# Kilmarnock Academy



New S4
Option Choice Booklet
2015 - 2016

#### SUBJECT DESCRIPTIONS

#### **ADMINISTRATION AND IT**

The study of this course will not only equip candidates with the level of competence required for using a range of software packages but will also enable them to apply their use to various administrative functions carried out in organisations. The Admin & IT course is one which has proven very useful to students in the past by teaching them a number of skills which would equip them well for a wide number of jobs.



- everyone need to have problems solving, numeracy and oral/written communication skills
- administration gives students a good core skill

#### What does the course involve?

The main purpose of this course is to develop your admin and IT sills so that you can contribute effectively to your workplace. The main aims of the course are to:

- develop understanding of administration in the workplace and the main laws that affect employees
- understand the importance of good customer care in an organisation
- develop excellent IT skills and use them to carry out administrative tasks
- develop your organisational skills e.g. to plan and organise events such as meetings

Should you wish to continue with Admin & IT at the end of third year, at National 5 level, the course is assessed by a 4 hour (2 x 2 hour)



practical coursework which is completed in class – there is no theory element however the assessment will usually have tasks covering health and safety and customer care.

### **ART AND DESIGN** (National 4 and National 5)

#### **Course Content:**

Courses have a format of an Expressive Folio, a Design Folio and critical work.



The grade awarded is based on attainment in these three areas. At National 5 there is a written exam at the end of the course. The units are made up of distinct areas which follow on from each other.

### **Design Folio:**

Research, Development, Final Solution and Evaluation. Art and Design Studies (written)

### **Expressive Folio:**

Investigation, Development and Expressive Outcome. Art and Design Studies (written)

#### **Assessment:**

Assessment is based upon the quality of all the units plus one written examination. The Art and Design written paper is 1hr 10 minutes long and will cover both Expressive and Design studies.

Pupils will also need to produce Expressive and Design development and critical work for SQA verification.

The subject offers activities which promote discovery, an understanding of ideas and a means of expressing creativity visually. This course encourages individuality, problem solving and the ability

to express themselves through a range of media and techniques. Pupils who achieve a qualification in S4 will be able to take either National 5 or Higher in S5/S6.

Art and Design qualifications are accepted points for all Colleges and Universities. Future course levels available to study – Masters, Honours Degree, Degree, HND, HNC, NC.

### **Career Options:**

**Fine Art** – Sculpture, Painting, Printmaking, Environmental Studies, Fine Art Photography, Stained Glass.

**Design** – Jewellery, Graphics, Illustration, Ceramics, Printer Textiles, Embroidery and Woven Textiles, Knitted Textiles, Interior Design, Product Design, Furniture, Animation, Theatre, Television and Film, Computer Graphics, Art and Design Historian, Art Conservation, Fashion Design.

### **BIOLOGY**

(Access 3, National 4 and National 5)

In S4, pupils will study Biology for 4 periods a week, working towards a National 4 or National 5 award. During this time, pupils will deepen their knowledge and understanding of the themes of Cell Biology, Multicellular Organisms and Life on Earth.



Part of the course will involve pupils spending their time researching topical biological issues and communicating their findings to others

in a variety of ways, developing their skills of scientific literacy. They will then apply the biological knowledge they gain to new situations, using it to interpret and solve problems.

In Cell Biology this knowledge will include the study of cells and cell culture for human benefit; normal and abnormal cell division and cancer; DNA and protein synthesis; genetic engineering and its uses and the development of improved food production through an understanding of plant photosynthesis.

In the Multicellular Organisms topic, pupils will study stem cells and their potential uses; the control of blood sugar and the causes and problems of diabetes; animal and plant reproduction and inheritance and the various effects of lifestyle choices on the health and workings of the body's main systems.

In the Life on Earth topic, pupils will complete their study of the variety and distribution of living things on the planet and their interaction in natural systems. They will continue to examine the many ways that humans are affecting all aspects of the environment and to search for solutions to the problems caused by the growing human population.

The course will be a mixture of reading and research, experimental work, group and individual work and the study of book and internet material.

Assessment requires pupils to:

- design, carry out and report on a piece of experimental work and
- research and write a short report on an aspect of biology that affects society
- carry out an extended report on a topical issue

National 4 is tested and marked in school. It involves 3 National 4unit tests; designing and carrying out an experiment and researching and

reporting on a topical issue. The Added Value unit for National 4 involves an extended research report.

National 5 is tested in school but marked externally. Three unit tests at National 5 must be passed, as well as an experimental write-up and a short research report. Pupils sit an external exam in May, worth 80% of the final mark, with the remaining 20% gained from an extended report on a topical issue.

These Biology courses are challenging and will need consistent hard work. There will be a lot of regular homework.

Pupils will need to develop their reading, writing and maths skills.

#### **BUSINESS**

### Why Business is the right choice for you!

Choosing to study Business Management allows you to gain access to many different career paths such as marketing, fashion, events management, engineering international business and accountancy to name but a few. Most college and university course have a business component – so this course will be of great benefit to you. You will also get the opportunity to take part in a variety of business challenges including the Tom Hunter Challenge and The Coca Cola Real Business Challenge.

This course gives pupils an insight into today's business world and we will study how some very famous entrepreneurs built up their businesses. Our journey will take us through not only where there is

a need for business and how the economy works but will also consider the areas of marketing, finance, human resource management and operations.

This course is not just about theory — you have to be able to say why you think a firm should make a particular decision, or discuss what you think a business should do. Therefore the best way to do that is to give you practical tasks such as undertaking a business research project, making and selling product s, creating TV and radio adverts, visiting local places of work to investigate how they do things etc.

Hydrogen bonding between water molecules

#### **CHEMISTRY**

(National 3, 4 and 5)

At National 4 we expect pupils to gain the knowledge and skill to pass the internal examinations based on the topics below and provide a suitable base for going onto National 5. Pupils are also expected to complete an assignment, a short report and detailed experimental write ups.

At National 5 we expect pupils to gain the knowledge and skill to pass an external exam worth an 80% of the overall marks awarded based on the topics below and the course also provides a suitable base for going onto the Higher examination in fifth year. Pupils are also expected to complete an assignment worth 20 marks for the external examination.

Chemistry: Chemical changes and structure

Chemistry: Nature's Chemistry Chemistry: Chemistry in Society The Chemistry Qualifications are new and are intended to be more relevant helping the pupils realise where chemistry is used in society and how it affects the world.

Skills in investigation will be encouraged and developed.

The course also gives them a suitable base for training and science related work in the future.

#### **DESIGN AND MANUFACTURE**



#### Rationale:

The two main aims of the design and manufacture course are to further develop a pupil's craft skills and their understanding of product design. Pupils will advance their appreciation of how, why, and where common materials are used. They will also discover how everyday products are designed and manufactured as well as how to design their own prototype product that they will manufacture in the workshop.

#### **Course content:**

Pupils will learn about material properties through the manufacture of craft models. Models will incorporate the use of manufactured and natural woods, metals, and plastics, and involve manufacturing processes such as wood and metal turning, aluminium casting, forging, plastic vacuum forming, fitting and general bench work. Modern manufacturing techniques, such as laser cutting, 3D printing and computer numerically controlled routing, can now be taught

alongside the equally important traditional craft methods at Kilmarnock Academy.

Design principles and problem solving skills developed earlier will be strengthened through the unit work required at National 4 and National 5. Craft skills and manufacturing processes learnt earlier in the course will also be reinforced in the course units in S4. The units lead on to the final course assignments and exam (only at National 5). It is hoped that the experience pupils have gained throughout the unit work will allow them to have the confidence to use modern equipment such as laser cutter, 3D printer or CNC router to communicate their design proposals.

### **Progression:**

In S4, pupils will hopefully achieve a National 4 or National 5 qualification in Design and Manufacture. This will allow them to return in S5 to improve their understanding and knowledge of the subject at National 5 and Higher respectively.

Design and Manufacture is aimed at pupils considering further or higher education and modern apprenticeships. This year, some of our S6 pupils have received unconditional offers for university courses such as Product Design, Sports Engineering, CAD with Mechanical Engineering, and Automotive Engineering.

Many of our pupils also obtain modern apprenticeships; over the last few years pupils have entered employment at local companies such as British Airways (Glasgow), BAE Systems (Prestwick), and Caledonian Paper Mill (Irvine).



Extra curricular activities have been prominent in this subject. F1inschools Bloodhound car racing, VEX Robotics and the Weir Pumps Challenge have been national competitions that our pupils have competed in recently.

Above, Kristiana Hamilton collects the Young Engineer award at The Big Bang, Glasgow 2013.

### **ENGLISH**

In S3 pupils will be placed in classes that suit their individual abilities.

All pupils begin by following a combined course – National 4/5 - and this is reviewed as pupil progress is tracked throughout the year.



What's the difference between National 4 and National 5?

**The National 4 course** is internally assessed and consists of 2 core units.

Analysis and Evaluation – (Reading and Listening) and Creation and Production – (Writing and Talking)

**The National 5 course** mirrors these units at a higher level. It leads to an SQA exam and an externally assessed folio of 2 pieces of Writing. The National 4/5 course:

- builds upon the Talking and Listening skills from S1 and S2.
- develops close reading and pupils will work steadily on these skills throughout the session.
- enables pupils to study and write about literature.
- encourages pupils to write creatively and discursively.

### **FASHION AND TEXTILE TECHNOLOGY**

(National 4 and National 5)

#### **Course Content**

Students will be creating inspirational fabrics and exploring surface decoration through fabric manipulation, free machine embroidery, fabric dying, printing, decorative and embellished techniques. Using these techniques, candidates will then construct the fabrics into interesting, individual textile items. These could be related to both fashion and interior design.

#### **Assessment**

Assessment is based on folio work produced and an externally set practical assignment demonstrating the candidate's ability to plan, implement and evaluate.

#### **Entry Requirements**

Fashion and Textile Technology is suitable for students who have an interest in Art and Design and who have an enthusiasm for fashion and textiles.

#### **GEOGRAPHY**

Geography is an interesting, diverse and useful subject. It gives a valuable understanding of what makes our planet tick. Being a good Geographer means being interested in anything you see, hear or read about things which are happening to places and environments, both locally and worldwide.



### **National 5**

- Physical Environments e.g. Landscape formation and land use management.
- Human Environments e.g. World Population and issues in Urban and Rural landscapes.
- Global Issues e.g. Natural disasters and Health.

### <u>Assessment</u>

As with National 4; learners must pass all of the required Units, however, they must also sit an external examination.

### **National 4**

- Physical Environments e.g. Landscape formation and land use management.
- Human Environments e.g. World Population and issues in Urban and Rural landscapes.
- Global Issues e.g. Natural disasters and Health.
- Added Value Unit a personal study on an issue from physical environments, human environments or global issues.

#### **Assessment**

There is no external assessment with National 4; however, learners must pass all of the required Units, including the Added Value Unit.

### Why Geography?

In many ways Geography is a unique subject as it is accepted as an entrance to some colleges and universities as both a Social Subject and a Science. The broad ranging nature of Geography is reflected in the types of careers to which Geography contributes e.g. tourism, surveying and meteorology. The transferable skills within the subject make Geographers particularly attractive to employers.

### **GRAPHIC COMMUNICATION**

#### Rationale:

Communication is by the use of graphics and, in particular, by the use of technical graphics in construction, engineering and consumer contexts.

The creation (manually and computer generated) and understanding of drawings are generic skills useful in employment and as life skills in a world where communication increasingly relies upon graphics.

#### **Course content:**

Pupils will develop knowledge and a practical application of sketching and drawing everyday items in orthographic and pictorial projections and creating colour illustrations, using both manual and computer-aided methods. Candidates will develop an understanding of how to use graphics to communicate more clearly and effectively. Candidates will also be made aware of the need for clear and accurate drawings and will gain knowledge of relevant British Standards.

Computers will be used in learning and teaching and candidates will work with computer-aided draughting (CAD) and desktop publishing packages, thus widening their appreciation of the role of information technology within Graphic Communication and the world today. In addition, candidates will have the opportunity to develop analytical thinking and creativity.

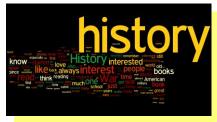
The Course makes a significant contribution to developing technological capability.

### **Progression:**

Pupils will progress through Graphic Communication experiences and outcomes at levels 2, 3 and 4. This will allow presentation at National 3, National 4 or National 5 in S4. Graphic Communication is aimed at pupils considering further or higher education. Many of our pupils also obtain modern apprenticeships; over the last few years pupils have entered employment at local companies such as British Airways (Glasgow), BAE Systems (Prestwick), and Caledonian Paper Mill (Irvine).

#### **HISTORY**

(National 4 and National 5)



The History course will further develop student skills in extended writing, enquiry, handling sources and evaluation of materials. Students are encouraged to research the past and develop a strong sense of and how that past helped form who we are today.

Pupils choosing History will study three distinct units.

#### Unit 1 -Scotland and the Great War

This area of study considers the First World War and how that affected Scotland, it looks at the impact of the war both in the trenches and at home. It also considers how the peace was implemented and how Scotland was affected after the war.

#### Unit 2 - Britain - the Atlantic Slave Trade

This unit focuses on the part Britain played in the 'Triangular Trade' as it was called. The economic benefits slavery brought to Britain will be studied, the treatment of slaves in Africa, the journey to the Americas and slavery in the West Indies. Finally the abolition of slavery in Britain and its colonies will be considered.

### Unit 3 – Europe - Germany 1918 to 1939

This unit looks at the rise of Hitler and the German Nazi Party, then considers Nazi rule in Germany up to the outbreak of the World War Two.

#### **Assessment:**

There will be ongoing assessment throughout the course, an S3 exam and a Preliminary exam in S4 All pupils are encouraged to aim high.

### **Progression:**

Pupils can study Nationals and Higher in S5/6

#### **Careers:**

History gives an excellent foundation for University learning and most managerial and professional jobs recognise that History gives a solid grounding in the techniques of research and report writing. Further to this employers benefit from the presentational skills, teamwork and emphasis on literacy that students experience in the course.

### **HOSPITALITY: PRACTICAL COOKERY**

(Access 3, National 4 and National 5)

The main focus of these courses is to give learners opportunities to develop cookery related knowledge, understanding and skills, and to use them at home, in the wider community and ultimately in employment.

#### Units include

- Cookery skills; processes and techniques
- Understanding and using ingredients
- Organisational skills for cooking

#### **Assessment**

At the end of each unit there will be a written and practical assessment for National 4 and 5

National 4 sit a mandatory Added Value Unit.

Pupils produce a two course meal for a given number of people, safely and hygienically.

### **National 5 Practical Activity.**

Pupils plan, prepare and present a three course meal for a given number of people to a given brief. The brief will specify the three dishes to be produced.

NB: Pupils will be expected to contribute towards materials.

### **MATHEMATICS**

All pupils will take Mathematics and everyone will have the opportunity of following an SQA accredited course; this could be Access 3, National 4 or National 5 depending on ability and progress.



Mathematics is the study of measurement, properties and relationships using numbers and symbols and can help us to make sense of the world around us. Mathematics can be used to model real-life situations and can equip us with the skills we need to interpret and analyse information, simplify and solve problems, assess risk and make informed decisions.

There will also be a separate formal SQA qualification in Numeracy at National 4 and National 5 levels.

Class tests will be set approximately every 6 weeks. From these and other pieces of work, evidence will be collected to enable pupils to gain Access 3 and National 4 qualifications. The National 5 award requires the gathering of internal evidence but pupils also need to pass an externally set and marked final exam.

### **Mathematics - National 4**

The National 4 course builds on learners previous experiences from the BGE and the National 3 course. It is a qualification equivalent to a General pass at Standard Grade or an Intermediate 1 pass. National 4 covers some of the more technical aspects of Mathematics (like Pythagoras and Trigonometry) but also extends previous learned skills in Numeracy, Algebra and Geometry. In following the Mathematics National 4 course pupils should be:

- Developing their understanding of straightforward mathematical skills in Algebra, Geometry, Trigonometry and Statistics
- Using mathematical techniques and reasoning skills to solve mathematical problems
- Developing a positive attitude to mathematics based on an understanding of its use in real-life situations.
- Becoming skilled in the use of mathematical vocabulary and exploring mathematical ideas.
- Becoming confident in problem solving.
- Developing an understanding of the importance of accuracy
- Interpreting, communicating and managing information in mathematical form
- Developing logical reasoning skills
- Communicating solutions using presentation skills
- Developing decision making skills
- Developing leadership and teamwork skills through group activities.

The Mathematics National 4 course consists of 3 Units:

- Expressions and Formulae
- Relationships
- Numeracy

There is also an Added Value Unit which is in the form of a whole course test.

To gain a pass in National 4, learners must pass all Units, including the Added Value Unit. Units are assessed as pass or fail by the school but other evidence can also be used for assessment such as class work, class tests etc. The Added Value Unit is in two parts – non calculator and calculator. The overall course award is either pass or fail.

National 4 should progress onto National 5.

### **Mathematics - National 5**

The National 5 course builds on learners previous experiences from the BGE and the National 4 course. It is a qualification equivalent to a Credit pass at Standard Grade or an Intermediate 2 pass. Learners must have already achieved a pass at National 4 to be able to select the National 5 course. National 5 introduces many of the more technical aspects of Mathematics (like Trigonometry, Quadratic Theory, factorisation, simultaneous equations) and is a necessary precursor to the Higher mathematics course.

In following the Mathematics National 5 course pupils should be:

- Developing an understanding of applying mathematical skills in Algebra, Geometry, Trigonometry, and Statistics
- Developing skills in simplifying and solving problems
- Developing skills in selecting and applying mathematical techniques to real-life contexts
- Making connections and informed predictions
- Using mathematical language and exploring mathematical ideas
- Developing resilience and confidence in problem-solving
- Developing analytical and evaluative skills
- Interpreting, communicating and managing information in mathematical form
- Developing logical reasoning skills
- Assessing risk and making informed decisions
- Developing creativity and the ability to think in abstract ways
- Manipulating abstract terms to solve problems and generalise

The Mathematics National 5 course consists of 3 Units:

- Expressions and Formulae
- Relationships
- Applications

There is also an Added Value Unit which is in the form of a whole course external exam. The Course Assessment consists of two Question Papers (exams marked by the SQA) and is graded A to D.

National 5 progresses onto Higher Mathematics

### **National 5 Lifeskills Mathematics**

National 5 Lifeskills Mathematics is an alternative course to National 5 Mathematics. Progression will normally be made from National 4 Mathematics or successful unit passes in National 5 Mathematics.

The purpose of the Lifeskills Mathematics Course is to motivate and challenge learners by enabling them to think through real-life situations involving mathematics and to form a plan of action based on logic.

The course develops confidence and independence in being able to handle mathematical processes and information in a range of real-life contexts. The course also enables learners to draw conclusions, assess risk and make informed decisions based on data presented in a variety of forms.

The mathematical skills within this course are underpinned by numeracy, and are designed to develop learners' mathematical reasoning skills relevant to learning, life and work in an engaging and enjoyable way. To gain the award of the Course, the learner must pass all of the Units as well as the end of the year Course assessment. The Course assessment will be set in two components; Paper 1 (non-calculator) and Paper 2 (case studies). This will provide the basis for grading attainment in the Course award.

## Lifeskills Mathematics does not provide progression to Higher Mathematics.

### **Unit 1: Numeracy**

The general aim of this Unit is to develop learners' numerical and information handling skills to solve real-life problems involving number, money, time and measurement. At this level, real-life problems will have some complex features and be set in contexts which are likely to be unfamiliar with the learner. As learners tackle real-life problems, they will decide what numeracy and information handling skills to use, and how to apply those skills to an appropriate level of accuracy. Learners will also interpret graphical data and use their knowledge and understanding of probability to identify solutions to solve real-life problems involving money, time and measurement. Learners will use their solutions to make and justify decisions.

### Unit 2: Geometry & Measure

The general aim of this Unit is to develop skills that focus on the use of mathematical ideas and valid strategies that can be applied to geometry and measurement in real-life contexts which may be new to the learner. This includes skills in analysing and using geometry and measures to determine and justify solutions to real-life problems. The Outcomes cover aspects of geometry and measurement in real-life situations requiring reasoning.

### **Unit 3: Managing Finance & Statistics**

The general aim of this Unit is to develop skills that focus on the use of mathematical ideas and valid strategies that can be applied to

managing finance and statistics in real-life contexts which may be new to the learner. This includes skills in analysing financial positions, budgeting as well as organising and presenting data to justify solutions and/or draw conclusions. The Outcomes cover aspects of finance and statistics in real-life situations requiring mathematical reasoning.

### Numeracy - National 4

The new National Numeracy Units develop skills in number processes and information handling using real-life contexts involving money, time and measurement. Numeracy skills should underpin all the work undertaken in mathematics and Lifeskills Mathematics Course at National 5. The units are available on a freestanding basis at SCQF levels 4 and 5 for all learners.

The general aim of National 4 Numeracy is to develop learners' numerical and information handling skills to solve straightforward, real-life problems involving money, time and measurement. As learners tackle real-life problems, they will decide what numeracy skills to use and how to apply those skills to an appropriate level of accuracy. Learners will also interpret graphical data and use their knowledge and understanding of probability to identify solutions to straightforward real-life problems involving money, time and measurement. Learners will use their solutions to make and explain decisions.

Learners who complete this Unit will be able to:

- 1. Use numerical skills to solve straightforward, real-life problems involving money, time and measurement.
- Selecting and using appropriate numerical notation and units
- Selecting and carrying out calculations

- Recording measurements using a straightforward scale on an instrument
- Interpreting measurements and results of calculations to make decisions
- Explaining decisions based on the results of measurements and calculations
- Interpret graphical data and situations involving probability to solve straightforward real-life problems involving money/time/measurement
- Extracting and interpreting data from at least two different straightforward graphical forms
- Making and explaining decisions based on the interpretation of data
- Making and explaining decisions based on probability

Learners who complete this Unit would be internally assessed. Should they be successful they will obtain a Numeracy Unit pass at SCQF level 4.

This is NOT a course award but could lead on to an overall course award for National 4 Mathematics.

National 4 Numeracy would be suitable for anyone who had an existing pass at National 3 Lifeskills or Access 3 Mathematics.

### Numeracy - National 5

The new National Numeracy Units develop skills in number processes and information handling using real-life contexts involving money, time and measurement. Numeracy skills should underpin all the work undertaken in Mathematics and Lifeskills Mathematics courses.

The Numeracy (National 5) Unit is a mandatory Unit in the National 5 Lifeskills Mathematics Course. It is also available as a free-standing Unit and is designed to meet the needs of a broad range of learners who may choose to study it.

The general aim of this Unit is to develop learners' numerical information handling skills in order to solve real-life problems involving money, time and measurement.

At this level, real-life problems will have some complex features and be set in contexts which are unlikely to be familiar to the learner. As learners tackle real-life problems, they will decide what numeracy and information handling skills to use, and how to apply those skills to an appropriate level of accuracy. Learners will also interpret graphical data and use their knowledge and understanding of probability to identify solutions to real-life problems involving money, time and measurement. Learners will use their solutions to make and justify decisions.

Learners who complete this unit will be able to:

- 1. Use numerical skills to solve real-life problems involving money/time/measurement selecting and using appropriate numerical notation and units.
- Selecting and using appropriate numerical notation and units
- Selecting and carrying out calculations
- Recording measurements using a scale on an instrument
- Interpreting measurements and results of calculations to make decisions
- Justifying decisions using the results of measurements or calculations
- 2. Interpret graphical data and situations involving probability to solve real-life problems involving money/time/measurement.
- Extracting and interpreting data from at least three different graphical forms

- Making and justifying decisions using evidence from the interpretation of data
- Making and justifying decisions based on probability

In addition, learners will have the opportunity to develop generic and transferable skills for learning, skills for life and skills for work.

Learners who complete this Unit would be internally assessed.

Should they be successful they will obtain a Numeracy Pass as SCQF level5. This is <u>not</u> a course award but could lead on to an overall course award for National 5 Mathematics.

National 5 Numeracy would be suitable for anyone who had an existing pass at National 4 Mathematics.

### **Modern Languages**

Modern Languages are important for all sorts of things – holidays, meeting new people, future employment and further study. Did you know that you can earn an extra 10-15% on your salary if you



are proficient in the use of a modern foreign language? Languages are being increasingly used on the internet and knowing another language can open up lots of new opportunities.

### **Myths about Language Learning**

**Everybody speaks English** – only 6% of the world's population speak English as a first language. 75% of the world's population don't speak any English at all!

You have to be fluent for languages to be of any use — a little language goes a long way — most employers are looking for conversational ability in the foreign language.

### **Benefits of Language Learning**

- Better understanding of different cultures
- Improved self confidence
- Enhanced ability to build new relationships
- Improved literacy and reading skills
- Enhanced problem solving, interpersonal and communication skills
- Increased employability

#### FRENCH National 4 and National 5

Course Content: The National 4 and 5 courses include many relevant and up to date topics which reflect the interests of teenagers today. Everyday topics such as holidays, families and friends, relationships, hobbies and how you spend your leisure time, health issues, use of social media and future plans are all covered in these courses. Depending on ability, pupils will either follow the National 4 or the National 5 course. Both courses offer opportunities to continue with further study of French.

**Assessment:** All pupils will be assessed in the skills of Reading, Writing, Speaking and Listening in the foreign language in classes set by ability. Authentic topic material is exploited and the use of ICT is encouraged.

### **MODERN STUDIES**

Pupils can choose to study Modern Studies at National 4 or National 5 level. Entry to study National 4 or National 5 is at the discretion of the Modern Studies Department and on the advice of guidance teachers.



Modern Studies develops in learners a greater understanding of the contemporary world and their place in it. The purpose of Modern Studies is to develop learners' knowledge and understanding of contemporary political and social issues in local, Scottish, United Kingdom and international contexts. In these contexts, learners will develop an awareness of the social and political issues they will meet in their lives.

Both National 4 and National 5 courses have four mandatory units, including a Modern Studies project. Within each unit there is a considerable degree of flexibility in themes which can be studied to allow personalisation and choice.

In terms of course content, the four units of study are as follows:

1) **Unit 1** – Democracy in Scotland and the United Kingdom

Learners have a choice of contexts for study which will be drawn from either the Scottish political system or the UK political system.

2) Unit 2 - Social Issues in the United Kingdom

Learners have a choice of social issues within Scotland and the UK. Contexts for study will focus on either social inequality or crime and the law.

### 3) Unit 3 – International Issues

Learners have a choice of contexts for study. Contexts for study can be either a socio-economic and political study of another contemporary society or an international issue.

### 4) Unit 4 – Modern Studies Project

Learners will choose an issue for personal study drawn from political, social or international contexts. They will research their chosen issue and communicate their findings.

To achieve the Modern Studies National 4 course, learners must pass all of the required units, including the project. National 4 courses do not have an externally assessed exam. To gain the award of the National 5 course, learners must pass all the units as well as the course assessment which consists of the project and an externally assessed question paper.

Modern Studies makes a distinctive contribution to the curriculum by drawing on the social sciences of politics, sociology and economics and, where appropriate associated ideas drawn from other social subjects. It thereby adopts a multi-disciplinary approach.

Modern Studies provides an entry qualification for study in further education and for entry into a diverse range of occupations and careers.

### **MUSIC**

The National 3/4/5 Music course aims to enrich the lives of pupils through practical involvement in music.



The course aspires to develop skills as musicians, enabling them to achieve the ability required to perform and create music.

Learners will expand their knowledge and understanding of music, gaining experience of identifying music concepts and styles.

Learners will:

- learn how to apply knowledge of simple compositional techniques through composing, arranging or improvising
- demonstrate basic knowledge of a range of music concepts, musical literacy and styles/genres of music
- gain knowledge of the social and cultural influences on music
- develop the ability to reflect on their own development of technical and musical performing skills through regular practice/rehearsal
- apply technical and musical performing skills while exploring a range of music
- gain knowledge of basic skills and simple techniques relating to the creative use and application of music technology
- develop the ability to evaluate their own work and identify areas for improvement
- develop the ability to work independently and take responsibility for their own learning.

### **Assessment**

Pupils will be assessed on performing, composing and listening. Marks will be awarded for performance on two instruments or one instrument and voice and listening/literacy question paper.

Performance = 60 marks Listening = 40 marks

Compositions will be judged on a pass/fail basis. They will not contribute a mark towards the final grade but a pass is required for a course award.

### Performances will be judged on:

- Melodic accuracy/intonation
- Rhythmic accuracy
- Maintaining the tempo and flow of the music
- Demonstrating musicality through mood and character and tone dynamics (where applicable)

### **Listening exam/ Question paper will test:**

- An understanding of the concept content for the Course
- The ability to identify concepts in a range of styles, and in straightforward and more complex contexts
- Knowledge and applied use of musical literacy
- The ability to identify and analyse the use of compositional techniques

### MUSIC TECHNOLOGY

The purpose of the National 4/5 Music Technology Course is to enable learners to develop their knowledge and understanding



of music technology and of musical concepts, particularly those relevant to 20th and 21st century music. Learners will engage in the development of technical and creative skills through practical learning. This Course will provide opportunities for learners to develop their interest in music technology and to develop skills and knowledge relevant to the needs of the music industry.

The aims of the Course are to enable learners to:

- develop skills in the use of music technology hardware and software to capture and manipulate audio
- use music technology creatively in sound production in a range of contexts
- develop skills in musical analysis in the context of a range of 20th and 21st century musical styles and genres
- develop a broad understanding of the music industry, including a basic awareness of implications of intellectual property rights
- critically reflect on their own work and that of others.

While developing their knowledge of music and their skills in using music technology, learners can work independently or in collaboration with others. These activities and approaches to learning will help learners to plan and organise, to make decisions and to take some responsibility for managing their own learning and their interactions with others. The practical and experiential nature of the Course gives learners opportunities to show imagination, creativity and technical problem-solving skills as they develop, review and refine their musical ideas and use music technology for specific effect.

Course assessment structure

Component 1 — assignment = 70 marks
Planning the production = 15 marks

Implementing the production = 45 marks Evaluating the production = 10 marks

#### Evidence should include:

- a formal plan for the production, which includes explanations and justifications for all decisions relating to technological and musical aspects of the production (in written, electronic and/or oral form)
- the completed audio master
- a record of progress through the task (such as an electronic log or diary maintained by the learner)
- a short report evaluating the production (in written, electronic and/or oral form)

Component 2 — question paper = 30 marks

It will consist of questions in response to music excerpts in a range of 20th and 21st century styles and genres. A range of question types will be used, assessing understanding of relevant musical and technological concepts.

Total marks = 100 marks

### National 4

#### **Course structure**

The Course consists of 3 Units:

- 1. Music Technology Skills (N4)
- 2. Understanding 20th and 21st Century Music (N4)
- 3. Music Technology in Context (N4)

To achieve the National 4 Music Technology Course, learners must pass all of the required Units, including the Added Value Unit.

### **National 5**

#### **Course structure**

The Course consists of 3 Units:

- 1. Music Technology Skills (N5)
- 2. Understanding 20th and 21st Century Music (N5)
- 3. Music Technology in Context (N5) Course assessment structure

Component 1 — assignment 70 marks

Component 2 — question paper 30 marks

**Total marks: 100 marks** 

To gain the National 5 award, the learner must pass all of the Units as well as the Course assessment.

### PEOPLE and SOCIETY

"People and Society" is a social subject course that utilises various disciplines (history, geography, modern studies, psychology, sociology etc.) to explore topic based study. There are 4 units:

- 1. Investigating Skills
- 2. Comparing and contrasting
- 3. Making Decisions
- 4. Added Value



The content of each unit is varied and is skills based. The topic of each unit will be determined by the interests of the class. Previous examples have included looking at conflict in Scotland and looking at the geography of local estates. The course activities are often delivered using outdoor education activities.

### PERSONAL DEVELOPMENT AWARD

Curriculum areas include:

- Personal, Interpersonal and Team Skills
- Citizenship and Community Awareness
- A Community Based Project
- Entrepreneurship and Enterprise
- Preparation for the World of Work



The young people working in Personal Development benefit from some extremely positive outcomes such as improved confidence and self-esteem, enhanced communication and organisational skills, and improved leaver destinations. The course is designed to educate pupils and better equip them for the workplace.

### **Physical Education**

#### **Course Content**

Through practical involvement in physical education, national 4 & 5 courses aim to enrich the lives of pupils who will develop skills,



knowledge and understanding and a positive attitude towards lifelong participation in sports.

The Course aims to enable the learner to:

- develop and demonstrate understanding of the principles and factors underpinning and impacting on physical performance
- explain factors which impact positively and negatively on engagement and performance in physical activities
- build capacity to enhance effective performance
- examine and analyse performance to inform and influence personal improvement

#### **Assessment**

The Course assessment will consist of two Components, a performance and a portfolio.

Component 1 — Performance

The purpose of this performance is to assess the learner's ability to plan and prepare for, effectively perform, and evaluate personal performance improvement in one physical activity.

This component will have 60 marks (60% of the total marks).

The context of performance in this section must be competitive and/or demanding. This will allow learners to demonstrate their ability to select from a range of skills and make informed decisions to meet the challenges during performance, as well as following the rules, regulations and etiquette which apply to that activity.

#### The marks will be awarded for:

- selection and application of movement skills with an appropriate degree of body
- management, economy, self-confidence and effectiveness in relation to others, their
- environment and/ or in relation or response to fixed or moving objects
- decision making and skill adaptation during performance
- application of safe practices, relevant rules, regulations and
- etiquette in the chosen physical activity
- evaluation of their performance with action points for future performance development

### Component 2 — Portfolio

The purpose of the portfolio is to provide evidence of the process involved in planning for personal performance development. This portfolio will have 40 marks (40% of the total marks). Evidence will be collated by the learner, with support from the teacher/lecturer, on an on-going basis during the Course. Learners may present this evidence in the form of a logbook, diary, development record or any other appropriate format. This could be in electronic or paper form and could include written contributions, photographic or video evidence or any other suitable evidence-types.

The marks will be awarded for planning and implementing a personal development plan which includes:

- identifying strengths and areas for improvement in performance preparing and implementing a personal performance development plan
- setting goals and recording progress

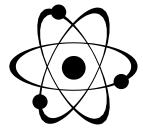
- monitoring progress on an on-going basis and adapting plans where appropriate
- reviewing and evaluating the effectiveness of the personal performance development plan
- Identification of area(s) for future development

### **Course Requirements**

- Pupils must have a good track record of bringing PE kit.
- Priority places will be given to those pupils who have never/rarely forgotten kit.
- In instances where letters have been sent home/guidance contacted due to no kit, pupils will be encouraged to consider other options.
- Pupils will be expected to remove all piercings during practical activities.
- Pupils will be unable to participate in PE if piercings are not removed.
- It is strongly discouraged that pupils get piercings during the course whereupon they are unable to remove the piercing.

### **PHYSICS**

National 5



The National 5 course will provide a basis for those pupils who wish to further their understanding of Physics. It is recommended that pupils studying this course are also undertaking the National 5 Mathematics course as it contains significant mathematical content. Pupils will be expected to be able to learn how to rearrange formula, solve equations and use scientific notation. It is the recommended course for those wishing to proceed to Higher Physics.

Through learning in physics, learners 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 by physics are needed across all sectors of society.

Physics courses should encourage resourcefulness which leads to becoming a confident individual. Successful learners in physics think creatively, analyse and solve problems. Physics can produce responsible citizens, through studying the impact it makes on their lives, on the environment and on society.

These Courses allow learners to understand and investigate the world in an engaging and enjoyable way. They develop learners' ability to think analytically creatively and independently, and to make reasoned evaluations. The Courses provide opportunities for learners to acquire and apply knowledge, to evaluate environmental and scientific issues, to consider risk and to make informed decisions. This can lead to learners developing an informed and ethical view of complex issues. Learners will develop skills in communication, collaborative working and leadership, and apply critical thinking in new and unfamiliar contexts to solve problems.

### **Course and Detail**

The course consists of three 40 hour units which are described below:

### **Dynamics and Space: 40 hours**

Velocity and Displacement – Vectors and Scalars; Velocity-time graphs; Acceleration; Newton's Laws; Projectile Motion; Space Exploration; Cosmology

### **Electricity and Energy: 40 hours**

Conservation of Energy; Electrical charge carriers and electric fields; Potential difference (voltage); Practical electrical and electronic circuits; Ohm's Law; Electrical Power; Specific Heat Capacity; Gas Laws and the kinetic model

#### Waves and Radiation: 40 hours

Wave parameters and behaviours; Electromagnetic Spectrum; Light; Nuclear radiation

In all 3 units, pupils will further their understanding of units and prefixes, significant figures and scientific notation.

Pupils will improve their practical laboratory skills by carrying out experiments on a regular basis and analysing the data they generate. They will be expected to write up a formal scientific investigation based on practical experiments they have carried out as part of a team. They must also carry out a research task based on an area of topical Physics which they will then write up formally.

In addition, there is a marked research assignment. This assignment is worth 20 marks towards the final grade. The research assignment requires pupils to apply skills, knowledge and understanding to investigate a relevant topic in physics and its effect on the environment and/or society.

To gain an award at National 5, pupils will be expected to pass three internal assignments (NARs) before sitting a final 2 hour exam which consists of a multiple choice paper worth 20 marks and an extended answer paper worth 60 marks. Including the assignment the total mark is out of 100 possible marks.

### PRACTICAL WOODWORKING

#### **Entry requirement:**

No specific entry requirements at National 4 & 5 apart from an interest in craft and making objects from wood.



#### Rationale:

The course is of a practical nature, is workshop-based and provides many skills which are appropriate to a wide range of applications. The Course will develop skills in marking-out, cutting, shaping and finishing wood based materials, as well as adjusting and maintaining a range of hand tools. Apart from giving an insight into industrial practice, such studies help with the development of self-confidence, manual dexterity and control, perseverance, maturity and spatial awareness.

#### **Course content:**

The course comprises of three units: Bench Skills 1 (Flat Frame Construction), Bench Skills 2 (Carcase Construction), and Machining and Finishing. The Bench Skills units include developing experience of reading and interpreting drawings, marking out, and manufacturing using common hand tools. Pupils will make a range of woodworking joints.

They will also learn how to apply practical skills and adopt safe working practices in the use of common machine and power tools for the manufacture of a finished machined product.

#### **Assessment:**

To gain the course award, the candidate must achieve a pass in all component Units as well as the Course Assignment. The Course project will be internally assessed and externally verified.



### **Progression:**

Pupils who study this course often have an interest in traditional skill based jobs like joinery, plumbing, electrician, stone masonry, motor engineering etc. but it is also taken frequently by scholarly pupils who seek a respite from their more academic subjects. They often find the work enjoyable and therapeutic. In S5, pupils can experience the Practical Metalworking course at National 4& 5 which follow a similar format as this course with bench skills and machine skills being developed this time with metal, most often mild steel.

#### **RELIGIOUS MORAL AND PHILOSOPHICAL STUDIES**

## National 4/5: Religious, Moral and Philosophical Studies What will I learn?

The main aims of the Course are to enable you to develop:

Moral

- The ability to understand and reflect on religious, moral and philosophical questions and how they affect the world we live in
- A range of skills including investigating and describing religious, moral and philosophical questions and responses, making comparisons, and the ability to give your own viewpoints with thoughtful reasons to back them up
- Straightforward knowledge and understanding of beliefs, practices and sources related to world religions
- Straightforward knowledge and understanding of religious, moral and philosophical questions and responses to them

### **Unit 1: World Religion**

In this Unit, you will develop

 Knowledge and understanding of Christianity through studying some key beliefs and practices and the contribution these make to the lives of followers.

### **Unit 2: Morality and Belief**

- In this Unit you will develop skills to describe and express views about a contemporary moral question or response to an issue selected from:
- Religion and justice e.g. crime and punishment; death penalty
- Religion, environment and global issues
- Religion, medicine and the human body e.g. euthanasia, genetic engineering
- Religion and conflict e.g. is it ever right to go war? Can pacifism work?

This year pupils focused on Religion and Justice but this is open to change.

- Pupils will work on presenting 12 their knowledge and understanding of contemporary moral questions with religious and nonreligious responses to these moral issues.
- There will be a range of options for you to choose from to allow for personalisation and choice.

### **Unit 3: Religious and Philosophical Questions**

In this Unit you will develop skills to describe and analyze religious and philosophical questions and responses. During this part of the course we will focus on arguments like Design, Evolution, and First cause, Big Bang and Suffering and Evil. Looking at evidence for and against the arguments.

#### Unit 4:

**N4 Added Value Unit/ N5 Assignment:** In this Unit, you will be able to select an issue or topic of your choice for personal study drawn from religious, moral or philosophical contexts. You will research your chosen issue or topic and communicate your findings.

#### **N5** Assessment

- Component 1 Exam question paper 60 marks (20 marks for each unit)
- Component 2 assignment 20 marks (as detailed above in Unit 4)
- Total marks 80 marks

### PART 2

#### **SUBJECT CHOICE**

- 1. The choice of <u>science</u> subjects is very important. Physics and Chemistry are useful subjects, both individually and in combination. For some careers, Chemistry and Biology are a preferred combination e.g. some branches of Laboratory Technology, Dietetics. In general, Biology should not be taken as a substitute for Chemistry. However, Higher Biology is required for Medicine at Glasgow University.
- 2. Courses in Chemistry, Physics and Biology will be offered at Access 3, National 4 and National 5. Pupils will be advised by the Departments which level will be most suited to their needs and abilities.
- 3. Although a National pass in a language other than English is not in itself an essential requirement for many jobs, it is often a necessary condition of entry to certain courses in Higher education, e.g. many University courses.
- 4. Art or Music is essential for related Vocational Courses e.g. Schools of Art or Architecture, Colleges of Music. These subjects are useful for some other careers too e.g. teaching (primary), speech and drama, photography, etc.

- 5. Pupils considering Technician apprenticeships in building or engineering should remember that suitable combinations of subjects are important. The most essential are English, Mathematics and Physics. Design and Manufacture and Graphic Communication are beneficial with National passes at levels 4 or above.
- 6. Pupils who wish to become craft apprentices (e.g. fitters, welders, millers, turners, joiners, bricklayers, plumbers etc) are all advised to take Maths, Design and Manufacture, Graphic Communication, English and a suitable science subject. Although National exam passes are not always formal requirements, competition is so fierce for the places available that good National passes in some of the above subjects would be an advantage.
- 7. Art and Design is essential for entry into Specialist Courses e.g. Art and Design Colleges. There are many other careers where qualifications in Art and Design are beneficial. e.g. Art Administration, Art historian, Promoter, Event's Organiser, Architecture, Publishing, Museums, Conservation and Restoration, Community Arts, Colour analyst, Advertising, Marketing, Product/Engineering, Retailing Buyers (Retailers), Fashion Forecasters, Landscape Architecture, Nursery Nurses, Childminders, Primary School Teachers, Hairdressing, Antiques, Catering, Multi Media.
- 8. Pupils seeking Engineering careers via university will nearly always require Maths and Physics. Design and Manufacture and Graphic Communication will also be beneficial to engineering and architecture courses.