

HELSBY

Sixth Form



Year 13

Subject Specific Revision

Information for the

PPE's

Autumn 2025

Applied IT (BTEC)

Due to the nature of this vocational course, students have not currently covered enough of the theory to be assessed in any depth at this stage. During the PPE window, students should continue with the Assignment Brief for the unit they are currently undertaking

Applied Science (BTEC)

1 x 2 hour paper Unit 3 Science investigation skills

Students should bring: Pen, pencil, ruler, rubber and calculator

Topics to be covered:

- D Enzymes in action – D1 protein in structure, D2 Enzymes as biological catalysts in chemical reactions,
- D3 Factors that can affect enzyme activity
- E Diffusion of molecules – E1 Factors affecting the rate of diffusion, E2 Arrangement and movement of molecules
- G Energy content of fuels – G1 Fuels, G2 Hazards associated with fuels, G3 Units of energy

Revision Resources:

Applied science text book chapter 3 – available on TEAMS

BTEC Applied Science Help https://www.youtube.com/channel/UC11v-AL_4VFrVczVBzURmIg

Where you can find the following videos to help prepare:

Science investigation skills

Skills investigation basics

Skills planning an investigation

Skills tables and graphs

Skills graphs and correlations

Writing a plan

Uncertainty and errors

Unit 3 Enzymes 3 videos

Unit 3 Diffusion of molecules 3 videos

Unit 3 Fuels 3 videos

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 whilst we await confirmation about what the exam board will expect.

Biology

2 papers 1 x 2 hour and 1 x 1 hour.

Students should bring: Pen, Pencil, Ruler (with millimetre measurements), eraser and scientific Calculator

Topics to be covered:

Paper 1: All AS Content

Section 1 (Biological Molecules, Nucleic Acids)

Section 2 (Cells, Membranes, Immune system)

Section 3 (Exchange of substances, Mass transport)

Section 4 (DNA, Protein Synthesis, Genetic diversity, Biodiversity)

- General How Science Works skills.

Paper 2:

- Respiration + selected other A2 content (further information will follow in class)
- General How Science Works skills

Revision resources:

- Practice papers and mark schemes
- Guide on preparation for examinations
- Links to past papers
- YouTube revision sites
- Revision notes + summary grids

All will be shared via Class Charts

Business Studies

1 x 2 hour paper. (Paper 3 longer case study)

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

Topics to be covered: Students should focus on their recent learning, 3.7 and 3.8 Strategy as well as the following topics

- Methods of promotion
- Copyright
- Gearing, Liquidity ratios and Debt Factoring
- Leadership Styles and Strategies
- Stakeholders and Takeovers
- Strategic planning including Ansoff, Porter's Five Forces and Porter's Generic Strategies

Resources provided:

- Case Study, question paper and lined paper

Business (BTEC)

Due to the nature of this vocational course, students have not currently covered enough of the theory to be assessed in any depth at this stage. During the PPE window, students should continue with the Assignment Brief for the unit they are currently undertaking.

Chemistry

Paper 1: Inorganic & Physical Chemistry 90 marks / 1hour 45mins.

Paper 2: Organic & Physical Chemistry 90marks / 1hour 45mins.

Students should bring: Pen, pencil, ruler (with millimetre measurements), eraser, scientific calculator.

Paper 1: Inorganic & Physical Chemistry - Atomic Structure Amount of Substance Bonding Energetics Chemical Equilibria & Le Chatelier's Principle Equilibrium Constant Kc Oxidation, reduction & redox equations Periodicity & Group 2 Group 7, The Halogens Thermodynamics

Paper 2: Organic & Physical Chemistry - Amount of Substance Bonding Chemical Equilibria & Le Chatelier's Principle Equilibrium Constant Kc Introduction to organic chemistry Alkanes Halogenoalkanes Alkenes Alcohols Organic analysis Rate Equations

These topics are common to Paper 1 & Paper 2. Amount of Substance Bonding Chemical Equilibria & Le Chatelier's Principle Equilibrium Constant Kc Introduction to organic chemistry Alkanes Halogenoalkanes Alkenes Alcohols Organic analysis Rate equations

Resources we will provide: Practice papers and mark schemes. Guide on Preparation for Examinations

Revision resources:

- Allery Tutor Chemistry Videos link to play list
<https://www.youtube.com/channel/UCPtWS4fCi25YHw5SPGdPz0q>
- A level Chemistry revision notes. <https://www.docbrown.info/page13/page13.htm>
- A level Chemistry notes. <http://www.knockhardy.org.uk/sci.htm>
- A level Chemistry notes and activities <https://s-cool.co.uk/a-level/chemistry>
- A level Chemistry notes and activities. <http://www.chemguide.co.uk/>
- A level Chemistry notes and activities. <http://www.chembook.co.uk/>

Additional Information: These topics are common to paper 1 and paper 2: Amount of substance Bonding Chemical Equilibria & Le Chatelier's principle Equilibrium Constant Kc

Computer Science

Paper 1: Programming to be completed in MGR Lesson

Paper 2: 1 hour 30 minutes (MDA material)

Topics to be covered:

- 4.5 Fundamentals of data representation
- 4.6 Fundamentals of computer systems
- 4.7 Fundamentals of computer organisation and architecture
- 4.8 Consequences of uses of computing

Revision Resources:

- Class Notes
- Revision pack
- Isaac Computing
- Craig "n" Dave YouTube website
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Criminology

No PPE - Students will complete a Controlled Assessment utilising draft documentation they have prepared during lessons.

Economics

1 x 2 hour paper.

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

Topics to be covered:

- Micro Economics.
- All Y12 work covered Sept to Dec 2023
- Y13 work covered since we returned in Sept 2024

Revision Resources:

- Revision guide pages as follows: Y12 Micro p5-37; 76-88; 90-106. Y13 Work Market structures P38-56; 58-67. Labour markets P102-117

English Language

Paper 1 Section A Individual Variation 1 hour 15 minutes

Paper 2 Child Language 1 Hour 15 minutes

Topics to be covered:

Paper 1

- How language varies depending upon mode, field, function and audience
- How language choices can create personal identities

Paper 2

- Spoken language acquisition and how children learn to write between the ages of 0 and 8
- The relationship between spoken language acquisition and literacy skills that children are taught, including the beginnings of reading
- Appropriate theories of children's language development

Revision Resources: Have been provided on ClassCharts and in lessons and also on RM Shared

English Literature

1 paper 2 hours 30 minutes **Aspects of Tragedy** – Closed book exam

Topics to be covered:

- "Othello"
- Poetry of Keats
- Death of a Salesman

Revision resources:

- Classroom notes
- Essays and text annotations.
- Emagazine subscription

Geography

1 paper 2 hours and 30 minutes

Topics to be covered:

- Water and cycles unit
- Coastal systems and landscape unit
- Changing places unit

Resources provided: Time for independent revision (homework)

Revision resources:

- Classroom notes.
- 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 <https://www.aqa.org.uk/subjects/geography/as-and-a-level/geography-7036/assessment-resource>

Health and Social Care (Level 3 Cambridge Technical)

1 x 1 hour paper

Unit 4 - LO3 The Digestive System

3.1 Gross structure of digestive system and functions of component parts

3.2 Mechanical and chemical digestion

3.3 Digestive roles of liver and pancreas

3.4 Absorption and assimilation

3.5 Digestive malfunctions – possible causes and effects on the individual

- Irritable Bowel Syndrome
- Gallstones
- Coeliac disease

3.6 Monitoring, treatment and care needs for digestive malfunctions listed to include impact on diet/lifestyle, endoscopy, ultrasound, lithotripsy and monitoring, medication as appropriate to the condition

Resources: Lesson Pack; Exam Pack; Independent Study Pack

Revision Resources: My Revision Notes textbook

History

1 paper 1 hour 30 minutes – full paper worth 50 marks

The Early Tudors 1485 – 1558 - Students should prepare for questions on **Henry VII**
Henry VIII **Edward V1** and **Mary I**

Revision Resources:

Weekly revision tasks to be completed in class and at home to help structure revision and preparation

<https://www.hoddereducation.co.uk/subjects/history/products/16-18/my-revision-notes-ocr-as-a-level-history-england-1>

Maths

2 papers x 2 hours

Pure – 2 hours

Statistics and Mechanics – 2 hours

Students should bring: Pen, Pencil, Calculator, and Ruler.

Topics to be covered:

All AS Topics

Pure:

Argument and Proof, Index Laws, Surds, Quadratic Functions, Lines and Circles, Simultaneous Equations, Inequalities, Differentiation, Rates of Change, Tangents and Normals, Turning Points, Integration, Area under a Curve, Trigonometry, Sine and Cosine Rules, Polynomials, Binomial Theorem, Algebraic Division, Vectors, Curve Sketching, Laws of Logarithms, Exponential Functions, Exponential Processes, Curve Fitting

Mechanics:

Forces and Newton's Laws, Units and Kinematics

Stats:

Probability, Binomial Distribution, Hypothesis Testing, Collecting, Representing and Interpreting Data, The Large Data Set

Resources we will provide:

Past exam papers already being completed and marked.

Past exam questions as starters in lessons

Revision resources: ActiveLearn textbook

Media Studies

1 x full Component One paper; Media Products, Industries and Audience 2 hours 15 minutes

Topics to be covered:

All Component One texts must be revised* as at least four of them will appear on the paper, just as in the real exam.

Topics to be covered:

- Newspapers/news websites (The Times & The Mirror)
- Music videos ('Formation' & 'Riptide')
- Film (I, Daniel Blake & Black Panther)
- Advertising (SuperHuman, Tide & KOTV poster)
- Radio (Woman's Hour)
- Computer Games (Assassins Creed)

*All theorists and terminology covered in Y12 – Subject handbook final sections (theorists in a nutshell and glossary of terms) are especially useful. Also, be prepared to respond to "unseen" audio-visual and print texts.

Resources provided: 'Unseen' audio-visual and print texts.

Revision resources: class notes, Eduqas fact sheets, Zig-zag e-revision, Mrs Fisher and Media Insider Youtube videos and all the free digital resources on the Eduqas website.

Performing Arts

1 x paper 70 minutes

Students are to pick on piece of live theatre that we have explored in lesson. Students will complete research and produce notes and a bibliography within lesson time and they will bring these into the PPE with them.

In the exam, they will explore question two of the Unit 1 exam which focusses on analysing theatre techniques and conventions in line with a theme. Students will have 70 minutes to complete this question, on laptops, and using their pre-prepared notes.

Physics

Paper 1 x 2hours Paper 2 x 1 hour 30 minutes

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

Paper 1 - Full A Level paper 1 - 85 Marks split 60 short and long answer questions and 25 multiple choice

Topics to be covered:

- Measurement and errors
- Particles and radiation
- Mechanics and materials
- Electricity
- Circular and Periodic motion

Paper 2 – Year 2 content and required practicals

Topics to be covered:

- Thermal Physics
- Further Mechanics
- Gravitational Fields
- Electric Fields
- Capacitance
- All required practicals completed up to the exam

Resources provided:

- Equation sheet

Revision Resources: Information and resources available via ClassCharts

Politics

1 x 2 hour paper on the **UK Government and Politics**

Q 1,2 and 3, 9 marks each, Q4 25 mark extract question, Q5/Q6 Mark essay question (from a choice of 2)

Topics to be covered:

- The Constitution
- Parliament
- Democracy and Participation
- Prime Minister and the Cabinet
- The Judiciary
- Devolution
- Elections and Referendums
- Political Parties
- The European Union

Revision Resources:

Students will be provided with a structured revision schedule including weekly tasks to complete both at home and in lessons.

Product Design

Paper 1x 2 hours and 30 minutes .Written paper 120 marks. Will cover areas of the specification:

- Technical Principles. This paper will include the following topics:
 - Composites
 - Enhancement of metals
 - Finishing of papers and boards
 - Manufacture, repair, maintenance and disposal
 - Materials and their applications
 - Maths: circle area
 - Maths: Pythagoras' theorem
 - Maths: trigonometry
 - Maths: calculating volume
 - Methods for investigating and testing materials
 - Performance characteristics of metals
 - Performance characteristics of polymer based sheet and film
 - Performance characteristics of polymers
 - Performance characteristics of woods
 - Processes of polymers
 - Processes of woods
 - Product development and improvement
 - Protecting designs and intellectual property: open design
 - Rapid prototyping
 - Safety in products and services to the customer
 - Scales of production
 - Smart materials

Paper 2x 1 hour and 30 minutes. Written paper 80 marks. Will cover areas of the specification:

- Designing and Making principles. This paper will include the following topics
 - Accuracy in design and manufacture
 - Design styles and movements
 - Designers and their work
 - Enhancement of metals
 - Iterative design process
 - Major developments in technology
 - Maths: calculating mass
 - National and international standards in product design
 - Processes of metals
 - Processes of polymers
 - Product life cycle
 - Prototyping methods
 - Quality assurance
 - Rapid prototyping
 - Socio economic influences on the work of designers
 - The use of a design process
 - Virtual modelling
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Students should bring: usual writing and drawing instruments and scientific calculator

Revision Resources:

The following text books are useful to support revision for the exam papers:

- <https://www.amazon.co.uk/AQA-AS-Level-Design-Technology/dp/1510414088>
- <https://www.amazon.co.uk/My-Revision-Notes-Technology-Product/dp/151043229>

Psychology

2 papers x 2 hours

Students should bring: Pen Pencil Ruler Calculator

Paper 1:

- Social Influence
- Memory
- Attachment
- Psychopathology

Paper 2:

- Issues and debates
- Relationships
- Approaches
- Research Methods

Students should already have their completed booklets/class notes for each topic, alongside previous assessments (with feedback) and some sample answers.

Revision resources:

Flash cards for each topic

Past paper questions

Essay plans

<https://www.tutor2u.net/psychology>

Sociology

2 x 2 hour papers

Topics to be covered:

Paper 1:

- Education, Research methods, Methods in context

Paper 2:

- Family, Crime and Deviance – Marxist views on crime, Gender and crime, Functionalism and crime

Revision resources:

- Students have been provided with flashcards and A3 summary sheets to use for revision
- Use feedback from previous assessments
- <https://www.tutor2u.net/sociology/latest>

Sport Studies (Cambridge Technical)

2 papers

- 1 x one hour 30 minutes **Unit 1**
- 1 x 1 hour **Unit 3**

Unit 1 Body Systems (for those taking resits only)

Topics to be covered:

- The Skeletal system
- The muscular system
- The cardiovascular system
- The Respiratory system
- The energy systems

Unit 3 Sports Organisation and Development (all students)

Topics to be covered:

- How sport in the UK is organised
- Sports development
- Measuring the impact of sport development

Revision resources:

- Folders
- Textbooks
- RMShared

The Best Way to Revise for Your A Levels

A Levels are a big step up from GCSEs — they require deeper understanding, stronger analytical skills, and more independent study. Effective revision is about quality, not just quantity. This guide will help you structure your revision to maximise results while staying balanced and focussed.

1. Start Early and Plan Ahead

A Levels cover a lot of material, so starting early is key. A good plan reduces stress and ensures you have enough time to cover everything thoroughly.

Steps to build a strong revision plan:

- **Begin 12–16 weeks before exams** to avoid last-minute cramming.
- **List all subjects and topics**, breaking them into small, manageable chunks.
- **Prioritise your weakest topics first** while still revising stronger areas regularly.
- **Set realistic daily and weekly goals**, balancing study with rest.
- **Include regular review sessions** to reinforce what you've learned.

Example weekly timetable:

Day	Morning (9:00–11:00)	Midday (11:30–1:30)	Afternoon (2:30–4:30)
Monday	Biology – Genetics	Chemistry – Organic	Maths – Mechanics
Tuesday	History – Cold War	Biology – Practice Qs	Chemistry – Equilibria
Wednesday	Maths – Pure	History – Source Qs	Biology – Essay Plans

2. Focus on Understanding, Not Just Memorising

A Levels test **critical thinking and application**, not just recall. You need to **understand concepts deeply** so you can apply them to unfamiliar questions.

How to achieve this:

- **Ask yourself "why?"** when revising – don't just accept facts.
- **Summarise in your own words** to check your understanding.
- **Teach someone else** – explaining a topic proves you truly understand it.
- **Use real-world examples** to connect abstract concepts to practical situations.

3. Use Active Revision Techniques

Active revision keeps your brain engaged and improves retention far more than passive reading.

Highly effective active methods:

- **Past Papers & Exam Practice:**
 - Do at least one paper a week per subject.
 - Time yourself to simulate exam conditions.
 - Mark carefully using the official mark scheme to understand what examiners want.
- **Flashcards (Digital or Paper):**
 - Use apps like Quizlet or Anki for spaced repetition.
 - Focus on key definitions, formulas, and concepts.
- **Mind Maps:**
 - Create visual diagrams to link ideas and spot connections.
 - Especially useful for essay-based subjects like History or Psychology.
- **Blurting Technique:**
 - Write down everything you know about a topic from memory.
 - Compare to your notes and fill in gaps.
- **Active Note Condensing:**
 - Rewrite notes into concise summaries or bullet points.
 - Aim to reduce each topic into a single side of A4 paper.

4. Space out Your Revision (Spaced Repetition)

Spacing your revision helps move information into long-term memory and avoids last-minute cramming.

Example spaced repetition cycle:

- **Day 1:** Learn a topic.
- **Day 3:** Review it briefly.
- **Day 7:** Test yourself without notes.
- **Day 14:** Revisit and refine your understanding.
- **Final weeks:** Focus on weaker areas and exam technique.

5. Balance Study and Wellbeing

Your brain works best when you look after yourself.

- **Sleep:** Aim for 7–8 hours per night – no all-nighters.
- **Exercise:** Even light activity boosts focus and mood.
- **Diet:** Eat balanced meals with slow-release energy foods (oats, nuts, whole grains).
- **Breaks:** Use the *Pomodoro Technique* – 25 minutes work, 5 minutes rest.
- **Avoid burnout:** Take a full day off occasionally to recharge.

6. Exam Technique Matters

Even if you know the content, poor exam technique can cost marks.

Tips for success:

- **Always read questions carefully** and highlight key words.
- **Answer the question, not the topic** – stay focused and relevant.
- **Plan essays briefly before writing** to stay structured.
- **Time management:**
 - Don't spend too long on one question.
 - Leave a few minutes at the end to check answers.

7. Useful Resources

Here are some free, reliable resources to boost your revision:

- **Seneca Learning:** <https://www.senecalearning.com>
- **Physics & Maths Tutor:** <https://www.physicsandmathstutor.com>
- **BBC Bitesize A Level:** <https://www.bbc.co.uk/bitesize>
- **Revision Science:** <https://revisionscience.com>
- **Past Papers:** From your exam board's official site (AQA, Edexcel, OCR, etc.).

8. Final Advice for A-Level Success

- Start early and stay consistent – little and often beats cramming.
- Use active techniques to make revision more effective.
- Practice past papers regularly to perfect exam technique.
- Stay calm, take care of yourself, and trust the process.
- Remember: progress comes from persistence, not perfection.