

The Royal School Dungannon



**Subjects for Study at
Advanced Level 2018/19**

Options Booklet

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Introduction

With a view to entry to Sixth Form pupils will be asked to indicate their choice of subjects for study to Advanced Level. The purpose of this booklet is to assist pupils and their parents in this choice by providing outline information about the subjects available. More detailed information about specific subjects can be obtained from the relevant subject teacher or the Head of Department.

Choosing your subjects

We would offer the following advice.

1. Choose subjects which you like and enjoy. You are more likely to make the necessary commitment of time and effort to subjects you like.
2. Choose subjects which you are good at and in which you feel you can do well at A Level. Year 11 & 12 examination results will have given you some indication of your best subjects, but if you have doubts about your ability you should consult your class teacher.
3. Choose subjects which you think you may need later. If you have a special interest in a particular career you need to ensure that your selection of subjects is compatible with its entry requirements. For the majority of pupils who do not have any definite career in mind at this stage, it is important to select a subject combination that keeps your future options as open as possible within the range of your likely interests. The resources of the careers library are available for you to research possible careers and courses. You are also encouraged to use ICT facilities to access university or other relevant websites to obtain further information. You should always discuss your choice of subjects with your careers teacher.
4. If you are unsure about your particular career path you should choose subjects that will provide you with a good foundation for degree level study.

The Russell Group* which currently represents 24 leading UK universities states “If you don’t yet know what you’ll want to study at university, there are some subjects which will keep your degree options open until you decide which course to take.” These Advanced Level subjects — which they call ‘facilitating subjects’ — “open doors to more degrees and more professions than others”.

Subjects that The Russell Group view as ‘facilitating’ subjects are:

- Mathematics and Further Mathematics
- English Literature
- Physics
- Biology
- Chemistry
- Geography
- History
- Modern Languages – e.g. French, German, Spanish etc...
- Classical languages – e.g. Latin, Ancient Greek

(* Source: The Russell Group - <http://russellgroup.ac.uk/informed-choices>)

5. For obvious reasons you should not choose a subject simply because your friends are choosing it or because you like the teacher.

A Level Subject Specifications

1. AS and A levels are being reformed in stages, with **most** subjects having taught new specifications from September 2016 and a small number commencing in September 2017. In these new specifications AS material accounts for 40% of the final A level result and A2 material accounts for 60%; previously AS and A2 were each worth 50%.
2. Most of the subjects offered at A level in RSD take CCEA qualifications. CCEA offers modular assessment, therefore pupils will sit AS modules at the end of Year 13 and then take the A2 modules at the end of Year 14. The AS qualification is awarded on the basis of performance in the two/three AS units, while the full A Level is awarded on the basis of performance in all four/six units (40% from AS units, 60% from A2 units).

As the majority of subjects will follow a modular structure it will be possible for pupils to finish their study of a particular subject in Year 13, taking an AS qualification based on examinations in two/three AS units. This means that a wider choice of subjects will be available to those pupils who may wish to study a fourth subject at AS Level in Year 13.

3. English awarding bodies' (examination boards') qualifications (AQA, EDEXCEL, OCR) are also undergoing reform with many subjects having revised content, however a significant change is that assessment in these qualifications is linear. This means that **all examinations must be taken at the end of the course**, i.e. a pupil taking A level must sit all units at the end of Year 14; if the pupil sits AS modules in Year 13 they will not count towards the A level result.

Please note: Computer Science (OCR), Media Studies (WJEC Eduqas) & Psychology (AQA) are linear qualifications.

4. University selectors are unlikely to equate two AS qualifications to one full A Level, especially in applications for competitive courses, and it is expected that most universities will continue to make conditional offers based on three A Level subjects. However, admissions policy will vary from university to university, and there are indications that offering a fourth subject at AS Level is viewed favourably by some Admission Tutors, especially if it is in a contrasting discipline. This is particularly the case for entry to Oxbridge and other prestigious universities, and for some high demand courses including Medicine, Dentistry, Law and Veterinary. Indeed there are cases where Universities are requiring 3 A Levels and 1 AS Level as a basic course requirement (e.g. QUB Medicine, Dentistry).

In the Republic of Ireland, universities such as Trinity and UCD require 4 A Levels for high demand subjects such as Medicine, Law, Dentistry and Physiotherapy. Four AS Levels are required for many courses in the Republic of Ireland.

Please note: At the moment Trinity College Dublin has a small number of places available to pupils from Northern Ireland based on three A levels.

The introduction of the A* grade (see below) has resulted in a small number of universities requesting it as part of their offer for some courses.

It is therefore advisable that pupils who may already have a special interest in a particular university or course use the resources of the Careers Library and university websites to familiarise themselves with

the current policy of the institution concerned. Please refer to note 3 on page 8 for further advice on the advantages and drawbacks of selecting four subjects in Year 13.

5. GCE A level grading from summer 2010

Summer 2010 saw the introduction of the new A* grade at A level. The A* grade rewards outstanding performance and allows for improved discrimination between the best performing candidates. It has been awarded for all A levels since Summer 2010.

The A* grade is awarded for the full A level qualification only. It is not awarded for the AS qualification or at unit level.

The A* grade will be awarded to candidates who achieve:

- an A grade overall in their GCE A level , and
- 90 per cent of the maximum Uniform Marks Scale (UMS) on the aggregate of their A2 units. This will mean achieving at least 180 (270) uniform marks out of the 200 (300) available at A2.

The A* grade will be achieved by pupils who have performed very well throughout all of their A level units (AS and A2) and, in addition, outstandingly well on the A2 units, which incorporate the most challenging questions.

(Source: http://www.rewardinglearning.org.uk/docs/circular/gce/2010/sif_23_10_circ.pdf)

Further Points concerning choice of subjects

1. Last year around 50% of pupils selected four subjects for study at Advanced Subsidiary Level in Year 13. The normal entry requirement for an A Level course is a grade B or better at GCSE higher tier in the relevant subject. However, Heads of Department may be prepared to give special consideration to a very committed pupil with a lower grade at GCSE, normally obtained at the GCSE higher tier.
2. A number of subjects (fresh start subjects) including Art & Design, Business Studies, Food Technology (Nutrition and Food Science), Geography, History, Music, Religious Studies and Sports Studies and the Active Leisure Industry may, with the agreement of the Head of Department concerned, be taken by pupils who have not studied that subject at GCSE. Any pupil opting for a subject not studied at GCSE Level must speak to the relevant Head of Department in advance and ask the Head of Department to initial the options form to show that they have been consulted. Clearly Economics along with Media Studies, Government & Politics and Psychology may be studied without the relevant GCSE but refer to the subject entry in this booklet for further information on entry requirements. **Pupils should not consider studying more than one subject at AS/A2 level which has not been studied at GCSE level.**
3. In making the decision as to whether or not to take a fourth subject in Year 13, pupils are advised to reflect carefully on the effect that study of a fourth subject at AS Level will have on their three main A Level subjects. It is not in a sixth former's interest to increase the breadth of study at the expense of performance in the three main A Level subjects. For some pupils this will mean selecting three subjects for study at both AS and A2 Level. However, those pupils who expect to achieve good GCSE results, and especially those who in addition may intend applying to a particularly prestigious university or for highly competitive courses, including Medicine, Dentistry, Law and Veterinary, are recommended to give serious consideration to taking a fourth subject to AS Level in Year 13. As has been the case in previous years, it is expected that a number of pupils will opt to study four subjects in Year 14 to full A Level standard.
4. There is no absolute guarantee or right to a place in any Year 13 course. The School reserves the right ultimately:-
 - i) to select candidates for any course that is over-subscribed
 - ii) to reject candidates for courses for which it believes they are not sufficiently capable of completing
 - iii) to withdraw a subject if there are insufficient numbers to make it viable.
6. Admission to Sixth Form studies for RSD pupils is on the basis of the advertised criteria which are shown on the following page (page 9).
7. The Sixth Form Charter lists the criteria for progressing from Year 13 to Year 14 and these are shown on page 10 of this booklet.
8. Specialist Careers Department staff conduct personal interviews with each Year 12 pupil, and will answer your questions and give any further guidance required at that stage.

Admission to Sixth Form for RSD Pupils

A* = 4

A = 3

B = 2

C = 1

Please note that GCSE Short Courses will only count for half the above points (i.e. A* = 2, A = 1½, B = 1, C = ½)

- ❖ The minimum requirement for automatic entry to Year 13 = 12# points (for 3 AS levels) **OR** 16# points (for 4 AS levels) including at least 6 GCSE passes, (pass = grade C or better). **Note:** # Year 11 Maths should be included in the points total.
- ❖ Pupils must normally have GCSE passes at grade A*, A or B for the AS/A2 subjects to be studied in Sixth Form. C grades are generally not suitable for A level work in that subject (please see options booklet)
- ❖ When selecting to study new start subjects a pupil must have GCSE passes at A*, A or B grades in related subject(s).
(Lower requirements may apply for pupils whose first language is not English.)

Pupils who have **not** reached the minimum number of points for automatic return should phone the school to arrange a meeting with the Headmaster. Pupils must be accompanied by a parent/guardian in order to review progression into Sixth Form. The purpose of this meeting is to determine the best way forward for the pupil. The discussion with the pupil and parent/guardian may result in:

- A decision for the pupil to continue to RSD Sixth Form with realistic and suitable subject combinations
- A decision to leave RSD and pursue an alternative course of study

Pupils returning with less than 12 points will be required to sign a Sixth Form performance contract. This will include setting targets for the pupil to meet in Year 13 and outline other requirements such as regular meetings with the Head of Sixth Form to analyse the pupil's tracking scores and discuss progress towards AS exams.

Examples:

$$2A^*+4A+3B = 26$$

$$3A+5B+1C = 20$$

$$1A^*+2A+3B+2C = 18$$

$$1A+4B+4C = 15$$

$$1A+3B+2C+ 1A(SC) = 12\frac{1}{2}$$

$$4B+6C = 14$$

$$5B+3C = 13$$

$$4B+4C = 12$$

$$3B+4C = 10$$

$$3B+5C+1C(SC) = 11\frac{1}{2}$$

NOTES:

ONCE THE RESULTS ARRIVE IN YOUR HOME IN AUGUST:

- Pupils who have **not** reached the minimum number of points (ie 12 points) for automatic return should phone the school to arrange a meeting with the Headmaster.
- If you are unsure about your choice of subjects, you should telephone the Reception Office to make an appointment to see a member of the Careers staff.
- If you wish to make a change to your choice of subjects, you should consult the options sheet to see that any change is feasible and then inform the Reception Office by telephone of your requested change(s). The Reception Office will pass the information to Miss Chestnutt. When the change has been considered, the Reception Office will telephone you to let you know the outcome. Remember that class sizes and other factors may determine whether any change is possible or not.

Jan 2018

Sixth Form Charter

Progress from Year 13 to Year 14

All pupils wishing to be admitted to Year 14 from Year 13 will be required to achieve the following standards during their first year of A levels:

- i) satisfactory attendance throughout the year, typically greater than 90% in total.
- ii) satisfactory Report Cards demonstrating consistent application and progress in line with the pupil's ability.
- iii) satisfactory standards in the Spring report demonstrating
 - (a) consistent application and progress in line with the pupil's ability;
 - (b) the completion of all coursework and/or controlled assessments (if relevant);
 - (c) satisfactory levels of preparation for the examinations in the summer.
- iv) 3 Passes at Grades A – E, with Grade D or better in at least TWO AS levels in August

In Addition:- All pupils wishing to be admitted to Year 14 from Year 13 will be expected to achieve the following standards during their first year of A levels:

- v) regular and active membership of **at least one** weekly extra-curricular activity, club or society (sporting, cultural, etc.)
- vi) no serious breaches of school discipline or Sixth Form Centre etiquette
- vii) be able to show evidence of achieving homework time targets over a sustained period (2½ – 3 hours per night, five nights a week, or 12½ – 15 hours in total)
- viii) active membership of House
- ix) ability to work well in Private Study periods
- x) good co-operation with subject teachers
- xi) punctual handing in of written assignments

Alternative Pathways

RSD's main collaboration is with St Patrick's Academy where it is possible to study the following A Levels and these subjects can be selected as **ONE** of your choices:

- Government & Politics (CCEA, Modular) – this course **may be available** (see page 32)
- Media Studies (WJEC Eduqas, Linear) (see page 41)
- Performing Arts (CCEA, Modular) (see page 49)
- Psychology (AQA, Linear) (see page 54)

It may be possible to arrange other educational pathways which are more vocational to meet the specific needs of a small number of individual pupils through collaboration with other local education establishments.

In 2018/2019 South West College has provisionally offered Year 13 pupils a BTEC Level 3 in:

- Engineering

In 2018/2019 The Integrated College Dungannon has provisionally offered Year 13 pupils a BTEC Level 3 in:

- Performing Arts

The BTEC Level 3 Course is an Applied Subject, broadly equivalent to AS/A Level.

The qualification is graded as follows:

- Pass (points equivalent to E Grade)
- Merit (points equivalent to C Grade)
- Distinction (points equivalent to A Grade)
- Distinction* (points equivalent to A* Grade)

The following points should be noted that:

- **a pupil will only be able to take a total of one subject in a partner school**
- the subject entry requirements of the partner school will apply
- there are a limited number of places available
- this type of arrangement inevitably results in some encroachment on times allocated to other subjects and pupils must recognize this from the outset and ensure that they make appropriate arrangements with their teachers to keep up with the work in all subjects
- the pupil will be responsible for making their own way to and from the partner school and will be required to sign in at reception each day on arrival and sign out on departure from the partner school and sign out when departing from and sign in on returning to RSD
- any pupil (along with their parents) who studies at another school will be required to sign an agreement concerning their understanding of what is expected of them and what the course entails.

It is also important to note that what you decide to study post-16 can have a major impact on what you can study at degree level. It is extremely important that you are aware that for several university courses some vocational/applied qualifications are not considered to be suitable.

The vocational/applied subjects offered by RSD are:

- A level Sports Science and the Active Leisure Industry
- A level Performing Arts (at St Patrick's Academy)
- BTEC Level 3 in Engineering (at South West College)
- BTEC Level 3 in Performing Arts (at the Integrated College Dungannon)

Some important issues to consider:

- If you do an Applied A-level you will need very high grades indeed plus a high grade in an extra 2 A-levels to be considered by most Russell Group universities*.
- Some universities consider these vocational qualifications in certain circumstances but the circumstances do vary. It is therefore particularly important to check requirements with individual universities.

(Information taken from <http://russellgroup.ac.uk/informed-choices>)

(The Russell Group represents 24 leading UK universities which are committed to maintaining the very best research, an outstanding teaching and learning experience and unrivalled links with business and the public sector.)*

Wendy Piatt, Director General of the Russell Group, said no Russell Group university barred any A-level subject. **"University websites typically include details on 'essential' and 'preferred' A-levels to help pupils maximise their chances of gaining entry to competitive degree courses. Most provide very clear and comprehensive information on required A-level subjects and which ones will not be considered when making admissions decisions. Pupils are well advised to take very careful note of such requirements."**

If you wish for the school to investigate the possibility of studying another subject, please indicate it on the option form or speak to Miss Chestnutt.

Art & Design (CCEA, Modular)

Head of Department: Mrs ME Clingan

Why choose GCE Art and Design?

The creative industries are a fast-growing area of the economy and are key to economic success. Northern Ireland and the UK have an established reputation in these industries. The study of Art and Design creates a pathway to a future career in a creative-industries related field. This specification is designed to broaden and deepen knowledge, skills and contextual understanding of a range of art, craft and design disciplines. It prepares pupils for further study in Art and Design or in a related field. This qualification is designed to promote and reward: independent learning; personal development and motivation; the ability to make creative connections, find alternative approaches and take risks in creating art and design work; and aesthetic awareness and intellectual capabilities. Art and Design encourages pupils to make personal connections, explore their identity, and develop their philosophical and spiritual understanding. The study of Art and Design has an inherent capacity to develop key transferable skills and qualities which are highly sought after by employers. These include creativity, problem solving, resourcefulness, resilience, imagination, empathy, and innovation. Higher order thinking skills such as researching, analysing and reflecting are fundamental to this qualification.

Prior attainment

This specification is designed to encourage pupils to progress from the study of GCSE Art and Design, GCSE Contemporary Crafts or similar Art and Design courses or qualifications. This specification builds on the knowledge, understanding and skills developed in Art and Design at GCSE and Key Stage 3 levels.

Content overview

Unit AS 1 and Unit AS 2

In Unit AS 1, pupils explore through visual enquiry a broad range of contextual sources, skills, techniques and disciplines. This builds their confidence in working independently. In Unit AS 2, they should bring their exploratory work to a completed personal outcome based on their response to a broad theme that CCEA sets.

Unit A2 1 and Unit A2 2

Pupils who continue to A2 pursue extended development of particular themes, ideas or issues. In Unit A2 1, they undertake further theoretical research. There is an increased requirement at A2 to demonstrate understanding through integrated practical and written pieces of work, and other means of communication. In unit two they will undertake more rigorous exploration of an interdisciplinary or multidisciplinary approach or greater specialisation in a particular medium or process. This is in response to a broad theme set by CCEA.

Apart from the written element in Unit A2 1, all work is assessed internally and moderated externally. The written element is sent to CCEA for assessment.

Assessment

Unit	Assessment	Weighting
AS 1: Experimental Portfolio	<ul style="list-style-type: none">• Pupils develop, explore and record ideas.• Teachers assess pupils' work, and CCEA moderates the results.• Assessment Objectives 1, 2, and 3 only	50% of AS 20% of A level

Unit	Assessment	Weighting
AS 2: Personal Response	<ul style="list-style-type: none"> In this unit, pupils respond to a theme that CCEA issues in a stimulus paper at the beginning of the AS course. It includes developmental work and an outcome that stems from the research and exploratory work completed for Unit AS 1. Pupils present a personal outcome. Teachers assess the controlled task, and CCEA moderates the results. Assessment Objective 4 more heavily weighted than Assessment Objectives 1, 2 and 3. 	50% of AS 20% of A level
A2 1: Personal and Critical Investigation	<ul style="list-style-type: none"> This unit includes both practical and written investigations and the use of theoretical research. Pupils demonstrate understanding through integrated practical and written forms. Written investigation 1000 – 3000 words – externally assessed 20% of A2, 12% of A level Teachers assess the practical investigation, and CCEA moderates the results. - 40% of A2, 24% of A level Written and practical work inform each other and are integrated, but are marked separately. Assessment Objectives 1,2, and 3 only 	60% of A2 36% of A level
A2 2: Thematic Outcome	<ul style="list-style-type: none"> In this unit, pupils respond to a theme that we issue in a stimulus paper at the beginning of the A2 course. This unit includes developmental work and an outcome which stems from the personal investigation completed for Unit A2 1. Teachers assess pupils' work, and CCEA moderates the results. Assessment Objective 4 more heavily weighted than Assessment Objectives 1, 2 and 3 	40% of A2 24% of A level

Assessment Objectives

In AS/A2 Art & Design there are four assessment objectives for this specification. Candidates must:

- Assessment Objective 1 – Knowledge and understanding** - develop ideas through sustained and focused investigations informed by contextual and other sources, demonstrating analytical and critical understanding;
- Assessment Objective 2 – Creative process** - explore and select appropriate resources, media, materials, techniques and processes, reviewing and refining ideas as work develops;
- Assessment Objective 3 – Skills** - record ideas, observations and insights relevant to intentions, reflecting critically on work and progress; and
- Assessment Objective 4 – Outcome** - present a personal and meaningful response that realises intentions and, where appropriate, makes connections between visual and other elements.

What can I do with a qualification in Art and Design?

A GCE in Art and Design provides a solid foundation for further study of art, craft and design at a higher level and for degree courses in other fields. Qualifications in Art and Design can lead to employment in many areas such as architecture, graphic design, interior design, product design, media, museum curatorship, gallery curator and fashion etc. The course will also provide you with creative skills valued by many employers.

Further Information: Please speak to Mrs Clingan or Mrs Best and/or see <http://ccea.org.uk/>

Biology (CCEA, Modular)

Head of Department: Mr RE Chambers

Subsidiary (AS) and Advanced Level (A Level) courses in Biology (CCEA Specification)

In the first year of sixth form pupils complete an AS course. The AS course can be taken either as a final qualification or as the first half of the A Level qualification. The full A level qualification is based on marks from AS level (40%) and A2 level (60%). The extra marks at A2 level reflect the more synoptic elements within the examination of these modules as well as the more demanding assessment objectives requiring application of knowledge.

The A Level award in Biology provides a basis for the further study, at tertiary level, of Biology and related courses. For those progressing directly into employment, an AS or A Level award is relevant not only in the fields of science, engineering and medicine, but also to areas of commerce and the public service in which problem-solving and practical skills are valued.

The course helps to provide an understanding of how biological developments affect the environment. The course also contributes towards an understanding of ethical and cultural issues, thus adding to a full and rounded education.

Studying biology encourages pupils to:

- develop their interest in and enthusiasm for Biology, including developing an interest in further study and careers in the subject;
- appreciate how society makes decisions about scientific issues and how the sciences contribute to the success of the economy and society;
- develop and demonstrate a deeper appreciation of, and understanding of, how science works;
- develop and demonstrate their skills and knowledge; and
- develop essential knowledge and understanding of different areas of the subject and how they relate to each other.

Entry Requirements:

It is recommended that those wishing to study Biology at AS/A2 level should have a least a B in GCSE Biology with at least B grades in both modules of the written papers or at least BB grades overall in GCSE Double Award Science including at least B grades in both modules of the written papers taken at higher tier in the Biology component.

What will I study?

Year 13:

Unit AS 1: Molecules and Cells

This unit deals with Molecules, Enzymes, Viruses, Cells, Cell Physiology, Continuity of cells(Mitosis & Meiosis) and Tissues and Organs

Unit AS 2: Organisms and Biodiversity

This unit deals with Transport and Exchange mechanisms in Plants and Animals, Adaptations of Organisms, and Biodiversity with an emphasis on local contexts.

Unit AS 3: Assessment of practical Skills

Pupils will be required to submit a practical booklet based on the completion of a minimum of 7 practicals listed within the specification. This will be assessed by your teacher and will be moderated by CCEA. There will also be a 1 hour externally assessed written paper assessing practical skills.

Year 14:

Unit A2 1: Physiology and Ecosystems

This unit deals with Homeostasis, Immunity, Coordination and Control in Plants and Animals, and Ecosystems

Unit A2 2: Biochemistry, Genetics and Evolutionary Trends

This unit deals with Respiration, Photosynthesis, DNA as the Genetic Code, Gene Technology, Genes and Patterns of Inheritance, Population genetics, Kingdom Plantae and Kingdom Animalia.

Unit A2 3: Assessment of Investigational and Practical skills in Biology

Pupils will be required to submit a practical booklet based on the completion of a minimum of 5 practicals listed within the specification. This will be assessed by your teacher and will be moderated by CCEA. There will also be a 1 hour 15 min externally assessed written paper assessing practical skills.

Specification at a glance:

Content	Assessment	Weightings
AS 1: Molecules and Cells	External written examination. 1 hour 30 minutes. Pupils answer six to eight structured questions and write an essay.	37.5% of AS 15% of A Level
AS 2: Organisms and Biodiversity	External written examination 1 hour 30 minutes Pupils answer six to eight structured questions and write an essay.	37.5% of AS 15% of A level
AS 3: Practical Skills in AS Biology	External written examination assessing practical skills. 1 hour and Internal practical assessment	25% of AS 10% of A Level
A2 1: Physiology, Co-ordination and Control of Ecosystems	External written examination 2 hours 15 minutes Pupils answer six to nine structured questions and write an essay.	24% of A Level
A2 2: Biochemistry, Genetics and Evolutionary Trends	External written examination 2 hours 15 minutes Pupils answer six to nine structured questions and write an essay.	24% of A Level
A2 3: Practical Skills in Biology	External written examination assessing practical skills. 1 hour and 15 minutes and Internal practical assessment	12 % of A Level

Opportunities Beyond A Level

Many pupils who study Biology go on to University to study a course in which Biology constitutes a major part of the degree course e.g. Biology, Biochemistry, Medicine, Dentistry, Pharmacy, Physiotherapy, Environmental health and The Food industry. However, the skills gained from studying Biology are transferable and will be beneficial in non-biological degree courses.

With the many developing uses and advances in Biological related industries and health and ethical issues a study of A level Biology would provide some knowledge and understanding of these changes which may affect us in the future.

Business Studies (CCEA, Modular)

Head of Department: Mrs AR Straghan

Course Content

Unit AS 1: Introduction to Business

This unit introduces pupils to the business world. It begins, as many businesses do, with the entrepreneur and what motivates individuals to develop business enterprises. Pupils are expected to become familiar with different business ownership structures and the key stakeholder groups which may have an interest in how a business is managed. Pupils must acquire a critical understanding of the importance of quality and its significance in the competitive marketplace, including the production process, and the recruitment and training of a quality labour force. Pupils should appreciate the impact of management and leadership styles on employee motivation and business operations.

Unit AS 2: Growing the Business

Pupils will understand the role of technology in growing a business and how to assist with decision making. They must also understand the impact of competition on a business. Pupils also acquire a critical understanding of the marketing process, marketing strategy and the use of E-Business. Pupils will build an appreciation of the role of accounting and financial information in business decision making and financial control.

Unit A2 1: Strategic Decision Making

Pupils will be expected to identify business objectives and the potential for these to conflict with those of various stakeholder groups. Pupils will be able to analyse and evaluate stakeholder management strategies. Pupils will gain an insight into business planning and the need to manage risk and uncertainty when developing business strategies. They must also be able to analyse the importance of accounting and financial information in making strategic business decisions.

Unit A2 2: The Competitive Business Environment

This unit examines the macroeconomic framework within which businesses operate. Pupils are expected to evaluate the impact of globalisation on business activities. Pupils will develop an appreciation of the importance of ethics and sustainability on business decision making and culture. They will also evaluate the influence of stakeholders on business operations.

The unit examines how businesses are affected by and react to change within the dynamic and technology-driven business environment.

Assessment

All assessment is **external** – there is no coursework element.

Pathways

Business can lead to a career in many areas. Business Management, International Business, Banking, Insurance, Finance, Accounting, Administration, Retail, Leisure Services, Production Management and many other professions.

Specification at a glance

Content	Assessment	Weightings
AS 1: Introduction to Business	External written examination 1 hour 30 minutes	50% of AS
	2 compulsory structured data responses (40 marks each)	20% of A level
AS 2: Growing the Business	External written examination 1 hour 30 minutes	50% of AS
	2 compulsory structured data responses (40 marks each)	20% of A level
A2 1: Strategic Decision Making	External written examination 2 hours	30% of A level
	5 compulsory structured data response questions (90 marks)	
A2 2: The Competitive Business Environment	External written examination 2 hours	30% of A level
	6 compulsory structured data response questions (90 marks)	

Chemistry (CCEA, Modular)

Head of Department: Mrs RL Hampton

Introduction

The aim of Chemistry is to encourage pupils to:

- develop their interest in and enthusiasm for chemistry;
- develop their interest in the further study of chemistry and the careers associated with courses related to the subject;
- draw together different areas of knowledge, skills and understanding;
- develop essential knowledge and understanding of the different areas of the subject and how they relate to each other;
- appreciate how society makes decisions about scientific issues and how the subject contributes to the success of the economy and society;
- develop competence and ability in practical, mathematical and problem-solving skills;
- develop and demonstrate a deep appreciation of the skills, knowledge and understanding of How Science Works and;
- demonstrate through challenging assessments that they understand and can apply key concepts.

Entry Requirements

It is recommended that those wishing to study Chemistry at AS/A2 level should have a least a B in GCSE Chemistry with at least B grades in both modules of the written papers or at least BB grades overall in GCSE Double Award Science including at least B grades in both modules of the written papers taken at higher tier in the Chemistry component.

What Will I Study?

Unit AS 1: Basic Concepts in Physical and Inorganic Chemistry

Formula and Equations, Atomic structure, Bonding, Intermolecular forces, Structure, Shapes of molecules and ions, Redox, Halogens, Acid base titrations and Qualitative tests

Unit AS 2: Further Physical and Inorganic Chemistry and an Introduction to Organic Chemistry

Formula and Amounts, Nomenclature and Isomerism, Alkanes, Alkenes, Halogeno-alkanes, Alcohols, Infrared spectroscopy, Energetics, Equilibrium, Kinetics and Group II elements

Unit AS 3: Basic Practical Chemistry

Opportunities for carrying out 18 practical activities will be embedded throughout the course to ensure candidates have mastered certain basic practical skills

Unit A2 1: Further Physical and Organic Chemistry

Lattice enthalpy, Entropy, Rates of Reaction, Equilibrium, Acid-base Equilibria, Isomerism, Aldehydes and Ketones, Carboxylic acid, Derivatives of Carboxylic Acids and Aromatic Chemistry

Unit A2 2: Analytical, Transition Metals, Electrochemistry and Organic Nitrogen Chemistry

Mass Spectrometry, Nuclear Magnetic Resonance Spectroscopy, Volumetric Analysis, Colorimetry, Chromatography, Transition Metals, Electrode Potentials, Amines, Amides, Amino acids, Polymer Chemistry and Medicinal Chemistry

Unit A2 3: Further Practical Chemistry

Opportunities for carrying out 21 practical activities will be embedded throughout the course to ensure candidates should have mastered certain basic practical skills

Specification At A Glance

Unit	Areas of study	Assessment	Weighing
AS 1	Basic Concepts in Physical and Inorganic Chemistry	External written paper lasting 1 hour 30 minutes	40% of AS 16% of A Level
AS 2	Further Physical and Inorganic Chemistry and Introduction to Organic Chemistry	External written paper lasting 1 hour 30 minutes	40% of AS 16% of A Level
AS 3	Basic Practical Chemistry	Practical Booklet A consists of a variety of practical tasks, is taken in the laboratory and lasts 1 hour 15 minutes. Practical booklet B tests practical techniques observations and calculations and is an external written paper lasting 1 hour 15 minutes	20% of AS 8% of A Level
A2 1	Further Physical and Organic Chemistry	A written paper lasting 2 hours	40% of A2 24% of A Level
A2 2	Analytical, Transition Metals, Electrochemistry and Further Organic Nitrogen Chemistry	A written paper lasting 2 hours	40% of A2 24% of A Level
A2 3	Further Practical Chemistry	Practical Booklet A consists of a variety of practical tasks, is taken in the laboratory and lasts 1 hour 15 minutes Practical booklet B tests practical techniques observations and calculations and is an external written paper lasting 1 hour 15 minutes	20% of A2 12% of A Level

A minimum of 20% of the marks in all papers will assess mathematical skills in a Chemistry context and one extended writing opportunity at AS and a minimum of two extended writing opportunities at A2 will be provided to assess Quality with Communication.

Opportunities Beyond A Level

Chemistry is a very important subject as a gateway to many scientific professions. It has thus become a prerequisite to have a high grade for medicine, dentistry, pharmacy, food science, agriculture, biochemistry and environmental studies. A suitable pass grade in chemistry is accepted as an A level for entry to many other careers and despite the fact fewer people now do a degree in Chemistry, it has become even more important as a feeder subject for a wider range of scientific careers.

Computer Science (OCR, Linear)

Head of Department: Mr KD McGuinness

Please note: This qualification is linear (ie, Pupils must sit all modules in Y14 to achieve a full A Level, even if they have sat the AS modules in Y13). AS grades do not contribute to overall A-Level qualification.

Introduction

Computer systems are continually transforming the way we live and work. The new A-level Computer Science course is being offered in RSD to satisfy a growing appetite for the knowledge and practical skills that are being demanded in the workplace. Computer Science is an exciting and intensely creative subject that combines innovation and logical thinking.

At its core, the Computer Science A-level course encourages invention and creativity. It helps pupils to develop the skills to solve problems, design systems and understand human and machine intelligence. This is achieved through the development of Mathematical skills, embedded throughout the content of the three components, and computational thinking – one of the key principles in understanding how complex problems can be broken down to derive solutions.

A-level Computer Science is a two-year course with three assessed components. All assessment takes place at the end of the second year of study. The course aims to build on the programme of study offered through GCSE Computing and many of the key concepts covered at GCSE level are developed further.

The three components are: Computer Systems; Algorithms and Programming; and Programming Project.

Component 01: Computer Systems:

This component will introduce pupils to the internal workings of the Central Processing Unit (CPU), the exchange of data and will also look at software development, data types and legal and ethical issues. It is expected that pupils will draw on this underpinning content when studying computational thinking, developing programming techniques and devising their own programming approach in the Programming project component. Pupils will be expected to apply the criteria below in different contexts including current and future uses of the technologies.

- The characteristics of contemporary processors, input, output and storage devices
- Software and software development
- Exchanging data
- Data types, data structures and algorithms
- Legal, moral, cultural and ethical issues.

Component 02: Algorithms and Programming:

This component will incorporate and build on the knowledge and understanding gained in the Computer Systems component (01). In addition, pupils will be expected to understand:

- Elements of computational thinking
- Programming and problem solving
- Pattern recognition, abstraction and decomposition
- Algorithm design and efficiency
- Standard algorithms.

Component 03: Programming Project:

Pupils will be expected to analyse, design, develop, test, evaluate and document a program written in a suitable programming language. The underlying approach to the project is to apply the principles of computational thinking to a practical coding problem. Pupils will use the skills and knowledge they have developed to solve a complex problem through:

- Analysis of the problem
- Design of the solution
- Developing the solution
- Evaluation

Assessment

Component	Assessment	Weighting
Computer Systems	2 ½ hour examination paper	40%
Algorithms and Programming	2 ½ hour examination paper	40%
Programming Project	Portfolio-based non-exam assessment	20%

In each of the examination papers there will be a mixture of questions including short answer, longer answer and some higher tariff questions that will test the quality of extended responses.

The programming project will be submitted in the form of a report that will contain the solution to a problem written in a suitable programming language.

Subject Requirements:

There are no prior qualification requirements for this specification. Pupils who are beginning an A level course are likely to have taken GCSE Computing. Those who have not studied Computing but wish to study A level Computer Science must be able to demonstrate a high level of mathematical aptitude and advanced IT skills.

Further Study

The A level Computer Science course will enable pupils to progress to higher study or to progress directly to employment. It will provide pupils with a range of transferable skills which will facilitate personal growth and foster cross curriculum links in areas such as Mathematics, Science and Design and Technology.

Experiences

Visits by GCSE & A level Computing and ICT pupils to The Gadget Show Live and Bletchley Park in recent years have added an extra dimension to the study of this subject and have helped to demonstrate some of the real-world applications that await pupils embarking on, or continuing with, their study within this exciting discipline.

Further Information

For further information, please speak to Mr McGuinness and/or see the subject specification at <http://www.ocr.org.uk/qualifications/as-a-level-gce-computer-science-h046-h446-from-2015/>

Digital Technology (CCEA, Modular)

Head of Department: Mr KD McGuinness

Digital technology incorporates aspects of computer science and information technology. It explores how we can use technology to create, store, process, analyse and present information in a digital context. This includes computer architecture, networks, web technology, digital media, programming tools and software applications. This A-level Digital Technology course provides a natural progression for those who have studied ICT but is also of interest for those who wish to advance their ICT skills and knowledge in preparation for a workplace that is increasingly reliant on new technologies.

The 2015 report *Make or Break: The UK's Digital Future*, from the House of Lords Select Committee on Digital Skills, refers to these categories:

- **Digital citizens** (37% of the total UK workforce) have the ability to use digital technology purposefully and confidently to communicate, find information and purchase goods and services.
- **Digital workers** (46% of the workforce) are working at the higher end of digital skills, with the ability to evaluate, configure and use complex digital systems. These tasks often require programming skills such as scripting.
- **Digital makers** (10% of the workforce) need skills sufficient to build digital technology, typically software development.

These three definitions give some insight into the range of areas that a qualification Digital Technology can lead to. The Digital Citizens and many Digital Workers will benefit greatly from a qualification in Digital Technology. Digital Makers and many Digital Workers would be advised to consider the A-Level Computer Science course.

Aims

The A-Level Digital Technology specification aims to encourage pupils to:

- develop a genuine interest in digital technology;
- gain an understanding of the systems development process;
- gain an awareness of a range of technologies and an appreciation of the potential impact these may have on individuals, organisations and society;
- participate in developing an application while adhering to the systems development process;
- develop an understanding of the consequences of using digital technology on individuals, organisations and society, and of social, legal, ethical and other considerations of using digital technology;
- apply their skills to relevant work-related scenarios;
- carry out research and development, and present their findings in different formats;
- develop advanced study skills that help them prepare for third level education; and
- demonstrate that they understand and can apply key concepts through internal and external assessments.

Key features

The following are some of the important features of this specification:

- It includes four assessment units: three are externally assessed and one is internally assessed.
- It gives pupils opportunities to progress to career paths leading to professional IT management.
- It offers advanced study of modern technology-based systems.
- It provides stretch and challenge for A2 pupils.
- It allows pupils to develop advanced skills in a range of development environments using a mixture of examination formats and question types.

AS Content

Module	Assessment	Weightings
AS 1: Approaches to Systems Development	External written examination - 1 hour 30 mins Pupils answer short and extended questions based on Approaches to Systems Development.	50% of AS 20% of A level
AS 2: Fundamentals of Digital Technology	External written examination - 1 hour 30 mins Pupils answer short and extended questions based on the Fundamentals of Digital Technology.	50% of AS 20% of A level

A2 Content

Module	Assessment	Weightings
A2 1: Information Systems	External written examination - 2 hours 30 mins Pupils answer short and extended questions based on Information Systems.	40% of A level
A2 2: Application Development (Case Study)	Internal assessment Pupils compile a portfolio showing evidence of the analysis, design, development, testing and evaluation of an application for a specified end user.	20% of A level

Subject Requirements:

There are no prior qualification requirements for this specification. Pupils who are beginning an A level course are likely to have taken GCSE ICT. Those who have not studied ICT at GCSE level but wish to study A Level Digital Technology must be able to demonstrate a high level of motivation and advanced IT skills.

Further information:

http://ccea.org.uk/digital_technology/

Economics (CCEA, Modular)

Head of Department: Mrs AR Straghan

What is Economics?

Economists study how individuals and groups of people make choices about what to do with their limited resources. Economics is, therefore, not just about money, business and the stock market. Though these are important aspects of the subject, economics also deals with wider social and environmental issues including climate changes, globalisation, sustainable development and the distribution of income and wealth.

Why study Economics?

Pupils of economics develop a host of practical and transferable skills that benefit them in education and in the world of work. These include critical investigation, analytical thinking, oral and written communication, numeracy, research, ICT and handling of data. What's more, the potential earnings for pupils with a degree in Economics is the highest for all graduates, and there are currently shortages of qualified economists. Economics will also be of benefit to you in everyday life by helping you make informed decisions and choices and enabling you to make some sense of what is going on in the world around you.

What will I study?

AS 1: Markets and Market Failure: In this unit, you will study the nature of the basic economic problem and the roles of markets and prices in resolving it. You will look at a range of markets, examine why these sometimes fail to work efficiently and look at ways of correcting this failure.

AS 2: Managing the National Economy: This unit examines the nature and causes of contemporary national economic problems and investigates how these can be resolved. You will look at issues such as unemployment, inflation and economic growth and consider how effective government policy is in these areas.

A2 1: Business Economics: This unit builds in the content of AS 1. It examines how firms make decisions about price and output in a variety of competitive situations. It investigates current influences on business such as environmental issues, globalisation and the growth of the internet. It also looks at government approaches to promoting competition.

A2 2: Managing the Economy in a Global World: A2 2 further develops some of the understanding developed in AS 2. You will study international trade including the case for and against free trade, the UK balance of payments and exchange rates. The unit also covers the European Union, economic development, the effects of increasing globalisation and policy issues in an open economy.

The following example of past papers questions illustrate the huge variety of topics you will study in the subject:

- Critically examine the view that a complete ban is the most effective method of dealing with the problem of smoking.
- Evaluate the view that reducing unemployment should be the UK Government's main economic objective.
- Explain some of the ways in which businesses may use and misuse the environment?
- Critically examine the view that the time has come for the UK to leave the European Union.
- Discuss how Governments should respond to the huge profits earned by banks.
- Critically examine the Government's decision to significantly cut welfare spending.
- Critically examine the view the increased concentration of the UK Supermarket industry ultimately hurt the interests of consumers.

- Evaluate the view that it is wrong for the NHS to deny treatments to people with unhealthy lifestyles.

As you can see from the questions above, by choosing to study economics, you will gain an insight into some of the major problems and issues facing society today.

What can I do with an A level in Economics?

Economics can open a wide range of opportunities in higher education or a rewarding career.

At university you can study economics on its own, or you may wish to consider combining it with the study of other compatible subjects such as Politics, Geography, History, Law, Modern Foreign Languages, Mathematics and Sciences. Economics also combines well with vocational subjects such as Engineering, Manufacturing and Business and many of these will have some Economics module as part of the course. Many Economics pupils go on to have successful careers in business, finance, management, government services, economic research and professions such as teaching, accountancy and the law.

How will I be assessed?

Each unit is assessed by means of an external examination.

AS1: Markets and Market Failure (Worth 50% of AS, 20% of A level)

1 hour 30 minutes examination paper which includes:

Section A – a number of short answer questions

Section B – one data response question

Section C – one extended open response question from a choice of two.

AS2: Managing the National Economy (Worth 50% of AS, 20% of A level)

1 hour 30 minute examination paper which includes Sections A, B and C as above.

A2 1: Business Economics (Worth 30% of A level)

2 hour examination paper

Section A – a number of short questions

Section B – one case study question

Section C – one extended open response question from a choice of two

A2 2: Managing the Economy in a Global World (Worth 30% of A level)

2 hour examination paper, Sections A, B and C as above.

What does it take to be a good Economics pupil?

- An interest in current affairs.
- The motivation to read around what we cover in class
- Good communication skills (Grade B or above in English is desirable)
- Good numeracy skills (Grade B or above in GCSE Maths is desirable)
- A willingness to work extra hard as it involves starting a new subject at AS level.

How can I find out more?

- Speak to Mrs Straghan
- Talk to pupils who are already studying the subject
- Have a look at the following websites – www.whystudyeconomics.ac.uk, www.tutor2u.net and www.bized.co.uk
- To view the full specification and the full range of support material available for GCE Economics, please visit the CCEA website www.ccea.org.uk

Engineering (Pearson, Level 3 BTEC)

This course is offered through our partnership with South West College

Pupils will study real-life, work-based case studies and complete projects and assessments (to include both assignment and internal classroom tests), which contribute to achieving each unit studied.

In order to complete each unit pupils must achieve against a set of outcomes. The assessment criteria address theoretical and practical exercises. The assessment process is ongoing, so it allows the student to analyse and improve their own performance through their course, in much the same way as they would in the real workplace.

What will I study?

Pupils will study 3 individual units during each of the two years. These units are aimed at preparing pupils for an exciting future in engineering. These units include:

Engineering Drawing: creating engineering drawings using traditional hand-drawing techniques and learning about relevant drawing standards.

Health and Safety: looking at different pieces of workshop equipment, creating risk assessments and researching health and safety regulations.

Mechanical Principles: Applying mathematical formulae to determine the answers to different engineering problems, e.g. how much weight can a bridge support?

Computer Aided Design: designing 3D engineering parts using “Solidworks” design software and learning the advantages of using CAD.

Engineering Materials: learning about different engineering materials and how they act under different conditions, plus why they are used in industry.

Electronic Principles: Exploring the applications of different electronic components and where these can be used in real life.

English Literature (CEA, Modular)

Head of Department: Mrs SJ Jackson

The study of English Literature at GCE level exposes the pupils to a variety of texts from the genres of poetry, prose and drama. The texts deal with very different themes and were written across several centuries. All of the books are challenging, of literary value and enjoyable.

Pupils are encouraged to have their own ideas and opinions. Learning is most effective in the classroom when pupils engage with the texts and then challenge the ideas of those around them. Even quiet pupils find their voice and learn to contribute with confidence. Writing critical essays is obviously how the course is assessed but pupils plan the essays with their teachers and are supported in deciding what material to include. Independence in planning and writing grows over the two years of study.

We aim to encourage pupils to:

- engage critically and creatively with a substantial body of texts and ways of responding to them;
- develop and apply effectively their knowledge of literary analysis and evaluation;
- explore the contexts of the texts they are reading and others' interpretations of them;
- deepen their understanding of the changing traditions of literature in English;
- carry out independent research and present personal responses in the form and language appropriate to literary study;
- develop advanced study skills that help them prepare for third level education;
- demonstrate through challenging internal and external assessments that they understand and can apply key concepts; and
- nurture a lifelong interest in Literature.

What do you need to be able to take this course?

It is of benefit to have studied GCSE English Literature. However, if you have a genuine enthusiasm for the subject and achieved a good grade in GCSE English Language, then it is possible to study A Level English Literature. It is advisable to speak to your teacher or Mrs Jackson to be assured of your capability.

Course Content and Assessment

Content	Assessment	Weightings
AS Module 1 Modern poetry A pair of poets, studying 12 poems from each and Modern Drama 1 play	2 hour examination Poetry: open book Play: closed book	60% AS 24% of A-Level
AS Module 2 The Study of Prose Pre 1900 1 novel	1 hour examination Closed book	40% of AS 16% of A-Level

Content	Assessment	Weightings
A2 Module 1 The Study of Shakespeare 1 play	1 hour 30 minutes examination Closed book	20% of A-level
A2 Module 2 The study of Pre1900 poetry and unseen poetry Chaucer	2 hour examination Closed book	20% of A-Level
A2 Module 3 Internal Assessment on 2 novels, comparing methods and themes.	2500 word essay	20% of A-Level

Opportunities Beyond Advanced Level

Effective communication skills are essential in all areas of employment and the study of this subject aims to foster these. It is a traditional subject and is viewed very favourably by employers and universities. It is an excellent base for future study in areas such as Law, Journalism and Media but it does develop skills that are very marketable in gaining employment and a university place in general.

Trips

Whenever possible we try to visit local theatres or the cinema to see performances of the texts we are studying or anything that is of interest and literary value.

Geography (CCEA, Modular)

Head of Department: Miss H Montgomery

There has never been a greater need to be aware of the changing world around us than at present. Change is happening all the time – both in the natural world and within human populations. Geography helps make sense of our world. By studying A level Geography you will learn about geographical concepts and processes within the natural environment, interactions between people, and between people and the environment, the challenges of sustainability and the importance of attitudes and values. You will then be able to relate what you have studied to the world around you. It offers prospective pupils an interesting, challenging and useful subject and is for pupils who are interested in the world around them.

In Year 13 each pupil enters three modules at Advanced Subsidiary Level, i.e. AS Level. These three modules will be examined at the end of the Lower Sixth Year and if required can be taken as a “stand-alone” qualification and the grades obtained used in UCAS application. If you wish to obtain a full A-level qualification, you must complete the second half of the course referred to as A2. The full advanced GCE award is based on your marks from the AS (40%) and the A2 (60%)

The contents of the modules are as follows:

AS 1: Physical Geography: In this section pupils investigate human interactions in fluvial environments (river systems), human impacts on ecosystems, and weather and climate, including global weather issues such as El Nino and hurricanes. As a result, the three themes of study are:

- Rivers
- Ecosystems
- Weather

AS 2: Human Geography: In this section, pupils examine aspects of natural population change including the need for fertility policies, planning in rural areas and the challenges posed in urban areas both in more and less economically developed countries. As a result, the 3 themes of study are:

- Population
- Settlement
- Development

AS 3: Fieldwork Skills and Techniques in Geography: This gives pupils the opportunity to take part in primary data collection relevant to a chosen geographical issue or question. There is **no** coursework at A-level, though following the gathering of data, pupils must provide a summary statement of approximately 100 words. This includes the:

- Title
- Details of the location of the study
- Statement of the aims and hypotheses to be tested.

The elements of fieldwork skills and techniques are tested in the examination. The data needed for this is collected on a residential fieldtrip.

Pupils who continue to A2 explore key themes including processes responsible for and challenges posed by earthquakes and volcanoes, the processes shaping our coastline, global climate change and the need for sustainable planning policies to manage global climate change; this is all part of A2 1. In A2 2, pupils have the opportunity to study contemporary themes such as cultural geography and the need for sustainability in both settlements and tourism. Each paper has four parts; each part corresponds to one of the four options. Pupils answer questions from their two chosen options. In each paper we look at:

A2 1: Physical Processes, Landforms and Management:

- Option A: Plate tectonics: Theories and Outcomes
- Option C: Dynamic Coastal Environments

A2 2: Processes and Issues in Human Geography:

- Option A: Cultural Geography
- Option C: Ethnic Diversity
- Option D: Tourism

A2 3: Decision Making in Geography:

This unit enables pupils to develop decision-making skills in a real-world scenario. Pupils identify and analyse appropriate material, examine conflicting values and make and justify recommendations.

This new course offers a flexible type of course by which you can take responsibility for organising parts of your work. It will provide you with the opportunity to gain transferable skills such as communication, teamwork, graphicacy, analysing, investigation and map reading (including GIS). Pupils are introduced to the use of statistics and ICT is embedded within the course. All of these skills are attractive to employers.

Studying Geography will help you gain a greater understanding of people and places, weather systems, tourism, global energy and sustainable development. Many of the topics or issues that you will study will be reported in the media, for example, environmental concerns such as pollution, flooding, earthquakes and global warming. This close link between studying Geography and what is going on in the world around you could lead you perhaps to a career in environmental work or with an aid agency. Many Geography pupils go on to have successful and interesting careers such as:

- urban planners
- cartographers (people who produce maps)
- GIS specialists (connects the use of ICT with Geography)
- climatologists/meteorologists (weather forecasters)
- environmental managers
- researchers
- teachers
- demographers (people who study changes in population/work with census material)
- environmental managers
- hazardous-waste planners
- jobs in the travel and tourism industry
- council administration
- accountancy
- governmental statistician
- development worker for an aid agency
- river/coastal engineer

The study of Geography involves aspects of both the Arts and the Sciences and so works well with Arts or Science A-level subjects to help pupils achieve the points' total they require to enter university courses. The subject itself may be studied at university in Arts or Science faculties.



Government and Politics (CCEA, Modular)

This course is offered through our partnership with St Patrick's Academy and **may be available** in September 2018.

What the subject is about:

The study of Government and Politics encourages young people to develop knowledge and understanding of the political systems in which they live. It involves discussion, debate and disagreement. Some view it as being about conflict and the resolution of conflict. Pupils will develop a greater awareness of current affairs. We follow the CCEA specification. Pupils study four modules and sit two exams at the end of each year.

Course content and assessment schedule:

Paper	Duration	Brief outline of main content.
1	1 hour 15 minutes	<i>The Government and Politics of Northern Ireland</i> Government of NI since 1994-direct rule/NI Assembly The Northern Irish political parties The Northern Irish electoral systems
2	1 hour 45 minutes	<i>The British Political Process</i> The executive (the PM and the government) The legislature (the House of Commons and the House of Lords) The judiciary Inter-relationships of the executive, legislature and judiciary
3	2 hour 15 minutes	<i>The UK and the USA</i> The US Constitution The US Congress and Executive A comparative analysis of the UK and US political systems
4	1 hour 30 minutes	<i>Political Power</i> Theories of Marxism, pluralism, elitism and feminism. Factors involved in the exercise of political power including legitimacy, coercion, and stability.

Entry requirements:

Compulsory GCSE subjects	Grade	Desirable subjects	Grade	Grade
English	B/A	History		B/A

Qualities/skills needed to succeed in the course

Pupils must

- have an interest in current affairs and the world around them.
- be prepared to read newspapers and to watch current affairs programmes outside of class time
- be able to work independently and carry out research.
- have a good standard of written communication as all modules involve some essay style questions.

Health and Social Care (CCEA, Modular)

Head of Department: Mrs PM McMullan

The health, social care and early years sectors are major employers in the public, voluntary and private sectors in Northern Ireland. This broad qualification gives pupils the opportunity to study a diverse range of subjects, including communication, physiology, social policy and psychology.

The qualification appeals to pupils with an interest in health, well-being and caring for others. It's likely to interest pupils who enjoyed studying Health and Social Care, Home Economics, Child Development, Psychology or Sociology at GCSE, although none of these are a prerequisite.

Pupils develop skills that are valued in further and higher education, as well as in the workplace. These skills include research, investigation, analysis, communication, problem solving and working with others.

Aims

This specification aims to encourage pupils to:

- develop their interest in health, social care and early years;
- draw together different areas of knowledge, skills and understanding;
- develop higher order thinking skills, creative thinking and problem-solving, where appropriate;
- apply their skills to work-related scenarios;
- work with others in groups;
- carry out research and present their findings in different formats;
- develop advanced study skills that help them prepare for third level education;
- develop knowledge and understanding relevant to degrees in nursing, allied health professions, social sciences, social policy, social work and early years;
- develop skills, aptitudes and values for employment in the health, social care and early years sectors;
- provide extended responses and evidence of quality of written communication; and
- demonstrate through internal and external assessments that they understand and can apply key concepts.

Key features

The following are some of the important features of this specification:

- It allows pupils to develop their subject knowledge, understanding and skills in relation to health, social care and early years work contexts.
- Assessment at A2 includes more question types, more demanding evaluative tasks, extended writing, and synoptic assessment that encourages pupils to develop their understanding of the subject as a whole.
- It can give pupils a sound basis for progression to higher education or work in health, social care or early years.

AS Content

Module	Assessment	Weightings
AS 1: Promoting Quality Care	Internal assessment: Pupils produce a written report based on practice in a health, social care or early years setting that they have experienced. Teachers mark the tasks and CCEA moderate the results	25% of AS 10% of A level
AS 2: Communication in Health, Social Care and Early Years Settings	Internal assessment: Pupils produce a written report on communication in a health, social care or early years setting. Teachers mark the tasks and CCEA moderate the results.	25% of AS 10% of A level
AS 3: Health and Well-Being	External written examination - 2 hours Pupils answer three compulsory questions.	50% of AS 20% of A level

A2 Content (Pupils study two of the four internally assessed modules from the list below along with the A2 3 module)

Module	Assessment	Weightings
A2 1: Applied Research	Internal assessment: Pupils produce a research report on a health and social care or early years topic of their own choosing. Teachers mark the tasks and CCEA moderate the results.	15% of A level
A2 2: Body Systems and Physiological Disorders	Internal assessment: Pupils carry out a practical investigation of the physiological status of individuals and research the diagnosis and treatment of a disorder. Teachers mark the tasks and CCEA moderate the results.	15% of A level
A2 3: Providing Services Compulsory	External written examination based on pre-release material - 2 hours Pupils answer three compulsory questions.	30% of A level
A2 4: Health Promotion	Internal assessment: Pupils produce a report on health improvement priorities in Northern Ireland, undertake a health promotion activity and report their findings. Teachers mark the tasks and CCEA moderate the results.	15% of A level
A2 5: Supporting the Family	Internal assessment: Pupils produce a review of changes to family structure, a case study and a report on services for families experiencing issues. Teachers mark the tasks and CCEA moderate the results.	15% of A level

Further information:

http://www.rewardinglearning.org.uk/microsites/hsc/revised_gce/index.asp

History (CCEA, Modular)

Head of Department: Mr PS Kerr

Introduction

History at 'AS' and 'A' Level offers much more than simple retelling of stories from the past. Political ideologies, systems of government, economics, the influence of religion, literature and art: all of these major themes come under the historians notice.

What will I study?

History pupils will take two modules¹ in their Lower 6th year and a further two in Upper 6th. In Year 13 pupils will study **"Italy and Germany 1815-1871"**, concentrating on the causes, course and failure of the 1848 revolts in these states and the long, often bloody, process of national unification. Along the way interesting figures such as Verdi, Mazzini, Metternich, Garibaldi, Cavour and Bismarck will all come under scrutiny.

The second AS module **"Italy's Quest for Great Power Status 1871-1943"** focuses on Italy's relations with the wider world during a turbulent period in its history. It assesses how, between 1871 and 1922, a succession of Liberal governments used foreign policy to bolster Italy's claim to Great Power status and create a sense of shared identity for Italians. It explores how the failure of this strategy helps to explain the rise of Mussolini after 1922. It also investigates how Mussolini's bolder, more radical approach helped to create a sense of shared identity but ended in catastrophe and his removal from power in 1943.

The first module studied at A2, **"The Causes and Consequences of Great Power Conflict 1848-1945"**, focuses on the growing tension between the Great Powers of Europe in the late nineteenth and earlier part of the twentieth centuries, which was to culminate in the two cataclysmic World Wars of 1914-18 and 1939-45. It analyses how the emergence of a unified German state destabilised Europe and how competing imperial and economic interests and ambitions produced a system of armed alliances that ultimately brought Europe to war in 1914. It also explores the First World War and the resulting Treaty of Versailles, coupled with the rise of Hitler, British appeasement and other factors, which set the stage for the even more devastating Second World War..

The second module at 'A2' Level, **"The Partition of Ireland 1905-1923"**, considers the circumstances which gave birth to modern Ireland, with all its divisions, rivalries and legacy of violence. Pupils will encounter such giants of early 20th century Ireland as Carson, Craig, Redmond, Pearse, Collins and De Valera.

The modules will give an overall perspective on many of the crucial developments in 19th and 20th century history. The struggle to create liberal, democratic and even totalitarian societies, the importance of economics, the triumph of nationalism with all its implications for good and ill, the important role of religion: all these issues and many more will challenge the young historian to consider the nature of society as it has evolved, and perhaps inspire them to think of how it could be changed for the better in the future. What more important intellectual exploration could there be?

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Specification at a glance

Content	Assessment	Weightings
AS1: Historical Investigations and Interpretations	External written examination. 1 hour 30 minutes Pupils answer a short response question and two-part source question.	50% of AS 20% of A Level
AS 2: Historical Conflict and Change	External written examination. 1 hour 30 minutes Pupils answer two questions from a choice of three. Each question has two parts, a short response and an extended essay.	50% of AS 20% of A Level
A2 1: Change Over Time	External written examination. 1 hour Pupils answer a synoptic essay question.	20% of A Level
A2 2: Historical Investigations and Interpretations	External written examination 2 hours 30 minutes Pupils answer three questions; two are source based and one is an extended essay.	40% of A level

Opportunities beyond A-Level:

Apart from the interesting content studied, 'A' Level History offers additional factors which make it a highly valued subject. The interpretation of documents, the comparison of differing viewpoints, presentational skills including essay writing, the ability to summarise and clarify complex issues, analytical skills – all these factors should attract pupils of an enquiring mind.

Those pupils choosing to study History at A-Level have the opportunity to participate in a variety of activities outside the classroom which provide the subject with a rich 'value-added' element. These have included successful trips to Rome, Berlin, Dublin, the Somme Heritage Centre, and to the battlefields of World War I. A2 Historians also have the opportunity to participate in a local inter-schools' Irish history project with their contemporaries at St. Patrick's Academy.

History is often studied by those contemplating a range of careers, from law, journalism, politics, television and business, where university selectors and employers value its study as an intellectual discipline which cultivates a well-stocked and incisive mind and an ability to communicate ideas to others. In recent times RSD historians have gone on to follow careers in such diverse fields as dentistry, medical sciences, investment banking, primary teaching, university administration and many more.

Life and Health Sciences (CCEA, Modular)

Head of Department: Mrs W Chambers/Mr RE Chambers/Mrs RL Hampton

This specification aims to develop pupils' advanced practical skills and knowledge, preparing them for employment or third-level study and a career in the life and health sciences. We have developed the course in partnership with industry and higher education to stimulate enthusiasm for science, as well as research and development.

Pupils learn to appreciate how science contributes in a fundamental way to both economic success and the success of society. They explore how different scientific industries rely on one another in order to grow and develop. The course will also develop pupils' competence in a full range of key practical, mathematical and problem-solving skills.

Course Aims

This specification aims to encourage pupils to:

- develop their interest in and enthusiasm for science, including developing an interest in further study and careers in research science;
- appreciate how society makes decisions about scientific issues and how the sciences contribute to the success of the economy and society;
- develop competence in a range of practical, mathematical and problem solving skills;
- develop and demonstrate a deeper appreciation of the skills, knowledge and understanding of how science works;
- develop essential knowledge and understanding of different areas of the subject and how they relate to each other; and
- develop advanced study skills that help them prepare for higher education.

Key features

The following are some of the important features of this specification:

- The specification allows pupils to develop their subject knowledge, understanding and skills.
- It provides a firm grounding for pupils wishing to progress to higher education in life and health sciences or related subjects such as engineering or electronics.
- Assessment at A2 includes elements of synoptic assessment that encourage pupils to develop their understanding of the subject as a whole.
- Assessment at A2 is less structured and consequently stretches and challenges the pupils.

AS Content

Module	Assessment	Weightings
Unit AS 1: Experimental Techniques	This unit is internally assessed; pupils complete a portfolio of evidence.	33.34% of AS 13.34% of A level
Unit AS 2: Human Body Systems	This unit is assessed through an external examination consisting of a series of compulsory structured questions, some of which may allow opportunities for extended writing. 1 hour 30 mins	33.33% of AS 13.33% of A level
Unit AS 3: Aspects of Physical Chemistry in Industrial Processes	This unit is assessed through an external examination consisting of a series of compulsory structured questions, some of which may allow opportunities for extended writing. 1 hour 30 mins	33.33% of AS 13.33% of A level

A2 Content

Module	Assessment	Weightings
Unit A2 1: Scientific Method, Investigation, Analysis and Evaluation	This unit is internally assessed; pupils complete a portfolio of evidence that includes an essay, plans, a lab book, and a report with analysis and evaluation.	20% of A level
Unit A2 2: Organic Chemistry	This unit is assessed through an external examination consisting of a series of compulsory structured questions, some of which may allow opportunities for extended writing. 1 hour 45 mins	20% of A level
Unit A2 3: Medical Physics	Pupils study any one of these three units.	20% of A level
Unit A2 4: Sound and Light	Each unit is assessed through an external examination consisting of compulsory structured questions, some of which allow opportunities for calculation and extended writing.	
Unit A2 5: Genetics, Stem Cell Research and Cloning	1 hour 45 mins	

Further information:

http://www.rewardinglearning.org.uk/microsites/life_health_sciences/gce/index.asp

Mathematics (CEA, Modular)

Head of Department: Mr GR Black

Entry Requirements

A grade B or above in GCSE Further Mathematics is desirable. However, pupils who have achieved a good grade at the Higher Tier at GCSE level will also be considered.

Aims

- (i) To enable pupils to acquire knowledge and skills with confidence, satisfaction and enjoyment.
- (ii) To give pupils experience of mathematical activity and develop resourcefulness in solving problems.
- (iii) To enable pupils to apply mathematics and recognise its significance to other disciplines.
- (iv) To develop pupils understanding of mathematical reasoning.
- (v) To provide pupils with a foundation for the further study of Mathematics.

Course Structure

AS Level – there are two sections, Pure Mathematics and Applied Mathematics. (AS contributes 40% of the final mark used to award the A level grade.)

The Applied Mathematics is equally split between Mechanics and Statistics. Pure and Applied Mathematics are examined in separate papers and the final mark is calculated using the weightings of 60% Pure and 40% Applied.

Pure Mathematics deals with ideas and concepts which do not necessarily have any immediate practical applications. Mechanics deals with the physical world, and incorporates the application of mathematics to engineering, business, computing etc. Statistics deals with the mathematics of the collection, organisation, and interpretation of numerical data.

A2 structure is similar to that for AS. (A2 contributes 60% of the final mark used to award the A level grade.)

The table below summarises the structure of the AS and A level courses:

Module	Assessment	Weightings
AS 1: Pure Mathematics	External written examination 1 hour 45 mins Pupils answer all questions.	60% of AS 24% of A level
AS 2: Applied Mathematics	External written examination 1 hour 15 mins Pupils answer all questions.	40% of AS 16% of A level
A2 1: Pure Mathematics	External written examination 2 hours 30 mins Pupils answer all questions.	36% of A level
A2 2: Applied Mathematics	External written examination 1 hour 30 mins Pupils answer all questions.	24% of A level

Career Opportunities

The qualities of Mathematicians include more than a flair for figures. Logical thought, problem solving, good communication skills and good organisational ability are the basis for successful careers for mathematicians. Careers which require an advanced knowledge of mathematics include research scientist, physicist, actuarial work, teacher, aerodynamics, pharmacology, statistician, meteorology.

Further Mathematics

An AS in Further Mathematics may be available to interested pupils in Year 14. There are two sections, Pure Mathematics and Applied Mathematics. A choice is available in the Applied Mathematics of either all Mechanics or Mechanics and Statistics. Pure and Applied Mathematics are examined in separate papers of length 1 hour 30 minutes but this time they receive equal weightings of 50% each. This is challenging and should only be considered by those who have shown a flair for Mathematics and are considering studying Mathematics in some way, at a higher level.

Media Studies (WJEC Eduqas, Linear)

This course is offered through our partnership with St Patrick's Academy.

Please note: This qualification is linear (ie, Pupils must sit all modules in Y14 to achieve a full A Level, even if they have sat the AS modules in Y13). AS grades do not contribute to overall A-Level qualification.

Overview of Specification

Pupils study a range of media forms in terms of a theoretical framework which consists of media language, representation, media industries and audiences. The following forms are studied in depth through applying all areas of the framework: newspapers, magazines, television, online, social and participatory media. Advertising and marketing, film, music video, radio and video games are studied in relation to selected areas of the framework.

The WJEC Eduqas A level in Media Studies offers a broad, engaging and stimulating course of study which enables pupils to:

- demonstrate skills of enquiry, critical thinking, decision-making and analysis
- demonstrate a critical approach to media issues
- demonstrate appreciation and critical understanding of the media and their role both historically and currently in society, culture, politics and the economy
- develop an understanding of the dynamic and changing relationships between media forms, products, industries and audiences
- demonstrate knowledge and understanding of the global nature of the media
- apply theoretical knowledge and specialist subject specific terminology to analyse and compare media products and the contexts in which they are produced and consumed
- make informed arguments, reach substantiated judgements and draw conclusions about media issues
- engage in critical debate about academic theories used in media studies
- appreciate how theoretical understanding supports practice and practice supports theoretical understanding
- demonstrate sophisticated practical skills by providing opportunities for creative media production.

Summary of Components and Assessment

Component 1: Media Products, Industries and Audiences. Written examination: 2 hours 15 minutes. 35% of qualification.

Component Overview

In this component, learners will develop knowledge and understanding of key aspects of the theoretical framework - media language and representation – as an essential basis for analysing media products from a variety of forms. In addition, learners will study products from specific media industries and for specific audiences to develop their knowledge and understanding of those areas of the theoretical framework. Learners will also explore how media products relate to their social, cultural, historical, political and economic contexts. In this component, learners will develop their ability to use relevant subject-specific terminology and theories.

The examination assesses media language, representation, media industries, audiences and media contexts. It consists of two sections:

Section A: Analysing Media Language and Representation

This section assesses media language and representation in relation to **two** of the following media forms: advertising, marketing, music video or newspapers. There are **two** questions in this section:

- **one** question assessing media language in relation to an unseen audio-visual or print resource
- **one** extended response comparison question assessing representation in one set product and an unseen audio-visual or print resource in relation to media contexts.

Section B: Understanding Media Industries and Audiences

This section assesses **two** of the following media forms – advertising, marketing, film, newspapers, radio, video games - and media contexts. It includes:

- **one** stepped question on media industries
- **one** stepped question on audiences.

Component 2: Media Forms and Products in Depth. Written examination: 2 hours 30 minutes. 35% of qualification.

Component Overview

In this component learners are required to study three media forms in depth, exploring all areas of the theoretical framework - **media language, representation, media industries, and audiences** - in relation to audio-visual, print and online products set by WJEC. The forms to be studied in depth are:

- television
- magazines
- blogs and websites.

The examination assesses media language, representation, media industries, audiences and media contexts. It consists of three sections:

Section A – Television in the Global Age

There will be **one** two-part question or **one** extended response question.

Section B – Magazines: Mainstream and Alternative Media

There will be **one** two-part question or **one** extended response question.

Section C – Media in the Online Age

There will be **one** two-part question or **one** extended response question.

Component 3: Cross-Media Production. Non exam assessment. 30% of qualification.

Content

This component synthesises knowledge and understanding of the media theoretical framework gained throughout their course by requiring learners to apply their knowledge and understanding of the media synoptically to practical production. In Components 1 and 2, learners gain a detailed understanding of the theoretical framework in relation to a range of media forms. In this component, learners are required to apply their knowledge and understanding of media language, representation, audiences, media industries and the digitally convergent nature of the media in an **individual** production for an intended audience. The production must be based on two media forms and completed in response to a **choice of briefs set by WJEC**.

Further information: http://www.eduqas.co.uk/qualifications/media-studies/as-a-level/eduqas-a-level-media-studies-spec-from-2017-e.pdf?language_id=1

Modern Foreign Languages - French and Spanish (CCEA, Modular)

Head of Department: Mr PG Moore

Aims

The primary aims of each course are to enable pupils to communicate more effectively and with greater ease on a wider range of topics than at GCSE level. You will gain a very thorough knowledge of life in France or Spain and the many other countries around the world where these languages are spoken.

Entry Requirements

These are the same as for other AS/A levels, but it is vital that you have a genuine interest in how language works and that you take pleasure in communication. The wide variety of themes studied means that you should have a desire to learn and experience the world around you. In addition, in order to be fully prepared to undertake the requirements of the course, it is strongly advised that a potential A Level Language pupil will have achieved a solid grade at GCSE.

Content of the Course

All of the GCSE skills are continued (see outline of modules, below) but the content moves on to cover such themes as Relationships, Young People in Society and Local and Global Citizenship. In short, the object is to enable the pupil to communicate fluently and intelligently on most aspects of modern living.

Modules

In brief, these are as follows:

AS:1 Speaking (presentation and conversation)

AS:2 Listening; Reading Comprehension; Grammar questions; Translation of short sentences from English into French/Spanish.

AS:3 Study of one French/Spanish Literature text or film.

A2:1 Speaking (Discussion of an A2 theme; Conversation)

A2:2 Listening; Reading Comprehension; Summarising a French/Spanish text into English; Translation from English into French/Spanish.

A2:3 Study of one French/Spanish Literature text.

Assessment Arrangements

An external examiner will conduct the Module 1 examinations. Examination listening material is presented on an individual CD recording for each candidate, which he/she has independent control of within the time-frame of the examination.

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Facilities

Each year, language teaching by the permanent staff of the department is supplemented by our Language Assistants, who are native speakers of French and Spanish. They primarily teach small groups of A Level pupils but are often timetabled to work with KS3 and KS4 classes.

The Department has its own extensive library containing books, magazines, publications and a broad range of audio-visual material on CD, DVD, MP3 and other formats. We make very frequent use of a wide variety of ICT related learning resources specific to language study and to the culture and current affairs of the target language countries. We subscribe to a range of online interactive websites which pupils are encouraged to access at home as well as within school. The MFL section of Fronter (RSD's VLE) is now very well developed and is of particular benefit to A Level pupils, who conduct detailed online discussions between themselves, their teachers and the language assistants.

Visits by GCSE and A level pupils to Paris are now a regular fixture in our departmental calendar, organised together with the Art Department. A week-long Spanish language course in Salamanca has taken place as well as a visit to the Barcelona area in conjunction with the PE Department. In addition, classes attend screenings of French and Spanish language films as well as other activities at QUB and elsewhere, including study days, translation competitions and AILO (All-Ireland Linguistics Olympiad).

Opportunities Beyond A Level

The days when languages could only be studied in isolation at university are now past. It is possible to study one or more languages in conjunction with most other subjects, including Law and Medicine. All branches of industry have overseas connections and all need talented, qualified linguists. Employment rates for Modern Language graduates remain consistently high.

The experience of having successfully mastered one new language will result in an openness to the learning of further languages. Many of these may be studied from scratch at university level, provided that the pupil can show ability in whichever language(s) they studied at A level. Recently, RSD pupils have gone on to study, amongst other languages, Italian, Korean, Arabic, Japanese and Chinese.

Music (CCEA, Modular)

Head of Department: Mr SJ Cuddy

Why study A level Music?

Music is a combination of sounds, silence, rhythm, pitch, tone, melody and harmony that communicate emotions and ideas. It has great power to excite and to relax us. Studying A level Music, you can create and perform music which allows you to express your own particular musical interests and style.

Research shows that studying music can help pupils develop critical thinking, spatial reasoning and cognitive skills. It also helps develop communication skills and encourages creativity and expressiveness. Pupils who play music develop skills in self-discipline, self-esteem and the ability to manage information.

Content overview

In the AS units, pupils study music from the Renaissance, Baroque, Classical and Romantic periods right through to popular musicals and other sacred vocal styles. Pupils who continue to A2 explore in more depth orchestral music of the twentieth century alongside secular and sacred vocal music spanning over 400 years. At each level, pupils are required to perform and compose a composition in a free choice of style using technology as appropriate. Part of the composition task must be completed on Sibelius (Bach Chorale), however, the rest of the task can be completed using Sibelius, Garageband or Logic.

At each level, pupils also take two external assessments, a test of aural perception and a written examination.

Pupils will be assessed as a solo performer and asked to discuss their programme with the examiner. Every orchestral instrument is accepted but valid instruments also include instruments like the drum-kit, traditional instruments like the bag-pipes and also voice.

Key features

The following are important features of this course.

- It includes six externally assessed units.
- It allows pupils to develop their subject knowledge, understanding and skills developed at Key Stages 1 to 3 and required by GCSE Music.
- It incorporates the three fundamental musical activities:
 - listening and appraising;
 - composing; and
 - performing.
- It promotes knowledge, understanding and appreciation of past and present musical styles, traditions and contexts.
- It provides an appropriate body of knowledge, promotes understanding and develops skills as a sound basis for progression to higher education, leisure or both.

Prior attainment

Pupils should possess skill in vocal or instrumental performance to a level of at least Grade 4. Pupils should also have some understanding of basic harmonic progression and staff notation.

Specification at a glance

The table below summarises the structure of the AS and A2 courses.

Content	Assessment	Weightings
AS 1: Performing	<ul style="list-style-type: none">• Solo performance• Viva voce	35% of AS 14% of A Level
AS 2: Composing	<ul style="list-style-type: none">• Composition task or• Composition task with technology • Written commentary	35% of AS 14% of A Level
AS 3: Responding to Music	Two external written examinations <ul style="list-style-type: none">• Test of aural perception 1 hour• Written examination 2 hours	30% of AS 12% of A Level
A2 1: Performing	<ul style="list-style-type: none">• Solo performance• Viva voce	21% of A Level
A2 2: Composing	<ul style="list-style-type: none">• Composition task or• Composition task with technology • Written commentary	21% of A Level
A2 3: Responding to Music	Two external written examinations <ul style="list-style-type: none">• Test of aural perception 1 hour 15 min• Written examination 2 hours	18% of A Level

Pupils will be assessed as a solo performer and asked to discuss their programme with the examiner. The written papers will assess skills in listening, score analysis and understanding of the various styles of music.

As can be seen in the table above, A2 level follows a similar structure to AS however:

- Performance will be at a higher standard (minimum Grade 6 or equivalent)
- Composition will be longer (3-4 mins compared to 2-3 mins at AS level)
- The Listening and Score Analysis will include more complex features and also more sophisticated 20th Century harmony.

What can I do with a qualification in Music?

There are many opportunities for pupils who wish to progress beyond A level. For example, some may choose to pursue further and higher education courses in Music or performing arts and others may simply use their A level qualification to access other degree level courses. Music qualifications can lead to employment in various areas such as teaching, performing, recording, radio/TV broadcasting and production and music therapy.

Nutrition and Food Science (CCEA, Modular)

Head of Department: Mrs PM McMullan

Why Study AS/A Level Nutrition and Food Science?

CCEA AS and A Level Nutrition and Food Science focuses on the areas of nutrition, health and more recently, food technology, safety and quality. You will be encouraged to develop and demonstrate knowledge, understanding and skills in a variety of topics relating to these areas. This will enable you to obtain an AS or A Level grade that will provide a sound foundation for University and College courses in Food Science, Food Technology, Nutrition and Health.

Alternatively you may use it as a means of obtaining an A Level for entry to other non- food related courses and in the process providing a worthwhile learning experience for adult-life.

What do you need to be able to take this course?

It is of great benefit to have studied Food Technology (Home Economics) at GCSE level. However, in the past, pupils have worked through the A Level very successfully, having come into the subject by way of a 'fresh start'.

How is the AS & A Level course structured?

AS and A Level Nutrition and Food Science will be taught in modules. The modules, four in all, are arranged to allow for either an AS award at the end of Year 13 or a full A Level Award at the end of Year 14. You will study two modules (AS1 & AS2) for the AS Level exam that will be taken at the end of your Year 13. A further two modules (A21 & A22) will be studied in Year 14 and this will lead to the A level award.

In the table below an outline of the content of each of the modules has been provided.

Module	Area of Study	Module	Area of Study
AS 1	Principles of Nutrition You will study micro and macro nutrients and other dietary constituents: <ul style="list-style-type: none">• Protein• Fat• Carbohydrate• Vitamins• Minerals• Micro- minerals• NSP• Water This unit will look at nutritional considerations through the lifespan.	AS 2	Diet and Health You will study a range of diet related diseases including: <ul style="list-style-type: none">• Cardio Vascular Disease• Obesity• Cancer• Diabetes As well as gaining an insight in areas such as: <ul style="list-style-type: none">• Energy Balance• Alcohol and its effects• Physical Activity
A2 1	Food Technology, Quality and Safety This module focuses on the developing food industry and issues such as: <ul style="list-style-type: none">• Food Biotechnology• Food Safety• Additives• Food Allergy and Intolerance• Food Legislation and Enforcement	A2 2	Research based Assignment You choose a research area from any of the other 3 modules (AS 1, AS 2 or A2 1) and produce a report of no more than 4000 words.

How will you be assessed?

AS 1 Principles of Nutrition	1 exam paper	1 hour 30 minutes
AS 2 Diet and Health	1 exam paper	1 hour 30 minutes
A2 1 Food technology, Quality and Safety	1 exam paper	2 hours
A2 2 Research Based Assignment	4,000 word assignment	

What can you do with a Qualification in Nutrition and Food Science?

As outlined in the introduction to Nutrition and Food Science AS/A Level, this GCE provides a solid foundation for higher education courses in Food Technology and other related subjects. Past pupils have used their A Level to gain entry into a wide range of careers e.g. Dietetics, Sports Nutrition, Health Promotion, Teacher Training, Psychology, Business Studies, Social Work, Environmental Health, Nursing, Midwifery, Sports and Leisure Studies, Occupational Therapy, Speech and Language Therapy, Podiatry, Radiography and Journalism.

Performing Arts (CCEA, Modular)

This course is offered through our partnership with St Patrick's Academy, Dungannon.

Performing arts is a growth industry in Northern Ireland. It encompasses drama, dance, music and any genre that involves performing to an audience. From the latest global blockbuster to local drama groups and street theatre, performing arts forms an important part of our leisure industry.

Performing arts relies as much on production as performance. The show can't go on without the work of technicians, managers, choreographers, designers, promoters, agents and administrators. Performing arts offers roles for those who prefer the technical aspects as well as those who aspire to entertain others with their talents.

Participating in performing arts develops self-confidence, self-awareness, personal discipline and creativity. Studying the performing arts enhances our ability to:

- interpret and apply ideas;
- receive direction and criticism; and
- understand the demands placed on professionals in the industry.

Performing arts is a collaborative discipline involving teamwork and self-management, which are important aspects of any role. It offers pupils the opportunity to develop production and performance skills and their own personal style.

The performing arts industry offers diverse employment opportunities in, for example, dance, drama, music, theatre, film, television, puppetry, costume design, set design, direction, sound engineering, lighting, make-up or special effects.

Aims

This specification aims to encourage pupils to develop knowledge and understanding of:

- the techniques and approaches required in one or more performing arts areas of study;
- working methods linked to industry practice;
- how their own skills and aptitudes could be best employed in further study and/or work within related sectors;
- the breadth of the sector through exploring its products and processes;
- the outcomes of industry practice in terms of people, products, services and contexts; and
- social, cultural and historical influences

This specification also develops ways of working that encourage pupils to:

- develop their skills, techniques and work attitudes to a standard that allows progression to further training and work;
- apply working methods used by professionals as individuals and in teams as well as with audiences and commissioners;
- explore independently, through creative and reflective experimentation, how meaning is communicated; and
- emphasise practical independence, self-management and improvement of performance over time.

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Key features

The following are some of the important features of this specification:

- Pupils have the opportunity to develop specialist knowledge, understanding and skills in either performance or production.
- Pupils choose one discipline, within either performance or production, to develop through AS and A2.
- Pupils investigate employment opportunities and working methods linked to industry practice, providing a sound basis for progression to further training and/or study.
- Assessment at A2 includes stretch and challenge reflected in working to a commission brief, undertaking an administrative role, synoptic assessment and extended writing.

AS Content

Module	Assessment	Weightings
AS 1: Developing Skills and Repertoire	Internally assessed - Externally moderated A portfolio, including a summary of research, skills audit, record of work, risk assessment, either live performance or production and presentation, and evaluation	60% of AS 24% of A Level
AS 2: Planning and Realising a Performing Arts Event	Externally set pre-release stimulus material - Externally assessed Supporting document in three sections produced under controlled conditions Live performance and/or presentation	40% of AS 16% of A Level

A2 Content

Module	Assessment	Weightings
A2 1: Planning for Employment	Internally assessed - Externally moderated A record of work, including a written report in three sections, promotional portfolio and evaluation	60% of A2 36% of A Level
A2 2: Performing to a Commission Brief	Externally set pre-release stimulus material - Externally assessed A record of work, including a research report, summary of findings, evidence of tasks completed and evaluation The evaluation is to be produced under controlled conditions. Live performance and/or presentation	40% of A2 24% of A Level

Further Information

http://ccea.org.uk/performing_arts/

Performing Arts (Pearson, Level 3 BTEC)

The above course may be available at the Integrated College Dungannon.

Performing arts include dance, music, theatre, spoken word, and musical theatre. This is a very practical course, teaching transferable skills in confidence, communication, teamwork, administration and business. Learn to act, dance and sing in front of paying audiences. This course can lead to University to study, for example, stage management and lighting, or even teaching. A number of pupils who have studied this course have gone on to LIPA and RADA.

Physics (CCEA, Modular)

Head of Department: Mrs W Chambers

Where Physics A Level Can Lead You

Physics AS/A Level is a course that is relevant not only to the fields of science and engineering, but also is highly regarded in the many areas of commerce and public service that value problem-solving and practical skills. A Physics qualification opens the doors to all sorts of jobs and courses. Physicists play a vital role in many technology based industries such as engineering, optoelectronics, nanotechnology, computing and renewable energy. Others work on investigating the universe; searching for extra-solar planets or looking for the remnants of the big bang. Others still go on to apply their knowledge in healthcare (medical physics), studying the processes of the Earth (geophysics) or the climate (meteorology).

Whatever you do, the knowledge and skills you gain by studying Physics will be useful. Physics is more than a subject – it trains your brain to think beyond boundaries. The knowledge and skills that studying Physics develops are important in other areas as well. Predicting future market behaviour is vital in finance, and so a physicist's ability to model complex systems is particularly valued in this sector, while a logical approach and ability to understand new technology is useful in law, for example, when patenting new inventions.

Physics provides a broad training in skills that are valued by all employers; an ability to grasp concepts quickly, a determination to find coherent answers, along with problem-solving, analytical, mathematical and IT skills. Even if you decide that you don't want to work in any physics-related industry after your A Levels, the skills and knowledge that you develop by studying Physics will always help you in whichever area you go into. Studying Physics at AS/A level is a good way of keeping your options open.

“There are millions of pupils in the world, but to get a job you have to stand out from the crowd. Physics will help to give you that edge; people are always impressed by a qualification in physics.” [Steff, weather forecaster]

What's Physics Like at AS & A2 Level?

You will already have come across some of the concepts of Physics at GCSE: forces, energy, waves, radioactivity, electricity and magnetism. At A level you will start to see how these ideas work together, and begin to grasp the universal principles that apply to everything from the smallest atoms to the largest galaxies.

However, there is significant mathematical content and it would be unwise to choose Physics as an option if you do not foster an ability and interest in this area of study.

What Skills Will I Develop?

The following skills should develop throughout completion of this course:

- Application of number
- Communication
- Improving their own learning and performance
- Problem solving
- Working with others

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What I Will Study and How I Will Be Assessed?

Content	Assessment	Weightings
AS 1: Forces, Energy and Electricity	1 hour 45 mins Externally assessed written paper consisting of compulsory short answer questions and some that require extended writing	40% of AS 16% of A level
AS 2: Waves, Photons and Astronomy	1 hour 45 mins Externally assessed written paper consisting of compulsory short answer questions and some that require extended writing.	40% of AS 16% of A level
AS 3: Practical: Techniques and Data Analysis	2 (1 hour) sub components Externally assessed test of practical skills, consisting of four short experimental tests (40 marks) and a separate paper requiring the analysis of experimental results (50 marks)	20% of AS 8% of A level
A2 1: Deformation of Solids, Thermal Physics, Circular Motion, Oscillations and Atomic and Nuclear Physics	2 hour written paper Externally assessed written paper consisting of compulsory short answer questions and some that require extended writing. The questions have elements of synoptic assessment, drawing together different strands of the specification.	40% of A2 24% of A level
A2 2: Fields, Capacitors and Particle Physics	2 hour written paper Externally assessed written paper consisting of compulsory short answer questions and some that require extended writing. The questions have elements of synoptic assessment, drawing together different strands of the specification.	40% of A2 24% of A level
A2 3: Practical Techniques and Data Analysis	2 (1 hour) sub components Externally assessed test of practical skills, consisting of two experimental tests (40 marks) and a separate paper requiring the analysis of experimental results (50 marks).	20% of A2 12% of A level

Aims and Learning Outcomes

This specification aims to encourage pupils to:

- develop their interest in and enthusiasm for Physics, including developing an interest in further study and careers in the subject
- appreciate how society makes decisions about scientific issues and how the sciences contribute to the success of the economy and society
- develop competence in a range of practical, mathematical and problem solving skills
- develop essential knowledge and understanding of different areas of the subject and how they relate to each other
- develop advanced study skills that help them prepare for third level education.

What are the Entry Requirements for Studying AS/A Level Physics?

It is recommended that those embarking on the 'A' Level Physics course should have at least a B Grade in GCSE Physics or a BB Grade in Double Award Science (if a B grade is obtained in either of these situations it is essential that the written papers are a strong B grade in their own right and have been a higher tier entry), in addition to an A grade in Higher Tier Mathematics or at least a B grade in Additional Mathematics. If a BB grade in Double Award Science is the case it is advisable to seek the advice of your Physics teacher regarding your potential for success at A Level in this subject.

How can I find Out More?

- Speak to your Physics teacher or Mrs Chambers
- Speak to a pupil who has studied or is currently studying Physics
- Visit the CCEA Microsite -<http://ccea.org.uk/qualifications/revision/specifications>

Psychology (AQA, Linear)

This course is offered through our partnership with St Patrick's Academy.

Please note: This qualification is linear (ie, Pupils must sit all modules in Y14 to achieve a full A Level, even if they have sat the AS modules in Y13). AS grades do not contribute to overall A-Level qualification.

Examination Board: AQA, for specification, please see <http://www.aqa.org.uk/subjects/psychology/as-and-a-level/psychology-7181-7182>

What the subject is about:

Psychology is the study of people: how they think, their behaviour and their emotions in social situations and the motivations underlying such behaviour.

The course focuses on the following Assessment Objectives:

AO1- Knowledge and understanding of scientific ideas, processes, techniques and procedures.

AO2- Application of knowledge and understanding of scientific ideas, processes, techniques and procedures.

AO3- Analyse, interpret and evaluations scientific information, ideas and evidence in order to make judgements and reach conclusions and develop and refine practical design and procedures.

Course content and assessment schedule:

AS Qualification (1 year)

Paper	Duration	Exam period	Brief outline of main content
Paper 1: Introductory topics in psychology	1 hour 30 mins (72 marks- 50% of AS	May 2018	Social Influence: Types of conformity, Zimbardo's study, obedience, minority influence and social change. Memory: Multi-store model of memory, long-term memory, working memory, accuracy of eye witness testimony and the cognitive interview. Attachment: Care-giver interactions, animal studies of attachment, Ainsworth's 'Strange Situation', Bowlby's theory of maternal deprivation, Romanian orphan studies and the influence of early attachment.
Paper 2: Psychology in context	1 hour 30 mins (72 marks- 50% of AS	May 2018	Psychopathology: Definitions of abnormality, the behavioural, emotional and cognitive characteristics of phobias, depression and OCD, the behavioural approach to treating phobias, the cognitive approach to explaining and treating depression, the biological approach to explaining and treating OCD. Biopsychology: Divisions of the nervous system: central and peripheral (somatic and autonomic), structure and function of sensory, relay and motor neurons, function of the endocrine system and the fight or flight response. Research Methods: Experimental methods, observation techniques, self-report, correlations, the scientific process to include aim, hypotheses, sampling, control etc. and data handling and analysis.

A-Level qualification (2 years)

Paper	Duration	Exam period	Brief outline of main content
Paper 1 Introductory topics in psychology	2 hour paper (33.3% of A-level)	May/June 2019	<u>All of the above from AS course and:</u> Social Influence: Explanations of resistance to social change, minority influence and the role of social influence processes. Memory: Explanations for forgetting, factors affecting the accuracy of eye witness testimony and improving the accuracy of eye-witness testimony. Attachment: As above.
Paper 2 Psychology in context	2 hour paper (33.3% of A-level)	May/June 2019	<u>All of the above from AS course and:</u> Approaches in Psychology: Learning approaches to include the behaviourist approach, the cognitive approach, the biological approach, the psychodynamic approach and the humanistic approach. The comparison of approaches. Biopsychology: localisation of function in the brain and hemispheric lateralisation, ways of studying the brain, biological rhythms. Research methods: features of science, reliability and validity, reporting on psychological investigations, levels of measurement, content analysis and inferential testing.
Paper 3 Issues and options in psychology	2 hour paper (33.3% of A-level)	May/June 2019	Issues and debates in Psychology: Gender and culture, free will and determinism, nature-nurture debate, Holism and reductionism, Idiographic and nomothetic approaches, ethical implications. Cognition and development: Piaget's theory of cognitive development, Vygotsky's theory of cognitive development, Baillargeon's explanation of early infant abilities and the development of social cognition. Stress: The physiology of stress the role of stress in illness, sources of stress, measuring stress, individual differences and managing and coping with stress. Forensic Psychology: Problems in defining crime, offender profiling, biological explanations, psychological explanations and dealing with offending behaviour.

Qualities/skills needed to succeed in the course

Tasks at both AS and A2 include a range from the following: multiple choice, short answers and extended writing tasks.

Pupils will be required to write a number of essay style questions at both at AS and A2 level and, as a result, should have a high standard of written communication. Pupils should be capable of interpreting information, applying knowledge and learned theories to a number of different scenarios. Potential candidates for this course should have a genuine interest in Psychological development and its effects on human behaviour.

Entry Requirements:

Compulsory GCSE subjects	Minimum Grade
English Language	B
Mathematics	B
Double Award Science	BB

Religious Studies (CCEA, Modular)

Head of Department: Ms AM Prescott

Introduction

Religious Studies makes a particular contribution to a pupil's understanding of spiritual moral and cultural issues by encouraging them to reflect on their own attitudes and those of others.

Why Choose A Level Religious Studies?

GCE A Level Religious Studies offers an academic approach to the study of religion. It is open to all pupils of any religious persuasion or none. Religious Studies plays an important role in many different cultures. Religious Studies enables pupils to develop an insight into areas of knowledge, belief and thought central to an understanding of the modern world.

Religious Studies pupils discuss and critically evaluate contemporary religious ideas. They also investigate and speculate about the ultimate meaning and purpose of life.

Entry Requirements

This qualification is for pupils who are interested in and enthusiastic about religion and its relation to the local community and wider world. Although the ideal starting point for AS Religious Studies is at least a B grade at GCSE level Religious Studies, it is however possible for good candidates who have no GCSE background in Religious Studies to start the subject in sixth form. It will appeal to anyone who enjoyed studying English, Sciences, Humanities or Languages at GCSE. Pupils studying sciences may wish to follow a contrasting course of study to their main interest.

Religious Studies helps equip pupils with many of the skills needed in further and higher education and the workplace. Pupils will develop critical evaluation skills and the ability to construct logical and convincing arguments.

What will I study?

At both AS and A2 there are two areas of study: Textual Studies and Systematic Study of One Religion.

AS candidates will undertake two areas of study:

AS 2: An Introduction to the Acts of the Apostles

In this unit pupils explore the beginnings of the Church of the New Testament. Pupils trace the journey of the Gospel, from Jerusalem to Judea and Samaria and into the Gentile world of the first century. At the start of the unit, pupils set the Acts of the Apostles in the context of the New Testament by studying authorship, date and purpose. They also learn about the organisation and worship of the early Christian community.

Pupils identify the role and importance of key individuals in the growth and expansion of the Church and assess their contribution. Pupils focus on Peter, Stephen and Philip with the start of the missionary work in Jerusalem, and the first expansion to Judea and Samaria. They study Paul's work as a missionary and evangelist through his missionary journeys and speeches.

Pupils also explore the relationship between the Acts of the Apostles and other aspects of human experience.

AS4: The Origins and Development of the Early Christian Church to AD 325

In this unit pupils explore the beginning, growth and development of the Christian Church in the first three centuries. Pupils focus on the possible reasons for expansion and study the causes and course of persecution. Pupils study the development of early Christian thought as characterised by Apostolic Fathers and apologists. They also examine in detail the contribution of the writings of Ignatius of Antioch and Justin Martyr.

Pupils learn about the development of the sacraments. They study the doctrine and practice of baptism and the Eucharist, referring to evidence in the sources from the period. Finally, pupils examine the relationship between the Christian Church and the state through the life of Emperor Constantine. They focus on events leading to his "conversion" and his subsequent religious policies up to the Council of Nicaea.

Pupils also explore the relationship between the Early Church to AD325 and other aspects of human experience.

A2 2: Themes in Selected Letters of St Paul

This unit builds on the study of Paul’s missionary activity completed at AS level. Pupils explore Paul’s role as a Christian evangelist in greater depth through his letters to the churches established during his missionary journeys in Acts. Pupils engage in detailed study of three New Testament texts and critically assess the importance of Paul’s teaching for early Christian communities and the Church today. Pupils also focus on the role of Paul as pastor and theologian.

In the final theme on controversy, division and resolution pupils examine the problem of controversy in religion and highlight some potential areas of conflict. The contribution of religion in encouraging dialogue and resolution is an important issue relating to controversy and division. Pupils initially study this theme in relation to New Testament texts. It then provides a perspective from which pupils can consider the content of other units.

Unit A2 4: Themes in the Early Church and the Church Today

The first two sections of this unit consist of themes in the early Church followed by a section dealing with belief and belonging in the modern world. Pupils study the changing nature of authority and Church government and the challenges of heresy. They link these to leadership, organisation and challenges to belief. Pupils also study the writings of Tertullian and Cyprian and consider the impact of modern theologians and apologists.

In the final theme on faith, morality and the state pupils consider the relationship between religious faith and state authority. This includes lessons that can be learned from historical and contemporary examples. The role religion plays in reconciliation is an important issue relating to faith and the state. Pupils initially study this theme in relation to the Early Church. It then provides a perspective from which pupils can consider the content of other units.

Specification at a glance

Content	Assessment	Weightings
AS2 Textual Studies An Introduction to the Acts of the Apostles	1 hour 20 minute external written examination	50% of AS 20% of A level
AS4 Systematic Study of One Religion AS 4: The Origins and Development of the early Church to AD325	1 hour 20 minute external written examination	50% of AS 20% of A level
A22 Textual Studies Themes in selected letters of Saint Paul	2 hour external written examination	50% of A2 30% of A level
A24 Systematic Study of One Religion Themes in the Early Church and the Church Today.	2 hour external written examination	50% of A2 30% of A level

Opportunities Beyond A Level

The Russell Group of universities has made it clear that Religious Studies A level provides “suitable preparation for University generally” in particular subject areas in the Arts, Social Sciences, Law and Theology faculties. Religious Studies complements a wide range of subjects in each of these faculties. Successful candidates of Religious Studies can therefore pursue a variety of careers, for example, Law, Teaching, Social Work, Church Ministry, Psychology, Counselling, Youth work, Medicine etc. In the last four years RSD Religious Studies pupils have gone on to study an impressive variety of subjects at degree level. This includes Multi-media Design, Law, Teaching, Theology, Geography and Accounting and Finance.

Sports Science and the Active Leisure Industry (CCEA, Modular)

Heads of Department: Mrs D Robb/Miss S Colgan & Mr GW McClintock

Introduction

GCE Sports Science and the Active Leisure Industry is an applied A level. It is made up of two parts: AS and A2. Pupils may take the AS as a stand-alone qualification if they wish. To get the full GCE pupils must complete both AS and A2. AS and A2 each comprise two units. There are four units in all.

Unit AS 1 - develops pupils' knowledge, understanding and skills involved in fitness and training. They administer a range of fitness tests and analyse the results. They devise a training programme and lead the sessions. This unit is internally assessed through a portfolio.

Unit AS 2 - introduces pupils to key concepts in health, fitness and lifestyle and explores the relationships between them. They study nutrition for health and exercise as well as components of fitness. They also analyse the health of the nation compared with other European countries. This unit is assessed by a written examination of short and extended questions and stimulus response questions.

Course Content/Assessment

AS	Course Content	Assessment	% Weighting
Component 1	Fitness and Training for Sport Portfolio showing written evidence of training methods; fitness assessment and planning; leading and evaluating exercise sessions; and risk assessment	Internal written assessment	60% of AS 30% of A Level
Component 2	The Active Leisure Industry: Health, Fitness and Lifestyle This includes short and extended questions and stimulus response questions based on health, fitness and lifestyle.	External written examination 2 hour paper	40% of AS 20% of A Level

A2 Level

Unit A2 1 is designed to develop pupils' higher level skills through greater depth, complexity, and application of knowledge and understanding. It is internally assessed and externally moderated through an internal assessment portfolio. This unit provides pupils with the opportunity to organise and run an active leisure event. A2 1 helps pupils to prepare for employment in this industry by giving them the opportunity to develop essential workplace business skills.

Unit A2 2 concentrates on examining the structure of the respiratory, circulatory, muscular and skeletal systems. Pupils learn about how these systems function during and after exercise, and at rest. They develop a knowledge and understanding of the structural apparatus of each system and discuss the functions. Pupils study how the acquisition of skills and the principles of learning are relevant to skilled performance. This unit is assessed by a synoptic written examination consisting of short and extended questions and stimulus response questions.

A2	Course Content	Assessment	% Weighting
Component 1	Event Management in the Active Leisure Industry Portfolio showing written evidence of planning for an active leisure event and evaluation of outcome.	Internal written assessment	30% of A Level
Component 2	The Application of Science to Sports Performance This includes short and extended answer questions and stimulus response questions based on anatomy and physiology, skill acquisition, principles of learning and performance.	External written examination 2 hour paper	20% of A Level

AS will be assessed at the end of Year 13 and A2 at the end of Year 14.

Pupils should be aware that this course requires the completion of a substantial piece of written coursework at both AS and A2 levels. Whilst staff will provide structure and guidance, this coursework requires considerable independent work. There is no accreditation for practical sporting performance.

Criteria for entry into AS/A2 Sports Science and the Active Leisure Industry Class

- A minimum grade B in GCSE PE. Pupils who have not completed a GCSE in Physical Education will still be considered if they have attained at least a B grade in one of the Sciences or GCSE English.
- It is highly recommended that pupils have achieved a minimum of a grade B in at least one science subject at GCSE level and GCSE English due to the requirements of the written assessment. It is further recommended that pupils have been actively involved in competitive sport for the previous two years and maintain this involvement throughout the duration of the A Level course.
- A commitment to studying a new subject in depth.
- Experience of Biology, whilst not essential, is viewed as being extremely beneficial.
- An eagerness to be involved in a subject which offers the opportunity to explore and experience new concepts in sport and recreation.
- An open-minded attitude to career options illustrating a penchant for variety.

Those interested in studying Sports Science and the Active Leisure Industry will be interviewed by the Heads of Physical Education when they will be asked to outline their involvement in a major sport, their interest in coaching and/or officiating and their prowess in that sport. This is to ensure that they have a sufficient amount of interest and involvement to satisfy the demands of the course.

Careers:

Some of the career opportunities for pupils studying Sport Science and the Active Leisure Industry are as follows:

- Teaching
- Sports Development or Coaching
- Sports Nutrition
- Physiotherapy and Rehabilitation / Sports Medicine
- Sports Psychology
- Personal Training / Leisure Industry
- Sports Science
- Sports Journalism / Media and Marketing
- Professional Sportsperson

Technology and Design (CCEA, Modular)

Head of Department: Mr NJ Canning

Aims

- To enable pupils to participate in, and exercise responsibility throughout the whole process of design, by identifying and meeting needs in the man-made world.
- To provide a suitable preparation for University and College courses in Science, Engineering, Product Design, Architecture, Biomedical Engineering, Computing and Surveying.
- To encourage pupils, to implement the final solution to a problem employing appropriate materials, components, systems and techniques in a safe and effective manner.
- To provide a worthwhile educational experience for pupils not intending to study Technology and Design at a higher level, whilst giving them an insight into how the world around them functions and how the products they use are produced.

Facilities

The high level of ICT integration into the subject means that the Department has a cluster of 20 PCs with software appropriate to the design and production of complex electronically based project work. Solidworks, Circuit Wizard and Techsoft 2-D Design form the main group of programs which are used in conjunction with the Laser Cutter and CNC Router to produce high quality products.

Entry Requirements

An ideal requirement for this subject at Advanced level is a good pass grade in GCSE Technology and Design (A* - B).

Specification at a Glance

The structures of the AS and A Level courses are summarised in the table below.

Unit	Assessment	Weighting
AS 1 - Product Design and Systems and Control	2 x 1 hour examinations in a single session	50% of AS 20% of A Level
AS 2 - Coursework: Product Development	Practical coursework internally assessed and externally moderated	50% of AS 20% of A Level
A2 1 - Systems and Control	2 hour examination	30% of A Level
A2 2 - Coursework: Product-System, Design and Manufacture	Practical coursework internally assessed and externally moderated	30% of A Level

Coursework is an essential part of these examinations with it making up 50% of the AS and 50% of the full A level.

Year 13

All pupils will complete units 1 and 2 in order to obtain an AS Level award.

Unit AS 1: Product Design and Systems and Control

This unit is a study of product design including materials and their processing with an area of systems and control. Pupils will study Section A: Product Design and Practice and a specialist area of systems and control in Section B: Electronic and Microelectronic Control Systems.

Unit AS 2: Coursework: Product Development

The emphasis in this unit is on the analysis and development of an **existing product**, with a view to re-designing either the product or an aspect of it. It is the responsibility of the teacher to ensure the choice of product allows sufficient scope for development and challenge at AS Level

Pupils will produce a 3-dimensional model or prototype which represents the practical outcome of the product analysis and development.

A portfolio should accompany the practical component with written and graphical information produced on not more than 10 A3 sheets. Pupils can present the portfolio in electronic format.

This unit draws on the knowledge and skills in Unit 1 and should represent approximately 45 hours of work. It will be internally assessed and externally moderated.

Year 14

All pupils must complete all units in order to obtain the full A level award.

Unit A2 1: Systems and Control

An in-depth study of Systems and Control in **Section A: Electronic and Microelectronic Control Systems**.

Unit A2 2: Coursework: Product-system, Design and Manufacture

Candidates will be required to design and manufacture a **technological product or system**. They must identify a problem or need and ensure it provides sufficient scope to meet the assessment criteria.

It is the responsibility of the teacher to ensure that the topic chosen allows sufficient scope and intellectual challenge appropriate to an A2 course.

A technological product must have an energy source to make it function and include a control system comprising input, process and output

A portfolio should accompany the practical component with written and graphical information produced on not more the 20 A3 pages. Pupils can present the portfolio in an electronic format.

This unit draws on the knowledge and skills covered in all units but must reflect the chosen option in A2 Unit 1: it represents approximately 60 hours of work and will be internally assessed and externally moderated.

Opportunities Beyond AS And A Level

Having successfully completed Technology and Design at A level pupils are encouraged to proceed on into higher education. Many pupils have found this subject to be extremely beneficial if they intend to follow a course in Engineering (Mechanical, Civil, Aeronautical, Electrical, Electronic and Production), Product Design, Architecture, Environmental Health, Housing Management, Information & Communication Technologies, Multimedia Design, Quantity Surveying or related fields either at University or College of Education.

To find out more detailed information about the many options open to pupils after Advanced level we recommend that pupils contact the Careers Department.

A Level Statistics 2015 Year 14

Subject	Total	A*	A	B	C	D	E	N	% A* - C	% A* - E	%Fail
Art & Design	4	1	3	0	0	0	0	0	100.0	100.0	0.0
Biology	32	4	7	6	7	5	2	1	75.0	96.9	3.1
Business Studies	3	1	0	1	1	0	0	0	100.0	100.0	0.0
Chemistry	16	2	4	6	2	1	0	1	87.5	93.8	6.3
Chinese	5	0	3	1	1	0	0	0	100.0	100.0	0.0
Design & Technology	7	0	2	4	1	0	0	0	100.0	100.0	0.0
Economics	10	0	1	8	0	0	0	1	90.0	90.0	10.0
English Literature	18	1	5	9	2	1	0	0	94.4	100.0	0.0
French	3	0	2	0	1	0	0	0	100.0	100.0	0.0
Further Mathematics	2	0	1	0	1	0	0	0	100.0	100.0	0.0
Geography	14	2	1	7	3	1	0	0	92.9	100.0	0.0
History	8	0	2	4	2	0	0	0	100.0	100.0	0.0
Home Economics	19	1	5	4	5	4	0	0	78.9	100.0	0.0
ICT	14	1	2	5	4	1	1	0	85.7	100.0	0.0
Mathematics	36	4	14	9	6	1	1	1	91.7	97.2	2.8
Media Studies	3	0	1	1	1	0	0	0	100.0	100.0	0.0
Music	4	0	0	0	3	1	0	0	75.0	100.0	0.0
Performing Arts*	1	1	0	0	0	0	0	0	100.0	100.0	0.0
Physical Education	3	0	0	0	2	1	0	0	66.7	100.0	0.0
Physics	28	4	4	11	3	4	2	0	78.6	100.0	0.0
Psychology	1	0	0	0	1	0	0	0	100.0	100.0	0.0
Politics	2	0	0	2	0	0	0	0	100.0	100.0	0.0
Religious Ed	9	0	1	6	2	0	0	0	100.0	100.0	0.0
Spanish	4	1	2	1	0	0	0	0	100.0	100.0	0.0
2015 Totals	246	23	60	85	48	20	6	4			
%		9.3	24.4	34.6	19.5	8.1	2.4	1.6			
cum%		9.3	33.7	68.3	87.8	95.9	98.4	100.0			

* - BTEC course so A Level grade equivalence is used.

YEARS 13 & 14 PUPILS

No. of pupils in Years 13 & 14 - 158

No. of these with a statement of

special educational needs - 0

OVERALL RESULTS

AS Levels

No. of pupils in Final Year of AS level Course	% of these pupils achieving 1 or more at Grades A- E
81	100

A Levels

No. of pupils in Final Year of A level course	% of these pupils achieving 3 or more passes at Grades A - C	% of these pupils achieving 2 or more passes at Grades A - E
77	74	98.7

A Level Statistics 2016 Year 14

Subject	Total	A*	A	B	C	D	E	N	% A* - C	% A* - E	%Fail
Art & Design	7	5	2	0	0	0	0	0	100.0	100.0	0.0
Biology	35	2	15	6	9	2	1	0	91.4	100.0	0.0
Chemistry	17	2	7	2	4	1	1	0	88.2	100.0	0.0
Chinese	6	0	4	0	2	0	0	0	100.0	100.0	0.0
Design & Technology	4	0	0	4	0	0	0	0	100.0	100.0	0.0
Economics	13	0	4	3	2	4	0	0	69.2	100.0	0.0
English Literature	10	0	5	4	1	0	0	0	100.0	100.0	0.0
French	2	0	0	1	1	0	0	0	100.0	100.0	0.0
Further Mathematics	1	1	0	0	0	0	0	0	100.0	100.0	0.0
Geography	11	1	5	3	2	0	0	0	100.0	100.0	0.0
History	15	0	2	7	5	1	0	0	93.3	100.0	0.0
Home Economics	18	1	8	8	1	0	0	0	100.0	100.0	0.0
ICT	10	0	3	2	1	3	0	1	60.0	90.0	10.0
Mathematics	21	1	8	5	3	1	3	0	81.0	100.0	0.0
Media Studies	1	0	0	1	0	0	0	0	100.0	100.0	0.0
Music	4	0	1	1	1	1	0	0	75.0	100.0	0.0
PE	8	1	1	3	1	0	2	0	75.0	100.0	0.0
Physics	14	1	4	2	4	2	1	0	78.6	100.0	0.0
Psychology	1	0	0	1	0	0	0	0	100.0	100.0	0.0
Religious Ed	5	0	0	4	1	0	0	0	100.0	100.0	0.0
Spanish	5	1	0	2	2	0	0	0	100.0	100.0	0.0
2016 Totals	208	16	69	59	40	15	8	1			
%		7.7	33.2	28.4	19.2	7.2	3.8	0.5			
cum%		7.7	40.9	69.2	88.5	95.7	99.5	100.0			

Years 13 & 14 PUPILS

No of pupils in Year 13 & 14 – 148

No of theses with statement of special educational needs - 1

OVERALL RESULTS

AS Levels

No. of pupils in Final Year of AS level Course	% of these pupils achieving 1 or more at Grades A- E
83	96.9

A Levels

No. of pupils in Final Year of A level course	% of these pupils achieving 3 or more passes at Grades A - C	% of these pupils achieving 2 or more passes at Grades A - E
65	80	100

A Level Statistics 2017 Year 14

Subject	Total	A*	A	B	C	D	E	N	% A* - C	% A* - E	%Fail
Art & Design	1	1	0	0	0	0	0	0	100.0	100.0	0.0
Biology	43	6	14	14	5	3	1	0	90.7	100.0	0.0
Business Studies	2	0	0	1	1	0	0	0	100.0	100.0	0.0
Chemistry	31	6	9	8	5	2	1	0	90.3	100.0	0.0
Chinese	3	0	0	3	0	0	0	0	100.0	100.0	0.0
Design & Technology	5	1	2	2	0	0	0	0	100.0	100.0	0.0
Economics	7	0	3	3	1	0	0	0	100.0	100.0	0.0
English Literature	15	5	6	3	1	0	0	0	100.0	100.0	0.0
French	2	0	1	0	1	0	0	0	100.0	100.0	0.0
Further Mathematics	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Geography	16	2	3	7	3	1	0	0	93.8	100.0	0.0
History	16	0	2	5	6	2	1	0	81.3	100.0	0.0
Home Economics	18	7	6	5	0	0	0	0	100.0	100.0	0.0
ICT	9	0	1	4	1	3	0	0	66.7	100.0	0.0
Mathematics	34	2	15	8	3	4	2	0	82.4	100.0	0.0
Media Studies	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Music	4	0	2	2	0	0	0	0	100.0	100.0	0.0
PE	3	0	0	1	0	2	0	0	33.3	100.0	0.0
Physics	17	3	4	5	0	4	1	0	70.6	100.0	0.0
Politics	2	1	0	0	1	0	0	0	100.0	100.0	0.0
Psychology	1	0	0	0	0	1	0	0	0.0	100.0	0.0
Religious Ed	8	1	1	4	1	1	0	0	87.5	100.0	0.0
Spanish	0	0	0	0	0	0	0	0	0.0	0.0	0.0
2017 Totals	237	35	69	75	29	23	6	0			
%		14.8	29.1	31.6	12.2	9.7	2.5	0.0			
cum%		14.8	43.9	75.5	87.8	97.5	100.0	100.0			

Years 13 & 14 PUPILS

No of pupils in Year 13 & 14 – 152

No of theses with statement of special educational needs - 0

OVERALL RESULTS

AS Levels

No. of pupils in Final Year of AS level Course	% of these pupils achieving 1 or more at Grades A- E
75	100

A Levels

No. of pupils in Final Year of A level course	% of these pupils achieving 3 or more passes at Grades A - C	% of these pupils achieving 2 or more passes at Grades A - E
77	75.3	100

Sample Post Option Sheet 2018/2019 (Provisional, for information only)

Please note: This form will only be issued when a pupil's choices do not fit the final option blocks.

A Level Option Sheet 2018/2019

Name: _____

Please choose three or four subjects from the blocks below. While it may be possible to change subjects at a later date, this will depend on the numbers choosing each subject. It is therefore important that you choose as accurately as possible at this stage. **Please refer to the options booklet for advice about selecting subjects, and for further details of the subjects on offer.**

Only those pupils wishing to be considered for four subjects should enter a fourth preference. It is important to refer to the introductory section of the options booklet for advice if you are considering four subjects. As it is usually not possible to satisfy all combinations due to timetabling and/or staffing difficulties, all pupils are asked to choose a reserve subject.

Option A	Option B	Option C	Option D
Subject ?????	Subject ?????	Subject ?????	Subject ?????
Subject ?????	Subject ?????	Subject ?????	Subject ?????
Subject ?????	Subject ?????	Subject ?????	Subject ?????
Subject ?????	Subject ?????	Subject ?????	Subject ?????
Subject ?????	Subject ?????	Subject ?????	Subject ?????
Subject ?????			Subject ?????
			Subject ?????

Please identify any subject chosen above which you have not studied at GCSE: _____

If you wish the school to investigate the possibility of studying a subject not available at RSD or through our collaboration with other educational institutions as explained on pages 11 & 12 of the Option Booklet, please list it here.

I understand that:

- Admission to Sixth Form Studies for RSD pupils is on the basis of the advertised criteria on page 9 of the Options Booklet, and progression from Year 13 to Year 14 for all pupils is on the basis of the criteria shown on page 10 of Options booklet,
- It may be necessary to carry out selection for some subjects which are oversubscribed,
- The school reserves the right to withdraw a subject if there are insufficient numbers to make it viable,
- In a few cases, the class teacher may change between Year 13 and Year 14 or some pupils may be allocated to a different class or classes may be combined,
- Pupils may be rejected for courses for which the school believes they are not sufficiently capable of completing,
- It may be possible to change some options within the constraints of the created option blocks and class sizes. Such changes should normally be made by the end of September at the latest.

Signed: _____ (Parent/Guardian) Date: _____

Options Sheet 2018/2019 (Provisional, for information only)

Name: _____

I intend to return to RSD to do 'A' Levels in Sixth Form (please tick
 I do not intend to return to RSD to do 'A' Levels in Sixth Form as appropriate)

If you do not intend returning to RSD for Sixth Form please have the form signed. Do not select any subjects.

Please choose three or four subjects from the list below in order of preference. These will be used to determine option blocks for next year. While it may be possible to change subjects at a later date, this will depend on the structure of the option blocks and the numbers choosing each subject. It is therefore important that you choose as accurately as possible at this stage. **Please refer to the options booklet for advice about selecting subjects, and for further details of the subjects on offer.**

Only those pupils wishing to be considered for four subjects should enter a fourth preference. It is important to refer to the introductory section of the options booklet for advice if you are considering four subjects. As it is usually not possible to satisfy all combinations due to timetabling and/or staffing difficulties, all pupils are asked to choose a reserve subject.

Art & Design	Biology	Business Studies	Chemistry	Computing (Linear)
Digital Technology	Economics	Engineering^	English Literature	French
Geography	Govt & Politics*	Health & Social Care	History	Life & Health Science
Mathematics	Media Studies* (Linear)	Music	Nutrition & Food Sci	Performing Arts* (A Level)
Performing Arts# (BTEC)	Physics	Psychology (Linear)*	Religious Studies	Spanish
Sport Science & the Active Leisure Industry	Technology & Design			

* Available at St Patrick's Academy, # Available at Integrated College, ^ Available at South West College

I wish to study 3 A Levels 4 A levels (Please tick appropriate box)

Preferred 'A' levels (in order of preference):

1st Preference _____
 2nd Preference _____
 3rd Preference _____
 4th Preference _____
 Reserve choice _____

HoD initials (if required)

_____ **(Only 1 of Economics, Media Studies, Politics
 Psychology & Spanish can be chosen as they will
 probably be in the same block)**
 _____ (leave blank if selecting 3 subjects)
 _____ (must be entered by all pupils)

Please identify any subject chosen above which you have not studied at GCSE: _____

If you wish the school to investigate the possibility of studying a subject not available at RSD or through our collaboration with other educational institutions as explained on pages 11 & 12 of the Option Booklet, please list it here.

I understand that:

- b) Admission to Sixth Form Studies for RSD pupils is on the basis of the advertised criteria on page 9 of the Options Booklet, and progression from Year 13 to Year 14 for all pupils is on the basis of the criteria shown on page 10 of Options booklet,
- c) The school will do its best to create option groups that satisfy all subject preferences but in some cases this may not be possible,
- d) It may be necessary to carry out selection for some subjects which are oversubscribed,
- e) The school reserves the right to withdraw a subject if there are insufficient numbers to make it viable,
- f) In a few cases, the class teacher may change between Year 13 and Year 14 or some pupils may be allocated to a different class or classes may be combined,
- g) Pupils may be rejected for courses for which the school believes they are not sufficiently capable of completing,
- h) It may be possible to change some options within the constraints of the created option blocks and class sizes. Such changes should normally be made by the end of September at the latest.

Signed: _____ (Parent/Guardian) Date: _____