HIGHAMLANE SIXTHFORM

Preparation for Sixth Form 2020

You will find a list of subjects we offer at sixth form and a brief outline of each. You will also find signposts to subject specific reading and relevant websites.

More detailed information and transition work will be shared with you after the Easter break.

The information below is just the first of many documents we are going to send you to support your transition to sixth form.

Fine Art

OCR: http://www.ocr.org.uk

Subject: Art and Design

Endorsement Fine Art (A Level: H601)

60% Personal Investigation, 40% Externally Set Task.

Intending to run a gallery visit during the autumn term. TBC.

Books:

The Art Book

The 20th Century Art Book

The Photo Book

Vitamin P2: A New Perspective on Painting

Vitamin D2: A New Perspective on Drawing

isms: Understanding Art

• Illustration Now: Portraits

Juxtapoz: Illustration

Juxtapoz: New Contemporary

Juxtapoz: Hyperrealism

Websites:

- <u>www.studentartguide.com</u>
- <u>www.illustrationweb.com</u>
- Gallery websites of which there are many that offer online collections and virtual tours.

A-Level Biology

Exam board and course code: AQA 7402

Topic 1: Biological Molecules -Monomers and polymers -Carbohydrates -Lipids Proteins -Nucleic acids and important information- carrying molecules -ATP -Water -Inorganic ions	Topic 2: Cells -Cell structure -All cells arise from other cells -Transport across cell membranes -Cell recognition and the immune system	Topic 3: Organism exchange substances with their environments -Surface area to volume ratio -Gas exchange -Digestion and absorption -Mass transport	Topic 4: Genetic information, variation and relationships between organisms -DNA, genes and chromosomes -DNA and protein synthesis -Genetic diversity can arise as a result of mutation or during meiosis -Genetic diversity and adaptation -Species and taxonomy -Biodiversity within a community -Investigating diversity
Topic 5: Energy transfer in and between organisms -Photosynthesis -Respiration -Energy and ecosystems -Nutrient cycles	Topic 6: Organisms respond to changes in their internal and external environments -Stimuli, both internal and external, are detected and lead to a response -Nervous coordination -Skeletal muscles are stimulated to contract by nerves and act as effectors -Homeostasis is the maintenance of a stable internal environment	Topic 7: Genetics, populations, evolution and ecosystems -Inheritance -Populations -Evolution may lead to speciation -Populations in ecosystems	Topic 8: The control of gene expression -Alteration of the sequence of bases in DNA can alter the structure of proteins -Gene expression is controlled by a number of features -Using genome projects -Gene technologies allow the study and alteration of gene function allowing a better understanding of organism function and the design of new industrial and medical processes

AQA A-Level Biology Specification

https://www.aqa.org.uk/subjects/science/as-and-a-level/biology-7401-7402

Exam board specification for the A-level Biology course

CGP Head Start to A Level Biology

https://www.cgpbooks.co.uk/secondary-books/as-and-a-level/science/biology/bbr71-head-start-to-a-level-biology

A book designed to help with the significant step up from GCSE to A level.

CGP A Level Biology Essential Maths Skills

https://www.cgpbooks.co.uk/secondary-books/as-and-a-level/science/biology/bmr71-a-level-biology-essential-maths-skills

A book that outlines all the key maths skills required for the A-level Biology course with worked examples and tasks

CGP A Level Biology Revision Guides

https://www.cgpbooks.co.uk/secondary-books/as-and-a-level/science/biology/bar73-new-a-level-biology

Revision guide that covers all of the A-level Biology course

CGP A Level Biology Workbooks

https://www.cgpbooks.co.uk/secondary-books/as-and-a-level/science/biology/baq71-new-a-level-biology-aqa-year-1-2-exam-p

Exam style questions and activities that will help develop exam technique

Useful websites:

http://nature.com The site of the scientific journal

http://royalsociety.org Podcasts, news and interviews with scientists about recent scientific developments

http://www.accessexcellence.org/RC/VL/GG A web site showing illustrations of many processes of biotechnology

Business

(Edexcel GCE Business 9BSO)

https://qualifications.pearson.com/content/dam/pdf/A%20Level/Business%20Studies/2015/specification -and-sample-assessment-materials/9781446914694 GCE2015 A BUS WEB.PDF

Units of Work:

Theme 1 – Marketing and People

Theme 2 – Managing Business Activities

Theme 3 – Business Decisions and Strategy

Theme 4 – Global Business

Subject Specific reading list:

https://www.bbc.co.uk/news/business recommended to keep up with the daily business news

Company of One: Why staying small is the next big thing for business by Paul Jarvis

Good to Great: Why some companies make the leap and others don't by Jim Collins

Grinding it Out: The making of McDonalds by Ray Kroc

Websites:

www.businessed.co.uk (if new to studying business)

www.tutor2u.net

www.senecalearning.com

https://www.youtube.com/c/TakingTheBiz

A level Chemistry

Exam board and course code: AQA 7405

Physical Chemistry	Inorganic Chemistry	Organic Chemistry
3.1.1 Atomic structure	3.2.1 Periodicity	3.3.2 Alkanes
3.1.2 Amount of substance	3.2.2Group 2 elements	3.3.3 Halogenoalkanes
3.1.3 Bonding	3.2.3 Group 7 elements	3.3.4 Alkenes
3.1.4 Energetics	3.2.4 Period 3 elements and	3.3.5 Alcohols
3.1.5 Kinetics	their oxides	3.3.6 Organic Analysis
3.1.6 Chemical equilibria	3.2.5 Transition metals	3.3.7 Optical isomerism
3.1.7 Redox reactions	3.2.6 Reactions of ions in	3.3.8 Aldehydes and ketones
3.1.8 Thermodynamics	aqueous solution	3.3.9 Carboxylic acids and
3.1.9 Rate equations		derivatives
3.1.10 Equilibrium		3.3.10 Aromatic chemistry
constant <i>Kp</i> for homogeneous		3.3.11 Amines
systems		3.3.12 Polymers
3.1.11 Electrode potentials and		3.3.13 Amino acids, proteins and
electrochemical cells		DNA
3.1.12 Acids and bases		3.3.14 Organic synthesis
		3.3.15 Nuclear magnetic
		resonance spectroscopy
		3.3.16 Chromatography
		3 1 ,

Subject specific reading:

CGP Head Start to A Level Chemistry

https://www.cgpbooks.co.uk/Student/books_a_level_chemistry_aqa.book_CBR71

A book designed to help with the significant step up from GCSE to A level.

CGP Revision guides and workbooks.

https://www.cgpbooks.co.uk/Student/books_a_level_chemistry_aqa.book_CARQB71

A useful set of learning aids.

Chemistry In Context. By Hill and Holman. ISBN 978 017 448276 5.

A very useful book which provides excellent background information to the A level syllabus.

Course Related Websites:

Chemguide. https://www.chemguide.co.uk/

Probably the best A level chemistry website out there.

Alevelchemistry. http://www.a-levelchemistry.co.uk/

Good notes and an excellent range of worksheets.

Periodic Table Of Videos http://www.periodicvideos.com/

Resources from the university of Nottingham.

Computer Science

OCR H446

https://www.ocr.org.uk/qualifications/as-and-a-level/computer-science-h046-h446-from-2015/

Component 1 – Paper 1 – Computer Systems (01) 140 marks, 2 hours 30 mins exam worth 40%

Component 2 – Paper 2 – Algorithms and programmins (02) 140 marks, 2 hours 30 mins worth 40%

Component 3 – Programming Project (03) 70 marks, worth 20%

Books:

- AS/A Level Computer Science for OCR Student Book, Author: Alistair Surrall and Adam Hamfleet
 ISBN: 9781108412711
- OCR A Level Computer Science (includes AS Level) Author: Sean O'Byrne, George Rouse, Jason Pitt
 ISBN: 9781471839764
- Essential Maths Skills for AS/A Level Computer Science by Victoria Ellis

Useful websites to explore

https://student.craigndave.org/a-level-videos

https://isaaccomputerscience.org/home

https://www.mrfraser.org/resources/videos/

Economics

Exam board: Edexcel

Course: Economics A (9ECO)

Level: A Level

Units:

The Pearson Edexcel Level 3 Advanced GCE in Economics A is structured into four themes and consists of three externally examined papers.

Students build knowledge and understanding of core economic models and concepts in Themes 1 and 2, and then build on this and apply their knowledge to more complex concepts and models in Themes 3 and 4.

Students will need to apply their knowledge and understanding to both familiar and unfamiliar contexts in the assessments and demonstrate an awareness of current economic events and policies.

Theme 1: Introduction to markets and market failure

This theme focuses on microeconomic concepts. Students will develop an understanding of:

- nature of economics
- how markets work
- market failure
- government intervention.

Theme 2: The UK economy – performance and policies

This theme focuses on macroeconomic concepts. Students will develop an understanding of:

- measures of economic performance
- aggregate demand
- aggregate supply
- · national income
- economic growth
- macroeconomic objectives and policy.

Theme 3: Business behaviour and the labour market

This theme develops the microeconomic concepts introduced in Theme 1 and focuses on business economics. Students will develop an understanding of:

- business growth
- business objectives
- revenues, costs and profits
- market structures
- labour market
- government intervention.

Theme 4: A global perspective

This theme develops the macroeconomic concepts introduced in Theme 2 and applies these concepts in a global context. Students will develop an understanding of:

- international economics
- poverty and inequality
- emerging and developing economies
- the financial sector
- role of the state in the macroeconomy.

Assessment:

There are three externally assessed exams taken at the end of year 13.

- Paper 1: Markets and business behaviour
- Paper 2: The national and global economy
- Paper 3: Microeconomics and macroeconomics

Subject specific reading:

- The Economist
- The Week
- BBC News
- Current affairs websites/journals/newspapers/news programmes

Subject websites:

 $\underline{https://qualifications.pearson.com/en/qualifications/edexcel-a-levels/economics-a-2015.html}$

https://www.tutor2u.net/economics

Trips/visits:

- Attractions in various industry sectors (shopping centres, sports venues, leisure)
- Financial sector in the City of London

Trips are provisional and subject to change.

English Language

Exam Board: OCR

Specification: H470

Website Link:

https://www.ocr.org.uk/qualifications/as-and-a-level/english-language-h070-h470-from-2015/

Course Content:

Component 1 – Exploring Language

2 hours 30 minutes written examination in June of Y13

40% of A-Level

80 marks

Section A: Language under the microscope (20 marks)

Section B: Writing about a topical language issue (24 marks)

Section C: Comparing and contrasting texts (36 marks)

Component 2 – Dimensions of Linguistic Variation

2 hours 30 minutes written examination in June of Y13

40% of A Level

80 marks

Section A: Child language acquisition (20 marks)

Section B: Language in the media – study of power, gender and technology (24 marks)

Section C: Language change (36 marks)

Component 3 - Non-exam Assessment – Independent Language Research

20% of A-Level

40 marks

Section A: An independent investigation of language (30 marks)

A report of your independent investigation into an aspect of language use (2000-2500 words)

Section B: The academic poster (10 marks)

A well-researched and effectively organised overview of your own independent investigation in a form suitable for display at an undergraduate conference for English language research (750-1000 words)

Provisional Trips:

The British Library in London

Beginner's Reading List:

Course Textbook: OCR A-Level English Language: Student Book (Oxford)

Other Useful Texts:

- A Little Book of Language David Crystal
- Listen to your Child David Crystal
- The Adventure of English Melvyn Bragg

Websites to Explore:

https://www.theguardian.com/global/series/buzzwords

How does language shape the world around us, and vice versa? Buzzwords explores politics, speech and meaning, with plenty of linguistic tidbits thrown in for good measure.

http://englishlangsfx.blogspot.co.uk/

EngLangBlog is a blog written for English Language students and teachers. The posts give suggestions for wider reading and direct you to online resources and articles about controversial language issues in the media.

http://david-crystal.blogspot.co.uk/

A blog written by 'The Expert' in Language and Linguistics, David Crystal.

English Literature

Exam Board: AQA

Specification: English Literature Specification B - 7717

Website Link:

https://www.aqa.org.uk/subjects/english/as-and-a-level/english-literature-b-7716-7717

Course Content:

Year 12

Paper 2 – Texts and Genres - Elements of Political and Social Protest Writing 3 hours written examination (open book)

40% of A-Level

75 marks

Study of three texts: one post-2000 prose text; one poetry and one further text, of which one must be written pre-1900

Exam will include an unseen passage.

Section A: One compulsory question on an unseen passage (25 marks)

Section B: One essay question on your set text (Songs of Innocence and of Experience) (25 marks)

Section C: One essay question which connects two set texts (*The Handmaid's Tale* and *The Kite Runner*)

(25 marks)

Summer Term / Summer Independent Study

Non-exam Assessment – Theory and Independence

Study of two texts: one poetry and one prose text, informed by study of the Critical Anthology 20% of A-Level

50 marks

Two essays of 1,250–1,500 words, each responding to a different text and linking to a different aspect of the Critical Anthology

Year 13

Paper 1 – Literary Genres – Option 1A: Aspects of Tragedy

2 hours 30 minutes written examination (closed book) in June of Y13

40% of A Level

75 marks

Study of three texts: one Shakespeare text (*Othello*); a second drama text (*Death of a Salesman*) and one further text (*Tess of the D'Urbervilles*), of which one must be written pre-1900.

Section A: One passage-based question on set Shakespeare text (25 marks)

Section B: One essay question on set Shakespeare text (25 marks)

Section C: Comparing texts: one essay question linking two texts (*Death of a Salesman and Tess of the D'Urbervilles*) (25 marks)

Paper 2 - Texts and Genres - Elements of Political and Social Protest Writing

3 hours written examination (open book)

40% of A-Level

75 marks

REVISION

Provisional Trips:

Theatre productions of set texts

Lecture study day at a university (Warwick or London) – a programme of lectures given by experts designed to enhance your knowledge and understanding of literary genres.

Beginner's Reading List:

Course Textbook: English Literature B A/AS Level for AQA Student Book (Cambridge)

Set Texts:

- The Handmaid's Tale by Margaret Atwood
- The Kite Runner by Khaled Hosseini
- Songs of Innocence and of Experience by William Blake
- Othello by William Shakespeare
- Tess of the D'Urbervilles by Thomas Hardy
- Death of a Salesman by Arthur Miller

Websites to Explore:

https://www.litcharts.com/

This website contains study guides for the set texts, including text overviews, themes, characters, and how to start analysing the key aspects.

https://www.bl.uk/

Head to the 'Discover and Learn' section to explore a range of literature and its contexts.

French

WJEC Eduqas (603/0064/4; 603/0071/1) https://www.eduqas.co.uk/

List of units:

- A-Level paper 1: Listening, reading and translation (50% of A-Level)
- A-Level paper 2: Written response to work, grammar and translation (20% of A-Level)
- A-Level paper 3: Speaking (30% of A-Level)

A-Level papers will be based on content from the following themes:

- Being a young person in French-speaking society
- Understanding the French-speaking world
- Diversity and difference
- France 1940-1950: the occupation and post-war years
- One book and one film will be studied for A-Level paper 2.
- One Independent Research Project (IRP) will be completed for A-Level paper 3.

Subject specific reading list

- Books: No et moi by Delphine de Vigan
- Films: Les Choristes

Subject websites to explore

- conjugemos.com (grammar practice on tenses)
- quizlet.com (vocabulary based)
- franceinfo (app in French to keep up to date with the French current affairs)

Geography

Exam Board and spec codes with website link - Edexcel A Level Geography 9GEO (Papers 01,/02, /03, /04) https://qualifications.pearson.com/en/qualifications/edexcel-a-levels/geography-2016.html

List of units / NEA / CW

- Paper 1 (9GEO/01) Dynamic Landscapes (Physical Geography) Exam 30%
- Paper 2 (9GEO/02) Dynamic Places (Human Geography) Exam 30%
- Paper 3 (9GEO/03) Synoptic/Decision making exam 20%
- NEA (9GEO/04) Fieldwork

Compulsory fieldwork for NEA: Norfolk (Autumn term - year 12) Northumberland (Summer term - year 12)

Optional - International trip (previously Iceland)

Subject website to explore:

https://timeforgeography.co.uk/

Government and Politics AQA

Firstly students should be watching the news regularly. You will be expected to know about key political events in Britain and in the US taking place at this time. Make sure that you download an American news app on your phone to get alerts about what is happening over there as well.

Programmes to watch:

- News BBC 24 News is the best.
- Question Time
- Andrew Marr Politics Show on Sundays
- BBC Parliament Live

YouTube:

Crash course US Politics – 50 clips taking you through the course

TV Series:

- Yes Minister and Prime Minister an old series, but still very relevant
- The Thick of It UK and US versions (Netflix)
- House of Cards US and UK versions (Netflix)
- West Wing again, an old series, but worth watching
- Louis Theroux BBC (Netflix)
- America's Book of Secrets (Netflix)
- Trump, An American Dream (Netflix)
- Dirty Money (Netflix)
- Designated Survivor (Netflix)
- Race for the House (Netflix)
- Knock Down the House (Netflix)
- Get Me Roger Stone (Netflix)
- Reversing Roe (Netflix)
- RBG (Netflix)
- Bobby Kennedy for President (Netflix)
- 13th (Netflix)
- Explained (Netflix)

Health and Social Care

OCR Cambridge Technical Extended Certificate Level 3

Scheme Code: 05831

Unit 1 (CW)

Units, 2,3,4 (Exam)

Unit 10 Unit 13 (CW)

Possible trips: visit to support students in a special school.

Guest Speaker on careers in the NHS.

Core Textbook: Cambridge TechincalS Level 3 Health and Social Care Ferreiro Peteiro et al Hodder

Education

Website:

https://www.ocr.org.uk/qualifications/cambridge-technicals/health-and-social-care/#level-3

History

AQA A Level History – modules 1C – The Tudors and 2Q – The American Dream.

For 1C – To prepare you for this module it would be brilliant if you could spend your time understanding the context of the time, which means understanding the Wars of the Roses.

History Books:

- The House of Beaufort; The Bastard line that captured the crown by Nathan Amin
- Uncrowned Queen; The fateful life of Margaret Beaufort Tudor matriarch by Nicola Tallis
- Red Roses; Blanche of Gaunt to Margaret Beaufort by Amy Licence
- The Wars of the Roses: The Fall of the Plantagenets and the Rise of the Tudors by Dan Jones
- The Brothers York: An English Tragedy by Thomas Penn
- Lancaster and York: The Wars of the Roses by Alison Weir
- Tudor: The Family Story by Leanda de Lisle

Historical Fiction:

- Philippa Gregory The Cousins War White Queen, Kingmaker's Daughter, Lady of the Rivers, Red
 Queen and White Princess.
- Conn Iggulden War of the Roses series

TV Series:

The White Queen and the White Princess – available on Amazon.

Online course:

• <u>Futurelearn.com</u> – free courses – England in the Time of King Richard III and The Tudors course are very good and will focus you over a period of time with different tasks set throughout the week.

For 2Q it is worthwhile reading up about the political system of the USA (which is covered in Government and Politics). It is also worth thinking about purchasing some key texts which will be attached.

YouTube Series':

- 1 BBC Cold War series 24 episodes. Very good for understanding the relationship between the USA and the USSR.
- 2 Eyes on the Prize 18 episodes. Excellent for background on the Civil Rights movement in the USA.
- 3 The History Channel series 'The President's'. This is a short set of biographies about each president. Start with Harry S Truman and finish with Ronald Reagan.

History Books:

- 1 'The Presidents by Stephen Graubard.
- 2 American Caesars by Nigel Hamilton
- 3 Empire of Liberty by David Reynolds
- 4 The Penguin History of the USA by Hugh Brogan

All of these texts are available on Amazon. They are the four texts strongly recommended. Reading is crucial, this is the perfect time to develop subject knowledge ahead of the course.

Law

Board: OCR A Level Law H415

Assessment: 100% examination (3 exams, 2hrs each)

Qualification: https://www.ocr.org.uk/qualifications/as-and-a-level/law-h015-h415-from-2017/

Specification: https://www.ocr.org.uk/Images/315216-specification-accredited-a-level-gce-law-h415.pdf

Units:

LAW01 The legal system and criminal law (100 marks)

Section A the legal system (25 marks) Section B criminal law (75 marks)

LAW02 Law making and the law of tort (100 marks)

Section A law making (25 marks) Section B the law of tort (75 marks)

LAW03 Further law (100marks)

Section A the nature of law (25 marks)
Section B the law of contract (75 marks)

Provisional trips: Hodder A Level Law conference; Galleries of Justice; Court Trips

Subject specific reading list (NOT wider reading)

Course textbook 1:

OCR AS/A Level Law Book 1 Paperback – 30 Jun 2017 by <u>Jacqueline Martin</u> (Author), <u>Nicholas Price</u> (Author)

Paperback: 304 pages

Publisher: Hodder Education (30 Jun. 2017)

Language: English ISBN-10: 1510401768 ISBN-13: 978-1510401761

Additional recommended background reading:

Letters to a Law Student: A guide to studying law at university Paperback – 31 Oct 2017 by Nicholas J

McBride (Author)
Paperback: 392 pages

Publisher: Pearson; 4 edition (31 Oct. 2017)

Language: English ISBN-10: 1292149248 ISBN-13: 978-1292149240

The Secret Barrister: Stories of the Law and How It's Broken Paperback – 4 Apr 2019

by The Secret Barrister (Author)

Paperback: 320 pages

Publisher: Picador; Main Market edition (4 April 2019)

Language: English ISBN-10: 1509841148 ISBN-13: 978-1509841141

Subject websites to explore (no more than 3)

https://www.thelawyerportal.com/blog/top-10-websites-for-law-students/

https://thestudentlawyer.com/

https://www.bbc.co.uk/news (particularly articles relating to law, politics, human rights and technology)

Maths

Edexcel - 9MA0

https://qualifications.pearson.com/en/qualifications/edexcel-a-levels/mathematics-2017.html

Units - Pure, Statistics and Mechanics

Opportunity to enter Senior Maths Challenge

www.mathsgenie.co.uk

www.drfrostmaths.co.uk

https://undergroundmathematics.org/

Further Maths

Edexcel 9FMA0

https://qualifications.pearson.com/en/qualifications/edexcel-a-levels/mathematics-2017.html

Units - Core Pure, Further Statistics and Decision Maths

Opportunity to enter Senior Maths Challenge

www.mathsgenie.co.uk

www.drfrostmaths.co.uk

https://undergroundmathematics.org/

Media Studies

Exam Board and spec codes with website link

WJEC Eduqas (603/1149/6)

http://www.eduqas.co.uk/media/d3fbs2s3/eduqas-a-level-media-studies-spec-from-2017-e-02-03-2020.pdf

Units

Component 1 - Media Products, Industries and Audiences

Section A: Analysing Media Language and Representation

Section B: Understanding Media Industries and Audiences

Component 2 - Media Forms and Products in Depth

Section A - Television in the Global Age

Section B – Magazines: Mainstream and Alternative Media

Section C – Media in the Online Age

Component 3 - Cross-Media Production - Non exam assessment

An individual cross-media production based on two forms in response to a choice of briefs set by WJEC, applying knowledge and understanding of the theoretical framework and digital convergence.

Provisional trips

British Film Institute – study days

Subject specific reading list

Bell, C & Johnson, L (2017), WJEC/Eduqas Media Studies for A Level Year 1 & AS – ISBN- 9781911208105

Gauntlett, D. (2013) Media, Gender and Identity: An Introduction – ISBN- 9780415396615

Bell, C & Johnson, L (2020) WJEC/Eduqas Media Studies for A Level AS and Year 1 Revision Guide – ISBN-9781911208877

Websites

https://www.bfi.org.uk/education-research

https://www.bbc.co.uk/bitesize/subjects/ztnygk7

http://www.eduqas.co.uk/media/fwkpruvm/eduqas-a-level-media-studies-sams-from-2017-eng.pdf

Physical Education

OCR A level PE (H555)

https://www.ocr.org.uk/qualifications/as-and-a-level/physical-education-h155-h555-from-2016/

Units:

Physiological factors affecting performance (2hr exam - 30%)
Psychological factors affecting performance (1hr exam - 20%)
Socio-cultural issues in physical activity and sport (1hr exam - 20%) and Performance in physical education (NEA - 15% practical/coaching performance and 15% analysis of performance for improvement)

Youtube channel: https://www.youtube.com/channel/UCChU8cYZY5xpQ7pBlklu3Xw

A level Physics

Exam board and course code: AQA 7407/8

Units:

It is highly recommended you take A-LEVEL MATHEMATICS with A-level Physics

Topic	Spec. ref.	Course content/Topic content	
Topic 1: Measurements and	3.1.1	Use of SI units and their prefixes	
	3.1.3	Estimation of Physical quantities	
	3.1.2	Limitations of physical measurements	
	3.2.1.1	Constituents of the Atom	
	3.2.1.2	Stable and unstable nuclei	
	3.2.1.3	Particles, antiparticles and photons	
	3.2.1.4	Particle interactions	
Topic 2: Particles and	3.2.1.6	Quarks and Anti-quarks	
Radiation	3.2.1.5	Classification of particles	
	3.2.1.7	Application of conservation laws	
	3.2.2.1	The photoelectric effect	
	3.2.2.2	Collisions of electrons with atoms	
	3.2.2.3	Energy levels and photon emission	
	3.2.2.4	Wave-particle duality	
Topic 3 – Waves	3.3.1.1	Progressive waves	
	3.3.1.2	Longitudinal and transverse waves	
	3.3.1.3	Principle of superposition of waves and formation of stationary waves (Required Practical 1)	
	3.3.2.1	Interference	
	3.3.2.2	Diffraction	
	3.3.2.3	Refraction at a plane surface (Required Practical 2)	
Topic 4: Mechanics and Materials	3.4.1.1	Scalars and vectors	
	3.4.1.2	Moments	
	3.4.1.3	Motion along a straight line (Required Practical 3)	
	3.4.1.4	Projectile motion	
	3.4.1.5	Newton's Laws of Motion	
	3.4.1.6	Momentum	
	3.4.1.7	Work, energy and power	
	3.4.1.8	Conservation of energy	
	3.4.2.1	Bulk properties of solids	
	3.4.2.2	The Young modulus (Required Practical 4)	
Topic 5 – Electricity	3.5.1.1	Basics of electricity	
	3.5.1.2	Current-voltage characteristics	
	3.5.1.3	Resistivity (Required Practical 5)	
	3.5.1.4	Circuits	
	3.5.1.5	Potential divider	
	3.5.1.6	Electromotive force and internal resistance (Required Practical 6)	

Subject specific reading:

CGP Head Start to A Level Physics

https://www.cgpbooks.co.uk/secondary-books/as-and-a-level/science/physics/pbr71-head-start-to-a-level-physics

A book designed to help with the significant step up from GCSE to A level.

CGP Essential Maths Skills for Physics

https://www.cgpbooks.co.uk/secondary-books/as-and-a-level/science/physics/pmr71-a-level-physics-essential-maths-skills

CGP Revision guides and workbooks.

Revision Guide & Workbook - https://www.cgpbooks.co.uk/secondary-books/as-and-a-level/science/
physics/parqb71-new-complete-revision-and-exam-practice

A useful set of learning aids.

Course Related Websites:

Maths and Physics Tutor - https://www.physicsandmathstutor.com/
Flipped Around Physics - https://www.flippedaroundphysics.com/
Isaac Physics - https://www.flippedaroundphysics.com/

Youtube Websites to subscribe to:

- Dr Physics A
- Crash Course Physics
- Science Shorts
- Khan Academy

PSYCHOLOGY

Exam Board and spec codes with website link: AQA SPEC 7182 A LEVEL https://www.aqa.org.uk/subjects/psychology-7181-7182 3 exams (2 hours each)

Subject content

Compulsory content

1 Social influence

https://www.aqa.org.uk/subjects/psychology/as-and-a-level/psychology-7181-7182/subject-content-as/introductory-topics-in-psychology#Social Influence 1 1 1

* 2 Memory

https://www.aqa.org.uk/subjects/psychology/as-and-a-level/psychology-7181-7182/subject-content-as/introductory-topics-in-psychology#Memory 1 1 2

* 3 Attachment

https://www.aqa.org.uk/subjects/psychology/as-and-a-level/psychology-7181-7182/subject-content-as/introductory-topics-in-psychology#Attachment 1 1 3

* 4 Psychopathology

https://www.aqa.org.uk/subjects/psychology/as-and-a-level/psychology-7181-7182/subject-content-as/psychology-in-context#Psychopathology 1 1 4

* 5 Approaches in Psychology

https://www.aqa.org.uk/subjects/psychology/as-and-a-level/psychology-7181-7182/subject-content-a-level/psychology-in-context#Approaches in Psychology 1 2 1

* 6 Biopsychology

https://www.aqa.org.uk/subjects/psychology/as-and-a-level/psychology-7181-7182/subject-content-a-level/psychology-in-context#Biopsychology 1 2 2

* 7 Research methods

https://www.aqa.org.uk/subjects/psychology/as-and-a-level/psychology-7181-7182/subject-content-a-level/psychology-in-context#Research Methods 1 2 3

* 8 Issues and debates in Psychology

https://www.aqa.org.uk/subjects/psychology/as-and-a-level/psychology-7181-7182/subject-content-a-level/issues-and-options-in-psychology#Issues and Debates in Psychology 1 3 1

Optional ONE TOPIC WILL BE ASSESSED FROM EACH OPTIONAL SECTION

Option 1

* 9 Relationships

https://www.aqa.org.uk/subjects/psychology/as-and-a-level/psychology-7181-7182/subject-content-a-level/issues-and-options-in-psychology#Relationships 1 3 2

* 10 Gender

https://www.aqa.org.uk/subjects/psychology/as-and-a-level/psychology-7181-7182/subject-content-a-level/issues-and-options-in-psychology#Gender 1 3 3

* 11 Cognition and development

https://www.aqa.org.uk/subjects/psychology/as-and-a-level/psychology-7181-7182/subject-content-a-level/issues-and-options-in-psychology#Cognition and Development 1 3 4

Option 2

* 12 Schizophrenia

https://www.aqa.org.uk/subjects/psychology/as-and-a-level/psychology-7181-7182/subject-content-a-level/issues-and-options-in-psychology#Schizophrenia 1 3 5

* 13 Eating behaviour

https://www.aqa.org.uk/subjects/psychology/as-and-a-level/psychology-7181-7182/subject-content-a-level/issues-and-options-in-psychology#Eating Behaviour 1 3 6

* 14 Stress

https://www.aqa.org.uk/subjects/psychology/as-and-a-level/psychology-7181-7182/subject-content-a-level/issues-and-options-in-psychology#Stress 1 3 7

Option 3

* 15 Aggression

https://www.aqa.org.uk/subjects/psychology/as-and-a-level/psychology-7181-7182/subject-content-a-level/issues-and-options-in-psychology#Aggression 1 3 8

* 16 Forensic Psychology

https://www.aqa.org.uk/subjects/psychology/as-and-a-level/psychology-7181-7182/subject-content-a-level/issues-and-options-in-psychology#Forensic Psychology 1 3 9

* 17 Addiction

https://www.aqa.org.uk/subjects/psychology/as-and-a-level/psychology-7181-7182/subject-content-a-level/issues-and-options-in-psychology#Addiction 1 3 10

Provisional trips - fieldwork / Iceland/ America / theatre /lectures / seminars etc

Subject specific reading: The Complete Companion: AQA Psychology Year 1 and AS Student Book (Complete Companion Psychology) 4th Edition by Cardwell and Flanagan ISBN-13: 978-0198338642, ISBN-10: 0198338643

Subject websites to explore

- https://www.youtube.com/results?search_query=tutor2u+psychology
- https://www.simplypsychology.org/a-level-psychology.html
- https://revisionworld.com/a2-level-level-revision/psychology-level-revision

Sociology

AQA GCE Sociology

Scheme Code: 7192

Units:

- Education With Methods in Context
- Families and Households
- Beliefs in Society
- Crime and Deviance
- Theory and Methods

Provisional trips: visit to Crimiknowledge conference, Revision Conference

Core Textbooks: AQA Sociology Year 1, AQA Sociology Year 2 Robb Webb and Keith Trobe -Napier Press

Websites:

https://www.aqa.org.uk/subjects/sociology/as-and-a-level www.revisesociology.com