

A Level Advanced Information

Art

100% coursework. The deadline for coursework is Tuesday 19th of April. There is no exam this year.

Art Photography

For summer 2022 OCR have confirmed that students taking Photography A Level Art and Design will **only be assessed on** the personal investigation component.

In 2022, students only need to complete Component 1 – Personal investigation. **OCR have removed Component 2** – Externally set task.

Component 01: Personal investigation consists of two elements:

(i) a portfolio of practical work which is, made up of two projects. Unit 5 Personal investigation and unit 6 Transcription project.

(ii) a related study: an extended response of a guided minimum of 1000 words.

Total marks: 120

<https://www.ocr.org.uk/qualifications/as-and-a-level/art-and-design-h200-h600-from-2015/changes-for-2022/>

Biology

Paper 1 – 9BN0/01

- Topic 6 Response to infection (6.7–6.9, 6.12–6.13)
- Topic 4 Biodiversity (4.1–4.6)
- Topic 5 Photosynthesis (5.5–5.9, including understanding of Core Practical 11)
- Topic 6 Pathogens and disease (6.2, 6.5–6.6, 6.11, 6.14–6.15, including understanding of Core Practical 15)
- Topic 2 Protein structure and enzymes (2.9–2.10, including understanding of Core Practical 4)
- Topic 3 Cell ultrastructure (3.1–3.5, 3.13)
- Topic 5 Ecology and energy transfers (5.1–5.4, 5.10–5.11, 5.21, including understanding of Core Practical 10)
- Topic 5 Climate change (5.12–5.16, 5.20, including understanding of Core Practicals 12 & 13)
- Topic 2 DNA and the genetic code (2.5–2.8, 2.11–2.12)

Paper 2 – 9BN0/02

- Topic 8 Nervous and hormonal control (8.1–8.7)
- Topic 7 Exercise and feedback mechanisms (7.11–7.16)
- Topic 1 Causes and development of CVD (1.5–1.7, 1.15, 1.18)
- Topic 3 Cell ultrastructure (3.1–3.5, 3.13)
- Topic 7 Control of heart rate and ventilation rate (7.8–7.9, including understanding of Core Practical 17)
- Topic 8 Brain and learning (8.8–8.15)
- Topic 3 Gametes, fertilisation and stem cells (3.6–3.7, 3.11)
- Topic 2 DNA and the genetic code (2.5–2.8, 2.11–2.12)
- Topic 2 Inheritance and genetic screening (2.13–2.16)

Paper 3 – 9BN0/03

- Topic 8 Brain and learning (8.8–8.15 including understanding of Core Practical 18)
- Topic 5 Ecology and energy transfers (5.1–5.4, 5.10–5.11, 5.21, including

understanding of Core Practical 10)

- Topic 8 Nervous and hormonal control (8.1–8.7)
- Topic 6 Response to infection (6.7–6.9, 6.12–6.13)
- Topic 5 Photosynthesis (5.5–5.9, including understanding of Core Practical 11)
- Topic 2 Protein structure and enzymes (2.9–2.10, including understanding of Core Practical 4)
- Topic 4 Drug testing protocols and assessing antimicrobial agent (4.13–4.14, including an understanding of Core Practical 9)
- Topic 7 Respiration (7.3–7.7, including understanding of Core Practical 16)

Business

Paper 1 (9BS0/01)

1.1 Meeting customer needs

1.1.1 The market

1.2 Market

1.2.2 Supply

1.2.3 Markets

1.3 Marketing mix and strategy

1.3.4 Distribution

1.5 Entrepreneurs and leaders

1.5.2 Entrepreneurial motives and characteristics

1.5.4 Forms of business

4.1 Globalisation

4.1.2 International trade and business growth

4.1.3 Factors contributing to increased globalisation

4.1.5 Trading blocs

4.2 Global markets and business expansion

4.2.5 Global competitiveness

4.4 Global industries and companies (multinational corporations)

4.4.1 The impact of MNCs

Paper 2 (9BS0/02)

2.2 Financial planning

2.2.3 Break-even

2.2.4 Budgets

2.3 Managing finance

2.3.1 Profit

2.3.2 Liquidity

2.4 Resource management

2.4.2 Capacity utilisation

3.1 Business objectives and strategy

3.1.3 SWOT analysis

3.1.4 Impact of external influences

3.3 Decision-making techniques

3.3.1 Quantitative sales forecasting

3.5 Assessing competitiveness 3.5.2 Ratio analysis

Paper 3 (9BS0/03)

1.3 Marketing mix and strategy

1.3.3 Pricing strategies

1.4 Managing people

1.4.2 Recruitment, selection and training

2.4 Resource management

2.4.2 Capacity utilisation

2.5 External influences

2.5.1 Economic influences

2.5.2 Legislation

2.5.3 The competitive environment

3.3 Decision-making techniques

3.3.2 Investment appraisal

3.4 Influences on business decisions

3.4.3 Shareholders versus stakeholders

4.1 Globalisation

4.1.4 Protectionism

4.2 Global markets and business expansion

4.2.3 Assessment of a country as a production location

Chemistry

H432 GCE A Level Chemistry A

H432/01 Periodic table, elements and physical chemistry:

- 2.1.3 Amount of substance (includes practical skills)
- 5.3.1 Transition elements
- 5.1.3 Acids, bases and buffers (includes practical skills)
- 3.1.1 Periodicity
- 3.2.1 Enthalpy changes (includes practical skills)
- 5.1.1 How fast?
- 5.2.2 Enthalpy and entropy
- 2.1.4 Acids (includes practical skills)

H432/02 Synthesis and analytical techniques:

- 2.1.3 Amount of substance (includes practical skills)
- 4.1.3 Alkenes
- 6.3.2 Spectroscopy
- 6.1.1 Aromatic compounds
- 6.2.5 Organic synthesis (includes practical skills)
- 6.1.2 Carbonyl compounds (includes practical skills)
- 4.1.1 Basic concepts of organic chemistry
- 4.2.4 Analytical techniques
- 6.2.3 Polyesters and polyamides

H432/03 Unified chemistry:

- 2.1.3 Amount of substance (includes practical skills)
- 5.2.3 Redox and electrode potentials (includes practical skills)
- 3.2.3 Chemical equilibrium (includes practical skills)
- 4.1.1 Basic concepts of organic chemistry
- 4.2.3 Organic synthesis (includes practical skills)
- 5.1.3 Acids, bases and buffers
- 5.2.1 Lattice enthalpy (includes practical skills)
- 6.2.2 Amino acids, amides and chirality

- 6.3.2 Spectroscopy

Computer Science

Students will still complete two exam papers as was always intended. These are called Component 1 - Computer Systems and Component 2 – Algorithms and Programming. Candidates are also expected to submit their full programming project (Component 3) which equates to 20% of their final A-Level grade.

The exam board have released a reduced specification for Component 1 – Computer Systems. The topics listed on the reduced specification are suggested key areas of focus for revision and final preparation. The exam board still advise each centre to aim to cover all specification content in teaching and learning and we are on track to do so as a department. The exam board have also stated that some questions may be answerable using more than one area of specified content, including areas that are not listed on the reduced specification. The reduced specification contains the name of topics and the sub-parts within those topics that are likely to be assessed. The reduced specification will be shared with students and practice papers that relate to the topics listed will be generated by our department and shared with students. There has been no reduction in the specification for the component 2 examination as the content is mostly problem solving and writing algorithms rather than knowledge recall.

As a department, we will continue to deliver teaching and learning lessons up until Easter to ensure the entire specification is covered. The end of the Spring term is also the deadline for the programming project which will be marked and sent to the exam board for external moderation. From that point onwards, lessons will be more revision based and will focus primarily on areas from the reduced specification of component 1 and practicing problem solving to prepare students for the component 2 examination.

Drama

Component 3 written exam

Section A Live theatre, can now be assessed using digital theatre performances, meaning students have access to the performance as many times as they wish to watch it. Performances can be accessed using the following website and their school email to log in.

[Home | Digital Theatre+ \(digitaltheatreplus.com\)](https://digitaltheatreplus.com)

Section B – questions will need to be answered using the following extract -

Page 49 – *A streetlight is lit outside* to Page 59 – *the scene lights for episode 8*

Section C – questions will need to be answered using the following extract

Page 10 – Faustus, *'How am I gutted?'* to Page 20 – Robin, *'I'll serve him, that's flat.'*

Economics

The subject will still have 3 papers. Paper 1 – Micro Economics, Paper 2 – Macro Economics, Paper 3 – Synoptic paper.

Some of the content for Paper 1 has been removed, but this is being tested in Paper 3 (likely through multiple choice questions)

Paper 2 - some content has been removed, but this is being tested in paper 3 (again likely through multiple choice questions)

Paper 3 – there will be MCQs and data response questions.

What has been given to your son / daughter to support their understanding of the Economics AQA Advance information?

- A copy of the advanced information directly from the exam board via Teams
- A summarised copy of this list clearly showing which topics will be tested and in which paper (printed and electronic version on Teams)

Students have been advised to review their specification to review their understanding of this advanced list. This will be done with me in lesson later this term.

Topics yet to be taught at all (that are listed in the Advanced Information)

- MICRO Economics - Labour Markets
- MACRO Economics - Globalisation, The Balance of Payments, Exchange Rates, Trade and Development.

Students have been and will continue to complete exam papers in class but will also be expected to review exam papers and mark schemes outside of lessons.

English Literature

Aspects of Comedy = Twelfth Night extract will come from Act 1

Film Studies

Students – please read alongside p14 of the specification on Teams to see which specialist subject areas have been omitted for each question. Below is the list of what has been kept.

Component 1 and component 2 – written exams:

Component 1 – Varieties of film and filmmaking:

Section A – Hollywood 1930-1990 (comparative study) • *Representation – Ethnicity and Gender* • *Auteur*

Section B – American film since 2005 (two-film study) • *Critical Approaches to Ideology*

Section C – British film since 1995 (two-film study) • *Performance and mise-en-scène* • *Narrative*

Component 2 – Global filmmaking perspectives:

Section A – Global film (two-film study) • *Representation - Gender* • *Political contexts* • *Social contexts*

Section B – Documentary film • *The key elements of film form* • *Filmmakers' theories*

Section C – Film movements – Silent cinema • *Social contexts* • *Critical Debate: The realist and the expressive*

Section D – Film movements – Experimental film (1960-2000) • *The key elements of film form* • *Auteur*

Component 3: coursework:

Coursework deadlines:

Screenplay – 11.2.22

Digital storyboards / short films – 4.3.22

Evaluative analysis – 18.3.22

Coursework adaptations for 2022: The running time for short films has been reduced by one minute. Candidates are now permitted to submit a film between 3 and 5 minutes

Screenplay plus storyboard No changes to the screenplay brief. The storyboard may now be hand-drawn or digitally photographed. Candidates are permitted to use a maximum of 5 found images. Candidates are encouraged to use the template provided by Eduqas which is on Teams

Evaluative analysis No changes

French

Topic content has been reduced to:

Paper 1: Listening, Reading and Writing

3.1.1 Aspects of French-speaking society: current trends

The 'cyber-society' (La « cyber-société ») -

Comment la technologie facilite la vie quotidienne

Quels dangers la « cyber-société » pose-t-elle ?

The place of voluntary work (Le rôle du bénévolat)

Le bénévolat – quelle valeur pour ceux qui sont aidés ?

Le bénévolat – quelle valeur pour ceux qui aident ?

3.1.2 Aspects of French-speaking society: current issues

Positive features of a diverse society (Les aspects positifs d'une société diverse)

L'enrichissement dû à la mixité ethnique

Life for the marginalised (Quelle vie pour les marginalisés ?)

Quelle aide pour les marginalisés ?

How criminals are treated (Comment on traite les criminels)

Quelles attitudes envers la criminalité ?

3.2.1 Artistic culture in the French-speaking world

A culture proud of its heritage (Une culture fière de son patrimoine)

Le patrimoine sur le plan national, régional et local

Cinema: the 7th art form

(Cinéma : le septième art) Pourquoi le septième art ?

3.2.2 Aspects of political life in the French-speaking world Demonstrations, strikes – who holds the power?

(Manifestations, grèves – à qui le pouvoir ?) Le pouvoir des syndicats

Politics and immigration (La politique et l'immigration)

Solutions politiques à la question de l'immigration

Paper 2 – Essay paper on La Haine and Kiffe Kiffe Demain – NO CHANGES

Paper 3 – Speaking (photo card and research project)

3.1.1 Aspects of French-speaking society: current trends

The changing nature of family (La famille en voie de changement)

La vie de couple – nouvelles tendances

The 'cyber-society' (La « cyber-société »)

Quels dangers la « cyber-société » pose-t-elle ?

The place of voluntary work (Le rôle du bénévolat)

Qui sont et que font les bénévoles ?

3.1.2 Aspects of French-speaking society: current issues

Positive features of a diverse society (Les aspects positifs d'une société diverse)

L'enrichissement dû à la mixité ethnique

Life for the marginalised (Quelle vie pour les marginalisés ?)

Quelle aide pour les marginalisés ?

How criminals are treated (Comment on traite les criminels)

Quelles attitudes envers la criminalité ?

3.2.1 Artistic culture in the French-speaking world A culture proud of its heritage (Une culture fière de son patrimoine)

Le patrimoine sur le plan national, régional et local

Contemporary francophone music (La musique francophone contemporaine)

Qui écoute et apprécie cette musique ?

Cinema: the 7th art form (Cinéma : le septième art)

Pourquoi le septième art ?

3.2.2 Aspects of political life in the French-speaking world Teenagers, the right to vote and political commitment (Les ados, le droit de vote et l'engagement politique)

Pour ou contre le droit de vote ?

Demonstrations, strikes – who holds the power? (Manifestations, grèves – à qui le pouvoir ?)

Le pouvoir des syndicats

Politics and immigration (La politique et l'immigration)

L'immigration et les partis politiques

Geography

Topic 1: Tectonic processes and hazards

Enquiry question 2: Why do some tectonic hazards develop into disasters? 1.4 c 1.6 a b c

Enquiry question 3: How successful is the management of tectonic hazards and disasters? 1.8 a b 1.9 a b c

Topic 2: Landscape Systems, Processes and Change

Option 2B: Coastal Landscapes and Change

Enquiry question 2: How do characteristic coastal landforms contribute to coastal landscapes? 2B.4 a b c 2B.5 a b c 2B.6 a b c

Enquiry question 3: How do coastal erosion and sea level change alter the physical characteristics of coastlines and increase risks? 2B.7 a b c 2B.9 a b c

Enquiry question 4: How can coastlines be managed to meet the needs of all players? 2B.10 a b c

Area of study 2: Dynamic Places Topic 3: Globalisation

Enquiry question 1: What are the causes of globalisation and why has it accelerated in recent decades? 3.1 a b c 3.2 a b c

Topic 4: Shaping Places

Enquiry question 1: How do population structures vary? An in-depth study of the local place in which you live or study and one contrasting place. 4B.1 c 4B.2 a b c 4B.3 a c 4B.4 b c 4B.5 a b c

Enquiry question 3: Why are there demographic and cultural tensions in diverse places? 4B.7 a b c 4B.9 a

Enquiry question 4: How successfully are cultural and demographic issues managed? 4B.10 b 4B.11 b c 4B.12 b c

Topic 5: The Water Cycle and Water Insecurity

Enquiry question 2: What factors influence the hydrological system over short- and long-term timescales? 5.4 a b c 5.5 a b c 5.6 a b

Topic 6: The Carbon Cycle and Energy Security

Enquiry question 1: How does the carbon cycle operate to maintain planetary health? 6.2 a 6.3 b

Enquiry question 2: What are the consequences for people and the environment of our increasing demand for energy? 6.4 a b c 6.6 a

Area of study 4: Human Systems and Geopolitics Topic 7: Superpowers

Enquiry question 2: What are the impacts of superpowers on the global economy, political systems and the physical environment? 7.6 a c 7.7.a c 7.8 c

Topic 8: Global Development and Connections

Option 8B: Migration, Identity and Sovereignty

Enquiry question 1: What are the impacts of globalisation on international migration? 8B.1 b c 8B.3 a

Enquiry question 2: How are nation states defined and how have they evolved in a globalising world? 8B.4 a b c

Enquiry question 3: What are the impacts of global organisations on managing global issues and conflicts? 8B.7 a 8B.8 a b c 8B.9 a b c

Additional content to be covered for Paper 3 Synoptic Investigation

Topic 1: Tectonic processes and hazards

Enquiry question 2: Why do some tectonic hazards develop into disasters? 1.4 a b

Enquiry question 3: How successful is the management of tectonic hazards and disasters? 1.7 c

Topic 3: Globalisation

Enquiry question 1: What are the causes of globalisation and why has it accelerated in recent decades? 3.3 c

Enquiry question 2: What are the impacts of globalisation for countries, different groups of people and cultures and the physical environment? 3.4 b 3.5 b 3.6 b

Enquiry question 3: What are the consequences of globalisation for global development and the physical environment and how should different players respond to its challenges? 3.7 a b c 3.8 c

Topic 5: The Water Cycle and Water Insecurity

Enquiry question 2: What factors influence the hydrological system over short- and long-term timescales? 5.6 c

Enquiry question 3: How does water insecurity occur and why is it becoming such a global issue for the 21st century? 5.8 c

Topic 6: The Carbon Cycle and Energy Security

Enquiry question 3: How are the carbon and water cycles linked to the global climate system? 6.8 c 6.9 a b c

Topic 7: Superpowers

Enquiry question 2: What are the impacts of superpowers on the global economy, political systems and the physical environment? 7.4 a b

History

Both components have had content taken from the specification. However, in most cases, that content needs to be revised in order to provide greater historical context of the time period studied. Students have been provided with information related to this in class.

Candidates will still complete all question types across both examination papers.

Tudors: [Advanced information June 2022 - A-level History \(7042\), 1C The Tudors: England, 1485-1603 \(aqa.org.uk\)](#)

Russia: [Advanced information June 2022 - A-level History \(7042\), 2N Revolution and dictatorship: Russia, 1917-1953 \(aqa.org.uk\)](#)

Music

Component 3 – Listening exam

The exam paper will contain all the questions as seen in other past papers. There is no information regarding the topic for the essay and you still need general understanding for each AoS and the key terminology.

Area of study C – Musicals questions

- Questions will focus on Richard Rodgers and Leonard Bernstein
- You will still need an understanding more generally about musicals and key terminology

Area of Study E – Into the 20th Century

- ‘Three Nocturnes no 1 from Nuages’ by Debussy will be the set work examined
- General understanding of other genres in the 20th century

Area of Study 1 – Western Classical Music

- Symphony No 104 by Haydn MOVEMENT 4
- Rest of the questions as normal

Politics

- For each paper the list shows the **major focus** of the content of the exam.
- There is **no Advance Information** provided for questions relating to the **non-core ideologies** (paper 3 - feminism).
- Students and teachers should consider how to **focus their revision of other parts of the specification**, for example to review whether other topics may provide knowledge which helps your understanding in relation to the areas being tested in 2022. AQA *have previously* stated that the advanced information list **only covers high tariff questions** (25-mark questions) so 9-mark questions *could cover topics not listed below*.
- Due to the synoptic nature of the assessments the information provided below is to **assist in providing the main content focus**. You will need to revise topics to aid synoptic assessment linked to the topics listed below.
- Topics not included on the list may still be assessed on lower tariff or synoptic questions.

Paper 1:

3.1.1.1: The nature and sources of the British Constitution

Nature and sources of the British constitution.

3.1.1.2: The structure and role of Parliament

Scrutiny of the executive and how effective scrutiny of the executive is in practice.

3.1.1.4: The judiciary

The role of the Supreme Court and its impact on government, legislature and policy process.

3.1.2.1: Democracy and participation

The nature of democracy.

3.1.2.2: Elections and referendums

The influence of the media on the outcomes of elections.

3.1.2.3: Political Parties

Party structures and functions of Conservative, Labour, and Liberal Democrat parties.

Paper 2

3.2.1.3: The executive branch of government: President

Constraints on President's ability to exercise those powers.

3.2.1.5: The electoral process and direct democracy

Voting behaviour and the main variables affecting the way people vote in the USA.

3.2.1.7: Pressure groups

Debates concerning the power of pressure groups in the USA.

3.2.2: Comparative Politics

Theoretical approaches – rational.

3.2.2.1: Constitutional arrangements

Similarities and differences between the devolution model in the UK and the federal model in the USA.

3.2.2.6: Civil Rights

Protection of civil rights key similarities and differences regarding the protection of civil rights in the UK and the USA.

Paper 3

Section B focuses on the political ideology of **Conservatism**.

Section A (9 mark question section) WILL assess **all core ideologies** (Liberalism, Socialism & Conservatism)

Section C (essay section) **WILL assess Feminism**.

Physics

General format of papers unchanged, but topics that the questions will be based on will be as follows:

Paper 1 7408/1

- 3.2.1 Particles
- 3.4.1 Force, energy and momentum
- 3.5.1 Current electricity
- 3.6.1 Periodic motion
- 3.2.2 Electromagnetic radiation and quantum phenomena

Paper 2 7408/2

- 3.6.2 Thermal physics
- 3.8.1 Radioactivity
- 3.7.5 Magnetic fields
- 3.7.2 Gravitational fields

Paper 3 7408/3A + 7408/3BD (Turning points in physics route)

- 3.6.2 Thermal physics (including Required Practical 8)
- 3.5.1 Current electricity (including Required Practical 5)
- 4.2 Materials (including Required Practical 4)
- 3.12.1.4 Principle of Millikan's determination of the electronic charge, e
- 3.12.2.2 Significance of Young's double slits experiment
- 3.12.3.5 Mass and energy

There are no 'explicitly excluded topics' as those not listed above "may be tested in lower mark questions", which could be interpreted as multiple choice section will be whole syllabus.

Physical Education

The format/structure of the papers remains unchanged, the content from each section is the bullet point, with reference within that section with the content listed underneath it.

All content may still be referred to and will be needed for the EAPI.

H555/01 Physiological factors affecting performance

1.1 Applied anatomy and physiology.

1.1.a Skeletal and muscular systems

- Joints, movements and muscles
 - Lower body
- Analysis of movement

1.1.b Cardiovascular and respiratory systems.

- Cardiovascular system during exercise of differing intensities and during recovery
- Respiratory system during exercise of differing intensities and during recovery

1.1.c Energy for exercise

- ATP resynthesis during exercise of differing intensities and durations

1.1.d Environmental effects on body systems

- Exercise at altitude

1.2 Exercise physiology

1.2.a Diet and nutrition and their effect on physical activity and performance

- Ergogenic aids

1.2.b Preparation and training methods in relation to improving and maintaining physical activity and performance

- Strength training
- Flexibility training

1.2.c Injury prevention and the rehabilitation of injury

- Rehabilitation of injury

1.3 Biomechanics

1.3.a Biomechanical principles, levers and the use of technology

- Biomechanical principles

1.3.b Linear motion, angular motion, fluid mechanics and projectile motion

- Linear motion
- Angular motion

H555/02 Psychological factors affecting performance

2.1 Skill acquisition

- Principles and theories of learning movement skills
- Guidance
- Feedback
- Memory models

2.2 Sports psychology

- Individual differences
- Personality
- Motivation
- Arousal
- Group and team dynamics in sport
- Attribution
- Weiner's model of attribution
- Confidence and self-efficacy in sports performance
- Leadership in sport

H555/03 Socio-cultural issues in physical activity and sport

3.1 Sport and society

- Emergence and evolution of modern sport
- Global sporting events

3.2 Contemporary issues in physical activity and sport

- Ethics and deviance in sport
 - Drugs and doping in sport
- Commercialisation and media
- Modern technology in sport – it's impact on elite level sport, participation, fair outcomes and entertainment
 - Elite performance
 - General participation

Psychology

In Psychology, students will sit 3 x 2-hour exam papers. Advanced information has been supplied by AQA which lists “examined components” to help students structure their revision. A full list of “examined components” for each paper has been shared with students on Arbor. For each paper, the list of “examined content” shows the major focus of the content of the exam. It is not permitted to take this advance information into the exam.

Paper 1 (2 hours) will assess the following topics:

- Social Influence
- Memory
- Attachment
- Psychopathology

Paper 2 (2 hours) will assess the following topics:

- Approaches in Psychology
- Biopsychology
- Research Methods (**Due to the integrated nature of the Research Methods content, students are required to revise all Research Methods content listed in the original specification. The Research Methods topic is integral to psychological research and theory, and Research Methods questions may also appear in Papers 1 & 3.**)

Paper 3 (2 hours) will assess the following topics:

- Issues & Debates in Psychology
- Schizophrenia
- Gender
- Forensic Psychology

RE

Advance information has been provided for all components; it identified topics that are the major focus of the content in the exam. The format of the exam papers will remain unchanged; for each exam, you will need to answer 3 essay questions from a choice of 4. Some questions may be answerable using more than one area of specified content, including ones not listed. Your responses to individual questions may draw upon other areas of the specification content where relevant, and credit will be given for this where appropriate. You may wish to review other topics (not listed here) that may provide knowledge and help with understanding the topics that are listed. The topics are shown in the order in which they appear in the specification, not the order in which the questions will appear on the exam paper.

Philosophy of Religion

- Philosophical Language and Thought: Ancient philosophical influences
- The Existence of God: Arguments based on observation
- God and the world: The problem of evil
- Theological and Philosophical Developments: The nature or attributes of God

Religion and Ethics

- Applied Ethics: Euthanasia
- Ethical Language: Meta-ethics (meta-ethics theories)
- Significant Ideas: Conscience
- Developments in Ethical Thought: Sexual ethics

Developments in Christian Thought

- Foundations: Knowledge of God's existence
- Foundations: The person of Jesus Christ
- Living: Christian moral action
- Society: Gender and theology

Sociology

- For each paper, the list shows the major focus of the content of the high tariff questions, worth 20 marks or more, with the exception of questions where Methods in Context is assessed.
- Advance information is not provided on Methods in Context.
- Content not explicitly given in the list may appear in lower tariff questions or via questions which require students to draw out links with other content studied in the specification.

The major focus of the June 2022 exam will be as follows.

Paper 1: Education with Theory and Methods (7192/1)

The Integral elements and Core themes as listed in the specification retain their underlying importance for all topics.

4.1.1. Education

- the significance of educational policies, including problems of selection, marketisation and privatisation, and policies to achieve greater equality of opportunity or outcome, for an understanding of the structure, role, impact and experience of and access to education; the impact of globalisation on educational policy.

Paper 2: Topics in Sociology (7192/2)

The Integral elements and Core themes as listed in the specification retain their underlying importance for all topics.

4.2.2 Families and Households

- the relationship of the family to the social structure and social change, with particular reference to the economy and to state policies.

4.2.5 Beliefs in Society

- ideology, science and religion, including both Christian and non-Christian religious traditions.

Paper 3: Crime and Deviance with Theory and Methods (7192/3)

The Integral elements and Core themes as listed in the specification retain their underlying importance for all topics.

4.3.1 Crime and Deviance

- crime, deviance, social order and social control.

4.3.2 Theory and Methods

- consensus, conflict, structural and social action theories.

A Level Maths

ADVANCE INFO A'Level MATHS

For specifications with synoptic assessments, topics not explicitly given in the advance information may appear, e.g. where students are asked to bring together knowledge, skills and understanding from across the specification.

Paper 9MA0/01 Pure Mathematics 1

- Formal proof
- The factor theorem
- Understand and use graphs of functions
- Use intersection points of graphs to solve equations
- Transformations of a curve
- Use of functions in modelling
- The coordinate geometry of the circle
- Arithmetic sequences and series
- Differentiation: stationary points, minima. Radian measure
- Trigonometric identities and equations
- Trigonometric functions and identities: area under a curve
- Exponentials: Solving equations, rate of change
- Maximum point; iteration
- Integration as a limit
- Methods of integration
- Use vectors to solve a problem in pure mathematics

Paper 9MA0/02 Pure Mathematics 2

- Formal proof
- The modulus of a linear function
- Understand and use function notation
- The binomial expansion
- Sequence generated by an iterative formula
- Geometric sequences and series; trigonometric identities

- Use of a trigonometric function
- The function a^x and its graph
- Differentiation; roots of equations
- Differentiation from first principles
- Find maximum and minimum points; Newton- Raphson method
- Differentiation of curves defined parametrically
- Area under a curve
- Solution of a first order differential equation; partial fractions
- The trapezium rule
- Use vectors to solve problems in pure mathematics

Paper 9MA0/31 Statistics

- Regression lines (change of variable); hypothesis test for correlation
- Measures of central tendency and variation
- Probability and Venn diagrams
- Discrete probability distributions; normal approximation
- Normal distribution
- Hypothesis testing

Paper 9MA0/32 Mechanics

- Constant acceleration in 2-D and Newton's 2nd law in 2-D using vectors
- Variable acceleration, language of kinematics
- Projectiles, constant acceleration
- Dynamics, resolving forces, friction, equilibrium
- Statics, moments, resolving forces, friction

ADVANCE INFO A'Level FURTHER MATHS

Paper 9FM0/01 Further Mathematics Core Pure 1

- Complex numbers: Multiplication and division, conjugates
- Complex numbers: Roots of polynomial equations, Argand diagram
- De Moivre's theorem; Volumes of revolution
- Matrices: Inverse of a 3×3 matrix, singular and non-singular
- Method of differences for summation of finite series

- Improper integrals; Hyperbolic functions
- Integration; Partial fractions
- Inverse hyperbolic functions
- Solution of first order differential equations
- Solution of second order non-homogenous differential equations

Paper 9FM0/02 Further Mathematics Core Pure 2

- Proof by induction; Use matrices to represent linear transformations in 2-D
- Complex numbers: Multiplication and division
- Complex numbers; Addition and subtraction; simple loci in the Argand diagram
- Matrices: Solution of three simultaneous equations
- The relationship between roots and coefficients of polynomial equations
- Differentiate inverse trigonometric functions
- Vectors; Equation of a straight line, scalar product, perpendicular distance from a point to a plane
- Polar coordinates: Area enclosed by a curve, tangents
- Differentiation of hyperbolic functions; Maclaurin series

Paper 9FM0/3B Further Statistics 1

- Discrete probability distributions (mean and variance)
- Geometric and negative binomial distributions
- Hypothesis tests; Poisson approximation
- Central Limit Theorem
- Chi squared test (goodness of fit, binomial)
- Probability generating functions
- Type I and Type II errors

Paper 9FM0/3D Decision Mathematics 1

- Bin packing
- Sorts; Flow charts
- Dijkstra's algorithm; Shortest inspection route around a network.

- Floyd's algorithm; Nearest neighbour algorithm
- Critical Path Analysis including Gantt charts and resource histograms
- Formulating and using Simplex to solve a linear programme
- Big-M method

Advance Information Core Maths Studies Level 3 information given for Paper 1 only

The following content of the Analysis of data and Maths for personal finance sections of the specification will be assessed. All of the content on Estimation will be assessed.

Spec section	Content	Additional information
D1 Data	D1.1 appreciating the difference between qualitative and quantitative data	Including the difference between discrete and continuous data
D2 Collecting and sampling data	D2.2 appreciating the strengths and limitations of random, cluster, stratified and quota sampling methods and applying this understanding when designing sampling strategies	Stratified sampling only

D3 Representing data numerically	D3.1 calculating/identifying mean, median, mode, quartiles, percentiles, range, interquartile range, standard deviation D3.2 interpreting these numerical measures and reaching conclusions based on these measures	Mean, median, quartiles, range and interquartile range only
D4 Representing data diagrammatically	D4.1 constructing and interpreting diagrams for grouped discrete data and continuous data, knowing their appropriate use and reaching conclusions based on these diagrams	Histogram, stem and leaf and box and whisker plots only
F1 Numerical calculations	F1.1 substituting numerical values into formulae, spreadsheets and financial expressions F1.3 applying and interpreting limits of accuracy, specifying simple error intervals due to truncation or rounding	
F2 Percentages	F2.1 interpreting percentages and percentage changes as a fraction or a decimal and interpreting these multiplicatively F2.2 expressing one quantity as a percentage of another F2.3 comparing two quantities using percentages F2.4 working with percentages over 100% F2.5 solving problems involving percentage change	Percentage increase only
F3 Interest rates	F3.1 simple and compound interest F3.2 savings and investments	Compound interest only
F4 Repayments and the cost of credit	F4.1 student loans and mortgages	Mortgages only
F5 Graphical representation	F5.1 graphical representation	
F6 Taxation	F6.1 income tax, National Insurance, Value Added Tax (VAT)	Income tax and National Insurance only
F7 Solution to financial problems	F7.1 the effect of inflation F7.2 setting up, solving and interpreting the solutions to financial problems, including those that involve compound interest using iterative methods F7.4 budgeting	RPI only