



Year 12 options booklet

Welcome to your AS/A-level Options Booklet.

Congratulations on reaching Year 12! At this stage in your school career, you are now able to focus on the subjects that you really want to do for the next two years.

Choosing subjects for Year 12 allows you to:

- Choose courses and subjects that match your interests, abilities and talents
- Choose courses that will help you prepare for further education at university or for your chosen career
- Take brand new subjects

Most students study three subjects at A-level. However, we are happy to be flexible so please let us know if you would like to study more or fewer subjects.

A-level is often quite different to GCSE. The subjects are often more challenging, and you will be expected to work independently and on your own initiative much more than you have been previously. There is a lot more responsibility on your shoulders to ensure that you go above and beyond what is taught in the classroom and continue learning in your spare time.

There will also be opportunities for you to volunteer to help your school community and to take part in the wider life of the school. This is because you need to build a profile of yourselves that will appeal to university admissions officers or potential employers.

You will also follow a Careers programme that will help you to write your CV and guide you through the process of applying for university, if you decide that this is what you want to do. Please try to engage fully with this programme, as it is often very helpful in preparing pupils for the world beyond school.

Who can help me decide?

Talk to your parents, your teachers and Year 13 students who have opted for these courses are all people who can offer good advice. We will also be holding a week of taster sessions that will have given you more information about the subjects that you're interested in.

What should I consider?

Don't do subjects just because the teachers or your parents (or even your friends) say you should. Of course, you should listen to the advice of people that you respect, but make your own decisions. After all, you will be the one who has to do the work!

Choose options that you know that you will enjoy or that you feel passionate about; you are more likely to succeed if you enjoy what you're doing.

We will need to know what subject you intend to do next year by 20th August at the latest. This is to give us enough time to create a timetable before school begins.

Please let us know the subjects that you intend to do. You may also let us know if there are alternative subjects that you might consider if not all of our subjects are available.

Subjects might be unavailable either because there is not enough take up of that subject (we need at least three students to run the course) or because there are unavoidable clashes.

Note:

You will see in the description of the courses that follow that some courses are **modular** and some courses are **linear**.

Most IAL (International A-level) courses are modular. This means that external exams can be sat at various points during the course (October/January/June). the results of these exams count towards the final result at the end of Year 13. The modular nature of the course also means that individual modules can be re-sat in order to improve grades where necessary.

If the subject is not offered by Pearson Edexcel as an IAL it is offered as an A-level. Most A-levels are linear. This means that all examinations are sat at the end of the two years of study. Pupils can usually study these subjects as an AS level and sit exams at the end of the first year. However, if the student then decides to continue studying the course in Year 13, any grades achieved in Year 12 will not count towards the final A-level grade in Year 13.

If you would like more guidance on this, please feel free to contact Kathryn for a chat.

Mathematics

Modular/Linear



Course Outline/Method of Assessment:

All students will complete 4 units of Pure Mathematics (2 for the AS) covering the following topics:

- *Algebra and functions*
- *coordinate geometry in the (x, y)*
- *trigonometry*
- *differentiation*
- *integration*
- *sequences and series*
- *exponentials and logarithms*
- *numerical methods*
- *binomial expansion*
- *vectors*

Pupils will then complete two further units (one for the AS) from a choice of Mechanical Mathematics, Statistics or Decision Mathematics.

Careers for Mathematicians:

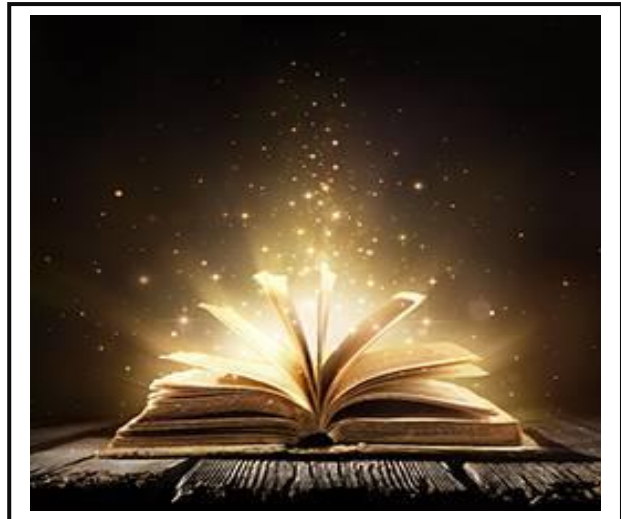
Acoustic consultant
Actuarial analyst
Actuary
Astronomer
Chartered accountant
Chartered certified accountant
Data analyst
Data scientist
Investment analyst
Research scientist
Software engineer
Sound engineer
Statistician

Careers where Maths is useful:

CAD technician
Civil Service
Financial manager
Financial trader
Game designer
Insurance underwriter
Machine learning engineer
Meteorologist
Operational researcher
Private tutor
Quantity surveyor
Radiation protection practitioner
Software tester

English Literature

Modular/Linear



Course Outline/Method of Assessment:

Year 12 (AS level)

Unit 1 –

1. Post 2000 Poetry
2. Post 2000 Novel

Unit 2 –

1. Pre-1900 Drama
2. Post-1900 Drama

Year 13 (A-level)

Unit 3 –

1. Unseen Poetry
2. Comparison of two novels

Unit 2 –

1. Shakespearean Drama
2. Poetry (choice of either Metaphysical, Romantic or Victorian poetry)

Careers where the study of English Literature is useful/necessary:

Digital copywriter

Lexicographer

Publishing copyeditor/proofreader

Writer

Advertising copywriter

Arts administrator

Marketing executive

PPC specialist

Records manager

Editorial assistant

Magazine journalist

Web content manager

Academic librarian

Archivist

Education consultant

Media researcher

Public relations officer

Social media manager

Biology

Modular/Linear



Course Outline /Method of Assessment:

Year 12 (AS level)

Unit 1 – Molecules, Diet, Transport and Health

Unit 2 – Cells, Development, Biodiversity and Conservation

Unit 3 - Practical Skills in Biology 1

Year 13 (A-level)

Unit 4 – Energy, Environment, Microbiology and Immunity

Unit 5 – Respiration, Internal Environment, Coordination and Gene Technology

Unit 6 - Practical Skills in Biology 2

Careers for Biologists:

Biotechnologist

Microbiologist

Nature conservation officer

Pharmacologist

Soil scientist

Animal physiotherapist

Dentist

Medical science liaison

Prosthetist/orthotist

Marine biologist

Nanotechnologist

Scientific laboratory technician

Research scientist (life sciences)

Anatomical pathology technologist

Clinical scientist, cardiac sciences

Genetic counsellor

Neuroscientist

Zoologist

Chemistry

Modular/Linear



Course Outline /Method of Assessment:

Year 12 (AS level)

Unit 1 – Structure, Bonding and Introduction to Organic Chemistry

Unit 2 – Energetics, Group Chemistry, Halogenoalkanes and Alcohols

Unit 3 - Practical Skills in Chemistry 1

Year 13 (A-level)

Unit 4 – Rates, Equilibria and Further Organic Chemistry

Unit 5 – Transition Metals and Organic Nitrogen Chemistry

Unit 6 - Practical Skills in Chemistry 2

Careers for Chemists:

Analytical chemist

Chemical engineer

Forensic scientist

Pharmacologist

Toxicologist

Management consultant

Patent lawyer

Biotechnologist

Clinical scientist, biochemistry

Nanotechnologist

Research scientist

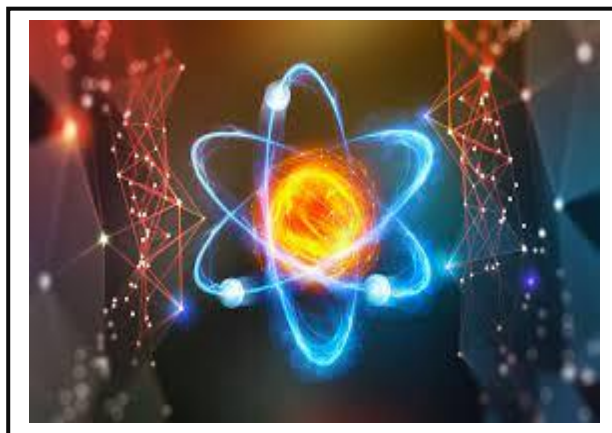
Environmental consultant

Nuclear engineer

Radiation protection practitioner

Physics

Modular/Linear



Course Outline /Method of Assessment:

Year 12 (AS level)

Unit 1 – Mechanics and Materials

Unit 2 – Waves and Electricity

Unit 3 - Practical Skills in Physics 1

Year 13 (A-level)

Unit 4 – Further Mechanics, Fields and Particles

Unit 5 – Thermodynamics, Radiation, Oscillations and Cosmology

Unit 6 - Practical Skills in Physics

Careers for Physicists:

Acoustic consultant

Clinical scientist, medical physics

Metallurgist

Nanotechnologist

Sound engineer

Clinical technologist

Nuclear engineer

Software engineer

Astronomer

Geophysicist

Meteorologist

Radiation protection

Applications developer

Data analyst

Operational researcher

Telecommunications

Art & Design

Modular/**Linear***

*There is no AS available for Art and Design



Course Outline /Method of Assessment:

Component 1: Personal Investigation

develop a portfolio of practical work and a minimum 1000 words of continuous prose that shows critical understanding in relation to the practical portfolio

Component 2: Externally Set Assignment

preparatory studies from February of the final year culminating in the final 15-hour period of sustained focus under examination conditions

Students must work within one of the following titles: Art, Craft and Design; Fine Art; Graphic Communication; Textile Design; Three-dimensional Design (e.g. sculpture); Photography.

Careers for Artists and Designers:

Advertising art director

Commercial art gallery manager

Conservator

Fine artist

Illustrator

Printmaker

Arts administrator

Interior and spatial designer

Special effects technician

Art therapist

Community arts worker

Exhibition designer

Graphic designer

Museum/gallery exhibitions officer

Animator

Estates manager

Multimedia programmer

VFX artist

Business

Modular/Linear



Course Outline /Method of Assessment:

Year 12 (AS level)

Unit 1 – Business and People

Meeting customer needs
The market
Marketing mix and strategy
Managing people
Entrepreneurs and leaders

Unit 2 – Managing Business Activities

Planning a business and raising finance
Financial planning
Managing finance
Resource management
External influences

Year 13 (A-level)

Unit 3 – Business Decisions and Strategy

Business objectives and strategy
Business growth
Decision-making techniques
Influences on business decisions
Assessing competitiveness
Managing change

Unit 4 – Global Business

Globalisation
Global markets and business expansion
Global marketing
Global industries and companies (multinational corporations)

Careers for which the study of Business is useful:

Arbitrator	Chartered management accountant
Corporate investment banker	Data analyst/scientist
Forensic accountant	Insurance underwriter
Management consultant	Project manager
Risk manager	Stockbroker
Supply chain manager	Construction manager
Costs lawyer	Environmental engineer
External auditor	Marketing executive
Human resources officer	Logistics and distribution manager

Information Technology

Modular/Linear



Course Outline /Method of Assessment:

Year 12 (AS level)

Unit 1

- 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*

Year 13 (A-level)

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*

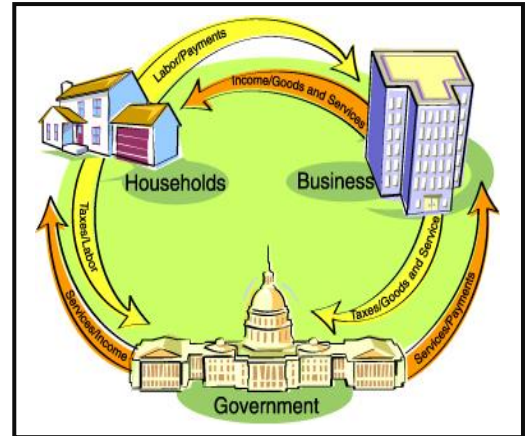
Careers for which the study of IT is useful:

- | | |
|-----------------------------|---------------------------|
| Applications developer | Cyber security analyst |
| Database administrator | Forensic computer analyst |
| Game designer | Games developer |
| Information systems manager | IT consultant |
| Software engineer | Systems analyst |
| UX designer | Web designer |
| Web developer | IT trainer |
| Nanotechnologist | Network engineer |

Economics

Modular/Linear

Course Outline /Method of Assessment:



Year 12 (AS level)

Unit 1 – Markets in Action

Introductory concepts
Consumer behaviour and demand
Supply
Price determination
Market failure
Government intervention in markets

Unit 2 – Macroeconomic performance and policy

Measures of economic performance
Aggregate demand (AD)
Aggregate supply (AS)
National income
Economic growth
Macroeconomic objectives and policies

Year 13 (A-level)

Unit 3 – Business Behaviour

Types and sizes of businesses
Revenue, costs and profits
Market structures and contestability
Labour markets
Government intervention

Unit 4 – Developments in the Global Economy

Causes and effects of globalisation
Trade and the global economy
Balance of payments, exchange rates and international competitiveness
Poverty and inequality
The role of the state in the macroeconomy
Growth and development in developing, emerging and developed economies

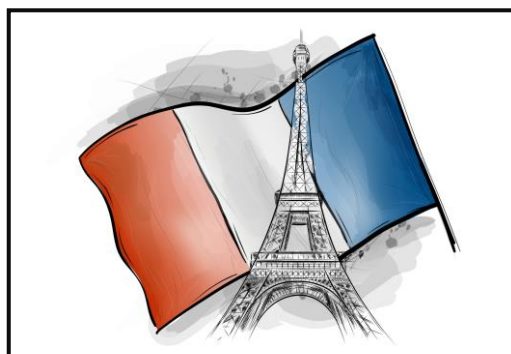
Careers for Economists:

Compliance officer
Financial risk analyst
Political risk analyst
Statistician
Stockbroker
Civil Service
Management consultant
Quantity surveyor

External auditor
Investment analyst
Risk manager
Diplomatic service officer
Business development manager
Local government officer
Policy officer

French

Modular/Linear



Course Outline/Method of Assessment:

Topics:

Youth matters
Lifestyle, health and fitness
Environment and travel
Education and employment
Technology in the French-speaking world
Society in the French-speaking world
Ethics in the French-speaking world

Year 12 (AS level)

Unit 1 – Spoken expression and response

Unit 2 – Understanding and written response

Year 13 (A-level)

Unit 3 – Understanding and spoken response

Unit 4 – Research, understanding and written response

Careers for linguists:

English as a foreign language teacher
Marketing executive
Publishing copy-editor/proofreader
Talent agent
Civil Service fast streamer
Editorial assistant
Public librarian
Translator

Lexicographer
Public relations officer
Speech and language therapist
Academic researcher
Digital copywriter
Information officer
Social researcher

Geography

Modular/Linear



Course Outline /Method of Assessment:

Year 12 (AS level)

Unit 1 – Global challenges

Topic 1: World at Risk

Topic 2: Going Global

Unit 2 – Geographical Investigations

Topic 1: Crowded Coasts

Topic 2: Urban Problems, Planning and Regeneration

Year 13 (A-level)

Unit 3 – Contested Planet

Compulsory topics:

Atmosphere and Weather

Biodiversity Under Threat

Optional Topics:

Energy Security or Water Conflicts

Superpower Geographies or Bridging the Development Gap

Unit 4 – Researching Geography

Option 1: Tectonic Activity and Hazards

Option 2: Feeding the World's People

Option 3: Cultural Diversity: People and Landscapes

Option 4: Human Health and Disease

Careers for Geographers:

Cartographer

Environmental consultant

Planning and development surveyor

Geographical information systems officer

International aid/development worker

Landscape architect

Logistics and distribution manager

Political risk analyst

Transport planner

Commercial/residential surveyor

Market researcher

Social researcher

Astronomer

Town planner

Tourism officer

Nature conservation officer

Sustainability consultant

German

Modular/Linear



Course Outline/Method of Assessment:

Topics:

Youth matters
Lifestyle, health and fitness
Environment and travel
Education and employment
Technology in the German-speaking world
Society in the German-speaking world
Ethics in the German-speaking world

Year 12 (AS level)

Unit 1 – Spoken expression and response

Unit 2 – Understanding and written response

Year 13 (A-level)

Unit 3 – Understanding and spoken response

Unit 4 – Research, understanding and written response

Careers for linguists:

English as a foreign language teacher
Marketing executive
Publishing copy-editor/proofreader
Talent agent
Civil Service fast streamer
Editorial assistant
Public librarian
Translator

Lexicographer
Public relations officer
Speech and language therapist
Academic researcher
Digital copywriter
Information officer
Social researcher

Politics

Modular/**Linear**



Course Outline /Method of Assessment:

Component 1:

1. Political Participation: democracy and participation, political parties, electoral systems, voting behaviour and the media.
2. Core Political Ideas: conservatism, liberalism, socialism.

Component 2:

1. UK Government: the constitution, parliament, Prime Minister and executive, relationships between the branches.
2. Non-core political ideas: one idea from the following: anarchism, ecologism, feminism, multiculturalism, nationalism.

Component 3:

Comparative Politics: the US Constitution and federalism, US Congress, US presidency, US Supreme Court and civil rights, democracy and participation, comparative theories.

Careers for which the study of Politics is useful:

Civil Service Fast Streamer
Policy officer
Politician's assistant
Social researcher
Detective
Forensic accountant
Local government officer
Marketing executive
Public relations officer

Government social research officer
Political risk analyst
Public affairs consultant
Charity officer
Diplomatic service officer
Human resources officer
Market researcher
Newspaper journalist
Stockbroker

History

Modular/Linear

Course Outline /Method of Assessment:



Year 12 (AS level)

Unit 1 – Depth Study with Interpretations

Options:

France in Revolution, 1774–99

Russia in Revolution, 1881–1917

Germany, 1918–45

Britain, 1964–90

Unit 2 – Breadth Study with Source Evaluation

Options:

India, 1857–1948: The Raj to Partition

China, 1900–76

Russia, 1917–91: From Lenin to Yeltsin

South Africa, 1948–2014.

Year 13 (A-level)

Unit 3 – Thematic Study with Source Evaluation

Options:

USA, Independence to Civil War, 1763–1865

The British Experience of Warfare, 1803–1945

Germany: United, Divided and Reunited, 1870–1990

Civil Rights & Race Relations in the USA, 1865–2009

Unit 4 –

Options:

The Making of Modern Europe 1805–71

World in Crisis 1879–1945

World Divided: Superpower Relations, 1943–90

The Cold War and Hot War in Asia, 1945–90

Careers for Historians:

Archivist

Historic buildings inspector/conservation officer

Museum education officer

Museum/gallery exhibitions officer

Broadcast journalist

Editorial assistant

Information officer

Policy officer

Solicitor

Heritage manager

Archaeologist

Museum/gallery curator

Academic librarian

Civil Service administrator

Human resources officer

Marketing executive

Political aide

Physical Education

Modular/**Linear**



Course Outline /Method of Assessment:

Component 1: Scientific Principles of Physical Education

Topic 1: Applied anatomy and physiology

Topic 2: Exercise physiology and applied movement analysis

Component 2: Psychological and Social Principles of Physical Education

Topic 3: Skill acquisition

Topic 4: Sport psychology

Topic 5: Sport and society

Component 3: Practical Performance

Skills performed in one physical activity as a player/performer/coach

Component 4: Performance Analysis and Performance Development Programme

1. In the role of player/performer or coach analyse two components of a physical activity (one physiological component and either a tactical or technical component).

2. In the role of player/performer or coach analyse, implement and evaluate a Performance Development Programme.

Careers for which the study of Physical Education is useful:

Exercise physiologist

Personal trainer

Sports coach

Sports therapist

Clinical scientist, cardiac sciences

Health improvement practitioner

Outdoor activities/education manager

Fitness centre manager

Sports administrator

Sports development officer

Choreographer

Event manager

Nutritionist

Sport and exercise psychologist

Psychology

Modular/Linear



Course Outline /Method of Assessment:

Year 12 (AS level)

Unit 1 – Social and Cognitive Psychology

- how does social influence effect our levels of obedience and conformity?
How does memory work?

Unit 2 – Biological psychology, learning theories and development

- how does our biology influence our behaviour? How do we learn?

We will conduct mini psychological investigations for each unit during the AS year.

Year 13 (A-level)

Unit 3 – Applications of Psychology Topics

Developmental psychology – how our early attachments affect us and how we develop?

Either Criminological psychology – why do some people become criminals?

Or Health psychology – how does stress affect us?

Unit 4 – Clinical Psychology and Psychological Skills

- how do mental health issues affect us? How do we conduct & evaluate psychological research?

Directly related careers:

Clinical psychologist
Counselling psychologist
Psychological wellbeing practitioner
Education mental health practitioner
Occupational psychologist
Forensic psychologist
Sport and exercise psychologist
Educational psychologist
Health psychologist
Researcher in psychology (within a specialist area)
Neuropsychologist
Teacher or lecturer in Psychology

Careers where Psychology is useful:

Advertising or marketing
Counsellor or Psychotherapist
Advice worker
Dance/Play/Art therapist
Life coach
Market or social researcher
Teacher (all ages)
Consultant
Human resources officer
Lawyer/Solicitor
Prison/law enforcement
Journalist/writer
Social worker

Portuguese

Modular/**Linear**



Course Outline /Method of Assessment:

Paper 1: Translation into English, reading comprehension and writing (research question) in Portuguese

Paper 2: Translation into Portuguese and written response to works (one literary text and one film)

Paper 3: Listening, reading and writing in Portuguese

Themes:

Tema 1: Mudanças na sociedade contemporânea.

Tema de pesquisa - A importância da educação após o ensino secundário em Portugal

Tema 2: Cultura política e artística nos países de língua portuguesa

Tema de pesquisa - Lusofonia no mundo atual

Tema 3: Movimentos migratórios

Tema de pesquisa - Movimento migratório em Portugal

Tema 4: Como a História moldou a Política

Tema de pesquisa - Os Descobrimentos: a viagem de Vasco da Gama à Índia

Careers for linguists:

English as a foreign language teacher

Marketing executive

Publishing copy-editor/proofreader

Talent agent

Civil Service fast streamer

Editorial assistant

Public librarian

Translator

Lexicographer

Public relations officer

Speech and language therapist

Academic researcher

Digital copywriter

Information officer

Social researcher

Spanish

Modular/Linear



Course Outline/Method of Assessment:

Topics:

Youth matters
Lifestyle, health and fitness
Environment and travel
Education and employment
Technology in the Spanish-speaking world
Society in the Spanish-speaking world
Ethics in the Spanish-speaking world

Year 12 (AS level)

Unit 1 – Spoken expression and response

Unit 2 – Understanding and written response

Year 13 (A-level)

Unit 3 – Understanding and spoken response

Unit 4 – Research, understanding and written response

Careers for linguists:

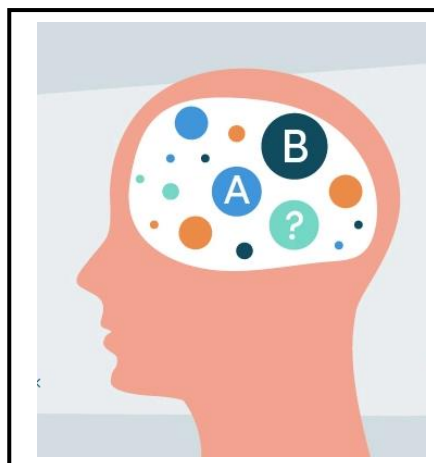
English as a foreign language teacher
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Public librarian
Translator

Lexicographer
Public relations officer
Speech and language therapist
Academic researcher
Digital copywriter
Information officer
Social researcher

Thinking Skills

Modular/**Linear**

At present Thinking Skills is offered as an AS only, not a full A-level.



Course Outline /Method of Assessment:

Paper 1 – Problem Solving

- Organise information
- Process information
- Analyse data
- Consider wider problems

1 hour, 30 minutes

50% of final grade

Paper 2 – Critical Thinking

- Evaluate and use evidence
- Analyse reasoning
- Evaluate reasoning
- Construct reasoning

2 hours

50% of final grade

While Thinking Skills is not a mainstream A-level subject, it teaches extremely valuable skills that can be utilised effectively in all other subjects, both at A level and at undergraduate level.

Problem Solving is about making use of the information available to deduce further information, draw conclusions and make choices and decisions. Critical Thinking is about judging the value or usefulness of evidence, and understanding how sound arguments are constructed. Both elements of the course will make you a better reader, writer, logician and thinker.

Thinking Skills AS level is a very useful fourth or fifth subject in addition to your main A-level courses.