharmacist
- Research Chemist

Assessment:

At the end of their 2 year course A level students will sit 3 exams.

Papers 1 and 2 are both worth 30% of the final grade and last 1 hour and 45 minutes.

Paper 3 covers content from any area of the A-level course and includes assessment of the understanding of practical principles. This paper is worth 40% of the final grade and lasts 2 hours and 30 minutes.

In addition, students will be separately judged on their practical skills by internal assessment over a minimum of 19 practical activities. This will be reported separately on their certificates as “pass” or “fail”.

Course content

You will study all of the following:

- The course covers: Analytical, Inorganic, Organic and Physical Chemistry.

Staff contact:

Miss S Winfield

Aspire and Achieve

The BTEC Extended Certificate in Creative Digital Media Production



The BTEC Extended Certificate in Creative Digital Media Production is an exciting and challenging course which introduces students to a range of different media concepts and practical production skills through a variety of different assessment methods: external exam, set tasks that are marked externally by the exam board and coursework which is marked internally by your media teacher.

Equivalent to: **1 A Level**

Units Studied

Unit 1 - Media Representations - in this unit you will study a variety of media texts including film, animation, game, websites and print media in order to analyse how meaning and values are created. This unit is assessed through external examination.

Unit 4 - Pre-Production Portfolio - in this unit you will gain understanding of the skills and procedures that are necessary in the planning of a moving image media product (for example scripting, story boarding and location scouting). This unit is assessed internally by your media teacher.

Unit 8 - Responding to a Commission - in this unit you will develop your understanding of the commissioning process and how to respond to a brief. The unit is assessed through a task which is set and marked by the exam board. Students will have five hours to complete the set task.

Unit 10 - Film Production: Fiction - in this unit you will study how narrative (story) is communicated in film before filming and editing your own short film. The unit is assessed internally by your media teacher.

Pathways

After completing this course students could progress to a media related degree course, for example Media Studies, Media Production, Journalism. Alternatively, the UCAS points achieved in this course can contribute towards a non-Media related application to university. For those students not wishing to go to university, this course would enable progression to employment within the Media sector.

Staff contact:

Mrs L Fox

Aspire and Achieve

Computer Science



Subject: **OCR Computer Science**

Qualification: **A-Level**

Why study this course?

- If you enjoy or are interested in Computer Science
- If you wish to acquire Computing skills, knowledge and understanding in a variety of different areas of IT, which would be useful in Higher education or employment
- If you want to learn how ICT is used in the wider world
- If you prefer assessment via by examination

Potential careers:

- Software developer
- Software engineers
- Web designers
- Hardware and software installation/configurations
- Network support technicians
- Network managers
- Technical support
- Remote technical support
- Digital strategy management
- IT consultants

Course content

You may study some/all of the following:

- Focus on programming, emphasis on the importance of computational thinking as a discipline.
- Computational thinking, design systems and understand human and machine intelligence.
- Computer systems
- Algorithms and Programming

In addition to studying these different areas you will have the opportunity to develop your programming skills when completing your programming project.

Staff contact:

Mr Kerry and Mr Gangar

Aspire and Achieve

Biology



Qualification: **A Level**

Why study this course?

- If you have an interest in living organisms
- If you enjoy carrying out investigations both in the laboratory and in the field
- If you are keen to learn about 'new' biology topics such as genetic engineering and the impact on society
- If you want to continue to study a science subject at University

Potential careers:

- Health care professions including medicine, nursing, physiotherapy, radiography and optometry
- Biomedical science
- Marine Biologist
- Social worker
- Vet and Animal Scientist
- Environmental health officer
- Police force
- Forensic scientist
- Lab assistant

Assessment

At the end of their two year course A level students will sit three exams.

Papers 1 and 2 are both worth 33% of the final grade and last 2 hours.

Paper 3 covers content from any area of the A-level course and includes assessment of the understanding of practical principles. This paper is worth 33% of the final grade and lasts 2 hours. In addition, students will be separately judged on their practical skills by internal assessment over a series of eighteen practical activities. This will be reported separately on their certificates as "pass" or "fail".

Course content

You will study the following:

The course builds upon GCSE study to develop a deeper understanding of basic processes and how our activities are influencing our health and the wider environment.

Topic 1: Lifestyle, health and risk

Topic 2: Genes and health

Topic 3: The voice of the genome

Topic 4 : Biodiversity and Natural resources

During Year 12 there will be a fieldwork trip to Twycross Zoo and a fieldwork trip.

Topic 5: On the Wild Side

Topic 6: Infection Immunity and Forensics

Topic 7: Run for your life

Topic 8: Grey matter

Staff contact:

Mrs C Clowes and Mr C Allen

Aspire and Achieve

Qualification: **A Level**

Why study this course?

- If you wish to pursue a career in business
- If you want to build and capitalise on your knowledge of business
- If you want to study a course that provides a strong foundation for either academic or vocational progression
- If you prefer assessment by examination
- If you are enterprising and see running your own business as a future career option.

Potential careers:

- Public sector organisations
- Schools/ teaching
- Law firms
- Property management
- Accountant
- Advertising account executive
- Banker
- Buyer
- Commodity broker
- Distribution manager
- Economist
- Human resource manager
- Marketing executive
- Market research executive
- Retail manager
- Sales executive
- Stock broker

Course content

You may study some/all of the following:

This looks at the inter-related nature of business using business models, theories and techniques to support analysis of contemporary business issues and situations to provide a dynamic subject content. You will look at topics and issues that are relevant in today's society; you will study key contemporary developments such as digital technology, business ethics, and globalisation.

AS Level

- What is business?
- Managers, leadership and decision making
- Decision making to improve marketing performance
- Decision making to improve operational performance
- Decision making to improve financial performance
- Decision making to improve human resource performance

A2 Level

- Analysing the strategic position of a business (A-level only)
- Choosing strategic direction (A-level only)
- Strategic methods: how to pursue strategies (A-level only)
- Managing strategic change (A-level only)

Staff contact:

Ms O'Reilly and Miss Ware

Qualification: **L3 BTEC Business**

Why study this course?

- If you wish to pursue a career in business
- If you want to build and capitalise on your knowledge of business
- If you want to study a course that provides a strong foundation for either academic or vocational progression
- If you prefer a bias towards assessment via coursework rather than examination
- If you are enterprising and see running your own business as a future career option.

Potential careers:

- Public sector organisations
- Schools/ teaching
- Law firms
- Property management
- Accountant
- Advertising account executive
- Banker
- Buyer
- Company secretary
- Commodity broker
- Distribution manager
- Human resource manager
- Insurance underwriter
- Marketing executive
- Retail manager
- Sales executive
- Self-employment
- Stock broker

Course content

You may study some/all of the following depending on if you complete the BTEC Business Extended Certificate or the National Diploma:

Extended Certificate

Year 12

- Unit 1 Exploring Business
- Unit 2 Developing a Marketing Campaign

Year 13

- Unit 3 Personal and Business Finance
- Unit 8 Recruitment and Selection Process

National Diploma

Year 12

- Unit 1 Exploring Business
- Unit 2 Developing a Marketing Campaign
- Unit 4 Managing an Event
- Unit 5 International Business

Year 13

- Unit 3 Personal and Business Finance
- Unit 6 Principles of Management
- Unit 8 Recruitment and Selection Process
- Unit 22 Market Research

National Extended Diploma

Year 12

- Unit 1 Exploring Business
- Unit 2 Developing a Marketing Campaign
- Unit 4 Managing an Event
- Unit 5 International Business
- Unit 7 Business Decision Making
- Unit 14 Investigating Customer Service

Year 13

- Unit 3 Personal and Business Finance
- Unit 6 Principles of Management
- Unit 8 Recruitment and Selection Process
- Unit 9 Team Building in Business
- Unit 17 Digital Marketing
- Unit 18 Creative Promotion
- Unit 22 Market Research

Staff contact:

Mrs Desideri and Mr Pearce

English Language



Qualification: **A Level**

Why study this course?

- If you have an interest in looking at how different social groups use language
- If you enjoy investigating the language of new technologies (the language of text messaging, email etc.)
- If you would like to analyse the ways that males and females use language
- If the history of the English Language interests you
- If you would like to learn about how children acquire language
- If you're interested in a career such as journalism, advertising or copywriting

Potential Careers

- Education
- Journalism
- Law
- Communication
- The Arts
- Media and Creative Writing

Course content

- Coursework: Candidates are asked to produce two pieces of original writing and analyse its impact
- Examination: Candidates are assessed on topics such as Language Variety in terms of accent, dialect, gender; Children's Language Development; and how language has changed over the centuries.

Assessment

- Coursework: - 20%
- Examination: - 80% (Edexcel)

Staff contact:

Mrs L Fox

Aspire and Achieve

English Literature



Qualification: **A Level**

Why study this course?

- If you have an interest in reading a wide variety of English
- If you enjoy expressing your opinions and justifying them
- If you want to enjoy studying a subject which is relevant to your own lives
- If you want to acquire skills, which will keep your options open for further study

Potential careers:

- Education
- Politics
- Communication
- The Arts
- Media and Creative Writing

Assessment

Coursework: - 20%
Examination: - 80%
(Edexcel)

Course content

- Coursework: Candidates are asked to critically respond to two texts of their choice
- Examination: Candidates are asked to look at a range of thematically linked texts eg. Tragedy and Comedy. Current texts include A Streetcar Named Desire, Othello, King Lear, Doctor Faustus, Frankenstein, The Handmaid's Tale, Christina Rossetti, Romantic Poetry and Contemporary Poetry.

Staff contact:

Mrs L Fox

Aspire and Achieve

Economics



Qualification: **A Level**

Why study this course?

- If you wish to pursue a career in business or as an economist
- If you want to build and capitalise on your knowledge of economics
- If you want to study a course that provides a strong foundation for either academic or vocational progression
- If you prefer assessment by examination
- If you are enterprising and see running your own business as a future career option

Potential careers:

- Public sector organisations
- Schools/teaching
- Law firms
- Property management
- Accountant
- Advertising account executive
- Banker
- Buyer
- Commodity broker
- Distribution manager
- Economist
- Marketing executive
- Sales executive
- Stock broker

Course content

You may study some/all of the following:

- The operation of markets and market failure: primarily about microeconomics.
- The national economy in a global context: primarily about macroeconomics.
- Individuals, firms, markets and market failure.
- The national and international economy, such as; fiscal and supply-side policies.
- Economic methodology.
- Perfect competition and the labour market.

Staff contact:

Mrs Desideri and Mr Riley

Aspire and Achieve

Environmental Science BTEC



Qualification: **BTEC**

Level 3 Diploma in Environmental Science (One A-Level Equivalent)*

**Level 3 Extended Diploma in Environmental Science (Two A-Level Equivalent) may be available depending on student interest. (Please inform Miss Barlow (Geography) or Sixth Form S&G if this would be your preferred option)*

Why study this course?

- Includes a wide range of subjects including geography, geology, biology, chemistry and physics
- Gets you thinking about human activities and how the future of the human race and all other forms of life depends on the environment in which we live
- Expands the mind and develops an enquiring mind
- Discover the extent of the problems facing the Earth both now and in the future, and attempt to answer the questions that as yet are unanswered
- This developing science is never dull, as new discoveries are being made all the time
- Develops skills necessary to perform laboratory and field work
- Ability to solve problems in an environmental context;
- Develops skills needed to do project based research and presentation;
- Develops independent learning and development. These are very important to employers and higher education.

Potential careers:

The government has committed to creating 400,000 new jobs in the 'green sector' by 2020 and there is a skills gap within industry.

Businesses need to meet sustainability targets to keep ahead in their sectors.

- Pollution scientists
- Environmental Consultancy
- Local Government Conservation, Business and Environmental Education
- Scientific Civil Service
- Sustainability Consultant

Course content

Managing energy for a sustainable future (Renewable energy)

The living environment and conservation

Monitoring our physical environment

Scientific principles and the environment

Assessment

Unit 1 - Managing energy for a sustainable future (Renewable energy) – 24% (Internally assessed)

Unit 2 - The living environment and conservation – 24% (Externally assessed)

Unit 3 - Monitoring our physical environment – 24% (Internally assessed)

Unit 4 - Scientific principles and the environment – 28% (Externally assessed – Pre-release material)

Staff contact:

Miss V Barlow or Miss L Molineux

Aspire and Achieve

Design and Technology Fashion and Textiles



Qualification: **A Level**

We acknowledge that some students may wish to take an A Level in Design and Technology, despite not taking any Design and Technology GCSE due to their personal Pathway programme. We will consider all applications that show an interest in furthering their career in Design and Technology.

Why study this course?

- If you want to study textiles, fashion or design in Higher Education
- If you are interested in a career in design. You will be encouraged to take a broad view of design and technology and to develop your capacity to design and make products within the exciting world of fibres, fabric and fashion

Potential Careers:

- Marketing and media
- Research and development
- Textiles design
- Teaching
- Theatre costume design
- Textile Journalism
- Buying
- Interior Design
- Surface Pattern design

Course Content

Paper 1

What is assessed?

Core technical principles and core Designing/Making principles

A mixture of short answers, multiple choice and extended responses.

How is it assessed?

2 Hour exam - **25% of grade**

Paper 2

What is assessed?

Specialist knowledge, technical and designing and making Principles

Section A

Product Analysis - up to 6 short answers based on a visual stimulus of products

Section B

Commercial manufacturing - A mixture of short and extended response questions

How is it assessed?

2 hour exam - **25% of grade**

Non-exam assessment (NEA)

What is assessed?

Practical application of technical principles, designing and Making

How is it assessed?

45 hours to produce a student generated portfolio to aid the practical outcome **50% of grade**

Areas of course content

Materials and application and their effective use, knowledge of testing for mechanical properties, product life cycle, product development/improvement, design methods and processes, inclusive design, ergonomics and anthropometrics, design illustrations/communications, Computer Aided Design and Computer Aided Manufacturing, safe working practices, safety built into designs, feasibility studies, how modern designs and materials assist in today's environment, protection of design and laws, enterprise and marketing, key designers and "Design movements," historical influences and developments in Technology.

Staff contact:

Mr A Buck, Mrs G Wildman or Mrs M Speed

Aspire and Achieve

French



Qualification: A Level

Why study this course?

- If you want to further develop the language skills you have acquired so far
- If you want to make yourself more employable - more and more employers are looking to take on personnel with good communication skills in French
- If you want to impress universities/employers - A level French is a highly valued qualification
- If you enjoy learning about a different culture

Potential careers:

- Tourism and travel services
- Media
- Translation and interpreting Services
- Banks and insurance companies
- Government
- International non-profit organisations
- Publishing companies
- Ministry of Defence
- Representatives in foreign companies
- Health services
- Social services
- Immigration services
- Primary, secondary education, universities and colleges

Assessment

- A speaking exam and two exams comprising listening/reading and writing.

Course content

Aspects of French-speaking Society:

Current trends

- The changing nature of family
- The 'Cyber-Society'
- The place of voluntary work

Aspects of French-speaking Society:

Current issues

- Positive features of a diverse society
- Life for the marginalised
- How criminals are treated

Artistic Culture in the French-speaking world:

- A culture proud of its heritage
- Contemporary Francophone music
- Cinema

Aspects of Political Life:

- Teenagers and the Right to Vote
- Demonstrations, Strikes
- Politics and Immigration.

- Grammatical knowledge
- Study of a work of literature
- Study of a film

Staff contact:

Mrs S Key and Mrs S O'Hagan

Geography



Qualification: **A Level**

Why study this course?

- Geographers are highly employable
- Gives you strong research and analytical skills
- If you are interested in current affairs
- If you enjoy studying a subject that is relevant to your own life and experiences
- If you want the opportunity to carry out practical work outdoors as well as class work
- If you enjoy finding out your own answers – not just being taught
- If you enjoy finding out about new people, places, landscapes and events
- If you want to keep your options open – Geography A level is an appropriate qualification for a very wide range of Higher Education or career choices – it does not force you to make an early commitment

Potential careers

- Management and Administration
- Teaching and Lecturing
- Financial Sector
- Retail and Marketing Sector
- Research, Industry, Manufacturing and Media
- Town Planning
- Environmental Consultant
- Planning and Development Surveyor
- Sustainability Analyst
- Landscape Architect
- Development and Flood Risk Specialist

Assessment

- Examinations are linear and will be in June at the end of Year 13.
- Component 1 and 2:
2 hours 30 minutes exam for each component which totals 80% of A Level.
- Geographical investigation:
4000 words and 20% of A Level.

Course content

You will study all of the following:

- Component 1: Physical Geography
 - Water and Carbon cycles
 - Coastal systems and landscape
 - Hazards
- Component 2: Human Geography
 - Global systems and global governance
 - Changing Places
 - Population and the environment
- Component 3: Geographical Investigation
Students complete an individual investigation which must include data collected in the field and relate to the specification.

Staff contact:

Miss V Barlow

Aspire and Achieve

Health and Social Care



Qualification: **Cambridge Technical (CTec)**

Why study this course?

- If you want a career in nursing, social work or teaching
- If you want to build communication skills
- If you want to support another subject choice, such as Sociology or Psychology
- If you want to learn how health and social care issues relate to society

Potential careers:

- Health and Social Care
- Nursing
- Child Care
- Primary Teaching
- Health Visitor
- Social Worker

Course content

You will study the following:

Single Award

- Building positive relationships - Coursework
- Equality and Diversity - Exam
- Health and Safety - Exam
- Anatomy and Physiology - Exam
- Nutrition - Coursework
- Health, Reproduction and Development Stages - Coursework

Double Award

As Single Award, plus:

- Infection Control - Coursework
- Personalisation and Person Centred approach - Exam
- Safeguarding - Exam
- Promoting Positive Behaviour - Coursework
- Supporting People with Mental Health - Coursework
- Creativity and Activity for Adults - Coursework

Staff contact:

Mrs G Jenkins, Mrs J Burton, Mrs P Tebbs,
Ms J Ball or Miss J Sowter

History



Qualification: **A Level**

Why study this course?

- If you have an interest in the way the world has developed through the ages
- If you enjoy investigation and discovery
- If you enjoy debate and like putting forward a well-argued case
- If you want to improve your analytical skills
- If you want to study a subject that encourages you to consider evidence to make up your own mind
- If you want to broaden your Science A Level studies to include a humanities subject
- If you want to keep your options open – History is widely regarded as a useful qualification for a wide range of Higher Education or career choices

Potential careers:

- Teaching
- Archaeologist
- Archivist
- Civil Service
- Journalism
- Lawyers
- Social Work
- Police
- Administrators
- Architect
- Librarian
- Armed Forces
- Medicine
- Banking
- Accountancy

Assessment

- British History 1930-1997 (1 hour 30 min. exam) – 25%
- European History 1789-1896 – (1 hour exam) – 15%
- Thematic study and historical interpretations 1865-1992 – (2 hour 30 min. exam) – 40%
- Topic based essay – (3000 – 4000 word coursework essay) – 20%

Course content

You may study some/all of the following:

British History 1930-1997

- The unit looks at Britain under Conservative and Labour government. The course covers the role of key individuals such as Wilson and Thatcher, together with key issues ranging from the trade unions to Britain's position in the post-war world.

The enquiry topic is on Winston Churchill.

European History 1789-1896

- This unit looks at the obstacles to Italy becoming one nation in the nineteenth century and how characters such as Garibaldi and Napoleon III of France contributed to the creation of a unified Italy.

Thematic Study and Historical Interpretations
1865-1992

- This unit looks at the development of Civil Rights in the USA. The course focuses on the struggle of American citizens to gain equality before the law.

Topic Based Essay – (3000-4000 word
coursework essay)

- This unit allows students to complete an essay on the topic of their choice.

Staff contact:

Mr D Staples

Aspire and Achieve

Qualification: **L3 BTEC IT**

Why study this course?

- If you enjoy or are interested in IT
- If you wish to acquire skills, knowledge and understanding in a variety of different areas of IT, with a particular focus on developing practical skills for real life situations
- If you want to gain a broad understanding of IT and be able to study selected areas in more depth
- To develop IT skills that are highly desirable to employers and universities
- If a practical approach to learning appeals to you
- If you want to develop independent learning skills
- If you prefer a bias towards assessment via coursework rather than examination

Potential careers:

- Software developer
- Software engineers
- Web designers
- Hardware and software installation/ configurations
- Network support technicians
- Network managers
- Technical support
- Remote technical support
- Digital strategy management
- IT consultants

Course content

You may study some/all of the following:

Extended Certificate

Year 12

- Unit 2 Creating Systems to Manage Information
- Unit 3 Using Social Media in Business
- Unit 1 Information Technology Systems

Year 13

- Unit 1 Information Technology Systems
- Unit 6 Website Development

National Diploma

Year 12

- Unit 2 Creating Systems to Manage Information
- Unit 3 Using Social Media in Business
- Unit 1 Information Technology Systems
- Unit 4 Programming
- Unit 17 Digital 2D and 3D Graphics

Year 13

- Unit 1 Information Technology Systems
- Unit 6 Website Development
- Unit 9 IT Project Management
- Unit 11 Cyber Security and Incident Management

Staff contact:

Ms O'Reilly and Mr Kerry

Laboratory Skills (Applied Science)



Qualification: **OCR CTEC in Laboratory Skills (Applied Science)**

Why study this course?

- If you want to work within a science organisation or organisation that uses science.
- If you want an assessment that combines examination with practical assessment and portfolio-based assessment, that covers a variety of scientific fields.
- If you enjoy areas of laboratory science. Forensic science, medical science, chemistry, Biology and Physics.
- If you would like to go to university and study sciences and plan to study an additional science at A Level.
- If you are interested in a route to employment in the science industry or within organisations that use science.

Potential careers:

- Medical Physics Technician
- Drug development
- Quality Control Technician
- Biotechnology – Brewing Industry
- Scientific Journalist
- Chemical Engineer
- Forensic Laboratory
- Chemical Analyst
- Farmer
- Food Industry

Assessment:

- Unit 1 Science Fundamentals, which is worth 25% and is externally assessed.
 - Unit 2 Laboratory Techniques, which is worth 25% and is externally assessed.
- The remaining three units make up the rest of the marks and are internally assessed.

These units include:

- Unit 6 Control of Hazards in the Laboratory
- Unit 18 Microbiology
- Unit 21 Product Testing Techniques.

Staff contact:

Miss Winfield or Miss Harrison

Aspire and Achieve

Mathematics



Qualification: **A Level**

Why study this course?

- If you are interested and enjoy Mathematics
- If you are interested in explanations about the world around you
- If you want to acquire skills and knowledge, which will be useful in Higher Education, the Sciences and Business
- If you want to enhance your employability
- Mathematics complements many other subjects such as Physics, Biology, Chemistry, Geography, Psychology and DT

Potential careers:

- Engineering
- Business
- Accountancy
- Sports Science
- Architecture
- Investment Banker
- Education
- Economics
- Insurance
- IT/Computing
- Aerospace and Defence
- Automotive Industry
- Construction
- Cryptography

Course content

All Maths A Levels now include Core, Mechanics and Statistics.

You may study some/all of the following:

- Topics covered include:
- Algebra and functions
- Coordinate geometry in the (x, y) plane
- Differentiation
- Exponentials and logarithms
- Integration
- Sequences and series
- Trigonometry
- Numerical methods
- Vectors

Statistics and Mechanics to include:

- Statistical Sampling
- Data Presentation and Interpretation
- Probabilities
- Statistical Distributions
- Statistical Hypotheses Testing
- Quantities and Units in Mechanics
- Kinematics
- Forces and Newton's Law
- Moments

Assessment

- Three, 2 hour exams, at the end of Year 13.

Staff contact:

Mr T Riley or Mr A Tompkins

Aspire and Achieve

Further Mathematics



Qualification: **A Level**

Why study this course?

- If you want to enhance your understanding of the single Mathematics course
- If you are considering studying Mathematics in Higher Education
- If you want two Mathematics qualifications
- If you enjoy Mathematics for its own sake.
- If you want to study one of the Russell Group facilitating subjects (gives more options)

Potential careers:

- Aeronautical Engineering
- Biochemistry
- Chemical Engineering
- Actuarial Science
- Plus all from Maths – just about anything!

Assessment

- Four 1½ hour papers at the end of Year 13.

Course content

You may study some/all of the following:

Compulsory elements:

- Further Pure 1 and 2
- Series
- Complex numbers
- Numerical solution of equations
- Coordinate systems, matrix algebra
- Inequalities
- Series, first order differential equations
- Second order differential equations
- Further complex numbers, Maclaurin and Taylor series
- Further matrix algebra
- Vectors, hyperbolic functions
- Differentiation
- Integration, further coordinate systems

Two of seven options include:

- Further Pure 3
- Further Statistics 1
- Further Mechanics 1
- Decision Maths 1
- Further Pure 4
- Further Statistics 2
- Further Mechanics 2
- Decision Maths 2

Staff contact:

Mr T Riley, Mr A Tompkins or Mr O Tyson

Mathematical Studies



Qualification: **Level 3 equivalent to A/S**

Why study this course?

- If you are not studying A level maths
- You are studying a course with mathematical content
- You enjoy problem solving
- You want to acquire skills and knowledge that will be of particular use in higher education, especially if you intend to study a Social Science

Potential careers:

- Business
- Economics
- Construction
- Accountancy
- Education
- Social Services

Assessment

- 2 x 1½ hour exams at the end of Year 13.

Course content

You may study some/all of the following:

- Introduction to spreadsheets
- Data Analysis
- Financial Maths
- Representing Data
- Critical Path Analysis
- Interest Rates
- Cost Benefits
- Area, Perimeter and Volume

Staff contact:

Mr A Tompkins, Mr C Roberts or Mr T Riley

Music



Qualification: **A Level**

Why study this course?

- If you want to broaden your musical horizons and understanding
- If you are considering studying Music in High Education it is essential. However many universities look at it favourably when applying for other subjects as it demonstrates motivation, commitment and your ability to work both independently and with others
- If you simply enjoy music

Potential careers:

- Performer
- Armed Forces Musician
- Teacher
- Recording Industry
- Composer
- Music Publishing
- Music Therapist

Assessment

- Examination
- Performance
- Coursework

Course content

You will study the following genres in order to answer aural and essay questions in the final examination:

Instrumental Music of Haydn, Mozart and Beethoven

Popular Song: Blues, Jazz, Swing and Big Band
Instrumental Jazz from 1900 to the present day
Programme Music from the Romantic era

You will perform a 10 minute programme of music, which will be filmed for submission. Two compositions will also need to be submitted, with a combined minimum duration of four minutes; one brief will be set by the examination board, the other will be set by yourself after discussions with your teachers.

Staff contact:

Mr S Aston

Photography



Qualification: **A Level**

Why study this course?

- If you want to follow a creative course specialising in Photography
- If you want to specialise in traditional and digital lens based media
- If you have a natural eye for the aesthetics and are passionate about the subject
- If you would like to prepare for courses in further and higher education

Potential careers:

- Photography
- Graphics
- Advertising
- Photo Journalism
- Multi-media Graphics
- Fashion Photography

Course content

You may study some/all of the following:

- You will be introduced to a variety of experiences exploring a range of photographic media, techniques and processes. You will be made aware of both traditional and new technologies.
- Candidates will explore relevant images, artefacts and resources relating to Photography and a wider range of art and design from both the past and recent times, including European and non-European examples.

The course comprises of two components:

- Personal Investigation
- Externally set Controlled assignment

The course will introduce you to:

- Portraiture
- Landscape photography, working from the urban, rural and/or coastal environment
- Still life photography, working from objects or from the natural world
- Documentary photography, photo journalism
- Experimental imagery
- Photographic installation
- Fashion photography
- Multi media

Staff contact:

Mrs S Bogacki or Mrs C Keary

Physical Education



Qualification: **A Level**

Why study this course?

- If you have a keen interest in sport and recreation
- If you want to know more about how the body functions and the effects of exercise
- If you want to evaluate and improve your own sporting performance
- If you have an enquiring mind and are interested in the development of sport throughout the world
- If you want to move onto a sport related career of higher education

Potential careers:

- Sports coaching
- Fitness training
- PE teacher
- Physiotherapist
- Sports therapist
- Biomechanist
- Sports physiologist
- Sports psychologist

Course content

- Physiological factors affecting performance
- Applied anatomy and physiology
- Exercise physiology
- Biomechanics
- Psychological factors affecting performance
- Skill acquisition
- Sports psychology
- Socio-cultural issues in physical activity and sport
- Sport and Society
- Contemporary issues in physical activity and sport
- Performance in physical education
- Performance or coaching of an activity taken from the approved list (1 Practical activity)
- The Evaluation and Analysis of Performance for Improvement (Controlled assessment)

Assessment

70% Examination

15% Practical sport (1 activity)

15% Controlled assessment/Coursework

Staff contact:

Mr A Jones

Aspire and Achieve

Physics



Qualification: **A Level**

Why study this course?

- If you have an interest in and enjoy physical sciences
- if you want to find out how things in the physical world work
- if you enjoy applying your mind to solving problems
- if you are studying other science subjects and/or mathematics and you want to take another course that will supplement and support your studies

Potential careers:

- Architecture
- Civil Engineering
- Armed Forces & Defence industry
- Astronomy
- Car Design
- Education & Teaching
- Law & Finance
- Medicine (especially Medical Physics)
- Meteorology
- Nanotechnology
- Nuclear, Oil & Gas Industries
- Renewable Energy Industry
- Space Exploration Industries
- Telecommunications
- Transport & Infrastructure

Assessment

At the end of their 2 year course A level students will sit 3 exams.

Papers 1 and 2 are both worth 30% of the final grade and last 1 hour and 45 minutes.

Paper 3 covers content from any area of the A-level course and includes assessment of the understanding of practical principles. This paper is worth 40% of the final grade and lasts 2 hours and 30 minutes.

In addition, students will be separately judged on their practical skills by internal assessment over a series of 16 practical activities. This will be reported separately on their certificates as “pass” or “fail”.

Course content

You will study all of the following:

- Mechanics
- Electric Circuits
- Further Mechanics
- Electric & Magnetic Fields
- Nuclear & Particle Physics
- Materials
- Wave & Particle Nature of Light
- Thermodynamics
- Space
- Nuclear Radiation
- Gravitational Fields
- Oscillations

Staff contact:

Mr S Griffiths

Aspire and Achieve

Qualification: **A Level**

Why study this course?

Lively, relevant, controversial... There are many ways to describe A-level Politics. It is one of the most interesting and engaging qualifications you can choose.

Covering news and current affairs from the UK and USA, it helps you understand how the UK country is run. It also develops your research, written communication and debate skills. It also helps grow your confidence.

It's ideal if you're considering studying Politics, Sociology, Ethics, Advertising, Law or Journalism at university.

Potential Careers:

Politics A-level is highly regarded by employers in the following industries and employment sectors:

- Politics
- Diplomatic Service
- The Civil Service
- International Organisations
- Local Government
- National Government
- Journalism
- Media
- Teaching/Lecturing
- Law/Legal professions
- Law enforcement

This is a 2-year Linear A level course. Student will sit 3 x 2 hour exam papers, each with equal weighting in the overall result.

Paper 1: Government & Politics of the UK, including:

- Nature & sources of the British Constitution
- Structure and Role of Parliament
- The Prime Minister & Cabinet
- The Judiciary
- Devolution
- Democracy & participation
- Elections & referendums
- Political parties
- Pressure groups
- The European Union

Paper 2: Government & Politics of the USA:

- Constitutional framework of the US government
- Legislative branch of government: Congress
- The executive branch of government: President
- Judicial branch of government
- Electoral process and direct democracy
- Political parties
- Pressure groups
- Civil Rights
- Comparative politics: Comparative study of the US and UK systems, following three approaches:
 - Structural
 - Rational
 - Cultural

Paper 3: Political Ideas:

- Core ideologies
 - Liberalism
 - Conservatism
 - Socialism
- Other ideologies:
 - Ecologism

Staff contact:

Mr G Burroughs or Mrs G Bull

Design and Technology Product Design



Qualification: **A Level**

We acknowledge that some students may wish to take an A Level in Design & Technology, despite not taking any Design & Technology GCSE due to their personal Pathway programme. We will consider all applications that show an interest in furthering their career in Design and Technology.

Why study this course?

- If you want to study Product Design at University
- If you are interested in a career in Product Design or another design area
- If you are interested in how products work
- If you want to develop communication and work place skills with real clients

Potential Careers:

- Consumer Product Design
- Teaching
- Product Design Consultant
- Design Research
- Project Planning
- CAD/CAM
- Interior/Exhibition Design
- Advertising
- Graphic Design
- Architecture
- Engineering

Course Content

Paper 1

What is assessed?

Core technical principles and core Designing/Making principles

A mixture of short answers, multiple choice and extended responses.

How is it assessed?

2 Hour exam - 25% of grade

Paper 2

What is assessed?

Specialist knowledge, technical and designing and making Principles

Section A

Product Analysis - up to 6 short answers based on a visual stimulus of products

Section B

Commercial manufacturing - A mixture of short and extended response questions

How is it assessed?

2 hour exam - **25% of grade**

Non-exam assessment (NEA)

What is assessed?

Practical application of technical principles, designing and Making

How is it assessed?

45 hours to produce a student generated portfolio to aid the practical outcome - **50% of grade**

Areas of course content

Materials and application and their effective use, knowledge of testing for mechanical properties, product life cycle, product development/ improvement, design methods and processes, inclusive design, ergonomics and anthropometrics, design illustrations/ communications, Computer Aided Design and Computer Aided Manufacturing, safe working practices, safety built into designs, feasibility studies, how modern designs and materials assist in today's environment, protection of design and laws, enterprise and marketing, key designers and "Design movements," historical influences and developments in Technology.

Staff contact:

Mr A Buck, Mrs G Wildman or Mr C Collier

Aspire and Achieve

Psychology



Qualification: **A Level**

Why study this course?

- If you enjoy exploring issues dealing with how and why people behave in certain ways
- If you enjoy finding out more about the link between people's behaviour and their environment
- If you enjoy planning and carrying out investigations to look for any patterns and explaining the behaviour of people

Potential careers:

- Psychology
- Clinical Psychologist
- Educational Psychologist
- Child Psychologist
- Teaching
- Police Force
- Business
- Nursing
- Art and Drama

Assesment:

Students will sit three x 2 hour exam papers, each with equal weighing in the overall result

Course content

You will study the following:

- Cognitive Psychology – including memory and Eye Witness Testimony
- Developmental Psychology – including how we attach to our caregivers and what happens if no attachment is formed
- Social Psychology – including why some people conform and obey others
- Individual differences – including definitions of abnormality and mental disorders and why the theories say they develop
- Approaches in Psychology – including the key theories in Psychology and its key supporting research. Biological, Behaviourism, Psychodynamic, Cognitive, Humanistic and Social Learning theories
- Biopsychology – including how the biological systems of the body and the brain function with the resultant impact on human behaviour
- Research Methods – including looking at the ways psychologists investigate behaviour
- Gender – including how and why the genders behave in different ways
- Schizophrenia – including the causes of Schizophrenia and the potential treatment methods for the disorder
- Forensic Psychology – including measuring crime, offender profiling, theories of offending and ways of dealing with offender behaviour
- Issues and Debates – including nature versus nurture, freewill versus determinism, ethical implications in research, as well as gender and culture in psychological research

Staff contact:

Ms J Ball and Mrs G Jenkins

Aspire and Achieve

Statistics



Qualification: **A Level**

Why study this course?

- If you are interested in and enjoy Mathematics
- If you want to study something with Mathematical content but do not want to do all of the pure Algebra
- If you want to acquire skills that will be required in many higher education courses
- If you want to enhance your employability
- To complement Psychology, Geography, Biology or Economics

Potential careers:

- Business
- Accountancy
- Sports Science
- Banking
- M.O.D
- Education
- Economics
- Insurance
- Medical Research
- Cryptography
- Biological Research

Course content:

You may study some/all of the following

- Probability and probability distributions
- Binomial distribution
- Normal distribution
- Population and samples
- Correlation and regression
- Hypothesis testing
- Contingency tables
- Non-parametric tests
- Bayes' Theorem
- Experimental design
- Significance testing
- Confidence intervals
- Paired tests
- Exponential and Poisson distributions
- Goodness of fit tests
- Analysis of Variance
- Statistical Enquiry Cycle (SEC)

Assessment

- Three, two hour examinations at the end of Year 13

Staff contact:

Mr A Tompkins

BTEC Sport



Qualification: **BTEC**

National Extended Certificate in Sport (One A-Level Equivalent)*

**National Diploma in Sport (Two A-Level Equivalent) may be available depending on student interest (please inform Mr Jones (PE) or Sixth form S&G if this would be your preferred option)*

Why study this course?

- If you want to gain a deeper understanding of how the body functions and the effects of exercise
- If you want to understand how to improve health and fitness
- If you want to pursue a career in the sports industry
- If you would like to study a sport related course that does not require high level practical performance

Potential careers:

Sports and leisure management
Sports coaching
Personal trainer
PE teacher

Course content

Anatomy and Physiology
Fitness Training and Programming for Health, Sport and Well-being
Professional Development in the Sports Industry
Application of fitness testing

Assessment

30% Examination (1 hour 30 min written exam paper in Unit 1 – Anatomy and Physiology – Externally marked)
30% Set task (2 hour 30 min written scenario task in Unit 2 Fitness training and programming completed in exam conditions – Externally marked)
40% Assignment (Written assignments – Internally marked & Externally verified)

Staff contact:

Mr A Jones

Aspire and Achieve

Sociology



Qualification: **A Level**

Why study this course?

- If you have an interest in people and society
- If you have a questioning mind
- If you have an interest in researching information
- If you enjoy debating topical issues

Potential careers:

- Researcher
- Social Work
- Management
- Teaching
- Journalism
- Any career that involves working with people

Assesment:

Students will sit three x 2 hour exam papers, each with equal weighing in the overall result

Course content

You will study the following:

- Families and Households – including trends in marriage and divorce, changing notions of childhood and the purpose of living in family units
- Education – including which social groups do best in education and why, changing education policy
- Research Methods – including methods used by sociologists to support theories and investigate society
- Crime and Deviance – including why people commit crime, which groups are most likely to commit crime and how we might reduce crime in society
- Mass Media – including its effect on behaviour, how it represents social groups and its role within globalisation
- Sociological theory – including the key sociological theories such as Functionalism, Marxism, Feminism, Social Interactionism and Postmodernism

Staff contact:

Mrs J Burton, Mrs G Jenkins or Miss J Sowter

Theatre Studies



Qualification: **A Level**

Why study this course?

- If you enjoy participating in drama
- If you want to develop valuable inter-personal skills, which will help you in Higher Education and employment
- If you would like to study a drama based course at University
- If you would like to learn more about the way theatrical performances are put together

Potential careers:

- Actor/actress
- Stage manager
- Arts administrator
- Drama teacher
- Drama therapist
- Television production assistant
- Radio presenter
- Theatre director
- Youth & community worker
- Personnel manager
- Social worker
- Journalist
- Marketing manager
- Charities administrator

Course content

You may study some/all of the following:

- The use of theatrical forms and genre in relation to the exploration and performance of plays
- How plays relate to the contexts in which they are created and/or performed
- The different ways plays are interpreted
- A minimum of three plays, two of which must be by different playwrights
- The importance of social, cultural and/or historical influences on plays
- The use of drama and theatre terms and concepts
- Practical drama activities with supporting exploration notes
- Evaluation of live theatre
- Monologue/duologue performance plus supporting notes
- Group performance
- The significance of theatrical forms and genre and performance theory in relation to devised work
- The ways in which plays have been interpreted through history
- The use and evaluation of higher order drama and theatre terms and concepts
- Written examination on a set text and historical performance conditions

Staff contact:

S Hackett

Aspire and Achieve