Y10 Curriculum Overview 2019-21

Subject	Exam Board
English Literature	**AQA**

Description:

The specification takes a skills-based approach to the study of English literature that is consistent across the genres. It offers excellent preparation for AS and A-level English Literature, as well as giving students a grounding in a wide variety of literature that will stay with them for life.

Students will read the following texts:

Shakespeare and the 19th-century novel:

- Macbeth
- A Christmas Carol

Modern texts and poetry:

- An Inspector Calls
- Poetry anthology
- Unseen poetry

In studying the set texts students should have the opportunity to develop the following skills:

- Reading comprehension and reading critically
- Writing

Method of Assessment:

Paper 1: Shakespeare and the 19th-century novel

Written examination (1 hour 45 minutes - 64 marks)

Section A Shakespeare: students will answer one question on their play of choice. They will be required to write in detail about an extract from the play and then to write about the play as a whole.

Section B The 19th-century novel: students will answer one question on their novel of choice. They will be required to write in detail about an extract from the novel and then to write about the novel as a whole.

Paper 2: Modern texts and poetry

Written examination (2 hours 15 minutes - 96 marks)

Section A Modern texts: students will answer one essay question from a choice of two on their studied modern prose or drama text.

Section B Poetry: students will answer one comparative question on one named poem printed on the paper and one other poem from their chosen anthology cluster.

Section C Unseen poetry: Students will answer one question on one unseen poem and one question comparing this poem with a second unseen poem.

Link to Specification:

http://www.aqa.org.uk/subjects/english/gcse/english-literature-8702/specification-at-a-glance

Y10 Curriculum Overview 2019-21

Subject	Exam Board
ENGLISH LANGUAGE	**AQA**

Description:

The specification will enable students of all abilities to develop the skills they need to read, understand and analyse a wide range of different texts covering the 19th, 20th and 21st century time periods as well as to write clearly, coherently and accurately using a range of vocabulary and sentence structures.

Subject content

- Explorations in creative reading and writing
- Writers' viewpoints and perspectives
- Non-exam assessment

Method of Assessment:

Paper 1: Explorations in Creative Reading and Writing

Written examination (1 hour 45 mins - 80 marks)

Section A: Reading - one literature fiction text

Section B: Writing - descriptive or narrative writing

Paper 2: Writers' Viewpoints and Perspectives

Written examination (1 hour 45 mins - 80 marks)

Section A: Reading - one non-fiction text and one literary non-fiction text

Section B: Writing - writing to present a viewpoint

Non-examination Assessment: Spoken Language

Presenting, responding to questions and feedback, use of Standard English

Link to Specification:

http://www.aqa.org.uk/subjects/english/gcse/english-language-8700/specification-at-a-glance

Y10 Curriculum Overview 2019-21

Subject	Exam Board
Mathematics	**AQA**

Description:

Maths is for everyone. It is diverse, engaging and essential in equipping students with the right skills to reach their future destination, whatever that may be.

Subject content

1 Number
2 Algebra
3 Ratio, proportion and rates of change
4 Geometry and measures
5 Probability
6 Statistics

Method of Assessment:

GCSE Mathematics has a Foundation tier (grades 1 – 5) and a Higher tier (grades 4 – 9). Students must take three question papers at the same tier. All question papers must be taken in the same series.

Paper 1: non-calculator

Written examination (1 hour 30 minutes - 80 marks)

A mix of question styles, from short, single-mark questions to multi-step problems. The mathematical demand increases as a student progresses through the paper.

Paper 2: calculator

Written examination (1 hour 30 minutes - 80 marks)

A mix of question styles, from short, single-mark questions to multi-step problems. The mathematical demand increases as a student progresses through the paper.

Paper 3: calculator

Written examination (1 hour 30 minutes - 80 marks)

A mix of question styles, from short, single-mark questions to multi-step problems. The mathematical demand increases as a student progresses through the paper.

Link to Specification:

http://www.aqa.org.uk/subjects/mathematics/gcse/mathematics-8300/specification-at-a-glance

Y10 Curriculum Overview 2019-21

Subject	Exam Board
Biology, Chemistry, Physics	**AQA**

Description:

Science has something to offer everyone and students study individual sciences.
These qualifications are linear. Linear means that students will sit all their exams at the end of the course.

Biology:

Subject content

1. Cell biology
2. Organisation
3. Infection and response
4. Bioenergetics
5. Homeostasis and response
6. Inheritance, variation and evolution
7. Ecology
8. Key ideas

Chemistry:

Subject content

1. Atomic structure and the periodic table
2. Bonding, structure, and the properties of matter
3. Quantitative chemistry
4. Chemical changes
5. Energy changes
6. The rate and extent of chemical change
7. Organic chemistry
8. Chemical analysis
9. Chemistry of the atmosphere
10. Using resources

Physics:

Subject content

1. Energy
2. Electricity
3. Particle model of matter
4. Atomic structure
5. Forces
6. Waves
7. Magnetism and electromagnetism
8. Space physics

Method of Assessment:

Biology:

Paper 1

Topics 1–4: Cell biology; Organisation; Infection and response; and Bioenergetics.
Written examination (1 hour 45 minutes – 100 marks)
Multiple choice, structured, closed short answer and open response.

Paper 2

Y10 Curriculum Overview 2019-21

Topics 5–7: Homeostasis and response; Inheritance, variation and evolution; and Ecology.
Written examination (1 hour 45 minutes – 100 marks)
Multiple choice, structured, closed short answer and open response.

Chemistry:

Paper 1

Topics 1–5: Atomic structure and the periodic table; Bonding, structure, and the properties of matter; Quantitative chemistry, Chemical changes; and Energy changes.
Written examination (1 hour 45 minutes – 100 marks)
Multiple choice, structured, closed short answer and open response.

Paper 2

Topics 6–10: The rate and extent of chemical change; Organic chemistry; Chemical analysis, Chemistry of the atmosphere; and Using resources.
Written examination (1 hour 45 minutes – 100 marks)
Multiple choice, structured, closed short answer and open response.

Physics:

Paper 1

Topics 1–5: Atomic structure and the periodic table; Bonding, structure, and the properties of matter; Quantitative chemistry, Chemical changes; and Energy changes.
Written examination (1 hour 45 minutes – 100 marks)
Multiple choice, structured, closed short answer and open response.

Paper 2

Topics 6–10: The rate and extent of chemical change; Organic chemistry; Chemical analysis, Chemistry of the atmosphere; and Using resources.
Written examination (1 hour 45 minutes – 100 marks)
Multiple choice, structured, closed short answer and open response.

Link to Specification:

http://www.aqa.org.uk/subjects/science/gcse/biology-8461/specification-at-a-glance
http://www.aqa.org.uk/subjects/science/gcse/chemistry-8462/specification-at-a-glance
http://www.aqa.org.uk/subjects/science/gcse/physics-8463/specification-at-a-glance

Y10 Curriculum Overview 2019-21

Subject	Exam Board
Computer Science (Option)	**OCR**

Description:
Computer Science is a very practical subject – students will be able to use the knowledge and skills they learn in the classroom on real-world problems. It's also a highly creative subject that calls on learners to be inventive. To help us develop this engaging, modern qualification, we talked to companies like Microsoft, Google and Cisco; organisations like Computing At School (CAS) and also teachers and academics.

Component 1 – COMPUTER SYSTEMS
Component 2 - COMPUTATIONAL THINKING, ALGORITHMS AND PROGRAMMING
COMPONENT 3 - A PROGRAMMING PROJECT

Method of Assessment:

Component 1 Computer Systems
Written examination (1 hour 30 minutes – 80 marks)

Component 2 Computational thinking, algorithms and programming
Written examination (1 hour 30 minutes – 80 marks)

Component 3 Programming project
Non-examined, externally moderated (20 hours - 40 marks)

Link to Specification:
https://www.ocr.org.uk/qualifications/gcse/computer-science-j276-from-2016/

Y10 Curriculum Overview 2019-21

Subject	Exam Board
Level 1/2 Technical Award in Engineering Studies	**NCFE**

Description:

The Level 1/2 Technical Award in Engineering is designed to provide learners with the skills, knowledge and understanding of the applied study of good engineering practices and an understanding of working in the sector.

Throughout this qualification, students will gain valuable knowledge of:

- engineering disciplines
- science and mathematics in engineering
- how to read engineering drawings
- properties and characteristics of engineering materials and why specific materials are selected for engineering applications
- engineering tools, equipment and machines
- production planning techniques
- processing skills and techniques applied to materials for a manufacturing task equipment

The units are indicated below:

- **Understanding the Engineering World**
  Assessment: External exam (60 mins)
  40% of the technical award.
  Written examination:
  80 marks
  1 hour 30 minutes - a mixture of multiple-choice, short-answer and extended-response questions.
  The paper will include: multiple-choice questions, short-answer questions and extended-response questions.
- **Skills and Techniques in Engineering**
  Assessment: Synoptic project (externally moderated)
  60% of the technical award.
  The synoptic project will assess students' ability to effectively draw together their knowledge, understanding and skills from across the whole vocational area.

Link to Specification:

https://www.qualhub.co.uk/qualification-search/qualification-detail/ncfe-level-12-technical-award-in-engineering-4593

Y10 Curriculum Overview 2019-21

Subject	Exam Board
Systems Control in Engineering (Option)	**OCR**

Description:

The Cambridge National in Systems Control in Engineering introduces students to how microprocessor control systems are used in a variety of engineering environments. Students develop practical skills by designing, producing and testing the operation of simple electronic controls.

To complete the course the students will study four units as follows:

- **Electronic principles** - fundamentals of electronic circuits and how they relate to the design, maintenance and repair of electrical/electronic systems used in engineering products. Students will design, construct and test electronic circuits using appropriate techniques, procedures and equipment, including fault-finding and identifying potential electrical hazards.
  Assessment: External exam (60 mins)
- **Simulate, construct and test electronic circuits** - develop knowledge and understanding of the construction techniques and processes used in the manufacture of electronic and electrical circuits. Students use computer-based simulation software to prototype and test the operation of circuits and produce designs for printed circuit boards (PCB). They also learn how to evaluate the performance of a simple electronic circuit.
  Assessment: assignment (externally moderated)
- **Engineering applications of computers** - consider how computer and microprocessor systems are used in a variety of engineering activities. This includes how engineering industries use Computer Aided Design (CAD) and Computer Aided Manufacture (CAM) to design and manufacture new products. Students will look at the use of systems such as Programmable Logic Controllers (PLC) and Programmable Interface Controllers (PIC) in automated manufacturing.
  Assessment: assignment (externally moderated)
- **Process control systems** - explore how different microprocessor and microcontroller control systems are used in a variety of domestic and commercial engineering contexts. Students develop a practical understanding of how such control systems are designed, simulated and tested, and they solve design problems using appropriate sensor, transducer and programmable logic controllers (PLC) or programmable interface controllers (PIC).
  Assessment: assignment (externally moderated)

Link to Specification:

https://www.ocr.org.uk/qualifications/cambridge-nationals/engineering-manufacture-level-1-2-award-certificate-j832-j842/

Y10 Curriculum Overview 2019-21

Subject	Exam Board
Level 1/2 Engineering Manufacture	**OCR**

Description:

This qualification is part of the new Cambridge Nationals in Engineering suite. It is aimed at students who wish to study the processes involved in manufacturing new engineered products. It provides students with the knowledge and skills required to operate manufacturing tools and equipment used to make products in accordance with a design specification, and develops their understanding of the processes and systems required to transfer a design concept into a mass produced quality product.

Engineering manufacture is a discipline of engineering dealing with different manufacturing practices and processes using the machines, tools and equipment that turn raw materials into new products. This qualification will enable your students to study these processes. It will also allow them to operate the tools and equipment used to make products from the requirements of a design specification, as well as use relevant computer applications such as CAD/CAM, and CNC equipment.

Units:

- Engineering materials, processes and production
- Preparing and planning for manufacture
- Computer-aided manufacturing
- Quality control of engineered products

Method of Assessment:

Engineering materials, processes and production
Written examination (1 hour– 60 marks)
Preparing and planning for manufacture
Internally assessed assignment, externally moderated
Computer-aided manufacturing
Internally assessed assignment, externally moderated
Quality control of engineered products
Internally assessed assignment, externally moderated

Link to Specification:
https://www.ocr.org.uk/qualifications/cambridge-nationals/engineering-manufacture-level-1-2-award-certificate-j832-j842/

Y10 Curriculum Overview 2019-21

Subject	Exam Board
BTEC Technical Award in Digital Information Technology	**Pearson**

Description:

The Award gives learners the opportunity to develop sector-specific knowledge and skills in a practical learning environment. The main focus is on four areas of equal importance, which cover the:

- development of **key skills** that prove your aptitude in digital information technology, such as project planning, designing and creating user interfaces, creating dashboards to present and interpret data
- process that underpins effective ways of **working in digital information technology**, such as project planning, the iterative design process, cyber security, virtual teams, legal and ethical codes of conduct
- **attitudes** that are considered most important in digital information technology, including personal management and communication
- knowledge that underpins **effective use of skills, process and attitudes** in the sector such as how different user interfaces meet user needs, how organisations collect and use data to make decisions, virtual workplaces, cyber security and legal and ethical issues.

Units covered are:

- Exploring User Interface Design Principles and Project Planning Techniques
  Internally assessed assignment, externally moderated
- Collecting, Presenting and Interpreting Data
  Internally assessed assignment, externally moderated
- Effective Digital Working Practices
  Written examination

Method of Assessment:

All assessment for BTEC Technical Awards is criterion referenced, based on the achievement of all the specified learning outcomes. Each unit within the qualification has specified assessment and grading criteria which are to be used for grading purposes.
A summative unit grade can be awarded at **pass, merit or distinction**: to achieve a 'pass' a learner must have satisfied all the pass assessment criteria to achieve a 'merit' a learner must additionally have satisfied all the merit grading criteria to achieve a 'distinction' a learner must additionally have satisfied all the grading distinction criteria

Link to Specification:

https://qualifications.pearson.com/en/qualifications/btec-tech-awards/digital-information-technology.html