# HELSBY

Sixth Form



# Year 13 Subject Specific Revision Information for the PPE's February 2023

#### **Maths**

3 x 2 hour papers.

2 x Pure 1 x Statistics and Mechanics

**Students should bring** Calculator Pen, Pencil, Ruler etc.

#### **Topics to be covered:**

#### **Pure:**

Algebraic Expressions Quadratics Equations and Inequalities Graphs and Transformations Straight Line Graphs Circles Algebraic Methods Binomial Expansion Trigonometric Ratios Trigonometric Identities and Equations Vectors Differentiation Integration Exponentials and Logs More Algebraic Methods Functions and Graphs Radians Trigonometric Functions Trigonometry and Modelling

#### **Mechanics:**

Modelling in Mechanics Constant Acceleration Forces and Motion Variable Acceleration Moments

#### Stats:

Data Collection Measures of Location and Spread Representations of Data Correlation Probability Statistical Distributions Hypothesis Testing

Resources we will provide: Formula Booklet

#### **Revision resources:**

- Active Learn
- Kerboodle
- Maths Genie
- Corbett Maths
- Dr Frost

# **Further Maths**

4 x 1½ hour papers

2 x Pure 1 x Statistics and 1 x Mechanics

Students should bring Calculator Pen, Pencil, Ruler etc.

#### Topics to be covered:

**Pure:** Complex Numbers Argand diagrams Series Roots of Polynomials Volumes of Revolution Matrices Linear Transformations Proof by Induction Vectors More Complex Numbers More Series Methods in Calculus Polar Coordinates

Stats: Discrete Random Variables Poisson Distributions Chi Squared Tests Hypothesis Testing

**Mechanics:** Momentum and Impulse Work Energy Power Elastic Strings and Springs Elastic Collisions in One Dimension Elastic Collisions in Two Dimensions

Resources we will provide: Formula Booklet

- Active Learn
- Kerboodle
- Maths Genie
- Corbett Maths
- Dr Frost

<sup>\*\*</sup>Drop in sessions are also available every Tuesday and Wednesday after school if wanted.\*\*

<sup>\*\*</sup>Drop in sessions are also available every Tuesday and Wednesday after school if wanted\*\*

#### **English Language**

# 2 Papers:

- Paper 1 Language Variation 2 hours 15 minutes
- Paper 2 Child Language Acquisition 1 hour 15 minutes

Students should bring Writing equipment

Resources we will provide: Exam booklets

Revision Resources: Materials on Show my Homework and Teams Lesson resources and materials

#### **English Literature**

#### 2 Papers:

- Paper 1 Aspects of Tragedy 2 hours 30 minutes
- Paper 2 Elements of Crime Writing 3 hours

Students should bring Writing equipment

# **Topics to be covered:**

**Tragedy**: Othello, Keats and Death of a Salesman

**Elements of Crime**: Atonement, Poetry anthology and When Will There Be Good News?

#### Resources we will provide:

Exam booklet.

Closed book examination for Aspects of Tragedy

Open book for Elements of Crime - clean copies of the texts will be provided.

Revision resources: See Teams and resources from the lessons

#### **Media Studies**

1 paper 2½ hours

**Topics to be covered:** Full Component Two paper materials

Revision resources: Materials on Show my Homework and Teams Lesson resources and materials

#### **Art & Photography**

Students will be assessed on their portfolio work in Art and Photography. During the PPE window students should continue to work on their individual portfolios. All students have been given individual targets and deadlines which they need to work towards. Students will not be having a formal PPE at this time.

#### **Drama and Theatre**

1 x 2½ hour paper

#### Students should bring Pen and Highlighter

#### **Topics to be covered:**

- Practitioner study
- Bertolt Brecht theatrical theories
- Lysistrata by Aristophanes
- Equus by Peter Shaffer
- Scripted understanding
- Evaluating live theatre

**Resources Provided:** Lysistrata text

#### **Revision resources:**

- Practitioner study
- Bertolt Brecht theatrical theories
- Lysistrata by Aristophanes
- Equus by Peter Shaffer
- live theatre

#### **BTEC Science**

Students will be sitting external examinations in this subject on 17 and 18 January and will work on mock papers as preparation in lessons. No formal PPEs will be undertaken.

# **Biology**

2 X 2 hour papers.

**Students should bring** Pen, Pencil, Ruler, and scientific Calculator

# **Topics to be covered:**

- Y12 Content: All content can be assessed
- Y13 Content: Content from section 5 (Energy transfer between organisms) and section 6 (Organisms respond to changes in their environment)
- Paper 1 A mix of Year 12 content, and an essay from Paper 3 (could include Y12 and Y13 content)
- **Paper 2** A mix of Year 13 content, and synoptic paper 3 questions (could include Y12 and Y13 content)

General How Science Works (graphs, data analysis, evaluating and interpreting data, comprehension and analysis of new information) and required practicals may also be assessed.

**Revision resources**: Will be provided on SMHW (summary grids, and sample questions)

# **Chemistry**

**Paper 1**: Inorganic & Physical Chemistry 105 marks – 2 hours **Paper 2**: Organic & Physical Chemistry 105 marks – 2 hours

**Students should bring** Black pens, pencil, ruler (with millimetre measurements), eraser, scientific calculator.

#### **Topics to be covered:**

**Paper 1**: **Physical Chemistry**: Atomic structure (AS); Amount of Substance (AS); Bonding (AS); Energetics (AS); Equilibrium (AS&A2).

**Inorganic Chemistry**: Redox reactions (AS); Periodicity (AS&A2); Group 2 Alkali Earth metals (AS); Group 7 Halogens (AS); Electrode Potentials (A2); Transition Metals (A2). Required Practical associated with these topics

**Paper 2**: **Physical Chemistry**: Atomic structure (AS); Amount of Substance (AS); Bonding (AS); Energetics (AS); Equilibrium (AS&A2); Kinetics (AS).

**Organic Chemistry**: Nomenclature & Isomerism (AS); Alkanes (AS); Alkenes (AS); Halogenoalkanes (AS); Alcohols (AS); Organic Synthesis (AS); Optical isomerism (A2); The carbonyl group – aldehydes, ketones, carboxylic acids, esters, acylation (A2); Aromatic chemistry (A2); Amines (A2); Polymers, amino acids, DNA (A2). Required Practical associated with these topics.

Resources we will provide: A2 Data sheet – includes a periodic table.

#### **Revision resources:**

- Own class notes
- Year 1 & Year 2 Text books.
- · Revision information sheet.

https://www.youtube.com/channel/UCPtWS4fCi25YHw5SPGdPz0g - Allery Tutor Chemistry Videos link to play list.

https://www.docbrown.info/page13/page13.htm- A level Chemistry revision notes.

http://www.knockhardy.org.uk/sci.htm - A level Chemistry notes.

https://s-cool.co.uk/a-level/chemistry - A level Chemistry notes and activities.

http://www.chemquide.co.uk/ - A level Chemistry notes and activities.

http://www.chembook.co.uk/ A level Chemistry notes and activities.

#### **Physics**

2 x 2 hour papers – Practical skills elements could be in either paper or both

Students should bring Pen, Pencil, Ruler, Rubber, Protractor and Scientific Calculator

# Topics to be covered:

#### Paper 1:

- Working as a Physicist
- Mechanics
- Electric circuits
- Further Mechanics
- Electric Fields

#### Paper 2:

- Working as a Physicist
- Materials
- Waves and Particle Nature of Light
- Thermodynamics
- Nuclear radiation

# **Resources provided:**

Equation and Data Booklet

**Revision Resources:** All provided on SMH:

# **BTEC Business**

Students will be sitting external examinations in January and will work on mock papers as preparation in lessons. No formal PPEs will be undertaken.

#### **BTEC ICT**

Students will be sitting external examinations in January and will work on mock papers as preparation in lessons. No formal PPEs will be undertaken.

# **Economics**

1 x 2 hour paper

Students should bring pen, pencil, ruler, rubber, and calculator

# **Topics to be covered:**

Macroeconomics

Resources provided: Case Study and question paper

Revision Resources: Revision guide pages 112-178 and 193-225

#### **Business Studies**

1 x 2 hour paper

Students should bring pen, pencil, ruler, rubber, and calculator

#### **Topics to be covered:**

- 3.2 Leadership and Decision making
- 3.3 Marketing
- 3.5 Finance
- 3.7 Analysing the position
- 3.9 Growth and innovation

Resources provided: Case Study and question paper

- Revision guide
- Knowledge guide

#### **Computer Science**

Paper 1 - 1 ½ hours Programming

Paper 2 - 1 ½ hours written paper

**Paper 1** will be completed on the computer.

Paper 2 will be a written exam.

# Students should bring Pen and spare/pencil Calculator

#### **Topics to be covered:**

#### Paper 1:

# **Algorithms**

- Sorting
- Tracing
- Heuristics

#### **Theory of Computing**

- Turing machine
- Problem solving
- Computational thinking
- Regular expressions

#### **Data representation**

Matrices

#### **Programming concepts**

Practical programming

#### Paper 2:

- 4.5 Fundamentals of data representation
- 4.6 Fundamentals of computer systems
- 4.7 Fundamentals of computer organisation and architecture
- 4.10 Fundamentals of databases

#### **Resources provided:**

Exam papers Files for the online exam

- Textbook AQA AS and A Level Computer Science (PG Online)
- Revision booklet (Paper 1 and Paper 2 separate)
- Class notes/PowerPoints
- YouTube Craig'n'Dave https://www.youtube.com/playlist?list=PLCiOXwirraUDUYF\_qDYcZV8Hce8dsE\_Ho
- Mr Griffin will provide a link to a website that provides them with programming puzzles that they need to solve to prepare them for the practical programming element.

#### **French**

Listening, reading & translation - 2 ½ hours - 50% Critical response to film & novel - 2 hours - 20% Speaking assessment - 20 minutes (during lesson times) - 30%

Students should bring Pen & spare pen Own earphones if required/preferred

#### Topics to be covered:

#### L, R & T Revise:

- Immigration and racism/Le Front National/multiculturalism (still working on this topic)
- Cultural dimensions of occupied France in WW2 (Still working mon this topic)
- All AS Topics

#### Film & novel Revise:

- All of No et Moi essay plans (characters and themes) and complex structures (subjunctives, passive and idioms)
- All of La Haine essay plans (characters and themes & cinematography) and complex structures (subjunctives, passive and idioms)

# **Speaking Revise:**

- IRP project/presentation and potential follow up questions
- Photo card task: Asking and answering questions using AO4 in your responses
- All themes/topic areas covered throughout Year 12 & 13

**Resources we will provide:** Exam papers & resource folder for reading MP3 players with relevant audio files uploaded Earphones (or you may bring your own)

#### **Revision Resources:**

- Topic skills practice on Kerboodle
- Grammar practice on Kerboodle
- Novel and film practice essays / essay plans
- Vocab lists and knowledge organisers
- Practice translations (see French A Level digital resources) on the Edugas website
- Your IRP preparation
- Your AO4 facts to learn for photo cards

\*\*Students are allowed up to ten key points **in English** to use as prompts in the IRP/presentation part of the speaking test\*\*

#### <u>German</u>

Listening, reading & translation - 2 ½ hours - 50% Critical response to film & novel - 2 hours - 20% Speaking assessment - 20 minutes (during lesson time) - 30%

Students should bring Pen & spare pen

# **Topics to be covered:**

#### L, R & T Revise:

- Die Wiedervereinigung Deutschlands / Deutschland vor und nach der Wende / Die Beziehung zwischen Ost- und Westdeutschland
- Immigration und die deutsche multikulturelle Gesellschaft / Integration/ Rassismus / Rechtsextremismus
- All AS topics

#### Film & novel Revise:

- All of ich fühl mich so 50 50 essay plans (characters & themes) and complex structures (subjunctives, passive and idioms)
- All of Goodbye Lenin essay plans (characters & themes & cinematography) and complex structures (subjunctives, passive and idioms)

# **Speaking** Revise

- IRP project/presentation and potential follow up questions
- Photo card task: Asking and answering questions using AO4 in your responses
- All themes/topic areas covered throughout Year 12 & 13

# Resources we will provide:

- Exam papers & resource folder for reading
- MP3 players with relevant audio files uploaded
- Earphones (or you may bring your own)

# **Revision Resources:**

- Topic skills practice on Kerboodle
- Grammar practice on Kerboodle
- Novel and film practice essays / essay plans
- Vocab lists and knowledge organisers
- Practice translations (see German A Level digital resources) on the Eduqas website
- Your IRP preparation
- Your AO4 facts to learn for photo cards

\*\*Students are allowed up to ten key points **in English** to use as prompts in the IRP/presentation part of the speaking test\*\*

# **Geography**

1 x 2½ hour paper.

**Students should bring** pen, pencil, ruler and calculator.

#### Topics to be covered:

- Hazards
- Global Systems and Global Governance
- Contemporary Urban environments

- A level textbook: AQA Geography, Skinner et al (2016)
- A level revision guides:
- My Revision Notes: AQA A-level Geography: Second Edition (2021),
- AQA Complete Revision & Practice, CGP A-Level Geography, (2021)
- AQA past papers <a href="https://www.aqa.org.uk/subjects/geography/as-and-a-level/geography-7036/assessment-resources">https://www.aqa.org.uk/subjects/geography/as-and-a-level/geography-7036/assessment-resources</a>
- Class notes

# **History**

1x 1 hour 45 minute paper:

**Civil Rights** - Paper will consist of 1 essay question and 1 interpretation question

Students should bring Black pens, highlighter for annotation

#### Topics to be covered:

Civil Rights in the USA 1865-1992

- African Americans
- Native American

#### **Revision resources Civil Rights:**

Revision resources and activities will be provided via SMH Students can also purchase revision guides as per link on SMH

#### 1X 1 hour paper:

**Russia 1894-1941-** This will be a full paper 1 X 10 mark question 1X 20 mark question. Students can choose from a set of two questions.

#### Students should bring Pen

#### Topics to be covered:

- Tsarist Russia 1894-1914
- World War One
- Revolutions of 1917
- Civil War
- · Lenin's Russia
- Rise of Stalin up to 1929

# Resources that will be provided:

- Textbook
- Guidance of question technique
- Summary Circles sheets for topics.

#### **Revision resources Russia:**

- Textbook
- Revision guide
- Past paper questions to be found on the OCR website for unit Y219/01

https://www.ocr.org.uk/qualifications/as-a-level-gce/history-a-h105-h505-from-2015/assessment/

#### **Politics**

1 x 2 hour Government and Politics of the UK

1 x 2 hour Government and Politics of the US and Comparative Politics

# Students should bring Pen, Highlighter

#### Topics to be covered:

All UK and US content.

NB: Comparative Pressure Groups and Comparative Executive will NOT be assessed on this paper as content not yet covered.

#### **Revision Resources:**

- Politics textbook
- Revision questions
- Guidance of question technique

\*\* No choice element to the papers. All questions to be answered \*\*

# **Psychology**

2 x 2 hour papers.

Students should bring Pen Pencil Ruler Calculator

# **Topics to be covered:**

Paper 1: Introductory topics in Psychology

- Social Influence
- Memory
- Attachment
- Psychopathology

# Paper 2: Topics paper

- Issues and debates
- Relationships
- Schizophrenia
- Addiction

Revision resources: Classwork booklets, Revision flash cards, Textbooks

#### R.E.

2 x 2 hour papers.

Students should bring a pen.

## Paper 1:

# SCO - Students revise: Philosophy

• Religious Language - There will be 2 questions on this topic you must answer 1

# **DCT - Students revise:**

- Augustine & human nature
- · Death and eternal life
- Natural and revealed Theology There will be 3 questions and you answer 2

# Paper 2:

#### **PJO - Students revise: Ethics**

 Kant, Utilitarianism and Business ethics – There will be 2 questions on this topic you must answer 1

# **DCT - Students revise:**

- Gender and Society
- Gender and Theology
- Bonhoeffer

There will be 3 questions and you must answer 2

Revision resources: Materials given out in lesson during the course

#### Sociology

2 x 2 hour papers.

# Students should bring a pen.

# Topics to be covered:

#### Paper 1 MLA:

- Education
- Beliefs
- Methods in context

#### Paper 2 PJO:

- Family
- · Crime and Deviance

#### **Revision resources:**

Materials given out in lesson during the course

#### **Criminology**

1 x 1½ hour paper.

#### Students should bring a pen.

# **Topics to be covered:**

- Explain forms of social control
- How laws are made
- Models of criminal justice
- Describe the organisation of the criminal justice system in England and Wales

#### **Revision resources:**

Students should refer to all of their notes.

# **Cambridge Technical Sport Studies**

# 1 x 1 hour paper **Sports Organisation and development**

#### **Topics to be covered:**

# 1. Understand how sport in the UK is organised

- 1.1 Organisations involved in sport in the UK
- 1.2 Roles and responsibilities of sports organisations in the UK
- 1.3 International organisations which impact UK sport
- 1.4 How the different organisations interact

# 2. Understand sports development

- 2.1 What sports development is
- 2.2 The purpose of sports development
- 2.3 The sports development continuum levels
- 2.4 Target groups

# D&T - Product Design

- 1 paper 2½ hours Paper 1 Technical Principles
- 1 paper 1½ hours Paper 2 Designing and Making principles
- $1 \times 2$  hour practical slot on their NEA task which will encompass a session working on both the making of their final product and also working on their accompanying NEA design folder to ensure it is up to date and of expected standard

**Students should bring** usual writing and drawing instruments, scientific calculator, Protractor and ruler.

#### **Topics to be covered:**

#### Paper 1:

- Materials and their applications
- Performance characteristics of materials
- Enhancement of material
- Forming, redistribution and addition processes
- The use of finishes
- Modern industrial and commercial practice
- Digital design and manufacture
- Product design and development
- Health & safety
- Protecting designs and intellectual property
- Design for manufacture, maintenance, repair and disposal
- Feasibility studies
- Enterprise and marketing in the development of products
- Design communication.

# Paper 2:

- Design methods and processes
- Design theory
- How technology and cultural changes impact designer
- Critical analysis and evaluation
- Selecting tools, equipment and processes
- Accuracy in design and manufacture
- Responsible design
- Design for manufacture and project management
- National and international standards in product design

# **Revision Resources:**

The following text books are useful to support revision for the exam papers: <a href="https://www.amazon.co.uk/AQA-AS-Level-Design-Technology/dp/1510414088">https://www.amazon.co.uk/AQA-AS-Level-Design-Technology/dp/1510414088</a> <a href="https://www.amazon.co.uk/My-Revision-Notes-Technology-Product/dp/151043229">https://www.amazon.co.uk/My-Revision-Notes-Technology-Product/dp/151043229</a>

# **Level 3 Cambridge Technical - Health and Social Care**

1 x 1 hour paper – **Unit 3** Health, Safety & Security LO1 Hazards in health, safety & security 1 x 1 hour paper - **Unit 4** Anatomy & Physiology, LO4 muscular skeletal system

#### Topics to be covered:

- 1 paper = Unit 3 Health, Safety and Security, LO1 Hazards in health, safety and security
- 1 paper = Unit 4 Anatomy & Physiology, LO4 Muscular skeletal system

#### **Revision Resources:**

For each separate written assessment the following are the best sources of revision:

- Lesson pack
- Independent study pack
- Exam pack
- Revision book: <a href="https://www.amazon.co.uk/My-Revision-Notes-Cambridge-Technicals/dp/1510442308/ref=sr-1-1?crid=1372W5K4TEJS4&keywords=hodder+my+revision+notes+l3+health+and+social&qid=1670929637&s=books&sprefix=hodder+my+reviosn+notes+l3+health+and+social%2Cstripbooks%2C55&sr=1-1</a>