

Introduction to subject preferences

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Subject preference

During their first two years of secondary school, pupils have been introduced to a number of subjects which they have not studied before. In Forms 1 and 2, all the subjects studied are determined by the School (except for a preference of Latin, German, Mandarin, or Spanish in Form 2) but from Form 3 onwards pupils have the responsibility of choosing the majority of the subjects that make up their curriculum.

The purpose of this booklet is to give pupils and parents some guidance on how to make the best choice for them, and on where to seek advice if they are unsure what to do. Detailed information on each of the certificate subjects is given later in this booklet.

National 5

All pupils will undertake national qualifications at **National 5** level.

The Form 3 and Form 4 timetable provides all pupils with the option to study eight subjects which lead to national qualifications offered by the Scottish Qualifications Authority (SQA) at National 5 level. In addition, all pupils will take Religious, Moral and Philosophical Studies, in which they may choose to complete an additional National 5 unit.

There may be exceptions whereby a pupil is unable to access a course at National 5 level, and in some cases it will be possible to be presented at National 4 level. Arrangements will be made after close communication between school and home in these circumstances.

All courses in this booklet are offered at National 5, and are studied over two school years. Pupils are expected to continue courses to their conclusion, and no provision is available in Form 3 or Form 4 for supervised or supported study.

Most courses at National 5 include a final examination, held in May / June of Form 4. The majority of courses also include a coursework assessment that is completed in school, under exam-style conditions, and marked externally by the SQA. Marks from the final exam and the coursework assessment are combined to determine an overall grade for the course. The grades awarded, from A to D, are confirmed in certificates posted to candidates in August following the exams.

Coursework assessment of the new qualifications may include a combination of practical work, case studies, investigations, and projects.

The coursework assessment, just like the final exam, is a formal element of the course and must be a pupil's own work. The precise requirements of these assessments differ by subject. Pupils will be made aware of specific requirements with clear guidance on the support available, in advance of commencing the coursework assessment in each subject.

All of the Form 4 courses are designed to prepare pupils for their choice of Higher courses in Form 5 and the possibility of undertaking Advanced Highers in Form 6.

Subject preference for Form 3

Why must a choice be made?

It may be that pupils are enjoying and doing well in all of their subjects; nevertheless there is not time in the school day to continue the study of every one of them to the required depth. Furthermore, several new subjects become available in Form 3.

Is this choice important?

Whatever subjects are chosen, pupils will have to study these subjects for at least two years (and the majority of them for at least three years). The subjects in which pupils will sit Highers in Form 5, and continue to Advanced Higher in Form 6, will in almost all cases be chosen from these subjects - and it is upon the results in Form 5 and Form 6 examinations that their options after school will depend.

Considering future courses and careers

The great majority of our pupils enter tertiary education on leaving school. Entry to university is dependent on obtaining the number and quality of Higher passes required for particular courses. Entrance requirements vary considerably, and the more popular courses and universities typically have higher requirements. Many courses require a pass in a particular subject or type of subject, e.g. any science.

In choosing a possible career, pupils must pay attention to their academic strengths and weaknesses. For example, if a pupil is poor in the sciences, there is no point in deciding to become a doctor. So academic ability should be considered as well as the prospect of a number of years of work in any given discipline.

In science, Chemistry is generally regarded as the central science and combines naturally with Biology and / or Physics. The Physics and Biology combination has a more limited application if a pupil is considering a career in science.

Any pupil who may be considering a career in Dentistry, Medicine or Veterinary Medicine is most strongly advised to study all three sciences during Forms 3 and 4.

What is a balanced curriculum?

The balanced curriculum is one which draws from the following modes:

- Language, literacy, and communication
- Mathematics and numeracy
- Science
- Technologies
- Social studies
- Creative and aesthetic activities.

So long as pupils follow a **balanced** curriculum, they will not disqualify themselves from many individual courses. It is worth bearing in mind that currently over half of the careers which require a degree are open to graduates in any discipline.

Does that mean the pupil has to have a career in mind now?

Absolutely not! Many pupils at the Form 2 stage have only a vague idea of what they wish to do after leaving school - and some of those who *think* that they know, may change their minds - many more than once - before the time comes to leave.

How do pupils decide which subjects to study?

There is no single correct answer to this question. What is right for one pupil may be inappropriate for another. In the first instance, in order to ensure a core set of skills and a balanced curriculum for all pupils, the following advice should be followed. Any changes to this model should be discussed with the pupil's Guidance Teacher.

- **English** and **Mathematics** are **compulsory** in Forms 3 and 4
- It is **expected** that all pupils will study **at least one Science** (Biology, Chemistry, or Physics)
- It is **expected** that all pupils will study **at least one language other than English** (French, German, Latin, Mandarin, or Spanish)
- All pupils will take Games and RMPS and will also have one period per week of Personal, Social and Health Education (PSHE)
- Thereafter, pupils may exercise freedom of choice.

To determine the remaining preferences, pupils can ask themselves three questions:

In which subjects am I doing well?

Whether a subject is found enjoyable or not, if a pupil finds it very difficult or is advised that the prospects of satisfactory progress are poor, then it is likely that they should not pursue the subject. This advice is particularly apt if, as a consequence of choosing that subject, another subject might be dropped in which good progress would be more likely.

Which subjects are likely to help in my future career?

The importance of this question depends on the extent to which a potential future career, or perhaps a selection of possibilities, has been mapped out. In the absence of a well-defined career path then it is much more important to ensure that pupils maintain a **balanced curriculum** through Forms 3 and 4, and beyond.

Which subjects do I like?

Pupils **usually** do better in subjects in which they have a real interest. The more a subject is studied, the more important this becomes. It may be argued that it is difficult to study a subject at university if one does not care for it. Also, if pupils can find a balanced curriculum from subjects which they enjoy, they will find their school education as a whole a more interesting and exciting experience.

Pupil happiness and wellbeing is also at the heart of what drives the School's wider Integrated Curriculum, and the benefits of following one's passions and interests should not be underestimated when deciding on subject preferences.

Further advice

Each pupil has received information on subject preferences during PSHE classes in Form 2 and this information should be borne in mind, along with what has already been stated in this booklet. Further advice is also available from a variety of sources:

In school

- General advice on subject preference should be sought in the first instance from the Guidance staff, who will be able to advise on the balance of subjects.
- Subject teachers (and if necessary the Heads of Department) will be able to give guidance, for their own subjects, on a pupil's future prospects.
- Advice on future careers is available from Mr Rodger, Head of Careers. Useful information may also be obtained from the Careers notice boards (in the Careers Library and outside room MB11).
- A very comprehensive Careers Library is located in the School's Library in Trinity. The Careers Library holds information on specific careers, employment opportunities and training and education requirements and is open to pupils from 8.30am until 5.00pm Monday to Thursday and from 8.30am to 4.30pm on Friday. Pupils may visit the library before or after school or at break times.
- Senior members of staff are also available for advice, including Mrs Watson and Mrs McGrath for specific help with university entrance requirements.
- In Form 4 all pupils will take careers aptitude tests and will receive individual feedback on these tests. They will also be given a considerable amount of information on careers in general.

Outwith school

Parents, other relations and / or friends of the family may be engaged in the kind of work in which pupils may be interested.

While it is the case that advice is very important and pupils should make every effort to get all the advice they can, in the end it is the **individual pupil's** career and **his or her** choice.

Pupils – and indeed parents - should beware of advice which may be based on the adviser's dislike of a particular subject (just because he or she disliked a subject does not mean that someone else will) or on out-of-date information (university entrance qualifications will almost certainly have changed since a pupil's grandfather went there).

Negative advice, from whatever source, of the type that 'X is a useless subject' or 'Y is a waste of time' is almost always unhelpful and should, at best, be treated with great suspicion.

Subject preference timeline

- October Subject preference / careers programme begins in PSHE classes
- Pupils are given an introduction to courses not studied in Forms 1 and 2 (i.e. Economics, Modern Studies, and Physical Education)
- November **Tuesday 5: Subject Preference Information Evening**
- This Form 3 subject preference booklet is available on the School website (a print version is available from the School Office on request).
- December Profile reports published
- January **Tuesday 14: Form 2 Parents' Evening**, when parents will have the chance to discuss their son/daughter's progress and potential with subject teachers.
- During the last week in January all pupils will have a subject preference interview with their Guidance teacher. During this meeting pupils will indicate provisional subject preferences. A copy of these preferences will be sent to parents for information, and to allow for changes to be discussed.
- February The **last date for changes** to subject preferences previously indicated by pupils will be **Friday 8 February**.

General notes for Forms 3 and 4

Reporting

Progress reports on the attainment of pupils in Forms 3 and 4 are issued regularly. In Form 4, a Parents' Evening and report are timed to link to the prelim examinations in Spring Term.

Homework

Homework and preparation are even more important than in the earlier years. Obviously the precise amount will depend on the ability of the individual pupil and the subjects chosen, but families should be guided by the School's Homework Policy, which suggests up to 8 hours per week in Form 3 and 12 hours per week in Form 4.

Regular revision of notes and work covered in class, in addition to completing set homework, is essential throughout both years of the course, and a valuable work ethic to develop in preparation for study in Form 5 and beyond.

Co-curricular activities

As in earlier years, it is the view of the School that pupils will gain significantly by participating as widely as possible in the activities organised by the School outwith the classroom.

Pupils are expected to fulfil their obligations in sporting fixtures and are advised to participate as widely as possible in the various cultural and social activities which take place in the School. It will be very much to pupils' benefit if they can use their leisure time outside School in a similarly constructive fashion.

Pupils' participation and achievement in activities, both school-based and outside, will be used in references, including those for university entrance, and are often viewed in a very positive light both by universities and prospective employers.

In addition, maintaining a healthy body, and engaging in a variety of physical and social activities is important for both the physical and mental health of all pupils.

Pupils should not underestimate the importance of co-curricular activities.

Form 3 and Form 4 curriculum

As already stated in the introduction, pupils in Forms 3 and 4 take eight main certificate subjects, chosen from those on the following pages.

Instrumental music

Tuition in instrumental music is offered on the basis of rota extraction, based on one 30-minute lesson on one or possibly two days per week. Any additional lessons can only be timetabled outwith normal classes where time permits.

If the number of pupils applying for instrumental lessons exceeds availability, the following priorities will apply:

1. Pupils with an SQA requirement in practical Music
2. Pupils from Form 6 down to Form 3 who are currently receiving tuition.

Learning Skills

The support of the Learning Skills department continues to be on offer to pupils in Forms 3 and 4.

This decision will have been discussed with parents, pupils and Guidance in advance of the subject preference process.

Mrs J Downie (Head of Department) will co-ordinate any specific support which a pupil *may require* in national examinations in consultation with the SQA.

Art and Design (*Head of Department: Mr A Kerr*)

Art and Design builds self-confidence and encourages an independent outlook, and therefore makes a very important and significant contribution to pupils' personal development. It also offers opportunities to develop other essential qualities, such as initiative, resourcefulness and decision-making, all of which will be highly beneficial in the future, irrespective of chosen career.

The National 5 Art & Design course consists of three elements: an Expressive Portfolio, a Design Portfolio, and a Written Exam. The creation of these portfolios will take up the majority of classroom activities along with preparation for the Written Exam. The course requires pupils to produce work of a good standard continually during class time in both Form 3 and Form 4.

1 Expressive Portfolio

Expressive Activity involves pupils in the creative process of exploring themes, developing personal responses and producing outcomes in drawing and painting. Pupils develop the ability to express their ideas and feelings in a visual context. It specifically focuses on developing pupils practical skills in drawing and painting. Critical exercises encourage pupils to express opinions on their own work as well as the work of relevant artists. Pupils will develop analytical skills and the ability to make informed judgments, and also an understanding and appreciation of artists' working practices.

2 Design Portfolio

Design influences our everyday lives much more than many appreciate. Designers play a major role in shaping our society – from the clothes we wear, the transport we travel in and the gadgets we use, to advertising, television and the mass media. Design Activity enables pupils to undertake practical 'real world' design projects (graphics, costume, jewellery etc). Pupils will use the design process to create a suitable solution to a design brief. This process will help to develop their creativity, problem-solving and critical-thinking skills as they consider and resolve design issues. They will experiment with a range of materials, techniques and technology in 2D and 3D formats.

Written Exam

Pupils will sit a written exam in both Form 3 and Form 4. They will then at the end of Form 4 undertake the SQA Written Exam, which will assess the pupils' ability to explain influences on an artist and designer and critically analyse art and design work. Some of the work they are analysing will be familiar to them and some will be new to them.

Assessment

All three elements of the course are externally assessed by the SQA. Each folio is marked out of 100. The Written Exam is a 1 hour and 30 minutes long and is marked out of 50. The final grade is based on the total maximum mark of 250.

Biology (*Head of Department: Dr E Duncanson*)

Through learning in Biology, pupils develop their interest in and understanding of the world. They engage in a wide range of investigative tasks, which allow them to develop important skills to become creative, inventive and enterprising, in a world where the skills and knowledge developed in Biology are needed across many sectors of society and the economy.

The Biology department offers a course of study in Form 3 and Form 4 which leads to presentation at National 5 Biology.

The course allows learners to understand and investigate the living world in an engaging and enjoyable way. It develops pupils' abilities to think analytically, creatively and independently, and to make reasoned evaluations. The course provides opportunities for learners to acquire and apply knowledge to evaluate biological issues, assess risk, and make informed decisions. This enables learners to develop an informed and ethical view of topical issues. Learners will be able to develop their communication, collaborative working and leadership skills, and be able to apply critical thinking in new and unfamiliar contexts to solve problems.

National 5 will build on pupils' knowledge and skills acquired in Forms 1 and 2 and will consist of 3 units:

- Cell Biology
- Multicellular Organisms
- Life on Earth

To gain the Course Award, pupils must complete the external course assessment consisting of a written exam paper and an assignment. The course assessment will provide the basis for grading attainment in the Course Award.

Pupils are expected to carry out regular homework as consolidation of the classwork.

Please note there is no facility to drop down to National 4 level in Biology.

Business Management (*Head of Department: Mrs C A Laird-Portch*)

Business plays an important role in society. We all rely on businesses to create wealth, prosperity, jobs and choices. Therefore, it is essential for society to have effective businesses and business managers to sustain this role.

This interesting National 5 course investigates small business organisations. It develops key skills and prepares pupils well for continuing onto the Higher course. The course looks at five areas:

Understanding business - Pupils are introduced to the business environment while developing skills, knowledge and understanding of enterprise, and the role of different types of business organisations in society. They also learn about the internal and external environments in which organisations operate, and the role of stakeholders in business.

Management of marketing - Pupils learn about the importance to organisations of having effective marketing systems. They investigate the processes and procedures organisations use to maintain competitiveness, and how marketing can be used to communicate effectively with consumers, maximising customer satisfaction.

Management of operations - Pupils discover the importance to organisations of having effective operations systems. They learn about the processes and procedures used to maintain quality through the effective management of suppliers, inventory, and methods of production in an ethical manner.

Management of people - Pupils build an understanding of the issues facing organisations when managing people. They look about the theories, concepts and processes relating to human resource management, and how employees contribute to the success of organisations.

Management of finance - Pupils learn about the issues facing organisations when managing finance. They work through the basic theories, concepts and processes relating to financial aspects of business, when preparing and interpreting information to solve financial problems facing organisations.

Assessment

In F4, the pupils are assessed using a combination of the final exam, worth 75%, and the assignment, which is 25% of the final mark.

The assignment, marked by SQA, requires pupils to research and analyse information, and produce a business report using given headings. The report, based on the evidence of the research findings, will provide appropriate conclusions and/or recommendations.

Chemistry (*Head of Department: Dr P G Taylor*)

The aim of the Chemistry course from Form 3 onwards is further to develop pupils' knowledge and experience of this subject; the science of the material world, concerned with the structure and interaction of all matter whether animal, vegetable or mineral.

Chemistry occupies a central position among the sciences. It links with Physics through Physical Chemistry; the study of interactions and rates of reactions. It also combines with Biology through Biochemistry; the study of living systems, which fundamentally depend on chemical reactions. Chemistry is, therefore, an essential subject choice for careers in Chemistry and Medicine. It is also viewed as a highly desirable subject for a wide range of careers, including in Biology and Agriculture.

In Form 3 pupils will begin to study for the National 5 qualification. They will complete work towards this award throughout the two years, culminating in a National 5 written paper at the end of Form 4. The course aims to give pupils the necessary skills of scientific enquiry and investigation, to allow them to be scientifically literate, and to understand the relevance of Chemistry in their own lives.

The National 5 course will build on pupils' knowledge and skills acquired in Forms 1 and 2 and consists of 3 units:

- Chemical Changes and Structure
- Nature's Chemistry
- Chemistry in Society

The work involves both self-paced learning using a resource-based approach and a variety of more formal direct teaching methods. This offers the pupils many opportunities to plan and carry out the course experiments under close supervision, and to observe demonstration experiments.

Pupils are expected to carry out regular homework as consolidation of the classwork throughout the National 5 course.

To gain the National 5 Course Award, pupils must complete the external course assessment consisting of a written exam paper (80%) and an Added Value assignment (20%). The course assessment will provide the basis for grading attainment in the Course Award.

Classical Studies (Head of Department: Mr E Faulkes)

This is a two-year course, preparing pupils for the National 5 exams in Classical Studies. The course, which is studied through the medium of English and does not require any knowledge of Latin or Greek, involves the study of three units and the production of an assignment on a subject of the pupil's own choice and interest. The reading of ancient texts in English as primary sources of evidence of ancient life is an important aspect of this course.

1 Life in Classical Greece

For this unit pupils will study two broad aspects of life in the ancient world. Firstly they will study the mythology that surrounds the Greek Gods, together with the ways in which the ancient Greeks worshipped their Gods through sacrifices and temples. Secondly the class will look at citizenship and democracy in ancient Athens and consider family life, rites of passage and slavery in the ancient world, all along comparing and contrasting all ideas with life in the modern world.

2 Life in the Roman World

In this unit pupils will study the civilisation of the Roman world by looking closely at the archaeology of the Roman city of Pompeii. Destroyed in the eruption of 79AD, Pompeii and its sister town of Herculaneum provide a unique insight into the life of everyday people in the ancient world, and through this pupils will have the opportunity to study various aspects of ancient culture including religion, entertainment and the lives of women and of slaves.

3 Classical Literature

In this part of the course pupils will study Sophocles' drama *Oedipus the King*, one of the most powerful of Greek dramas. Pupils will consider the major themes that emerge during the play, which are as relevant today as they were two and a half millennia ago; a reason why this play is still performed regularly today.

Classical Studies gives pupils the opportunity to investigate the origins of western civilisation and democracy, and discover the underlying values and ethos of our modern world.

Computing Science (*Head of Department: Mr S B McBride*)

Overview

The study of Computing Science is appropriate for general university entrance, entry to computer-based as well as non-technical courses, pupils aiming for a Higher or Advanced Higher Computing qualification and for pupils who wish to have a range of general Information Technology skills to assist them in a wide array of careers. Programming now has a place across a wide range of courses and career paths including Maths, Sciences, Engineering and Computing. These often use languages such as Python, which is currently the main language taught in the department.

Prerequisites

It is expected that pupils will have undertaken an introductory Computing course in Forms 1 and 2, on which the Form 3 course builds.

Assessment

The National 5 has an externally assessed assignment (31% of final grade) and a written two hour exam (69% of final grade).

Course topics

The course consists of four units, which are explored through a variety of means including teacher-led discussion, independent and group practical work, and self- and peer-evaluation.

These are:

- Software Design and Development
- Databases Design and Development
- Web Design and Development
- Computer Systems

The topics of study include:

- designing, implementing, testing and evaluating computer programs
- designing and implementing static and interactive web pages/sites
- designing and implementing database systems
- understanding and developing problem-solving algorithms
- understanding the hardware requirements of an information system
- understanding the security implications of running an information system
- investigating and evaluating emerging and innovative technologies
- considering the impact of computing on the environment and society.

The units also provide an opportunity to develop the following transferable skills:

- problem analysis
- design and modelling
- application of computational thinking
- critical thinking and evaluation
- communication of key facts using appropriate terminology.

Drama (*Head of Department: Mrs L M Drummond*)

The study of the theatre arts has long been acknowledged as an excellent medium for personal growth and social development, for the promotion of personal and interpersonal skills and creative and analytical thought and for the development of effective communication skills in both written and spoken modes. The style of learning undertaken offers pupils a unique and relevant learning experience which can be applied successfully to all professions in the long term but at this stage is invaluable for the development of core skills in the education of the whole child.

Course

In F3 pupils will follow a drama course comprising of skills-based units with a thematic approach in preparation for certification at National 5. Two mandatory units will be internally assessed and there is an external written paper at the end of F4. The course will articulate with Higher Drama in Form 5 or 6 and Advanced Higher in F6. This course is suitable for pupils wishing to improve their communication skills and with a general interest in drama and/or for those wishing to progress to further levels of study in acting, directing, design or technical theatre.

All pupils undertaking the course will be required to attend at least one theatre trip and produce a production analysis essay.

1 Drama Skills

Pupils will explore and develop a range of drama skills and ways of communicating thoughts and ideas to an audience, develop a range of skills as an actor, learn how to respond to stimuli, including text, learn how to develop portrayal of character in a range of ways and develop knowledge and understanding of form, structure, genre and style when creating and presenting drama.

Pupils will develop knowledge and understanding of social and cultural influences on drama, learn how to evaluate their own progress and that of others and be required to provide evidence demonstrating knowledge and understanding of a range of skills used when creating drama. Using text, pupils will use drama skills when they create and present drama as an actor.

2 Production Skills

Pupils will develop a range of production skills which may include: lighting, sound, costume, set, make-up, props and acting. They will use these skills to enhance drama when presenting. Pupils will use problem-solving skills in order to generate ideas for presenting drama. They will provide evidence to demonstrate their knowledge and understanding of a range of production skills, through practical and theoretical exploration. Pupils will use production skills to enhance drama when presenting, evaluate their own work and that of others.

Course assessment

This will be through a **performance (60%)**, involving creating and presenting a drama through one of the production areas, and a **question paper (40%)**, which will require demonstration of a depth of knowledge and understanding from the course.

Economics (*Head of Department: Mrs C A Laird-Portch*)

This National 5 course may be undertaken and awarded as a 'stand-alone' award; it has also been specifically designed as a solid foundation for the study of Economics at Higher level.

Economics is about choice and its impact. It relates to every aspect of our lives, from the decisions we make as individuals or families to the structures created by governments and businesses. An economic way of thinking can help a pupil make better choices relating to their life and work. The course looks at governments, businesses and global trade and their economic contexts.

The main purpose of the course is to highlight how important economic concepts and government policies are to our everyday lives. The course will build on pupils' own experiences as consumers and, in addition, will help them to interpret economic situations through the application of these concepts.

A main feature of this course is the development of thinking skills. Pupils will be able to understand and make use of economic information to analyse, interpret, predict and explain the actions of individuals, businesses and governments in a range of economic circumstances. The course will develop pupils' ability to think logically and to consider the reasons for, and the effects of, economic situations.

The course will appeal to pupils with an enquiring, logical and analytical mind.

The Form 3 course is designed to build a foundation of knowledge across all sections. In Form 4, the core material is strengthened and built upon, in preparation for all forms of assessment.

There are three units of study, whose general aims are as follows:

1 Economics of the Market

To enable pupils to understand that the scarcity of resources leads to the need for individuals, firms and governments to make choices. Pupils will be introduced to personal economic decisions, the basic economic problem, and demand and supply and their place in a market economy.

2 UK Economic Activity

To enable pupils to understand the different ways that the UK Government raises taxation revenue and how it spends it. It will enable pupils to understand the economic aims of the government, the concept of economic growth, and the causes and effects of inflation and unemployment. Pupils will also gain knowledge and understanding of economic activity from a UK and Scottish perspective.

3 Global Economic Activity

To enable pupils to understand the advantages and disadvantages of global trade to the UK economy and the effects of exchange rates on such trade.

Engineering Science (Head of Department: Mr S M McBride)

Engineering Science is an exciting subject. It is about understanding everyday technological devices which improve our lives and help us to control our environment. The National 4/5 course develops knowledge and promotes reasoning and the ability to analyse systems. Through the application of technology, pupils learn to simulate and construct solutions to technological problems. The course will be assessed by means of internal assessments for National 4 and an external examination for National 5.

The course consists of the following units:

1 Engineering Contexts and Challenges This unit provides a broad context for the course. It introduces engineering concepts by exploring a range of engineered objects, and straightforward engineering problems and solutions. It also allows the learner to explore some existing and emerging technologies and challenges, and to consider implications relating to the environment, sustainable development, and economic and social issues.

2 Electronics and Control This unit explores a range of key concepts and devices used in analogue and digital electronic control systems. Skills in problem solving are developed through simulation, practical projects and investigative tasks in a range of contexts. It teaches ways of analysing complex systems and develops an understanding of the types of inputs, processes and outputs used in technology. It also develops skills used to create programs that control a range of devices. The development of skills in computer programming is a major part of this unit.

3 Mechanisms and Structures This unit develops a basic understanding of simple mechanisms and structures. Skills in problem solving are developed through simulation, practical projects and investigative tasks in a range of contexts. It develops skills to allow pupils to investigate mechanical devices that are used to make life easier, for example, looking at how gear systems are used in mountain bikes. We also make use of pneumatic systems to control motion and systems such as bus doors, and robots are investigated.

4 Assignment This requires the learner to apply and integrate skills and knowledge from the other units to solve an appropriately challenging engineering problem involving practical circuits or simulation software.

How will Engineering Science benefit pupils?

We need to be able to adapt quickly to the rapidly changing technology we see around us. This course helps the pupil to keep pace with the changes in technology and engineering. Employers are now aware of the benefits of Engineering Science, as are universities, and at Higher Grade this is one of the *recommended* qualifications for entry into a very wide range of engineering courses. In particular this course uses micro-controller technology, which is now used in everyday modern appliances. The course also allows pupils to show that they can apply learned theory, and teaches skills in information technology, numeracy and problem solving.

English (*Head of Department: Mrs A D Tevendale*)

Pupils will have acquired skills in analysis, literary appreciation, writing, listening and talk in Forms 1 and 2, and the aim of this course is to develop and extend these skills and to encourage a more in-depth study of English, with a view to gaining a National 5 qualification and, looking ahead, to prepare pupils for Higher English.

All pupils in Form 3 and Form 4 will follow a two-year course in which they will undertake a full and detailed study of language and literature, which will prepare them for presentation at National 5 English.

As part of the National 5 English course, all pupils must also complete and pass a Speaking and Listening Unit Assessment.

Throughout each year of Forms 3 and 4 pupils will study poetry, prose, drama and media. It is vital that pupils engage actively in class by contributing helpfully to class discussion and debate as and when this is required.

Assessment

Throughout Form 3, a continuous record of progress will be undertaken, including ongoing assessments and an end-of-year examination in close reading and literature.

- In Forms 3 and 4, pupils will be formally assessed in Speaking and Listening.
- In Form 4, the National 5 award is completed by the external examination.

The Form 3 course is very full and requires a good deal of commitment. Formal homework will be issued on a regular basis and it is essential that this homework is submitted. In addition, pupils will be required to read widely and undertake revision of work covered in class.

Geography (*Head of Department: Miss J L Stewart*)

Geography in Forms 3 and 4 is a two-year course of study, building on knowledge and skills developed in Forms 1 and 2 and leading towards the National 5 examination at the end of Form 4.

The principal aim of Geography at National 5 level is to develop an understanding of a variety of the human, physical and environmental aspects of the contemporary world. Pupils will develop an understanding of how people interact with their environment on a local, national and global scale. They will be encouraged to take an interest in and develop an understanding of environmental issues. Geographical skills of research, analysis, evaluation and presentation, including the use of IT, will be used to support learning and pupils will learn to process information through maps, diagrams, graphs and fieldwork. The study of geography at National 5 level will therefore assist pupils in developing a range of important transferable skills that can be applied across the curriculum.

Geography is a richly comprehensive subject with a scope which ranges from the pure sciences to the social sciences. This is reflected in the National 5 course where a wide variety of topics is studied within its three component units:

1 Physical environments

In this unit a selection of landscape types in Britain are taught, including coastal and glaciated upland environments and associated conflicts of land use. The role the weather plays is integral to understanding our relationship with the environment.

2 Human environments

Themes of population growth, urban change, international development and changing agriculture are explored within the context of developing and developed countries.

3 Global Issues

This unit has an emphasis on 21st century challenges facing the natural environment and the human response to these. It includes the study of natural disasters, such as hurricanes, volcanoes and earthquakes. Tourism will feature as an example of the fine line between resource use and abuse.

These units link well with the component units of Higher Geography and would therefore provide an excellent basis from which to progress to Higher in Form 5.

Throughout the course, a continuous record of progress will be undertaken, by means of ongoing assessment, an end-of-year examination and a course work assignment which is worth 20% of the final grade.

History (*Head of Department: Mr G Fyall*)

Pupils opting to study History at the end of Form 2 will prepare during Forms 3 and 4 for the National 5 examination in History.

The aims of the National 5 History course are to acquire breadth and depth in the knowledge and understanding of historical themes and to develop skills of explaining historical developments and events, drawing conclusions and evaluating historical sources. These aims will be achieved through study of a range of contexts. All three units in the course have a common set of outcomes and performance criteria.

Throughout the two-year course the History department will seek to develop and progress the practices acquired by pupils in Forms 1 and 2. Topics will be broken down into issues, many of them controversial, on which pupils will firstly be invited to study evidence and context, before being asked to express opinions. Cross-curricular skills will once again be emphasised. Notably, reading and writing skills will be developed through research and mini-essays, which will help with a range of other subjects. Cognitive skills will continue to be explored and refined to improve pupil performance in assessments.

The course is divided into three units:

1 The Atlantic Slave Trade, 1770 - 1807

A study of the nature of the British Atlantic slave trade in the late eighteenth century, changing attitudes towards it in Britain and the pressures that led to its abolition, illustrating the themes of rights, exploitation and culture.

2 Free at Last? Civil Rights in the USA, 1918 - 1968

A study of the development of race relations in the USA during the years 1918–68, illustrating themes of ideas, identity and power.

3 Migration and Empire, 1830 – 1939

A study of the causes and results of the movement of population into and away from Scotland during the period 1830s to 1930s, focusing on issues of identity and community and on the experiences of migrants in their new countries or communities.

Health and Food Technology (*Head of Department: Mrs L J Ross*)

Practical Cookery

The National 5 course contains a significant practical component, which involves experiential learning and is supported by related theory. Pupils are actively engaged in their learning through practical tasks, gaining confidence and essential life skills and a real sense of pride in the high standard of work they produce.

The course aims to enable learners to

- proficiently use a range of cookery skills, food preparation techniques and cookery processes when following recipes
- select and use ingredients to produce and garnish or decorate dishes
- develop an understanding of the characteristics of ingredients and an awareness of their sustainability
- develop an understanding of current dietary advice relating to the use of ingredients
- plan and produce meals and present them appropriately
- planning, costing, organisational and time management skills in a cookery context
- following recipes in the preparation of dishes and carrying out an evaluation of the product
- work safely and hygienically

Assessments

Component 1: a question paper assessing knowledge and understanding of the course. This is worth 25% of the overall mark.

Component 2: a practical assignment where learners carry out a practical activity preparing and cooking a three-course meal in 2½ hours. This is worth 75% of the overall mark.

Additional Award

Pupils who successfully achieve a pass in the food hygiene element of the course will be presented for the Royal Environmental Health Institute of Scotland Elementary Food Hygiene Certificate.

A nominal charge for food is made; this is currently £80 per annum for two practical classes per week.

Latin (*Head of Department: Mr E Faulkes*)

This course is a continuation of the one followed by pupils taking Latin in Forms 1 and 2. During Forms 3 and 4 pupils will continue to work through the Oxford Latin Course in order to reach the level required for the National 5 exam, which they will sit at the end of Form 4.

The first of the two papers of National 5 Latin consists of a passage in Latin which pupils will be asked to translate into English using the knowledge of Latin grammar which they have acquired during the course. Pupils will do this translation with the help of a word list.

During the course pupils will also read a number of extracts in Latin from Roman writers. At present, the extracts are from the writings of

- Virgil, who describes the adventures of the hero Aeneas, including a descent into the underworld
- Cicero, a Roman lawyer, who in dramatic courtroom speeches attacks the villains of ancient Rome
- Catullus, who wrote some of the greatest love poetry of the ancient world
- Ovid, whose book *The Metamorphoses* is one of our main sources of ancient mythology
- Pliny the Younger, whose letters tell anecdotes that are a wonderful source of knowledge about everyday life in the Roman Empire.

These are some of the greatest of Roman writers; their works are not only interesting in themselves but have also had a huge influence on later European literature and culture.

In the second paper of the exam, pupils will be asked to answer questions in English about these extracts, to show that they understand what they are about and what they tell us about Roman life and Roman beliefs.

The Forms 3 and 4 National 5 Latin course continues to stress the influence of Latin on many other areas of knowledge, particularly the English language. Many of the words in English derive from Latin, and a knowledge of these will aid pupils in the understanding and spelling of English vocabulary. The process of translating from Latin into English should give pupils a better understanding of the structure of their own language and help them to write clear and effective English. The fact that many European languages are directly derived from it should facilitate the learning of these languages by pupils who have studied Latin. Latin is also widely used in scientific and legal terminology and is important for the study of many periods of history, including that of the Scottish Wars of Independence.

Mathematics (*Head of Department: Mrs L A Craig*)

Mathematics is important in everyday life, allowing us to make sense of the world around us and manage our lives. Using Mathematics enables us to model real-life situations and make connections and informed predictions. It equips us with the skills required to interpret and analyse information, simplify and solve problems, assess risk and make informed decisions.

The National 5 Mathematics course develops numerical, geometric, algebraic and problem-solving skills acquired in Form 1 and 2. All Form 3 and 4 pupils will follow the two-year course, which consists of a variety of topics, each containing core and extension material. Investigations will be built into the course to allow for the development of investigative techniques and provision will be made for consolidation and integration of skills. The emphasis will be on work that is relevant and interesting and there will be opportunities for collaborative working, creativity and showing initiative.

The National 5 Mathematics Course will develop learners' ability to:

- understand and use mathematical concepts and relationships
- select and apply operational skills in algebra, geometry, trigonometry and statistics within mathematical contexts
- select and apply skills in numeracy
- use mathematical models
- use mathematical reasoning skills to interpret information, to select a strategy to solve a problem, and to communicate solutions

Course Structure

National 5 Mathematics consists of three units:

- Expressions and Formulae
- Relationships
- Applications

There is a variety of methods of assessment, much of it completed informally, but formal diagnostic assessment will be an integral part of the learning and teaching process. Extended tests, including the prelim in Form 4, will be undertaken at the appropriate times during the course. The main function of these extended tests will be to prepare pupils for the final SQA National 5 exam at the end of Form 4. The SQA external examination at the end of the course assesses skills developed across all three units and consists of a non-calculator and calculator question paper.

Modern Languages (Head of Department: Mr N A MacKinnon)

French / German / Mandarin / Spanish

Pupils have been developing skills in Reading, Listening, Speaking and Writing in Forms 1 and 2. These skills will be further developed in Forms 3 and 4, leading to the National 5 examination. The department's aim is to develop learners' skills in all four competences using a realistic, communicative approach. Emphasis is placed on those language skills most likely to be useful, understanding the foreign language, both spoken and written, and above all speaking it. Whilst fluency and confidence with authentic material is the main aim at this stage, grammar plays a large part in both understanding and speaking, and accurate writing in the foreign language is an integral part of the course. Learners will be encouraged to develop broad, generic skills as an integral part of their learning experience, leading to enhanced skills for learning, skills for life and skills for work. The topics covered in the course may be divided into the following contexts:

Society	Family and friends	Family relationships / arguments Ideal parents Friends / peer pressure
	Lifestyles	Healthy / unhealthy lifestyles – advantages and disadvantages Lifestyle-related illnesses
	Media	Advantages / disadvantages of new technology, eg internet, mobile phones. Impact of TV
	Global languages	Language learning and relevance
	Citizenship	Local area as a tourist centre Town / country life Being environmentally friendly in the home
Learning	Learning in context	Likes and dislikes re learning activities / subjects Preparing for exams
	Education	Comparing education systems Improving own education system Learner responsibilities
Employability	Jobs	Part-time jobs and studying Qualities for present / future jobs / plans
	Work and CVs	Planning and reporting back on work experience Reviewing achievements / ambitions
Culture	Planning a trip	Travel / language skills and their importance Describing your best holiday / trip / attitudes to travel
	Other countries	Aspects of other countries' educational, social, historical, political aspects
	Celebrations	Comparing traditions, celebrations, events in another country / customs and traditions
	Literature of another country	Literary fiction, eg short stories – understanding and analysis
	Film and TV	Film in the modern language TV in other countries

Modern Studies (*Head of Department: Mr G Fyall*)

Overview

Modern Studies is a subject which looks at what is happening in the world today, both at home and abroad. Themes covered include political processes, voting behaviour, crime and the law issues and a study of topical issues in the USA. The synthesis of political, sociological and economic issues can be an excellent preparation for many courses offered at further education level.

Pupils learn through developing their knowledge and understanding of the contemporary world and through developing enquiry skills in relation to investigating, evaluating and interpreting contemporary local, national and international issues. Significant use is made of IT resources.

The National 5 course consists of three units:

1 Government and Decision-making in Scotland

- Decision-making for Scotland, the Scottish Parliament, the Executive, the powers of the First Minister, the work of a backbench MSP.
- Participation in the voting system, forms of participation, reasons for variations in voter turnout at elections, influence of the media and pressure groups on the political system and level of participation.
- Case Study, the influence of pressure groups on the political process.

2 Crime and the Law in Scotland and the UK

- The causes of crime and the impact of crime on individuals and society
- The role of individuals, the police, the legal system and the state in tackling crime.

3 International Issues: The United States of America

- Social and economic issues, main regional and cultural differences, inequalities in terms of employment, income, health, housing, education and law and order amongst ethnic minorities. Government responses to these.
- Political issues, inequalities of representation and participation in the political process by different groups and government responses to these issues.

Music (*Director of Music: Dr L S Steuart Fotheringham*)

The National 5 course is designed to serve the needs of pupils who wish to study Music as part of a general education, to pursue an interest in Music, or who intend to follow a career in Music. The course will provide increasingly sophisticated development of musical skills through a wide range of challenging experiences. Pupils will gain a sense of historical perspective on the music they listen to and perform, and be able to place it in context. Pupils' participation in ensembles and concerts in the Music Department, as well as their solo performing, will be enhanced by their having a better understanding of the way the music is constructed and how it can be better communicated to their audiences.

The course consists of three units:

1 Performing Skills

Pupils will be required to prepare an 8-minute recital of music in a range of styles on two instruments (or one instrument and voice) equivalent in standard to Grade 3 (any exam board). Please note that pupils are required to receive instrumental and/or vocal instruction in school from a member of staff who is fully conversant with the requirements and standards of the course. There will be no tuition fee for those instruments which are being examined. Pupils not already learning in school should apply for music lessons in May in the usual way. One individual music lesson will be during Music curricular time, the other on a rota through all subjects.

2 Composing Skills

Pupils will learn how music is constructed in terms of form, harmony, melody, rhythm and other aspects. They will also gain an understanding of how composers create music in different styles, what influences and inspires the work of musicians and composers, and how to use music as a means of communication and expression. For the exam, pupils will demonstrate the creative use of these compositional techniques in a piece of music and provide a score, audio recording and self-evaluation for the composition.

3 Understanding Music

Pupils will learn the history of music from c.1600 to the present day. The course will encompass all styles of music from classical, jazz and Scottish to popular, and pupils will develop an informed sense of historical background. Learning takes place primarily by listening to music and familiarising pupils with how each style sounds different. Pupils will learn music terms and be able to apply them to recordings of unfamiliar music, and will learn about the social and cultural influences on the distinctive sounds and structure of specific music styles. Fluency in reading and understanding musical notation is desirable, and pupils will be encouraged to study for Grade 5 Theory.

Physical Education (*Head of PE and Games: Mr E D Jack*)

National 5

The main purpose of the course is to develop and demonstrate movement and performance skills in physical activities. By engaging in practical activities, learners can demonstrate initiative, decision-making and problem-solving. The course encourages learners to develop a positive attitude towards a healthy lifestyle, and the contribution that physical activity makes to this. The course also provides an opportunity to support the way that individual attitudes, values and behaviours are formed.

The main aims of the course are to enable the learner to:

- develop the ability to safely perform a comprehensive range of movement and performance skills
- understand factors that impact on performance in physical activities
- build capacity to perform effectively
- develop approaches to enhance personal performance
- monitor, record and evaluate performance development

The course comprises two areas of study:

1 Performance

Learners will be required to demonstrate a comprehensive range of movement and performance skills in physical activities.

2 Factors Impacting on Performance

Learners will be required to demonstrate knowledge and understanding of factors that impact on performance from: mental, emotional, social and physical. They will also develop personal performance and show an ability to evaluate the development process.

Assessment

The learner will be assessed by two 'one off' performances in different activities and a portfolio submission.

The purpose of the performance is to assess the learner's ability to perform effectively in **two** physical activities.

The purpose of the portfolio is to assess the learner's knowledge and understanding of the performance development process.

Physics (*Head of Department: Mr J Darby*)

The study of Physics is crucial to understanding the world around us, the world inside us, and the world beyond us. It is the study of the fundamental laws that govern all natural phenomena. As such it pervades every part of the world of science, technology and engineering. Its methods and insights are widely applicable, people with qualifications in Physics are sought by employers in a wide range of industries.

Physics has rarely been in such an exciting state as it is today. It concerns the challenge to discover the ultimate structure of matter and the universe, from the impossibly small to the unimaginably large. It also improves our everyday lives and the world we live in through the development of new technologies.

The F3 and F4 Physics course provides opportunities for pupils to develop knowledge and understanding of the concepts of physics, the ability to solve problems, the skills of scientific inquiry and investigation as well as analytical thinking skills. Pupils will develop literacy and numeracy skills and their ability to use technology effectively and appropriately. The course will provide those who wish to continue their study of Physics at Higher with a suitable basis for further study.

The National 5 course will build on pupils' knowledge and skills acquired in Forms 1 and 2 and will consist of 6 topics and an Added Value Unit:

- Waves
- Radiation
- Electricity
- Energy
- Dynamics
- Space
- Added Value Unit

There will be regular internal assessments throughout the course and particularly at the end of topics. The Added Value Unit will involve pupils investigating a topical physics issue using knowledge and skills acquired in the course and communicating their findings under exam conditions in class.

The course is assessed in a 2½ hour exam worth 80% of the total course marks. The Added Value Unit is worth the remaining 20% of the marks.

National 5 Physics can lead on to Higher Physics.

Additional subjects

High Performance Sport Programme (HPSP)

(Head of Elite Sport Development: Mr P J Godman)

The HPSP caters for our pupils who are performing in sport at the highest level. The aim of the programme is to enhance and develop these athletes during timetabled sessions to enable them to reach their full potential. Run in partnership with Abertay University, the programme will also allow pupils access to state-of-the-art facilities and assistance from the University's expert staff.

The HPSP will have a flexible structure that is tailored to the individual needs of each athlete. By producing this bespoke programme, we strive to create an environment that allows each athlete to thrive in their sport while concurrently ensuring they maintain a good sport/life/school balance. The following are elements that will be included in the programme:

- Strength and Conditioning
- Specialist Training Sessions
- Physiotherapy and Rehabilitation
- Video Analysis
- One-to-One Mentoring
- Sports Psychology Sessions
- Guest Speaker Presentations

Selection

Places on the HPSP are limited and as such an application process is required. As a minimal, those applying should have performed at a regional or national level in their sport. Other factors that will be taken into account will be current level of performance, evidence of progression and external references.

Those meeting these criteria and interested in choosing HPSP in their timetable for next session should initially make an appointment to discuss this with Mr Godman. The purpose of this discussion is to ensure both that the course is right for the individual and also that the individual is right for the course.

All pupils taking part in the HPSP will be expected to display full commitment to the programme, communicate and cooperate fully with staff and peers, and demonstrate exemplary conduct throughout.

Assessment

There is no formal assessment for the HPSP and therefore no formal qualification will be gained.

In addition to the continual monitoring of performance throughout the year, a formal end-of-year review will take place. This will allow all parties to comment on and evaluate progress/strengths/development needs and ultimately decide if it would be beneficial to continue with the HPSP programme for another year.

PE and Games (*Head of PE and Games: Mr E D Jack*)

The Core PE and Games programme runs across the six years of secondary education. All pupils in Form 3 are timetabled for three periods of PE/Games per week, with opportunities for increased contact time available through co-curricular activities.

The overriding aim is to facilitate the pupils reaching their physical potential while concurrently developing a positive attitude to physical activity that will last a lifetime.

In Form 3 an element of pupil-led activity choice is added to the PE curriculum. The onus is on pupil choice.

Options change on a termly basis but may include:

- athletics
- badminton
- basketball
- climbing
- circuits
- cricket
- dance
- fitness suite
- gymnastics
- hockey
- netball
- rugby
- Scottish Country Dance
- summer games
- team games
- trampolining
- volleyball

Personal, Social and Health Education

A Personal, Social and Health Education programme is delivered to all year groups to complement the Guidance structure.

One period per week is allocated to the formal teaching of the subject. Classes are taken, as far as possible, by members of the Guidance team and occasionally outside speakers are involved.

The aim is to encourage positive personal and social development by increasing the pupils' self-awareness through the development of self-assessment and target-setting. Emphasis is placed on the skills of the course rather than the content e.g. working with others, informed decision-making, leadership, problem solving and so on. Included in the course is Careers Guidance as this is essential for effective personal and social development.

Topics already covered in Forms 1 and 2 have included personal health topics such as understanding positive mental health, healthy eating and puberty, as well as those concerning life in society today such as social media and online behaviour, personal relationships and substance use. The Form 3 course reinforces these issues and introduces others which are relevant to an older age group. A particular focus is placed on building positive mental health and developing strategies to manage the increasing academic workload.

The overall aim of the courses is to ensure that pupils are prepared to face the challenges which they will meet as individuals in modern society.

Religious, Moral and Philosophical Studies *(Head of Dept: Mr A Cummins)*

In Form 3, this core curriculum course seeks to build on established knowledge, understanding and personal awareness of religious and philosophical ideas in providing pupils with opportunities individually to form mature, informed and justified moral commitments and philosophical beliefs regarding themselves and the world around them. The objective is to establish a critical and rational approach to exploring fundamentally important issues of belief which confront people and society today, as well as encouraging an inquisitive and incisive disposition towards the world and underlying issues of social justice.

In exploring moral values, various social issues will be considered, as will a variety of responses to these issues. Pupils will be encouraged to critically examine and challenge social ideas and values, and question their own sense of social justice and personal values. Recognising that one's own values and sense of justice influences the ways in which one responds to moral issues in the world, pupils will be directed to explore the impact these values have on their personal world view and moral commitments in responding to social concerns.

This course introduces pupils to some of the material and forms of philosophical debates addressed in Higher Philosophy and Higher Religious, Moral and Philosophical Studies in Forms 5 or 6.