

# DYCE ACADEMY



**S4 Subject Choice  
2018 - 2019**

## **Introduction for Parents / Carers**

Under Curriculum for Excellence, for the last three years,(S1-S3), your child has followed a broad general education. Towards the end of S3 they will now make option choices for S4, which is the beginning of their senior phase. The purpose of which is to further specialise in subjects the young person wishes to continue to study.

In S3 they have had the opportunity to personalise their subject choice whilst breadth of learning was retained. They are now at the stage where they are being asked to make the very important decisions about which subjects they might take forward. This involves them choosing subjects from the new National Qualifications framework, including the National 3, 4 and 5 courses which have replaced Standard Grade. Our students have the opportunity to personalise their choice of subjects further from the choices they made at the end of S2.

In S4 students will study 6 subjects of which Maths and English are compulsory. The 4 choices they will be asked to make will allow them to study each of the subjects chosen in depth and thoroughly prepare them for their National Qualifications.

This booklet is designed to give you all the information you will require to allow you to support your son or daughter in making their choices for S4. Each subject has outlined the content of the course, how it is assessed and possible progression within the subject beyond S4.

I hope you find this booklet informative. If you have any questions please contact your child's Guidance Teacher.

## National Qualifications

As you will be aware your son / daughter will be studying for the new National Qualifications which are now known as National 3, 4, and 5. At the end of S4 students will be entered for the qualification, which best suits their ability.

New National Qualification
National 3
National 4
National 5
Higher (new)
Advanced Higher (new)

The National Qualifications offer increased flexibility, provide more time for learning, more focus on skills and applying learning, and more scope for personalisation.

There is a greater emphasis on skills development to ensure young people develop the necessary skills for learning, life and work. There continues to be an important focus on the development of knowledge and understanding of key concepts and content to ensure progression through levels.

The qualifications are designed to meet the needs of all learners in progressing from their prior levels of achievement in their broad general education, through the qualifications framework to other learning and employment. Approaches to assessment will be more closely linked to learning.

### How are the qualifications structured and assessed?

Courses are comprised of a number of contributing units and coursework.

**National 4 courses** are assessed by teachers through coursework assessment. This will draw upon skills and knowledge developed across the course to provide challenging and motivating tasks for young people. **There will be no external assessment or grading at this level**, but coursework will be assessed by teachers using SQA assessments and quality assurance processes to ensure maintenance of national standards.

**National 5 courses** are assessed by teachers through coursework assessment and by an external SQA assessment (an examination, where appropriate). The external SQA assessment will require the learner to apply and/or integrate skills, knowledge and understanding in less familiar contexts and demonstrate deeper understanding and higher level skills. The external assessment at National 5 provides a useful experience for young people in preparing them for examinations at level 6 (Higher).

## **How are the qualifications graded?**

All courses will continue to contain work that is assessed and marked throughout the year by teachers. Courses at National 3 and 4 will not be graded. They will be assessed as pass or fail.

Courses at National 5 will be graded A to D or No Award.

If a student fails a Course assessment they will receive credit for the Units they have achieved at that level.

## **Added Value**

In the National 4 courses the Added Value is project based which draws together all the work completed in the other units. Unless the student passes the Added Value element of the course plus passes all the other units they will not gain the course award but would be accredited with the units they have passed.

At National 5 level the Added Value will be the final exam at the end of the year. Students must pass this to gain the overall course award.

## **Course Choice Process**

This month the students will make a provisional choice of six subjects. It is important that the choice the students make is made after discussion with parents and carers, and reflects the realistic choices of the learner. Over a period of time pupils will be prepared for this choice process in school through PSE and individual interviews with their Guidance teacher.

Of the six subjects they choose the first two subjects must be English and Maths. The remaining four subjects will be a free choice. Predominantly students would be continuing with four of the subjects they chose in S3 having dropped two subjects, or they may wish to choose a subject which they did not study in S3.

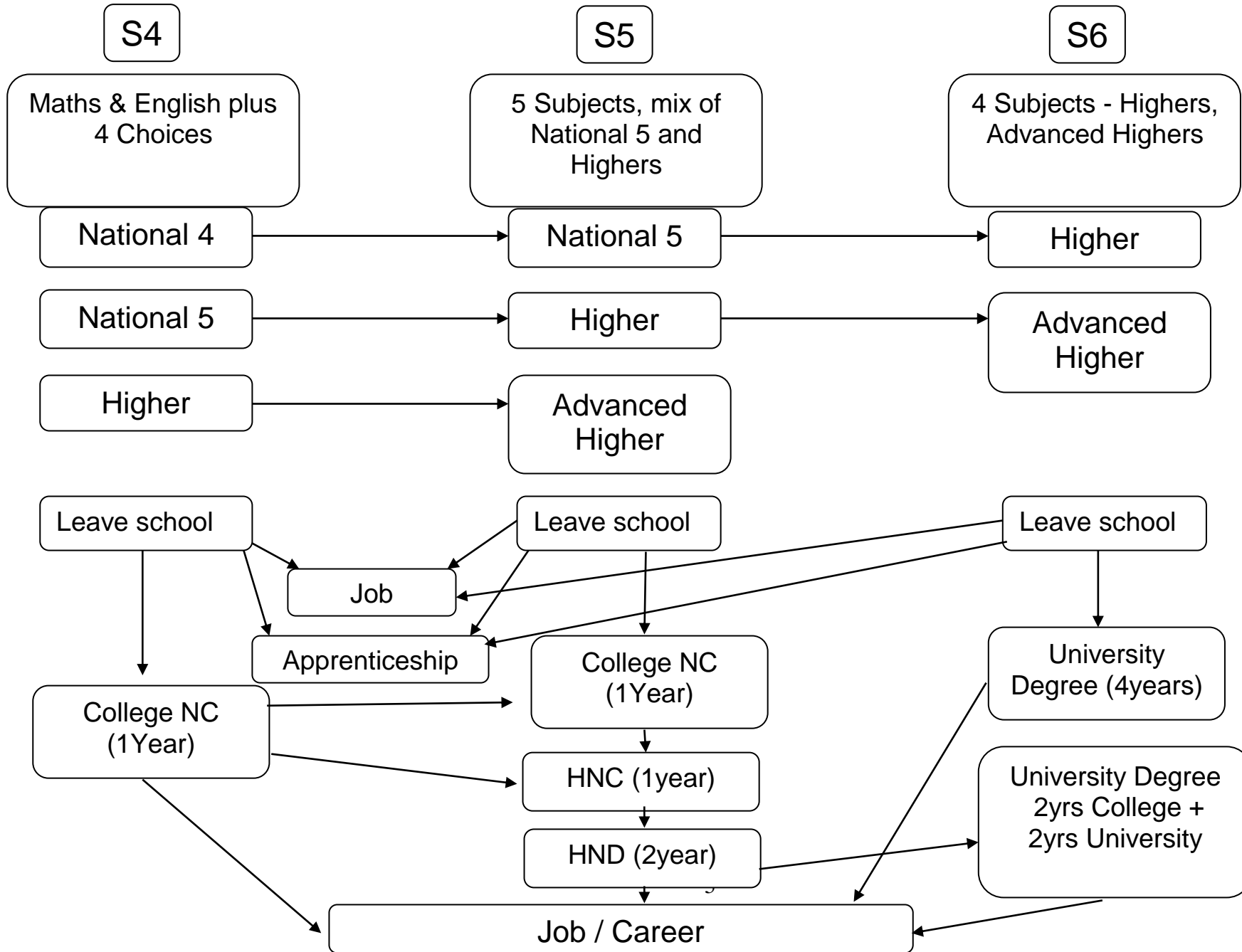
It is also important to consider as part of the choice process the planned progression route of each student beyond S4 as this may have a bearing on the combination of subjects they would be required to choose. On the following page you will find an outline of possible progression routes for students.

## **Course choice timeline**

Thursday 22 February at 7pm – Senior Phase Parents information evening.

Friday 2 March – Completed Course choice forms handed in to school.

**Possible Progression routes through the Senior Phase**



## **Information for Students**

### **Making your choices**

You are about to enter the Senior Phase within your education and make your S4 subject choice. It is very important that you think very hard about the subjects that you like, are good at, or that you find interesting. It is also important at this stage for you to consider which progression route you think you will take into employment as this may have a bearing on the combination of subjects, which you choose to study.

### **Which subjects can I take?**

During S3 you chose to study eight subjects. In S4 you will personalise your choice of subjects even further by choosing to study six subjects. There is no requirement to choose your subjects from the different curricular areas. You will have a free choice of the subjects to study.

Everyone will study English and Maths as well as PSE and PE. In addition you will choose four further subjects.

The subject choice form has been divided into four columns.

**You are required to choose one subject from each column as well as a reserve subject in each column.**

For those pupils in ACMS an individual curriculum will be negotiated with your guidance teacher to allow for the additional music tuition to be factored into your timetable. It would be advisable at this stage that you also choose four subjects and four reserve subjects.

### **Music must be chosen from column D.**

When looking at the subjects you want to study in S4 it is important to make choices that you are interested in.

Choosing a subject because your friends are doing it is not a good reason for a subject choice. Neither is selecting a subject because you like the teacher, as this teacher may not be teaching the subject next year.

It is also important that if you are considering a specific career choice or are considering going to university that you research carefully the entry requirements.

# **Subject Information**

## **Core Curriculum**

## ENGLISH

The main purpose of the English course is to provide learners with the opportunity to develop the skills of listening and talking, reading and writing in order to understand and use language. As learners develop their literacy skills, they will be able to process information more easily, apply knowledge of language in practical and relevant contexts, and gain confidence to undertake new and more challenging tasks in a variety of situations. Building on literacy skills, the course develops understanding of the complexities of language, including through the study of a wide range of texts. The course develops high levels of analytical thinking and understanding of the impact of language.

**(SQA: Course Aims: 2012)**

### Course Details and Assessment

#### **National 5 (Units and external assessment)**

##### **Spoken Language**

An internal unit that will assess pupils' ability in **Talking and Listening**. This unit is mandatory and pupils cannot achieve an overall award if they do not pass. Pupils can be assessed through Group Presentation or Co-operative Learning tasks or Individual Presentation with Question and Answer section. Other options are available and will be decided on by the teacher based on the strengths and needs of the pupil/class.

##### **Added Value**

The added value will be assessed in the **Writing Folio** (weighting 30 marks) and the end of session examinations.

##### **Folio: 2 pieces of Writing with clear dates on timeline for staged submission**

1. **Broadly Discursive** – pupils will identify, plan and complete a topic of their choice
2. **Creative** – pupils will choose a genre, plan and complete an essay

##### **External Assessment**

- Reading for Understanding, Analysis and Evaluation examination paper (30 marks weighting).
- A Critical Reading examination paper that will have the following two sections:
  - Part 1: Assessment on Scottish text (weighting 20 marks).
  - Part 2: A Critical Essay (weighting 20 marks).

##### **On-going assessment**

Throughout the course pupils will follow a strict **Assessment Timeline** – shared via Google Classroom each term – to ensure skills are developed, to measure ability and track progress.



## **National 4 (Units and Added Value Unit)**

### **Unit 1 English: Analysis and Evaluation**

The purpose of this Unit is to provide learners with the opportunity to develop **listening** and **reading** skills in the contexts of literature, language and media. Learners develop the skills needed to understand, analyse and evaluate straightforward texts.

(SQA: 2015)

### **Unit 2 English: Creation and Production**

Learners are provided with the opportunity to develop **talking** and **writing** skills in familiar contexts. Learners develop the skills needed to create and produce straightforward texts in both written and oral forms.

(SQA: 2015)

### **Unit 3 Literacy**

The purpose of this Unit is to develop the learners' reading, writing, listening and talking skills in a variety of forms relevant for learning, life and work. Learners develop the ability to understand straightforward ideas and information **presented orally and in writing**. Learners also develop the ability to communicate ideas and information orally and in writing with technical accuracy.

(SQA: 2015)

### **Added Value Unit**

The Added Value Unit provides learners with the opportunity to apply their language skills to investigate and report on a chosen topic. This assignment will allow the learner to demonstrate challenge and application.

(SQA: 2015)

## **National 3 (Units)**

### **Unit 1 Understanding Language**

The purpose of this Unit is to provide learners with the opportunity to develop **listening** and **reading** skills in the contexts of literature, language and media. Learners develop the skills needed to understand, analyse and evaluate simple texts.

(SQA: 2015)

### **Unit 2 English Producing Language**

Learners are provided with the opportunity to develop **talking** and **writing** skills in familiar contexts. Learners develop the skills needed to produce simple texts in both written and oral forms.

(SQA: 2015)

### **Unit 3 Literacy**

Learners' develop reading, writing, listening and talking skills in a variety of forms relevant for learning, life and work. Learners develop the ability to understand simple ideas and information **presented orally and in writing**. Learners develop the ability to communicate ideas and information orally and in writing with technical accuracy.

(SQA: 2012)

### **Progression**

National 5 pass in S4: Take Higher in S5 and Advanced Higher in S6.

National 4 pass in S4: take National 5 in S5 and Higher in S6.

National 3 pass in S4: National 4 in S5 and National 5 in S6.

## **MATHEMATICS**

### **Brief Description of Course**

In S4, pupils will follow a mathematics course as a continuation of the course they followed in S3, preparing them and leading into either the National 4 or National 5 courses certified at the end of S4.

During S3, pupils will have already worked on some of the component units, and hopefully achieved successful completion of unit assessments, in either:-

- National 3 Applications of Mathematics, leading into, National 4 Mathematics

or

- National 4 Mathematics, leading into, National 5 Mathematics

### **National 3 Lifeskills Mathematics**

The National 3 Lifeskills Mathematics course consists of three units:

- Manage Money and Data (Nat 3)
- Shape, Space and Measure (Nat 3)
- Numeracy (Nat 3)

Each unit is assessed through continuous assessment and internally marked unit assessments; there is no final exam at this level. Successful completion of the units provides the candidate with certification of the qualification of National 3 Lifeskills Mathematics. As with all subjects, courses at National 3 level are not graded and are designated as pass/fail only.

### **National 4 Mathematics**

The National 4 Mathematics course consists of three units and, where appropriate, a fourth “Added Value” unit, which is assessed by way of a final exam/test:

- Expressions and Formulae (Nat 4)
- Relationships (Nat 4)
- Numeracy (Nat 4)
- Added Value Unit (Nat 4)

Each core unit is assessed through continuous assessment and internally marked unit assessments. Entry to the Added Value Unit is determined by successful completion of the three core units. The aim of the Added Value Unit is to allow the learner to demonstrate their ability to apply the combined knowledge of the three core units in more challenging contexts; it is assessed by a two-part (non-calculator and calculator) test set by the SQA. Successful completion of the three core units and the Added Value Unit, provides the candidate with certification of the qualification of National 4 Mathematics. As with all subjects, courses at National 4 level are not graded and are designated as pass/fail only.

## **National 5 Mathematics**

The National 5 Mathematics course consists of a final course assessment in the form of an external exam. This exam is set by the SQA and is graded A-D. There are two parts, calculator and non-calculator.

Pupil progress will be assessed through continuous assessment and homework tasks.

Pupils will cover work from the areas of geometry, trigonometry and algebra and those gaining a pass in S4 may progress to Higher mathematics in S5.

### **Resources**

The nature of the new curriculum and qualifications is such that pupils use a variety of different resources such as textbooks, worksheets, websites, etc. As such, it is no longer the case that a pupil completes the vast majority of their course using a single textbook. We do however aim to ensure that most pupils are issued with a textbook to have available at home for homework and revision, as well as to work from in class. All pupils are issued with jotters and a plastic wallet to protect any resources issued.

## **PERSONAL AND SOCIAL EDUCATION**

As in S3, weekly contact with your guidance teacher comes through your PSE lessons. This allows relationships to be further strengthened and allows effective personal, curricular and careers guidance.

### **Course Outline**

The Personal and Social education programme throughout is designed to help you to develop all aspects of your life including understanding, qualities and skills essential to personal development and educational achievement. It includes experiences to help you to develop as a successful learner, a confident individual, a responsible citizen and an effective contributor.

The course especially includes:

- The development of self-awareness, self-esteem and self-confidence.
- The development of the ability to assess your strengths and weaknesses and to develop strategies for using your own strengths and dealing with your weaknesses.
- The development of the qualities and skills necessary to form effective relationships with others.
- The development of decision making skills and strategies, including vocational planning.
- The development of the ability to deal with change and with life transitions.

### **Teaching and Learning Approaches**

In class you will work as a class, in groups and as an individual. Activities will include discussion, worksheets, personal research using the internet and the school library as well as input from outside speakers.

# **Subject Information**

## **Optional Subjects**

**Pupils should use the information given on the following pages to make an informed choice of 4 subjects plus 4 reserve subjects.**

## Art & Design – National 5

### Entry Requirements

**National 5:** National 4 Art and Design Course relevant component Units

### Purpose of course:

The course provides opportunities for learners to be inspired and creatively challenged as they explore how to visually represent and communicate their personal thoughts, ideas and feelings through their work.

### Course details:

#### Expressive Folio: 100 Marks

This unit helps learners to develop their personal thoughts and ideas in visual form with a critical understanding of artists' working practices and the social and cultural influences affecting their work. They will select stimuli and produce investigative drawings. They will explore **one line** of development using of a range of materials, techniques and/or technology in 2D and/or 3D formats. A final outcome will be produced.

#### Design Folio: 100 Marks

In this unit learners will plan, research and develop creative design work in response to a design brief. They will develop their problems solving and critical thinking skills as they consider complex design opportunities, and work to resolve design issues and constraints. They will develop critical understanding of designers' working practices and the social and cultural influences affecting their work. They will explore **one line** of development using of a range of materials, techniques and/or technology in 2D and/or 3D formats. A final solution will be produced.

### Assessment

Each folio will be externally marked by the SQA.

A question paper that focuses on the pupils' knowledge and understanding of artists' and designers' work and practice completes the external assessment.

**National 5:** 1 Hour 30 Mins.

### Progression:

The N5 Course is designed to provide progression to the Higher course.



## **BUSINESS EDUCATION**

### **Administration and IT - National 4 and National 5**

Administration and IT will build the skills and knowledge that would be used by decision makers or for supporting management in organisations. This course will be aimed at pupils attaining the National 5 qualification but will allow pupils to achieve at National 4 depending on their individual ability. Pupils who have not taken Business Information Technology in S3 may have some “catch-up” in terms of progressing to the Spreadsheet and Database skills required for National 5, but this should not present any problems for suitably motivated pupils.

#### **Why study Administration and IT?**

This course develops real life skills that are essential in every workplace by offering engaging, motivating and relevant learning experiences through a range of theory and practical activities relevant to the world of work.

Coursework will involve you learning to gather information and use technology to prepare, present and communicate your findings efficiently and professionally. This will include understanding how modern technologies – web conferencing, blogging and social networking have impacted on the modern workplace. Emerging technologies will be incorporated so as to ensure that the content remains current and relevant.

This is a course which develops skills and knowledge that will be valuable for all pupils regardless of ability and future career. You will develop a very good standard of skills to benefit you immediately, whether in employment, Further or Higher education and in your personal lives.

A significant number of job vacancies today require the use or understanding of ICT applications and most employees are expected to perform some administration duties. Colleges and Universities will also assume that applicants are competent in a range of ICT applications in order to present and communicate coursework in an appropriate manner beyond simple word processing.

#### **Course Structure**

##### **Administrative Practices**

- Learners will develop an understanding of key legislation affecting both organisations and employees
- The benefits to organisations of good customer care
- The skills, qualities and attributes required of administrators.
- Carrying out a range of administrative tasks required for organising and supporting events

##### **IT Solutions for Administrators**

- Developing learners’ skills in IT, problem solving and organising and managing information to complete business tasks



- Using IT applications to create and edit business documents
- Emerging technologies may be incorporated so as to ensure that its content remains current and relevant Undertaking organisational tasks that would be required to support small scale projects and events

### **Communication in Administration**

- Using IT for gathering and sharing information with others in administration-related contexts
- Developing an understanding of what constitutes a reliable source of information
- Identifying and using the most appropriate methods for gathering information
- Communicating information in the most effective, efficient and appropriate manner

### **Assessment**

National 4 is internally assessed as a combination of unit assessments and an integrated practical added-value task.

National 5 is assessed by a 3 hour, 70 mark integrated practical and theory based assignment as well as a 2 hour 50 mark practical question paper focussing on Database and Spreadsheet skills with some theory questions.

### **Progression**

Learners who attain National 5 would naturally progress to Higher in S5 while learners achieving National 4 could continue with the subject at National 5 in S5. Some students may also extend their knowledge by studying Business Management, Accounting or Computing Science at National 5 or Higher in S5 or S6. Pupils who achieve National 4 may wish to continue towards the National 5 qualification in S5.

The Higher course is aimed at developing the administrative skills and knowledge used by managers and senior support staff in the workplace. Both levels of qualification will equip learners with skills and knowledge that will allow them to use ICT more effectively if continuing in education as well as making a valuable contribution to any employment.

## **ACCOUNTING - National 5**

This course is only available at National 5 and as such we would require that pupils are confident with their arithmetic and expected to achieve National 5 Maths in S4.

### **Why Study Accounting?**

Financial pressures are one of the most common reasons for business failures; business needs employees who can analyse and interpret financial information, identify the profitability and security of a business as well as being able to manage budgets and control costs.

Accounting relates to many aspects of everyday life and therefore gives you experiences which are topical, and which develop skills for learning, life and work. The course will encourage you to think logically, and to apply accounting principles in your everyday life, thereby supporting your own personal financial security while preparing you for the world of work, or further study of accounting and other business-related disciplines. It deepens understanding of accountancy and highlights a range of accountancy-based career opportunities that are available within all business sectors. A large number of college and university courses with commercial aspects to them may assume prior knowledge of accounting.

Accounting would particularly suit students who enjoy, or wish to take advantage of, numeracy-based learning opportunities as well as those who like to apply their logical and analytical thinking.

### **Course Structure**

The course comprises three units and throughout the whole course students will:

- Use ICT to produce and communicate accounting information
- Develop their knowledge and understanding of fundamental accounting concepts and theories

#### **Preparing Financial Accounting Information**

- Understand key Financial Accounting terms relating to the preparation of final accounts and use final accounts in familiar contexts
- Recording Financial Accounting transactions, preparation of financial statements and final accounts in order to determine business profits and costs

#### **Preparing Management Accounting Information**

- Preparing straightforward cash budgets and a range of straight forward cost statements
- Understanding key Management Accounting terms, and knowledge of their application in straightforward familiar contexts

## **Analysing Accounting Information**

- Ability to interpret, analyse and evaluate a range of accounting information to assess the current financial position and success of a business
- Understanding a range of straightforward analytical concepts used to assist financial decision making and knowledge of their application in familiar contexts

## **Assessment**

Assessment will be through a combination of a 2 hour final exam worth 130 marks (72% of overall mark) and a 50 mark practical accounting-related assignment, solving accounting problems (28% of the overall mark).

The final exam question paper will require demonstration of a depth of knowledge, understanding and skills accumulated from across the course, while the assignment will be a project where each student's work will be based on a real-life business context where they are required to combine their accounting knowledge and skills from across the course.

## **Progression**

Students will be able to continue with Accounting at Higher in S5. Students may also wish to expand their knowledge by studying Business Management at National 5 or Higher, or Administration and IT at National 5 or Higher.

## **BUSINESS MANAGEMENT - National 5 & BUSINESS - National 4**

This course will be aimed at pupils attaining the National 5 qualification in S4 but will allow some pupils to achieve National 4 depending on their individual ability.

### **Why Study Business Management?**

This course introduces you to the dynamic, changing, competitive and economic environment of industry and commerce and its effect on society as well as allowing an understanding of the impact on ourselves.

These courses will develop skills in communicating and presenting business-related information and will enable you to succeed in life with determination and an ability to think logically. These skills will support you in becoming more confident, particularly regarding your own future education and place in the world of work. Understanding the economic and financial environment in which business operates will help you to contribute responsibly to society and by encouraging working with others, the course will help you to participate effectively in our ever-changing global business environment.

Studying Business and Business Management will allow you to make a positive and practical contribution to any organisation regardless of your career choice. You will develop transferable, enterprising, skills and attributes which enhance your employability. A large number of College and University courses will assume prior learning if they include Business, Finance and Economics units.

### **Course content**

#### **Understanding Business:**

By looking at real life business situations, students will develop skills, knowledge and understanding relating to the role of business organisations and entrepreneurship in society. Students explore issues relating to the external environment in which organisations operate and their effects on organisational activity, decision making and survival.

Students will be able to:

- Understand how entrepreneurship supports business development, creating wealth and employment
- Explain how organisations contribute to generating wealth and satisfying customers' needs
- Describe key business terms and concepts, and knowledge of their application in familiar business situations

#### **Management of People and Finance**

Students will grasp theories, concepts and processes relating to Human Resources Management, allowing them to demonstrate an understanding of how to manage people in order to maximise their contribution to an organisation's success. Students will also follow basic theories, concepts and processes relating to financial aspects of business in

preparing and interpreting financial information in order to solve financial problems facing businesses.

Students will be able to:

- Identify factors influencing both Human Resources Management and Financial Management, and draw conclusions on how to address issues arising from them
- Describe key business terms and concepts relating to Human Resource and Financial Management, and knowledge of their application in familiar business situations

### **Management of Marketing and Operations**

Students will understand how Marketing can be used to communicate effectively with consumers, maximise customer satisfaction, and enhance competitiveness. Students will explore and identify the processes and procedures required to produce goods or services to an appropriate standard of quality.

Students will be able to:

- Identify factors influencing the management of Marketing and Operations, and draw conclusions on how to address issues arising from them
- Describe key business terms and concepts relating to Marketing and Operations Management, and knowledge of their application in familiar business situations

### **Assessment**

**National 4 Business** is internally assessed through an added value assignment and successful completion of the unit assessments.

**National 5 Business Management** is assessed through a 30 mark course assessment (25% of the marks) and a 2 hour external exam worth 90 marks (75% of the marks).

The exam will have two sections: section 1 will consist of 2 case studies each with a series of questions totalling 20 marks. Section 2 consists of 5 sections, based on each of the areas of study, each containing questions worth 10 marks

The assignment, conducted independently, will have 30 marks and students have to research the current effectiveness of a business activity and produce report which clearly communicates:

- Research carried out, justifying its purpose and value
- Impact on the organisation of the research evidence
- Identified areas for improvement of the business activity
- Recommendations to enhance the future effectiveness of the business activity
- Justifications for the recommendations made (with reference to the research undertaken)

## **Progression**

Pupils attaining National 5 will be able to continue at Higher and they may also wish to expand their knowledge by studying Accounting at National 5 or Higher, or Administration and IT at National 5 or Higher. Pupils who achieve National 4 may wish to continue towards National 5 Business Management and/or Accounting in S5.

## **COMPUTING SCIENCE – National 4 and National 5**

This course will be aimed at pupils attaining the National 5 qualification in S4 but will allow pupils to achieve at National 4 depending on their individual ability.

### **Why study Computing Science?**

Computing science is vital to everyday life — socially, technologically and economically. Computing is embedded in the world around us, from systems and devices in our homes and places of work, to how we access education, entertainment, transportation and communication. Understanding computational processes and thinking is also vital to many other fields including science, economics, business and industry.

While many students will want to become computing professionals, all will benefit from the development of these foundational skills and the underpinning knowledge necessary to meet the needs of society today and for the future.

The course aims to enable you to:

- Develop a range of computing and computational thinking skills, including: skills in analysis and problem-solving, design and modelling as well as developing, implementing and testing digital solutions across a range of contemporary contexts.
- Develop knowledge and understanding of key computing concepts and processes, and the ability to apply this to a variety of problems; and an awareness of the impact of computing technologies on the environment or society.

### **Course Content**

The Course has **four** Units and the Course Assessment Assignment.

#### **Software Design and Development:**

- Developing knowledge, understanding and practical problem-solving skills in software design and development, through a range of practical and investigative tasks using appropriate software development environments.
- Developing programming and computational-thinking skills by implementing practical solutions and explaining how these programs work.

#### **Computer Systems:**

- Developing an understanding of how data and instructions are stored in binary form and basic computer architecture.
- Gaining an awareness of the environmental impact of the energy use of computing systems and security precautions that can be taken to protect computer systems.

### **Database Design and Development:**

- Developing knowledge, understanding and practical problem-solving skills in database design and development, through a range of practical and investigative tasks.
- Applying computational-thinking skills to analyse, design, implement, test, and evaluate practical solutions, using a range of development tools such as SQL.

### **Web Design and Development:**

- Developing knowledge, understanding and practical problem-solving skills in web design and development, through a range of practical and investigative tasks.
- Applying computational-thinking skills to analyse, design, implement, test and evaluate practical solutions to web-based problems, using a range of development tools such as HTML, CSS and Javascript.

### **Assessment**

National 4 Computing Science is assessed by a combination of internally assessed unit assessments that must be passed as well as an internally marked 'Added-Value' course assessment that combines knowledge, understanding and practical abilities.

National 5 Computing Science is assessed through a 110 mark 2 hour external exam (69% of the marks) and a 50 mark course assessment, completed in class time (31% of the marks).

The exam will have two sections: section 1 (25 marks) will consist of a number of short answer questions; section 2 (85 marks) consists of extended response questions that integrate topics from the full range of course content.

The assignment will have 50 marks and will require you to apply the skills you have learnt in Programming, Database and Web Design to solve a real world problem.

### **Progression**

Pupils will be able to continue with Computing Science to Higher in S5 and may also wish to expand their knowledge by studying Business Management or Administration and IT at National 5 or Higher in S5 or S6.



## **ENGINEERING SCIENCE – National 5**

The National 5 Engineering Science course will develop technological skills that are relevant to engineering. It also builds on some science experiences and outcomes, prior learning in mathematics and numeracy and aspects of technological developments in society.

Engineering shapes the world in which we live, by applying elements of technology, science and mathematics to real-world challenges. Engineers play key roles in meeting the needs of society in fields that include climate change, medicine, IT and transport, and it is important there are more young people with an informed view of engineering. As we are living in the oil capital of Europe, this course may especially suit you if you are considering a career in the Oil Industry here in Aberdeen.

The course encourages candidates to become successful, responsible and creative in using technologies and to develop a range of qualities, including flexibility, perseverance, confidence and enterprise.

This course involves challenging National 5 Mathematics work therefore pupils would also be expected to be studying National 5 Mathematics.

### **Course Details**

The course helps candidates to develop an understanding of the far-reaching impact of engineering on our society. They learn about the central role of engineers as designers and problem-solvers, able to conceive, design, implement and operate complex systems. Candidates develop the ability to:

- apply knowledge and understanding of key engineering facts and ideas
- understand the relationships between engineering, mathematics and science
- apply skills in analysis, design, construction and evaluation to a range of engineering problems
- communicate engineering concepts clearly and concisely, using appropriate terminology
- develop an understanding of the role and impact of engineering in changing and influencing our environment and society

### **Assessment**

The course assessment comprises an examination paper (1 hour 50 minutes) and a Coursework Assessment Task, which enables candidates to apply:

- breadth of knowledge and depth of understanding to answer appropriately challenging questions in engineering contexts
- knowledge and skills to solve a challenging practical engineering problem
- knowledge and skills in both practical and theoretical contexts

The Coursework Assessment Task provides an opportunity for candidates to demonstrate engineering science skills and creativity, analyse engineering problems, design and build/simulate solutions to engineering problems, and test and evaluate solutions to engineering problems. This will represent 31% of the grade. The examination will represent the remaining 69%.

**Pupils selecting this course must be capable of achieving National 5 Mathematics at A or B.**

## **DRAMA – National 4 and 5**

### **Drama – National 4**

#### **Entry Requirements**

Open to all pupils.

National 4 Drama allows pupils to develop practical skills in creating and presenting drama as well as developing their ability in an area of theatre production. A strong emphasis on public performance is given and students are asked to maintain a folio of evidence.

#### **Course Content**

**Drama Skills** – In this unit pupils will create and develop their own piece of drama from a variety of stimuli.

**Production Skills** – In this unit pupils will have the opportunity to explore script and develop the different areas of theatre production, including costume, makeup, lighting, sound, props and set.

**(Added Value Unit) Performance** – Pupils will draw on and extend their knowledge and apply what they have learned to a drama performance.

#### **Assessment at National 4**

All assessment at National 4 will be internal.

#### **Progression**

National 5 Drama



## Drama – National 5

### Entry Requirements

Pupils must have an interest in Drama and are expected to have attained the skills, knowledge and understanding relevant to National 4 or equivalent.

National 5 Drama provides opportunity for pupils to further develop their practical skills in creating and presenting drama as well as continuing to explore the area of theatre production in order to enhance drama when presenting. A strong emphasis on public performance is given and students are asked to maintain a folio of evidence. The transferable skills that Drama offers makes this an exciting course option for everyone – enabling them to apply the skills learnt to their future careers.

### Course Content

**Drama Skills** – In this unit pupils will develop their skills, knowledge and understanding to create and present drama from a range of stimuli.

**Production Skills** – The aim of this unit is for pupils to further develop their knowledge of a range of production skills. They will then use these skills to enhance drama when presenting.

**Performance** - Pupils will draw on, extend and apply the skills they have learned during the course to a performance of a scripted extract. The pupil can be assessed in Acting as well as Set Design with either Sound Design, Costume Design, Make-up & Hair Design, Lighting Design or Props Design and construction as their second choice.

### Assessment at National 5

Performance – Externally Assessed Performance (60%)

Question Paper – Externally Marked (40%)

### Progression

Higher Drama or NPA Acting and Performance (SCQF Level 6)



## Music – National 4/5

### Entry Requirements

This course is suitable for pupil at grade 3 standard on 2 instruments or those capable of reaching this standard within a 6 month period. Ability to engage in independent practice and set short-term targets is recommended.

**Recommended that candidates have, where possible, their chosen instrument at home for practice and homework for best attainment.**

The National 4/5 course consists of 3 units:

- 50% is built up of practical work on 2 instruments (or 1 instrument and voice), leading to a practical program of 8 minutes, which will be externally assessed. The practical requirements look at your ability to both perform on your chosen instruments/voice and also your ability to plan a program of appropriate length. At national 4 the performing unit does not have to be externally assessed. All performances for internal assessment must include an 'audience' of a least 1 person (in addition to the assessor) and candidates should provide a critical self-reflection (without prompt) of their performance.
- An externally assessed composition folio containing one final composition of between 1 and 2 ½ minutes. Small composition tasks are completed throughout the year to build skills and repertoire.
- An Understanding Music unit, which consists of recognition of instruments/styles/forms as well as musical concepts, literacy and short essays/presentations detailing your understanding of the cultural and social links within particular styles and or periods.

### Course Content

The course consists of 3 units:-

- 50% is built up of practical work on 2 instruments (or voice), leading to a practical externally assessed in February. Each instrument must have a programme of 4 minutes of contrasting music.
- An externally assessed composition piece.
- A Listening Unit, which consists of recognition of instruments/styles/forms as well as musical concepts and literacy.



## National Progression Award in Photography (NPA)

### Levels 4 & 5

The course at both levels will begin with an introduction to photography and will focus on:

- The Essentials: *Basic camera controls / composition and lighting*
- Downloading / Storage and Computer Manipulation

The aim is to provide learners with the basic knowledge and skills required to undertake the course units. Learners should aim to further develop this knowledge and these skills as the course progresses.

Unit 1: *Understanding Photography and Working with Photographs*

Unit 2: *Photographing People and Places*

### Unit 1: Understanding Photography & Working with Photographs

- This unit offers learners an opportunity to gain knowledge of photographic styles and genres, as well as learning about the working approaches of chosen photographers. Learners will become familiar with how to use appropriate photographic terminology to express opinions about their own and others photographic work.
- Learners will use the skills and knowledge gained *in The Essentials* as a starting point to undertake mini projects to establish a technical platform from which to progress with more specific photographic tasks in unit 2.

### Unit 2: Photographing People and Places

- This unit will require a personal exploration of various interior and exterior settings with a focus on approaches to composition and lighting. Learners will look at various approaches to photographing the figure with the use of photographic techniques to communicate expression and mood, with consideration to the relationship between the figure(s) and setting. Photo shoots will be carried out during class activities with the majority completed in their own time.
- Learners will be required to plan photo shoots based on prior research and the work of chosen photographers. The working process will involve image selection and manipulation, as learners work towards unit presentations. Identification of areas of success and improvement will be required, supported by image description, analysis and evaluation of practice.

### Assessment:

**All units are internally assessed** against unit requirements – assessed on a unit-by-unit basis or combined - **assessed** on a **pass/ fail** basis within centres

Evidence will be a combination of practical, written and oral.

## **HOSPITALITY – PRACTICAL COOKERY- NATIONAL 4 AND NATIONAL 5**

This course will be aimed at pupils attaining the National 5 qualification in S4 but will allow some pupils to achieve National 4 depending on their individual ability.

Aimed at students with an interest in practical food activities, it would be of particular value to those considering working in the food or hospitality industries or any student keen to further develop their creative culinary skills.

The course is practical in nature allowing students to develop a range of cookery skills and food preparation techniques, as well as planning, organisational and time management skills. Students will acquire knowledge of ingredients, their uses, the importance of responsible sourcing of ingredients and of current dietary advice.

### **Assessment**

#### **National 5**

1 hour written Question paper

Written preparation for practical exam

Practical Exam – students will complete a two and a half hour practical exam, where they are required to produce a three course meal.

The course is graded A to D.

#### **National 4**

The courses consists of three National units and a fourth 'Added Value' unit.

- Cookery Skills, Techniques and Processes
- Understanding and Using Ingredients
- Organisational Skills for Cooking

Each unit is assessed through continuous assessment and is internally marked. Entry to the Added Value Unit is determined by successful completion of the three core units. The aim of the Added Value Unit is to enable students to draw on the knowledge, understanding and skills developed in the other three units. It is assessed by way of an activity brief that requires students to prepare and cook a two-course meal for a given number of people within a given timescale and to present it appropriately.

### **Progression**

- Pupils who achieve National 4 may wish to continue to National 5 Hospitality
- National 5 Cake Decoration
- A range of employment or training opportunities within the Hospitality and Food industry.

A charge is made towards the cost of ingredients.

## **MODERN LANGUAGES**

### **French and Spanish**

In S4, students will have the choice of either French or Spanish as a continuation from their S3 studies. Both of these subjects will be offered at National 4 and National 5 levels.

Previous study of the language is a prerequisite to entry into these courses.

Both National 4 and National 5 courses offer learners the opportunity to develop and extend a wide range of skills. In particular, these courses aim to enable learners to:

- Read, listen, talk and write in a modern language, as appropriate to purpose, audience and context.
- Understand and use a modern language, as appropriate to purpose, audience and context.
- Apply knowledge of a modern language.

The course is divided into 2 units:

- Understanding Language
- Using Language

Topics covered in both courses will include;-

- Society: Family and friends, Health and Wellbeing, Media, Global Citizenship
- Education and the world of work
- Culture - planning a trip to the country, important festivals and events, film and television

At National 4 level, learners will undertake an “Added Value Unit” where they will plan and research a topic of their choice relevant to the language they are studying. This unit of work takes the form of a personally researched assignment that can be presented either orally or in written form to allow learners to use all manner of media for example podcasts or e-portfolios.



## **PHYSICAL EDUCATION – National 4**

### **Curriculum Area: Health and Wellbeing**

#### **Recommended Entry Levels**

After agreement with Principal Teacher of HWB, considering:

- Homework records (deadlines met and standard of response)
- Your participation record and level of effort (both in theory and practical elements)
- Your practical performance ability (you must be capable of passing a minimum of two different activities at N4 level)
- Behavioural record within the PE Department has been positive from S1-4

#### **Course Description**

The National 4 PE course will teach mandatory knowledge and employable skills to pupils through practical and classroom based sessions. Pupils will then be assessed through Practical and an internally marked written Portfolio. Pupils will also complete a Practical Added Value Unit.

1. Performance Skills: Pupils will develop a range of movement and performance skills in physical activities. They will develop consistency and control, fluency of movement and body and spatial awareness.
2. Factors Impacting on Performance: Pupils will explore and develop their knowledge of factors that impact on personal performance in physical activities. They will record, monitor and reflect on their own performance.
3. Added Value Unit (Performance): Pupils will prepare for, and carry out, a performance which will allow them to demonstrate practical ability within a challenging context. This unit will be treated as a practical exam with only one sitting being permitted in order to pass. Within this unit there may be opportunities for personalisation and choice in the selection of physical activities.

#### **Assessment**

All 3 units will be assessed internally and will be on a pass / fail basis. Accredited units will be passed on to the SQA for certification.

#### **Homework**

Homework will be issued on a weekly basis. These will, mainly, be written tasks but there will be occasions when other tasks are issued. There are strict deadlines for homework and these deadlines are essential to progress in National 4 Physical Education.

#### **Progression**

- |                                    |                      |
|------------------------------------|----------------------|
| 1. National 5 PE                   | 2. Sports Coaching   |
| 3. Entry towards Further Education | 3. Leisure Assistant |
| 4. Lifeguard                       | 5. Sports Science    |

## **PHYSICAL EDUCATION – National 5**

### **Curriculum Area: Health and Wellbeing**

#### **Recommended Entry Levels**

After agreement with Principal Teacher of HWB, considering:

- Homework records (deadlines met and standard of response)
- Your participation record and level of effort (both in theory and practical elements)
- Your practical performance ability (you must be capable of passing two different activities at N5 level)
- Behavioural record within the PE Department has been positive from S1-4

#### **Course Description**

The National 5 PE course will teach mandatory knowledge and employable skills to pupils through practical and classroom based sessions. Pupils will then be assessed through Practical Exams and an externally marked written Portfolio. The course content is comprised from two key areas detailed below:

1. Performance: Pupils will have to plan, prepare, perform and evaluate their own personal performance. This could be in a variety of activities covered over the course of the year. Pupils must show minimum competency within at least 2 activities.
2. Factors impacting on Performance: Pupils will investigate factors that may impact on performance. These include Physical, Social, Mental and Social factors. This knowledge will be built on and developed through both theoretical and practical contexts.

#### **Assessment**

1. Performance: Pupils will be assessed on their practical ability within two separate Practical Exam performances. These exams are like any other with pupils performing to the best of their ability during single performance sittings, there are no re-sits. Pupils will, where possible, get to choose activities that they would like to sit their exams through. [50% of course award]
2. SQA Portfolio: The portfolio is a set of questions answered under exam conditions over a number of months within school. The portfolio allows the pupils to demonstrate their knowledge and understanding of investigating, analysing, planning, implementing and re-evaluating the performance development process that they would be undertaking throughout the portfolio process. [50% of course award]

#### **Homework**

Homework will be issued on a weekly basis. These will, mainly, be written tasks but there will be occasions when other tasks are issued. There are strict deadlines for homework and these deadlines are essential to progress in National 5 Physical Education.

## **Progression**

Pupils can progress onto Higher PE, Advanced Higher PE and various Further Education courses.

## **RELIGIOUS, MORAL & PHILISOPHICAL STUDIES (RMPS)**

### **National 4/5 RMPS**

In RMPS you will develop a range of cognitive and analytical skills that will support your learning throughout your time at school. The subject encourages active learning in the process of investigating religious, moral and philosophical topics and ideas. You will learn to express different viewpoints and abstract concepts whilst working on adding depth and structure to arguments. The National 4/5 course reflects on what you as learners are interested in and is split into three units: World Religion, Issues of Morality and Religious & Philosophical questions.

#### **World Religion: Buddhism**

Most Buddhists would not consider Buddhism a religion but a way of life or a philosophy. In what ways is Buddhist philosophy and ethics relevant in society today? You will consider key Buddhist beliefs and practices as well as looking back to where it all started – the life of the Buddha and ‘The Middle Way’.

#### **Issues of Morality: Religion, Environment and Global Issues**

In everyday life you only have to check the news to see that we have real issues about how we have been treating the planet and the people on our home called Earth. What environmental issues are we facing today? Is poverty manmade and is it possible to solve? What are the principles of stewardship? In this unit we will consider the moral implications of environmental crises and poverty.

#### **RPQ: The Origins of Life**

How did it all begin? Is a question that religion, philosophy and science have all provided ideas and potential answers to for a long time now. This is a metaphysical question which brings people together through religion but also causes conflict; it is an important discussion to have. But, was everything created by a higher power? Where does Evolution come in to it? This unit will consider philosophical arguments for the origins of life and the universe as well as looking at counter views to this in the form of the Big Bang theory and the theory of Evolution.

#### **Assessment**

Assessment will take place throughout the course. You will have a degree of choice which will allow you to focus on something that really interests you. This will be completed in the form of an assignment which you will investigate throughout the year. Assessment can be carried out in a number of ways to reflect strengths and ability. National 5 external assessments: Assignment 25% and final exam 75% of the overall grade.

**Homework**

Homework will be given on a regular basis throughout each unit. This may consist of writing a report, watching a documentary, researching for a project or answering tasks given by your teacher.

**Progression** You will have the option to choose Higher Philosophy in S5/6.

## **SCIENCE**

### **Science: National 4**

#### **Why study Science?**

Science is vital to everyday life and allows us to understand and shape the world in which we live and influence its future. Scientists play a key role in meeting society's needs in areas such as medicine, energy, industry, material development, the environment and sustainability. As the importance and application of science continues to grow and develop, it is important that everyone has an informed view of science.

#### **What does the Course involve?**

The Course aims to:

- ◆ develop learners' curiosity, interest and enthusiasm for science in a range of contexts.
- ◆ develop skills of scientific inquiry and investigation
- ◆ acquire and apply knowledge and understanding of science concepts
- ◆ develop understanding of relevant applications of science in society

The Course has three mandatory Units. The Units are:

#### **Fragile Earth (National 4)**

Learners will cover two topics from the following four: energy, food, metals and water. They will focus on their source, origin, production and/or extraction; uses and benefits; conflicts and possible local or national solutions. Learners will gain knowledge of how science is involved in environmental issues.

#### **Human Health (National 4)**

Factors which contribute to a healthy lifestyle; procedures to measure physical fitness, mental/social health issues and media reports of national/international health areas.

#### **Applications of Science (National 4)**

Science's contribution to communication technologies and the impact that these have had on society/environment; production and use of new materials and how science helps the understanding of risk and how it can be reduced in modern life.

#### **How is your work Assessed?**

Three end of Unit assessments (school based pass/fail). In addition, learners will draw on, extend and apply the skills they have learned during the Course as part of an Added Value Assessment.

HOMEWORK 30 minutes per week

## **Progression**

By successfully completing a course in Science at National 4 progression is to the following courses of study:

- National 4/5 Biology
- National 4/5 Chemistry
- National 4/5 Physics
- Other qualifications in science or related areas
- Further study, employment or training.

Further information on this course can be found on the SQA web-site at <https://www.sqa.org.uk/sqa/45719.html>

## **Biology: National 4 and 5**

This course will be aimed at pupils attaining the National 5 qualification in S4 but will allow some pupils to achieve National 4 depending on their individual ability.

### **Why study Biology?**

Biology affects everyone and aims to find solutions to many of the world's problems. Biology — the study of living organisms — plays a crucial role in our everyday existence, and is an increasingly important subject in the modern world. Advances in technologies have made this varied subject more exciting and relevant than ever.

Through enjoyable learning in biology, learners develop their interest in and understanding of the world.

The Course will be of value to those wishing to develop skills, knowledge and understanding of biology.

### **What does the Course involve?**

The Course aims to:

- develop and apply knowledge and understanding of biology
- develop an understanding of the impact of biology on everyday life
- develop an understanding of biology's role in scientific issues and relevant applications of biology, including the impact these could make on society and the environment
- develop scientific inquiry and investigative skills
- develop scientific analytical thinking skills in a biology context
- develop the skills to use technology, equipment and materials, safely, in practical scientific activities
- develop planning skills
- develop problem-solving skills in a biology context
- use and understand scientific literacy, in everyday contexts, to communicate ideas and issues and to make scientifically informed choices
- develop the knowledge and skills for more advanced learning in biology
- develop skills of independent working

The Course has three mandatory Units. The Units are:

### **Cell Biology (National 4 and 5)**

The key areas covered are: cell structure; transport across cell membranes; DNA and the production of proteins; proteins; genetic engineering; respiration.



## **Multicellular Organisms (National 4 and 5)**

The key areas covered are: producing new cells; control and communication; reproduction; variation and inheritance; transport systems — plants; transport systems — animals; absorption of materials.

## **Life on Earth (National 4 and 5)**

The key areas covered are: ecosystems; distribution of organisms; photosynthesis; energy in ecosystems; food production; evolution of species.

## **Added Value Unit: Biology Assignment (National 4 only)**

In this Unit, learners will draw on and extend the skills they have learned from across the other Units, and demonstrate the breadth of knowledge and skills acquired, in unfamiliar contexts and/or integrated ways.

## **Homework**

Minimum one hour per week. Homework is an integral part of the course and regular written homework will be set based on the work done in class and making extensive use of example exam paper questions. Self-study and some research are also required.

## **How is your work assessed?**

At National 4, the course is assessed by internal end of unit assessments by the teacher and moderated by the SQA. At National 5, the course is assessed by an external examination, set and marked by the SQA. An assignment is completed in school time, marked by the SQA and contributes towards the final grade.

Presentation at the appropriate level will be advised based on evidence from classwork, homework, assignment, unit assessment and other appropriate assessment.

## **Progression**

By successfully completing a course in Biology at National 4 progression is to the following courses of study:

- National 5 Biology
- National 4 Chemistry, Science or Physics

By successfully completing a course in Biology at National 5 progression is to the following courses of study:

- Higher Biology
- National 5 Chemistry or Physics

Further information on this course can be found on the SQA web-site at <http://www.sqa.org.uk/sqa/45723.html>

## **CHEMISTRY - National 4 and 5**

This course will be aimed at pupils attaining the National 5 qualification in S4 but will allow some pupils to achieve National 4 depending on their individual ability.

### **Why study Chemistry?**

The Course develops learners' interest in, and enthusiasm for, Chemistry through a variety of contexts relevant to Chemistry's impact on society, namely: utilising nature's resources, chemical analysis, and the development of new and novel applications.

Chemistry offers a broad, versatile and adaptable skill set which is valued in the work place developing knowledge and understanding of some basic chemistry concepts, learners will become scientifically literate citizens, able to evaluate the Science-based claims which they will come across in a rapidly developing society.

### **What does the Course involve?**

The main aims of this Course are to:

- develop and apply knowledge and understanding of chemistry
- develop an understanding of the impact of chemistry on everyday life
- develop an understanding of chemistry's role in scientific issues and relevant applications of chemistry, including the impact these could make on society and the environment
- develop scientific inquiry and investigative skills
- develop scientific analytical thinking skills in a chemistry context
- develop the skills to use technology, equipment and materials, safely, in practical scientific activities
- develop planning skills
- develop problem-solving skills in a chemistry
- use and understand scientific literacy, in everyday contexts, to communicate ideas and issues and to make scientifically informed choices
- develop the knowledge and skills for more advanced learning in chemistry
- develop skills of independent working

The Course has three mandatory Units. The Units are:

### **Chemical Changes and Structure (National 4 and 5)**

In this area, topics covered are: rates of reaction; atomic structure and bonding related to properties of materials; formulae and reacting quantities; acids and bases.

### **Nature's Chemistry (National 4 and 5)**

In this area, topics covered are: homologous series; everyday consumer products; energy from fuels.

## **Chemistry in Society (National 4 and 5)**

In this area, topics covered are: metals; plastics; fertilisers; nuclear chemistry; chemical analysis.

### **Added Value Unit: Chemistry Assignment (National 4 only)**

Learners will draw on and extend the skills they have learned from across the other Units, and demonstrate the breadth of knowledge and skills acquired, in unfamiliar contexts and/or integrated ways.

### **Homework**

Minimum one hour per week. Homework is an integral part of the course and regular written homework will be set based on the work done in class and making extensive use of example exam paper questions. Self-study and some research are also required.

### **How is your work assessed?**

At National 4, the course is assessed by internal end of unit assessments by the teacher and moderated by the SQA.

At National 5, the course is assessed by an external examination, set and marked by the SQA. An assignment is completed in school time, marked by the SQA and contributes towards the final grade.

Presentation at the appropriate level will be advised based on evidence from classwork, homework, assignment, unit assessment and other appropriate assessment.

### **Progression**

By successfully completing a course in Chemistry at National 4 progression is to the following courses of study:

- National 5 Chemistry
- National 4 Biology, Science or Physics

By successfully completing a course in Chemistry at National 5 progression is to the following courses of study:

- Higher Chemistry
- National 5 Biology or Physics

Further information on this course can be found on the SQA web-site at <http://www.sqa.org.uk/sqa/45720.html>

## **PHYSICS - National 4 and 5**

This course will be aimed at pupils attaining the National 5 qualification in S4 but will allow some pupils to achieve National 4 depending on their individual ability.

### **Why study Physics?**

Learners are given an insight into the underlying nature of our world and its place in the universe.

From the sources of the power we use, to the exploration of space, it covers a range of applications of the relationships that have been discovered through experiment and calculation, including those used in modern technology. Advances in Physics mean that our view of what is possible is continually being updated and learners will recognise the impact physics makes on their lives, the environment and society.

### **What does the Course involve?**

The main aims of this Course are for learners to:

- develop and apply knowledge and understanding of physics
- develop an understanding of the impact of physics on everyday life
- develop an understanding of the role of physics in scientific issues and relevant applications of physics, including the impact these could make on society and the environment
- develop scientific inquiry and investigative skills
- develop scientific analytical thinking skills in a physics context
- develop the skills to use technology, equipment and materials, safely, in practical scientific activities
- develop planning skills
- develop problem-solving skills in a physics context
- use and understand scientific literacy, in everyday contexts, to communicate ideas and issues and to make scientifically informed choices
- develop the knowledge and skills for more advanced learning in physics
- develop skills of independent working

The National 5 Course has six Units. The Units are:

#### **Dynamics**

In this area, the topics covered are: vectors and scalars; velocity–time graphs; acceleration; Newton’s laws; energy; projectile motion.

#### **Space**

In this area, the topics covered are: space exploration; cosmology.

#### **Electricity**

In this area, the topics covered are: electrical charge carriers; potential difference (voltage); Ohm’s law; practical electrical and electronic circuits; electrical power.

### **Properties of matter**

In this area, the topics covered are: specific heat capacity; specific latent heat; gas laws and the kinetic model.

### **Waves**

In this area, the topics covered are: wave parameters and behaviours; electromagnetic spectrum; refraction of light.

### **Radiation**

In this area, the topic covered is nuclear radiation.

The National 4 Course has four Units. The Units are:

#### **Electricity and Energy (National 4)**

The unit covers the key areas of energy transfer, heat and the gas laws. Learners will research issues, apply scientific skills and communicate information related to their findings, which will develop skills of scientific literacy.

#### **Waves and Radiation (National 4)**

The unit covers the key areas of waves and nuclear radiation. Learners will research issues, apply scientific skills and communicate information related to their findings, which will develop skills of scientific literacy.

#### **Dynamics and Space (National 4)**

The unit covers the key areas of kinematics, forces and space. Learners will research issues, apply scientific skills and communicate information related to their findings, which will develop skills of scientific literacy.

#### **Added Value Unit: Physics assignment (National 4 only)**

Learners will draw on and extend the skills they have learned from across the other Units, and demonstrate the breadth of knowledge and skills acquired, in unfamiliar contexts and/or integrated ways.

### **Homework**

Minimum one hour per week. Homework is an integral part of the course and regular written homework will be set based on the work done in class and making extensive use of example exam paper questions. Self-study and some research are also required.

### **How is your work assessed?**

At National 4, the course is assessed by internal end of unit assessments by the teacher and moderated by the SQA.

At National 5, the course is assessed by an external examination, set and marked by the SQA. An assignment is completed in school time, marked by the SQA and contributes towards the final grade.

Presentation at the appropriate level will be advised based on evidence from classwork, homework, assignment, unit assessment and other appropriate assessment.

### **Progression**

By successfully completing a course in Physics at National 4 the progression is to the following courses of study:

- National 5 Physics
- National 4 Biology or Chemistry

By successfully completing a course in Physics at National 5 the progression is to the following courses of study:

- Higher Physics
- National 5 Biology or Chemistry

Further information on this course can be found on the SQA web-site at <http://www.sqa.org.uk/sqa/45729.html>

## **SOCIAL SUBJECTS**

### **NATIONAL HISTORY**

This course will be based on the development of skills, and knowledge and understanding in three areas of historical study:

- Scottish
- British
- European and World

#### **Scottish unit**

##### **Migration and Empire, 1830-1939**

- Immigration to Scotland 1830s – 1939
- Experience of immigrants to Scotland, 1830s–1939
- Scottish emigration, 1830s–1939
- Experience of Scots abroad, 1830s–1939

#### **British Unit**

##### **The Atlantic Slave Trade, 1770 – 1807**

- The Triangular
- Britain and the Caribbean
- The captive's experience and slave resistance
- The abolitionist campaigns

#### **Europe and World**

##### **Hitler and Nazi Germany, 1919–39**

- Weimar Germany, 1919
- Nazi rise to power
- Nazi control of Germany
- Nazi social and economic policies

#### **End of topic assessments**

There will be a timed assessment for each of the three units. These will be marked internally and will assess the learners ability to use a range of historical skills using primary and secondary sources.

**The National 5 History course is assessed through the following components:**

Course examination	<b>80% of the total mark</b>
Controlled assessment assignment	<b>20% of the total mark</b>

The controlled assessment assignment will give pupils an opportunity to:

- Research an appropriate historical issue of their choice
- Process the information gathered
- Show knowledge and understanding of the topic or issue studied
- Present a reasoned and well- balanced conclusion, supported by evidence

### **Progression**

Candidates who are successful at National 5 will be able to progress to Higher History or National 5 in another Social Subject. Candidates who are successful at National 4 could progress to History at National 5 or another Social Subject.

### **National Geography**

This course will be based on the development of skills, and knowledge and understanding in three units:

- Physical Environment
- Human Environment
- Global Issues

#### **Physical Environments**

- Location of landscapes and the formation of key landforms; Landscapes types will be chosen from either glaciated upland areas and coastlines of erosion and deposition; or rivers and their valleys and upland limestone.
- Land use and sustainability
- Weather

#### **Human Environments**

Pupils will study and compare developed and developing countries.  
Topics will included:

- Contrasts in development
- World population distribution and change
- Changing urban and rural landscapes

#### **Global Issues**

Pupils will develop knowledge and understanding of significant global geographical issues.  
Two topics will be selected from:

- Climate change
- The impact of human activity on the natural environment
- Environmental hazards
- Development and health
- Tourism



**The National 5 Geography course is assessed through the following components:**

Course examination	<b>80% of the total mark</b>
Controlled assessment assignment	<b>20% of the total mark</b>

The controlled assessment assignment will give pupils an opportunity to:

- Research an appropriate geographical / environmental topic through fieldwork
- Process the information gathered
- Show knowledge and understanding of the topic or issue studied
- Present a reasoned and well- balanced conclusion, supported by evidence

**Progression**

Candidates who are successful at National 5 will be able to progress to Higher Geography or National 5 in another Social Subject.

Candidates who are successful at National 4 could progress to Geography at National 5 or another Social Subject.

## **NATIONAL MODERN STUDIES**

The focus of the course will be on the development of skills and techniques, and knowledge and understanding in three units:

- Democracy in the United Kingdom
- Crime and the Law
- International Powers: The United States of America

### **Democracy in the United Kingdom**

Key topics will include:

- Power and decision making in the United Kingdom
- Participation and representation in British politics
- Voting systems and influence

### **Crime and the Law**

Key topics will include:

- The different types of crime
- The causes of crime
- The impact of crimes on individuals, communities and society
- The role of the police
- The court system in Scotland and the Youth Justice system in Scotland

### **International Powers: The United States of America**

Key topics will include:

- Political systems and structures in the USA
- The influence of the USA on other countries
- Social and economic issues within the USA
- Effectiveness in tackling social and economic issues

### **Course Assessment (National 5) is in two parts**

Course examination **80% of the total mark**

Controlled assessment assignment **20% of the total mark**

The controlled assessment assignment will give pupils an opportunity to:

- Research an appropriate Modern Studies topic
- Process the information gathered
- Show knowledge and understanding of the topic or issue studied
- Present a reasoned and well-developed conclusion, supported by evidence.

### **Progression**

Candidates who are successful at National 5 will be able to progress to Higher Modern Studies or National 5 in another Social Subject.

Candidates who are successful at National 4 could progress to Modern Studies at National 5 or a National in another Social Subject.