

## **Introduction to the Senior Phase**

In S2 pupils were given the opportunity to choose subjects within the BGE curricular area framework with additional opportunities for personalisation and choice.

Now in S3 pupils are about to enter the next phase in their education journey as they prepare to make choices about which subjects to study in S4 (the beginning of the Senior Phase). These subjects will ultimately form the basis for their first set of nationally recognised SQA qualifications, certificated in August 2025. Generally, pupils will undertake qualifications at National 3, National 4 or/and National 5, however other qualifications and levels may be offered to suit pupil needs.

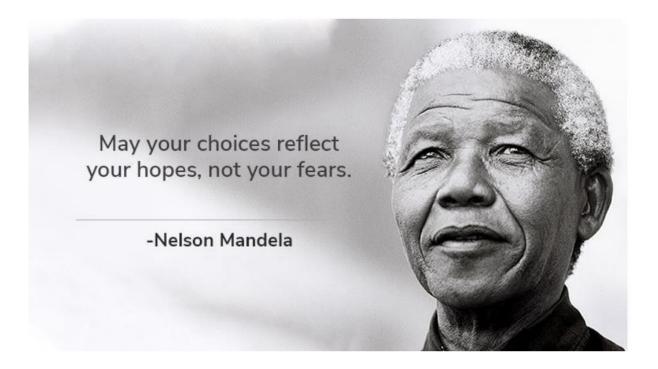
# Supporting Pupils with their Subject Choices

At Cumbernauld Academy our priority is to ensure that all out students are guided and supported through the option choice process to help them make positive decisions for themselves about their future.

In advance of option choices being made Pupil Support teachers are delivering Skills for Life (SfL) lessons which concentrate on preparing pupils for this process. SDS Career Advisors will also participate in lessons offering further guidance and support on career planning.

Following on from, and as a key part of the overall process each pupil will receive an individual interview with a member of the Pupil Support team to discuss preliminary option choices best suited to their ability, progress, interests and career aspirations. On completion a final recommendation will then be passed to parents/carers for reviewing.

If in agreement with these recommendations the completed option forms should be signed and returned to the appropriate Pupil Support Teacher within the week. Please note should parents/carers disagree with any of these recommendations then the relevant Pupi Support teacher should be contacted to discuss any concerns. Should no concerns be communicated then pupil choices will be put forward for next sessions curriculum.



# S4 Subject Structure

The basic compulsory curriculum for all pupils in S4 is show below.

Compulsory Subject	Allocation
English (A)	4 Periods
Mathematics (B)	4 Periods
Physical Education (Core)	2 Periods
Religious Education (Core)	1 Period
Skills for Life	1 Period

The remaining periods are those chosen by the pupil and are allocated 4 periods each. Please see table below

Chosen Subject	Allocation
Option C	4 Periods
Option D	4 Periods
Option E	4 Periods
Option F	4 Periods
Option G	4 Periods

It may occasionally happen that some choices must be altered because too few pupils opt for particular subjects, and the classes available are therefore well below a workable capacity. When this happens each pupil's overall curriculum will be reviewed in terms of subject balance with a view to negotiating alternative options. It should be emphasised however that every effort is made to give pupils their first choices.

## **Opportunities for Progression in S5**

It should also be noted that subjects studied at S4 will have progression for further study in S5/6, however there can be no guarantees that all desired classes will run at this time as this will be dependent on pupil uptake at this time.

A pupil achieving National 3 by the end of S4 may progress to National 5 A pupil achieving National 4 by the end of S4 may progress to National 5 A pupil achieving National 5 by the end of S4 may progress to Higher

## CONTENTS

#### **Design - Art/ Home Economics/ Technical**

Art & Design – National 4 Art & Design – National 5

Hospitality (Practical Cookery) – National 4 Hospitality (Practical Cookery) – National 5

Design & Manufacture – National 4 Design & Manufacture – National 5

Graphic Communication – National 4 Graphic Communication – National 5

Practical Craft Skills – National 3 Practical Woodworking - National 4 Practical Woodworking – National 5

## Performance - Drama/ Music/ Physical Education

Drama – National 4 Drama – National 5

Music – National 4 Music – National 5

Music Tech – National 4/5

Physical Education – National 4 Physical Education – National 5

#### **English & Literacy**

English – National 4 English – National 5

## **Business and Administration IT**

Administration & IT – National 4 Administration & IT – National 5

Business Management – National 4 Business Management – National 5

#### Humanities

Geography – National 4 Geography – National 5

History – National 4 History – National 5

Modern Studies – National 4 Modern Studies – National 5

## Mathematics & Numeracy

Application Mathematics – National 3/4 Mathematics – National 4 Application Mathematics – National 5 Mathematics – National 5

#### Modern Languages

French/German/Spanish – National 4 French/German/Spanish – National 5

## Science and Computing Science

Biology – National 4 Biology – National 5

Chemistry – National 4 Chemistry – National 5

Physics – National 4 Physics – National 5

Computing Science – National 4 Computing Science – National 5

Environmental Science – National 4

Applied Sciences - National Progression Award (SCQF Level 5)

The purpose of the Course is to provide a broad practical experience of art and design and related critical activity. The Course provides opportunities for learners to experiment with how they can represent their thoughts and ideas and create imaginative expressive and design work.

In the Course, learners will experiment with using art and design materials, techniques and/or technology. They will develop their critical thinking skills as they develop their understanding of art & design practice.

The Course will enable learners to:

- communicate personal thoughts, feelings and ideas through the imaginative use of art and design materials, techniques and/or technology
- develop knowledge and understanding of art and design practice
- plan, develop, produce and present creative art and design work
- develop understanding of the social and cultural influences on artists and designers and their work
- develop problem solving, critical thinking and reflective practice skills

#### **Recommended entry**

Pupils must have studied Art & Design in S3 in order to progress to National 4 in S4.

#### **Course Content:**

#### **Expressive Activity**

This Unit helps learners to develop their personal thoughts and ideas in visual form. Pupils will look at the work of artists, their influences and their materials and techniques They will research and develop their thoughts and ideas in 2D and/or 3D. They will produce observational drawings and studies and develop their expressive ideas and compositions.

#### **Design Activity**

This Unit helps learners to plan, research and develop design ideas in response to a given brief. Learners will develop their problem-solving skills as they consider the design opportunities and constraints of the brief. They will develop their understanding of designers' working practices and the factors that influence their work. They will experiment with and develop media handling skills in 2D and/or 3D formats.

#### Added Value Unit: Practical Activity

In this unit, learners will use the knowledge previously learned to produce one piece of expressive art and one piece of design work.

#### Assessment

All units are internally assessed. They will be assessed on a pass/fail basis within the school, however they will be open to external verification by the SQA. All course units have to be passed for an overall course award. There is no formal written examination in National 4.

## Progression

Pupils will be able to progress to National 5 Art & Design in fifth year, and possibly Higher Art & Design in S6 depending upon success at National 4 and National 5.

The purpose of the Course is to provide a broad practical experience of art and design and related critical activity. The Course provides opportunities for learners to experiment with how they can represent their thoughts and ideas and create imaginative expressive and design work.

In the Course, learners will experiment with using art and design materials, techniques and/or technology. They will develop their critical thinking skills as they develop their understanding of art & design practice.

The Course will enable learners to:

- communicate personal thoughts, feelings and ideas through the imaginative use of art and design materials, techniques and/or technology
- develop knowledge and understanding of art and design practice
- plan, develop, produce and present creative art and design work
- develop understanding of the social and cultural influences on artists and designers and their work
- develop problem solving, critical thinking and reflective practice skills

## **Recommended entry**

Pupils must have studied Art & Design in S3 in order to progress in National 5 in S4. Entry into National 5 will be agreed between the learner and teacher dependant on performance in S3.

#### Course Content:

#### Expressive Activity

This Unit helps learners to develop their personal thoughts and ideas in visual form. Pupils will look at the work of artists, their influences and their materials and techniques They will select stimuli and produce analytical drawings and studies. They will research and develop their thoughts and ideas in 2D and/or 3D. They will produce observational drawings and studies and develop their expressive ideas and compositions.

## Design Activity

This Unit helps learners to plan, research and develop design ideas in response to a given brief. Learners will develop their problem-solving skills as they consider the design opportunities and constraints of the brief. They will develop their understanding of designers' working practices and the factors that influence their work. They will experiment with and develop media handling skills in 2D and/or 3D formats.

#### Assessment

There are two assessable components in National 5 Art & Design:

- 1. Portfolio of their course work including the production of one piece of expressive art work (40%) and one design (40%)
- 2. External examination Question paper (20%)

All practical work is submitted to the SQA for external Course assessment and will include assessment of the added value which will focus on the challenge and application in the course.

#### Progression

Dependent upon successful completion of the course, pupils will be able to progress to Higher Art & Design, further training or employment

The aims of this course are to develop practical cookery skills so that the candidate has experience in various cookery processes and has a range of food preparation skills. The course develops organisational skills and basic food hygiene. Pupils will also learn about the uses of different ingredients in terms of flavours and technical uses in recipes.

#### Recommended entry

Pupils who have undertaken the Hospitality course in S3. Additionally pupils must have an interest in practical cookery and be motivated to learn, able to work on their own initiative and enjoy fast paced practical cookery lessons.

**Course Content:** The course has four mandatory Units, one of which is the Added Value Unit

**Cookery skills techniques and processes (National 4)** - The general aim of this Unit is to develop learners' cookery skills, food preparation techniques and their ability to follow cookery processes, in the context of producing dishes with minimal guidance. Learners will also develop an understanding of the importance of safety and hygiene and the ability to follow safe and hygienic practices at all times.

**Understanding and using ingredients (National 4)** - The general aim of this Unit is to develop learners' knowledge and understanding of ingredients from a variety of different sources and their uses. It also addresses the importance of responsible sourcing of ingredients and of current dietary advice. Learners will develop an ability to select and use appropriate ingredients, with minimal guidance, in the preparation of dishes and to do so safely and hygienically.

**Organisational skills for cooking (National 4)** - The general aim of this Unit is to develop learners' organisational and time management skills. Learners will acquire the ability to follow recipes and time plans to produce dishes, with minimal guidance, and to work safely and hygienically. They will also further develop the ability to carry out an evaluation of the product.

Added Value Unit National 4 (Producing a Meal) - This Unit aims to enable learners to draw on the knowledge, understanding and skills developed in the other three Units. Learners will carry out a practical activity which will require them to prepare, cook and present a two-course meal to a given specification within a given timescale. It will require learners to demonstrate their ability to follow

safe and hygienic practices throughout.

#### Assessment

To achieve the National 4 Hospitality: Practical Cookery Course, learners must pass all of the required Units, including the Added Value Unit.

National 4 Courses are not graded and there is no formal written examination

#### Progression

Hospitality at National 4 can lead onto to Hospitality or Practical Cake Craft at National 5 or other qualifications in Hospitality or related areas or further study, employment and/or training.

The aims of this course are to develop practical cookery skills so that the candidate has experience in various cookery processes and has a range of food preparation skills. The course develops organisational skills and basic food hygiene. Pupils will also learn about the uses of different ingredients in terms of flavours and technical uses in recipes.

#### Recommended entry

Pupils who have undertaken the Hospitality course in S3 or have a qualification in the subject at National 4. Additionally pupils must have an interest in practical cookery and be motivated to learn, able to work on their own initiative and enjoy fast paced practical cookery lessons.

#### Course Content:

**Cookery skills, techniques and processes (National 5**) - The general aim of this Unit is to develop learners' cookery skills, food preparation techniques and their ability to follow cookery processes, in the context of producing dishes. Learners will also develop an understanding of the importance of safety and hygiene and the ability to follow safe and hygienic practices at all times.

**Understanding and using ingredients (National 5)** - The general aim of this Unit is to develop learners' knowledge and understanding of ingredients from a variety of different sources and their uses. It also addresses the importance of responsible sourcing of ingredients and of current dietary advice. Learners will develop an ability to select and use appropriate ingredients in the preparation of dishes and to do so safely and hygienically.

**Organisational skills for cooking (National 5)** - The general aim of this Unit is to develop learners' organisational and time management skills. Learners will acquire the ability to follow recipes and time plans to produce dishes and to work safely and hygienically. They will also further develop the ability to carry out an evaluation of the product.

**Course Assessment National 5** - The learner will be assessed by a practical activity drawing on the knowledge, understanding and skills developed across the Course. The activity will require learners to extend cookery-related knowledge, understanding and skills, and to apply them in the production of a meal to a given specification. Learners will plan, prepare and cook a three-course meal for a given number of people within a given timescale and present it appropriately.

## Assessment

There are two assessable components within the National 5 Hospitality: Practical Cookery course:

Practical Activity (75%) used to assess skills developed through coursework

External Examination (25%) used to assess knowledge and understanding developed through coursework

#### Progression

Hospitality at National 5 can lead onto other qualifications in Hospitality or related areas or further study, employment and/or training.

Other progression pathways are also possible including progression to other qualifications at the same or different levels i.e. Practical Cake Craft at National 5

The Course provides a broad practical introduction to design, materials and manufacturing processes. It provides opportunities for learners to gain skills in both designing and in communicating design proposals. It allows learners to explore the properties and uses of materials and to make models and prototypes of products. This Course provides learners with opportunities to continue to acquire and develop the attributes and capabilities of the four capacities as well as skills for learning, skills for life and skills for work.

#### Recommended entry

CfE Level 4 Design & Manufacture course or National 3 Design and Technology Course or relevant component Units

#### Course content

Design and Manufacture: Design (National 4) Design and Manufacture: Materials and Manufacturing (National 4) Added Value Unit Design and Manufacture Assignment (National 4)

#### Assessment

All Units are internally assessed.

They will be assessed on a pass/fail basis within school. SQA will provide rigorous external quality assurance, including external verification, to ensure assessment judgments are consistent and meet national standards.

The assessment of the Units in this Course will be as follows:

#### Design and Manufacture: Design

In this Unit, evidence will be provided by the production, evaluation and justification of design proposals, including a simple specification in response to a brief. Knowledge will also be assessed.

#### **Design and Manufacture: Materials and Manufacturing**

In this Unit, evidence will be provided by the production and evaluation of simple products in response to given instructions. Knowledge will also be assessed.

#### **Design and Manufacture: Added Value Unit**

In this Course, the Added Value Unit will focus on challenge and application.

The learner will draw on, extend and apply the skills and knowledge they have developed during the Course. This will be assessed through an assignment requiring application of skills and knowledge from the Units to produce an effective overall response to the brief. The response to the brief will include a design folio and model, a prototype or a completed product. The brief for the assignment will be sufficiently open and flexible to allow for personalisation and choice.

## Progression

This Course or its Units may provide progression to:

Design and Manufacture National 5 or related SQA courses, Further study, employment or training

The Course provides a broad practical introduction to design, materials and manufacturing processes. It provides opportunities for learners to gain skills in both designing and in communicating design proposals. It allows learners to explore the properties and uses of materials and to make models and prototypes of products. This Course provides learners with opportunities to continue to acquire and develop the attributes and capabilities of the four capacities as well as skills for learning, skills for life and skills for work.

## Recommended entry

National 4 Design and Manufacture Course or relevant component Units

## **Course content**

## **Design and Manufacture: Design**

In this Unit, evidence will be provided by the production, evaluation and justification of design proposals, including a simple specification in response to a brief. Knowledge will also be assessed.

#### Design and Manufacture: Materials and Manufacturing

In this Unit, evidence will be provided by the production and evaluation of simple products in response to given instructions. Knowledge will also be assessed.

#### **Design and Manufacture: Course Assessment**

Courses from National 4 to Advanced Higher include assessment of added value. At National 5, the added value will be assessed in the Course assessment. The added value for the Course must address the key purposes and aims of the Course by addressing breadth, challenge and application.

The learner will draw on, extend and apply the skills and knowledge they have developed during the Course. These will be assessed through a combination of an assignment and a question paper.

## Assessment

There are three assessable components within the National 5 Design & Manufacture course:

Assignment 1 – Design (30%) used to assess skills developed through coursework

Assignment 2 – Manufacture (25%) used to assess skills developed through coursework

External Examination (45%) used to assess knowledge and understanding developed through coursework

#### Progression

This Course or its Units may provide progression to:

Other SQA qualifications in Design and Manufacture or related areas, Further study, employment or training

The National 4 Graphic Communication Course enables learners to develop skills in graphic communication techniques, including the use of equipment, materials and software. Learners extend and apply knowledge and understanding of graphic communication standards, protocols and conventions, and develop an understanding of the impact of graphic communication technologies on our environment and society

#### Recommended entry

Pupils who have undertaken the S3 Graphic Communication course. Additionally pupils who have an interest in 2d/3d computer work, graphic presentation, sketching and drawing. Pupils must be motivated to learn, able to work on their own initiative and enjoy learning about all forms of graphic communication

#### **Course Content**

The course has three mandatory units

## 2D Graphic Communication (National 4)

This Unit helps learners develop their creativity and skills within a 2D graphic communication context. It will allow learners to initiate, develop and communicate ideas using graphic techniques in straightforward and familiar contexts. Learners develop 2D graphic spatial awareness

## 3D and Pictorial Graphic Communication (National 4)

This Unit helps learners develop their creativity and skills within a 3D and pictorial graphic communication context. Again, it will allow learners to initiate, develop and communicate ideas using graphic techniques in straightforward and familiar contexts. They will develop 3D graphic spatial awareness.

## Added Value Unit: Graphic Communication Assignment (National 4)

This Unit adds value by introducing challenge and application.

Learners will be able to extend and apply their knowledge and skills through the assignment They will draw on their range of graphic communication experiences from the Units in order to produce an effective overall response to the assignment. The assignment brief will be sufficiently open and flexible to allow for personalisation and choice.

#### Assessment

To achieve the National 4 Graphic Communication course, learners must pass all of the required Units, including the Added Value Unit.

National 4 Courses are not graded and there is no formal written examination

## Progression

- Qualifications in Graphic Communication (National 5) or related areas
- Further study, employment or training

The National 5 Graphic Communication Course enables learners to develop skills in graphic communication techniques, including the use of equipment, graphics materials and software. Learners extend and apply knowledge and understanding of graphic communication standards, protocols and conventions, and develop an understanding of the impact of graphic communication technologies on our environment and society.

## Recommended entry

Pupils who have undertaken the National 4 course. Additionally pupils who have an interest in 2d/3d computer work, graphic presentation, sketching and drawing. Pupils must be motivated to learn, able to work on their own initiative and enjoy learning about all forms of graphic communication

## Course Content

## 2D Graphic Communication (National 5)

This Unit helps learners develop their creativity and skills within a 2D graphic communication context. It will allow learners to initiate, develop and communicate ideas using graphic techniques in straightforward and familiar contexts. In addition, the Unit allows learners to develop their skills in some less familiar or new contexts. Learners will develop 2D graphic spatial awareness.

## 3D and Pictorial Graphic Communication (National 5)

This Unit helps learners develop their creativity and skills within a 3D and pictorial graphic communication context. Again, it will allow learners to initiate, develop and communicate ideas using graphic techniques in straightforward and familiar contexts. In addition, the Unit allows learners to develop their skills in some less familiar or new contexts. Learners will develop 3D graphic spatial awareness

## Added Value Unit: Graphic Communication Assignment (National 5)

The learner will draw on, extend and apply the skills and knowledge they have developed during the Course. These will be assessed through a combination of an assignment and a question paper.

The Graphic Communication Assignment adds value by introducing challenge and application. Learners will draw on their range of skills and knowledge from the Units in order to produce an effective overall response to the brief.

## Assessment

There are two assessable components within the National 5 Graphic Communication course:

Assignment (33%) - used to assess skills developed through coursework

External Examination (67%) - used to assess knowledge and understanding developed through coursework

## Progression

- Qualifications in Graphic Communication (Higher) or related areas of study
- Further study, employment or training

The Course provides opportunities to develop and enhance practical creativity and practical problem-solving skills, and to gain an appreciation of safe working practices in a workshop or similar environment.

The aims of the Course are to enable learners to:

- develop skills in reading and interpreting drawings and diagrams
- identify, select and use a range of workshop tools, equipment and materials
- develop basic skills in measuring and marking out of materials
- develop basic skills in cutting, shaping, fixing and joining materials
- apply safe working practices in a workshop or similar environment
- take account of good practice regarding sustainability and recycling

#### Recommended entry

Pupils who have not studied Practical Woodwork in S3 are recommended to study Practical Craft Skills National 3. This course is also recommended for those achieving CFE Level 2 and Level 3 Not On Track within S3 Practical Woodwork.

## Course Content

Unit 1 - Working with Tools

Unit 2 - Working with Materials

Unit 3 - Making an Item

## Assessment

## Working with Tools (National 3)

In this Unit, learners will develop knowledge of a range of common tools and equipment used in woodworking and/or metalworking. The learner will also develop skills for measuring and marking out and for preliminary cutting and shaping of materials.

## Working with Materials (National 3)

In this Unit, learners will develop skills in working with different woodworking and/or metalworking materials. This Unit helps learners to develop skills in cutting, shaping, fixing and joining materials, using a variety of appropriate craft techniques.

## Making an Item (National 3)

In this Unit, learners will develop skills in making an item from wood, metal or a combination of these materials. Learners will learn to read and interpret simple working drawings, select and use tools safely, apply appropriate finishing techniques and review their completed item.

In each of the three Units, learners will develop an appreciation of safe working practices in a workshop environment. They will also develop knowledge of good practice in sustainability and recycling.

## Progression

- National 4 Practical Woodworking
- other qualifications in Practical Technologies or related areas

The Course provides opportunities for learners to gain a range of practical woodworking skills and to use a variety of tools, equipment and materials. It allows them to plan activities through to the completion of a finished product in wood. The aims of the Course are to enable learners to develop:

- skills in woodworking techniques
- skills in measuring and marking out timber sections and sheet materials
- safe working practices in workshop environments
- practical creativity and problem-solving skills
- knowledge of sustainability issues in a practical woodworking context

## **Recommended entry**

Pupils must have studied Practical Woodwork in S3 in order to progress to National 4 in S4.

## Course Content

Practical Woodworking: Flat-frame Construction (National 4)

Practical Woodworking: Carcase Construction (National 4)

Practical Woodworking: Machining and Finishing (National 4)

Added Value Unit Making a Finished Product from Wood (National 4)

## Assessment

Each unit is internally assessed on a pass/fail basis. All units have to be passed for an overall Course Award. There is no formal examination in National 4.

## Practical Woodworking: Flat-frame Construction (National 4)

In this Unit, evidence will be required that the learner can produce basic flat-frame joints and assemblies to a given standard. Evidence of knowledge will also be required.

## Practical Woodworking: Carcase Construction (National 4)

In this Unit, evidence will be required that the learner can produce basic carcase constructions to a given standard. Evidence of knowledge will also be required.

## Practical Woodworking: Machining and Finishing (National 4)

In this Unit, evidence will be required that the learner can carry out simple machining and finishing to a given standard. Evidence of knowledge will also be required.

## Added Value Unit

The learner will draw on, extend and apply the skills and knowledge they have developed during the Course. This will be assessed through a practical activity which involves producing a finished product in wood to a given standard. The task will be sufficiently open and flexible to allow for personalisation and choice and for learners to demonstrate practical creativity.

## Progression

- Practical Woodwork National 5 or other qualifications in practical technologies or related areas
- further study, employment or training

The Course provides opportunities for learners to gain a range of practical woodworking skills and to use a variety of tools, equipment and materials. It allows them to plan activities through to the completion of a finished product in wood. The aims of the Course are to enable learners to develop:

- skills in woodworking techniques
- skills in measuring and marking out timber sections and sheet materials
- safe working practices in workshop environments
- practical creativity and problem-solving skills
- knowledge of sustainability issues in a practical woodworking context

#### **Recommended entry**

Pupils must have studied Practical Woodwork in a previous session in order to progress to National 5. The level will be determined by the teacher following discussion with the pupil.

## Course Content

## Practical Woodworking: Flat-frame Construction (National 5)

In this Unit, evidence will be required that the learner can produce flat-framed woodworking joints and assemblies to a given standard. Tasks will include some complex features. Evidence of knowledge and understanding will also be required.

## Practical Woodworking: Carcase Construction (National 5)

In this Unit, evidence will be required that the learner can produce carcase constructions to a given standard. Tasks will include some complex features. Evidence of knowledge and understanding will also be required.

#### Practical Woodworking: Machining and Finishing (National 5)

In this Unit, evidence will be required that the learner can carry out machining and finishing to a given standard. Tasks will include some complex features. Evidence of knowledge and understanding will also be required.

## Assessment

There are two assessable components within the National 5 Practical Woodworking course

Practical Activity (70%) – used to assess skills developed through coursework

External Examination (30%) used to assess knowledge and understanding developed through coursework

## Progression

- Other qualifications in practical technologies or related areas
- further study, employment or training

## Why Study National 4 Drama?

Drama is a practical, hands-on subject that develops your creativity and imagination, and your artistic skills. You will learn how the use of voice, language and movement can develop your ideas for drama. And, you will learn the skills and techniques involved in planning, producing and presenting drama.

You will also find out how actors and writers work, and how the environment and culture affect their work.

#### **Entry Qualifications**

Pupils should have chosen Drama in S3 as this provides a foundation on which to build.

## Course Details

The course has three compulsory units, plus an added value unit that assesses your practical skills.

## Drama Skills (9 SCQF credit points)

In this unit you will:

- develop your drama skills and ways of communicating thoughts and ideas to an audience
- learn how to respond to stimuli (things that prompt ideas for drama)
- develop your understanding of how to portray character
- learn about form, structure, genre and style when creating and presenting drama
- reflect on your own progress and that of others.

## Drama: Production Skills (9 SCQF credit points)

In this unit you will:

- explore and develop your production skills and use these skills to present drama
- use problem solving skills in order to generate ideas for presenting drama.

Added value Unit: Drama Performance (6 SCQF credit points) In this unit you will:

• apply your production skills in a drama performance.

## Assessment

Your work will be assessed by your teacher on an ongoing basis throughout the course. The course is not graded. You will be assessed as pass or fail. Your must pass all three units, including the added value unit, to gain the course qualification. The added value unit will be assessed through a drama performance in which you create and present a drama.

#### **Progression Routes**

If you complete the course successfully, it may lead to: National 5 Drama Further study, training or employment in: Communications and Media & Performing Arts.

## Why Study National 5 Drama?

Drama is a practical, hands-on subject that develops your creativity and imagination, and your artistic skills. You will learn how the use of voice, language and movement can develop your ideas for drama. And, you will learn the skills and techniques involved in planning, producing and presenting drama. You will also find out how actors and writers work, and how the environment and culture affect their work.

## Entry Qualifications

Pupils should have chosen Drama in S3 as this provides a foundation on which to build.

## Course Details

The course has **two** compulsory units. The units are similar to those for **National 4**, but you will be expected to produce a higher standard of work.

## Drama Skills (9 SCQF credit points)

In this unit you will:

- explore and develop a range of drama skills and ways of communicating thoughts and ideas to an audience
- develop a range of skills as an actor
- learn how to respond to stimuli, including text
- develop your understanding of how to portray character
- develop your knowledge and understanding of form, structure, genre and style when creating and presenting drama
- extend your understanding of social and cultural influences on drama
- reflect on your own progress and that of others.

## Drama: Production Skills (9 SCQF credit points)

In this unit you will:

- develop a range of production skills and use these skills to enhance drama when presenting
- use problem solving skills in order to generate ideas for presenting drama.

#### Assessment

Units will be assessed internally by your teacher or lecturer as 'pass' or 'fail'. Your work will be assessed on an ongoing basis throughout the course.

Units do not contribute to your overall grade but to achieve the course qualification, you must pass both units plus the course assessment.

The course assessment for this course consists of two components:

- performance (60 marks)
- examination question paper (40 marks).

The question paper will be set and marked by the Scottish Qualifications Authority (SQA). For the performance component, you will create and present a drama. This will be set by your school or college and assessed by an SQA visiting assessor.

The course assessment is graded A–D.

## Progression

If you complete the course successfully, it may lead to: Higher Drama Further study, training or employment in: Communications and Media & Performing Arts

- To develop performing skills on 2 instruments
- To explore the background of and learn to identify various styles of music
- To gain an understanding of musical literacy and use this to explore composition techniques

## Recommended entry

National 4 – Pupils opting for National 4 should have achieved Level 3 in S1-S3 Course Content

The music course contains 3 elements: Performing, Understanding Music and Composing. In performing, pupils will learn 2 instruments (or one instrument and voice). In the Understanding element pupils will explore a wide range of styles from Scottish Music to Classical and including Pop and Rap. This will influence the composing element where pupils will complete a series of short projects learning how to incorporate the new concepts they have learned into their own music.

The course has **three** compulsory units, plus an **added value** unit that assess your practical skills.

## Music: Performing Skills (6 SCQF credit points)

In this unit you will:

- develop your performing skills on two selected instruments, or on one selected instrument and voice
- learn how to perform music accurately while maintaining the musical flow
- develop your own technical and musical performing skills.

## Music: Composing Skills (6 SCQF credit points)

In this unit you will:

- experiment with and use compositional methods and music concepts in imaginative ways when creating your own music
- reflect on your own creative choices and decisions and develop a basic understanding of how composers develop their ideas and create their music.

## Understanding Music (6 SCQF credit points)

In this unit you will:

- develop your knowledge and understanding of a range of music concepts and music literacy
- learn how to identify the distinguishing features of specific music styles, and how to recognise music concepts in excerpts of music
- learn how to understand and recognise common music signs and symbols used in music notation.

## Added Value Unit: Music Performance (6 SCQF credit points)

In this unit you will:

• prepare and perform a programme of music in a solo setting and/or as part of a group. Assessment

Assessment will be ongoing throughout the course. Pupils will be assessed on performances throughout the year. Their composition work will be marked task by task. Understanding of music will be evaluated through the use of questioning techniques, class discussions and listening tests. Teachers will regularly provide meaningful feedback to pupils who will also have a role in the assessment of both their own and others' work. Pupils will be encouraged to become skilled in setting their own targets and taking responsibility for personal learning.

## Progression

Pupils who are successful in National 4 may choose to progress to National 5. There are many NQ college courses available studying performing, musical technology and musical theatre.

- To develop performing skills on 2 instruments
- To explore the background of and learn to identify various styles of music
- To gain an understanding of musical literacy and use this to explore composition techniques

## Recommended entry

National 5 – Pupils opting for National 5 should have achieved Level 4 in S1-S3

## Course Content

The music course contains 3 elements: Performing, Understanding Music and Composing. In performing, pupils will learn 2 instruments (or one instrument and voice). In the Understanding element pupils will explore a wide range of styles from Scottish Music to Classical and including Pop and Rap. This will influence the composing element where pupils will complete a series of short projects learning how to incorporate the new concepts they have learned into their own music.

## Music: Performing Skills (6 SCQF credit points)

In this unit you will:

- develop your performing skills on two selected instruments, or on one selected instrument and voice
- learn how to perform music accurately while maintaining the musical flow
- develop your own technical and musical performing skills.

## Music: Composing Skills (6 SCQF credit points)

In this unit you will:

- experiment with and use compositional methods and music concepts in imaginative ways when creating your own music
- reflect on your own creative choices and decisions and develop a basic understanding of how composers develop their ideas and create their music.

## Understanding Music (6 SCQF credit points)

In this unit you will:

- develop your knowledge and understanding of a range of music concepts and music literacy
- learn how to identify the distinguishing features of specific music styles, and how to recognise music concepts in excerpts of music
- learn how to understand and recognise common music signs and symbols used in music notation.

## Assessment

Assessment will be ongoing throughout the course. Pupils will be assessed on performances throughout the year. Their composition work will be marked task by task. Understanding of music will be evaluated through the use of questioning techniques, class discussions and listening tests. Teachers will regularly provide meaningful feedback to pupils who will also have a role in the assessment of both their own and others' work. Pupils will be encouraged to become skilled in setting their own targets and taking responsibility for personal learning.

At National 5 level pupils will be required to pass units in Understanding Music, Composing Skills and Performing Skills. These will be internally assessed and will be subject to verification by the SQA.

**In National 5 only**, an SQA examiner will visit the school to assess a performance given by each pupil on both of their instruments (or one instrument and voice). This performance will be worth 60% of the final grade. Pupils will also be required to sit a question paper to test their knowledge of musical concepts, notation and styles. This question paper will be set and marked by the SQA and will be worth 40% of the final grade. The National 5 course is graded from A - D.

## Progression

Pupils who are successful at National 5 may choose to progress to Higher. There are many NQ college courses available studying performing, musical technology and musical theatre.

## Aim(s) of course

Music Technology is a creative course that allows you to build skills using hardware and software to capture and manipulate audio. The course is mainly practical with 70% being based on project-work.

My studying Music Technology you will:

- Gain hands-on experience using a range of equipment including various microphones, mixing desks, audio interfaces, speakers, amplifiers etc
- Be able to assemble equipment for both a live-sound and studio recording environment
- Produce original music for TV and Video Games
- Gain skills using pro-level software to write, record, edit and mix your music
- Be able to recognise and use a range of effects to shape your recordings
- Be able to identify a range of modern styles and genres and their related features
- Develop your ability to plan, organise and lead your own projects, making your own decisions
- Gain an understanding of the multitude of roles within the music and creative industries

## Learning and Teaching Content

This course is especially suitable if you have broad musical interests, and are particularly interested in music technology and 20th and 21st century music.

- The skills that you develop in Music Technology are especially suitable for students looking to work in all types of Media including Production and Broadcasting for Music/TV/Film/Video Games/Stage, Sound Engineering and Recording, Sound Effects Design, Acoustics, Music Journalism, Events Management, DJing, Music Publishing, Promotions Management, Teaching, Performing, Artist Management
- You will get the chance to use up-to-date software and sound equipment in a creative and innovative manner, gaining experience in using a wide variety of equipment and using pro-level software to arrange, mix and manipulate audio. Your work will follow the same principals and techniques used by industry professionals, helping to prepare you for a career in this industry. Additionally, the Music Technology course also helps to nurture a wide variety of skills applicable to any professional working environment.

## **Course Outline**

The course is practical and experiential in nature and there is considerable scope for personalisation and choice.

You will:

- Use music technology creatively in sound production in a range of contexts such as multitrack recording, sound design for Film/Video Game and Radio Drama/Podcast
- develop skills in the analysis of music in the context of a range of 20th and 21st century musical styles and genres
- develop an understanding of aspects of the music industry, including a basic awareness of implications of intellectual property rights
- develop skills in the use of music technology hardware and software to capture and manipulate audio

## Assessment

The course has two main components. A coursework portfolio worth 70% and a question paper worth 30%.

## **Coursework Portfolio**

For this component you will complete 2 large projects. You are able to choose from a range of options including multitrack recording, sound design for film or game and a radio drama. These projects will demonstrate effective use of recording equipment and software. You must also demonstrate good teamwork and leadership skills as you will invariably need to work with others.

## **Question Paper**

A short question paper will include questions on a range of musical and technological concepts including different genres, instruments, recording techniques and effects/processes used in the music industry.

## Homework

Pupils will be given homework linking to each unit of the course. It is also expected that pupils opting to continue with music technology will undertake additional research and listening on an individual basis.

## Progression into Senior Phase

Music Technology Higher

## Why Study National 4 PE?

Physical Education is a practical subject that develops your physical movement and performance skills. You may experience a range of activities such as Badminton, Basketball, Gymnastics, Volleyball, Trampolining, Table Tennis and Fitness. You will learn how to reflect on and develop your performance.

#### Entry Qualifications

Pupils should have chosen PE in S3 as this provides a foundation on which to build.

#### Course Details

The course has **two** compulsory units, plus an **added value** unit that assesses your practical skills.

#### Physical Education: Performance Skills (9 SCQF credit points)

In this unit you will:

- demonstrate a range of movement and performance skills in physical activities
- develop some consistency in your control, fluency of movement and body and spatial awareness
- learn how to respond to the physical demands of performance in a safe and effective way.

#### Physical Education: Factors Impacting on Performance (9 SCQF credit points) In this unit you will:

- demonstrate knowledge of factors that affect personal performance in physical activities
- develop personal performance
- record, monitor and review your own performance.

#### Added Value Unit: Physical Education Performance (6 SCQF credit points) In this unit you will:

- prepare for and carry out a performance in a physical activity
- adapt skills and techniques in performance situations
- follow rules and guidelines for that physical activity.

#### Assessment

Your work will be assessed by your teacher on an ongoing basis throughout the course. Items of work might include:

- practical work performance of a physical activity
- research assignments and reports
- projects

You must pass all the units including the performance unit to gain the course qualification

## **Progression Routes**

If you complete the course successfully, it may lead to National 5 Physical Education. Further study, training or employment in: Armed Services or Security & Protective Services or Sport and Leisure.

## Why Study National 5 PE?

Physical Education is a practical subject that develops your physical movement and performance skills. You may experience a range of activities such as Badminton, Basketball, Gymnastics, Volleyball, Trampolining, Table Tennis and Fitness. You will learn how to reflect on and develop your performance.

## Entry Qualifications

Pupils should have chosen PE in S3 as this provides a foundation on which to build

## Course Details

The course has **two** compulsory units. The units are similar to those for **National 4** but you will be expected to work to a higher standard.

# Physical Education: Performance Skills (9 SCQF credit points)

In this unit you will:

- develop your range of movement and performance skills
- learn how to select, use, demonstrate and adapt these skills
- develop consistency in control and fluency during movement to enable you to perform safely and effectively.

Physical Education: Factors Impacting on Performance (9 SCQF credit points) In this unit you will:

- develop your understanding of the factors that affect physical performance
- consider the effects of mental, emotional, social and physical factors on performance
- learn how to plan for, monitor, record and evaluate the process of personal performance.

## Assessment

Both units will be assessed internally by your teacher or lecturer as 'pass' or 'fail'. Your work will be assessed on an ongoing basis throughout the course. Items of work might include:

- practical work performance of a physical activity
- research assignments and reports
- projects.

Units do not contribute to your overall grade but to achieve the course qualification, you will need to pass both units plus a course assessment. The course assessment for this course consists of **two** components:

- performance (60 marks)
- portfolio (40 marks).

The performance component is internally marked by your school or college. It will be externally verified by SQA.

The portfolio component will be set and externally marked by SQA. The course assessment is graded A-D.

## Progression Routes

If you complete the course successfully, it may lead to Higher Physical Education. Further study, training or employment in: Armed Services or Security & Protective Services or Sport and Leisure.

## Aims of course:

Our aim is to ensure that all learners develop the knowledge, skills and attributes they will need for life, learning and work, now and in the future.

#### Recommended Entry:

A secure understanding of the Level 3 *Experiences and Outcomes* in the *Broad General Education* (S1 – S3).

#### Course Content:

The course follows on from the *Experiences and Outcomes* of the *Broad General Education* and focuses on extending the skills of reading, writing, listening and talking. Along with completing class work, learners are expected to undertake tasks such as reading, completing research assignments, preparing presentations and engaging with online resources.

The course consists of four mandatory units:

#### **English: Analysis and Evaluation**

Learners have the opportunity to develop their reading and listening skills through the contexts of literature, language and media. The outcome is to understand, analyse and evaluate straightforward texts.

## English: Creation and Production

Learners have the opportunity to develop their writing and talking skills through the contexts of literature, language and media. The outcome is to create and produce straightforward texts in both written and oral forms.

## Literacy

Learners have the opportunity to develop their competence in the skills of reading, writing, listening and talking using 'real life' contexts. The outcome is to understand straightforward ideas and information presented orally and in writing. Learners should also be able to communicate orally and in writing with a degree of technical accuracy.

## Added Value English Assignment

Learners have the opportunity to investigate and report on a topic of their choice. The outcome is to demonstrate challenge and to apply previously learned language skills in producing the assignment.

## To achieve the National 4 course, learners must pass all four of the required units.

#### Assessment:

All units are internally assessed on a pass/fail basis.

## Progression:

This course or its units may provide progression to other qualifications in English, for example, National 5. Learners could also proceed to further study, employment or training.

## Aims of course:

Our aim is to ensure that all learners develop the knowledge, skills and attributes they will need for life, learning and work, now and in the future.

## Recommended Entry:

A secure understanding of the Level 3 and 4 *Experiences and Outcomes* in the *Broad General Education* (S1 – S3) OR a National 4 qualification.

## Course Content:

The course follows on from the *Experiences and Outcomes* of the *Broad General Education* and enables and encourages learners to develop their language skills in reading, writing, talking and listening. Although these essential skills can be dealt with and treated separately, often the most effective and natural teaching and learning approaches will allow for them to be integrated.

When operated together, the elements can be said to support each other, and often work on one skill can aid the development of another: broad reading of literature and language will not only strengthen key reading skills of understanding, analysis and evaluation, but will have an impact on a learner's ability to write. Spoken language has a part to play here too: it is often through discussion that a deeper understanding of language and literature emerges. Talking and listening activities also help to improve learner interaction and engagement. In this way, a holistic approach is taken to course content. Areas and topics of study will encompass many of the skills required.

The course has one mandatory, internally assessed unit:

## Performance-spoken language

The purpose of this performance–spoken language is to provide evidence of the learners' skills in talking and listening. This performance, which is part of course assessment, is assessed on an achieved/not achieved basis. It is a compulsory requirement for a course award in National 5 English.

The spoken language performance comprises the skills of talking and listening. There are four aspects to the spoken language performance, and learners must achieve them all. These are:

- employs detailed and relevant ideas and/or information using a structure appropriate to purpose and audience
- communicates meaning effectively through the selection and use of detailed spoken language
- uses aspects of non-verbal communication
- demonstrates listening skills by responding to spoken language

In this assessment learners have to do at least one of the following spoken language activities:

- Take part in a group discussion, or discussion-based activity, to which they contribute relevant ideas, opinions, or information, using detailed language. Learners must take account of the contributions of others and stay focused on the topic or task.
- Prepare and present a presentation. The presentation must be detailed in content, and must be structured in a clear and relevant way. Learners must answer questions from the audience at some point in the presentation.

## Assessment:

The course has two externally assessed components:

#### Portfolio

Learners have the opportunity to develop their knowledge and understanding of writing for different purposes and audiences. The outcome of this is to produce two pieces of writing: one broadly creative and one broadly discursive.

#### Examination

The exam consists of two papers: *Reading for Analysis and Evaluation* and *Critical Reading*. In the first paper, learners read and answer questions on an unseen text and in the second, learners apply critical reading skills and knowledge and understanding in addressing two tasks which are based on literary texts. One task involves a series of questions on a set Scottish text; the other is a critical essay on any text in a genre different to that of the Scottish text.

#### Progression:

This course or its units may provide progression to other qualifications in English, for example, Higher. Learners could also proceed to further study, employment or training.

## Aim(s) of course

Administration and IT is a growing employment sector. Administration and IT are not only required for a wide range of jobs but also equip you with many core skills which will help you throughout your life.

Administrative and IT skills which will enable you to carry out a range of tasks essential for the smooth running of all types of organisation.

The aim of a course in Administration and IT is to enable learners to:

- Develop an understanding of administrative activities in the workplace
- Develop IT skills and use them to complete administrative tasks

## Learning and Teaching Content

The National 4 and 5 courses contain 3 units Administrative Practices

- the tasks, skills and qualities of administrators
- customer service
- The key personal responsibilities in health and safety and the security of people, property and information
- Event Management

IT Solutions for Administrators

- Word processing
- Spreadsheets
- Databases
- Desk top publishing
- Using the internet and email
- Organising, processing and communicating information

Communication in Administration

- Using electronic methods to communicate information
- use of emerging technologies:
- blogs
- podcasts
- instant messaging
- forums

## Assessment

Units are assessed internally and are practical based task assessing both ICT skills and knowledge of Administrative Practices. At National 4 level, learners must complete an added value unit. Assessment at National 5 is an Administration and IT practical assessment which determines your final course award.

## Homework

Formal written homework is issued regularly and will assess knowledge and skills developed throughout the course.

## **Progression to S5 Senior Phase**

This Course or its components may provide progression to:

Course Level National 4 Administration and IT – Progress to National 5 Administration and IT Course Level National 5 Administration and IT – Progress to Higher Administration and IT

## Aim(s) of course

Business plays an important role in society. Businesses and entrepreneurs create wealth, prosperity, jobs and choices which benefits the country and its citizens. By following this course you will understand the way in which businesses operate in a dynamic and changing world and adopt entrepreneurial attitudes.

This course will develop many skills which prepares pupils for everyday life, the world of work or further study of the many business courses available at further education colleges and universities. This course is also suitable for all learners interested in entering the world of business – whether as a manager, employee or self-employed person.

## The aim of a course in Business Management is to enable learners to develop:

- Knowledge and understanding of the way society relies on business to satisfy our needs
- An understanding of the steps taken by organisation to improve their overall performance
- An insight into how organisations ensure customers' needs are met
- An awareness of how external influences including the economy, impact on organisations.
- A financial awareness through a business context

## Learning and Teaching Content

You will learn about the different factors which contribute to business success and the role of different departments within a business.

The National 4 course contains 2 units

- Business in Action
- Influences on Business

with an added value unit which is a **Business Based Assignment** which will require learners to choose an element of business which interests them and complete a business report from research and analysis.

The National 5 course contains 3 units

- Understanding Business
- Management of People and Finance
- Management of Marketing and Operations

## Interdisciplinary Learning

Pupils will be able to use their Business Management skills and knowledge across different curriculum areas when exploring a theme or an issue, meeting a challenge or solving a problem.

## Assessment

Each unit is internally assessed. Assessments use a variety of methods: written answers, IT tasks and presentations. The National 5 course has a final written assessment in May under SQA conditions which contributes to 70% of the final grade as well as a Business Report Assessment (30% of the final grade).

## Homework

Formal written homework is issued regularly to consolidate learning and understanding.

## Progression into S5 Senior Phase

- Course Level National 4 Business Progress to National 5 Business Management
- Course Level National 5 Business Management Progress to Higher Business Management
- Higher Business Management Progress to Advanced Higher

The purpose of this course is to develop the learner's knowledge and understanding of our changing world and its human and physical processes. Opportunities for practical activities, including fieldwork, will be encouraged, so that learners can interact with their environment. In the 21<sup>st</sup> century, with growing awareness of the impact of human activity upon the environment and scarce resources, the study of Geography fosters positive life-long attitudes of environmental stewardship, sustainability and global citizenship. The contexts for study are local, national and global. Through the successful completion of this course, learners will develop a range of skills including: using and interpreting a range of geographical information; using a range of maps; and researching skills, including fieldwork.

#### Recommended entry

Pupils must have studied Geography in S3 in order to progress to National 4 in S4.

## Course Content

The course has four mandatory units:

- 1. Physical Environments: formation of 2 different landscape types and features, land use and management, sustainability and weather.
- 2. Human Environments: Urban, Rural and Population changing urban and rural landscapes, population distribution and change.
- 3. Global Issues: 2 selected from 6 options e.g. Environmental Hazards, Health.
- 4. Added Value Unit: Choice of field work investigation based on a physical or human landscape topic.

#### Assessment

All units are internally assessed as there is no formal examination in National 4.

At the end of each unit pupils will undertake a formal assessment. Pupils will also undertake additional assessments throughout each unit which may include format such as poster work.

#### Progression

Pupils will be able to progress to National 5 Geography in fifth year, and possibly Higher Geography in sixth year depending upon success at National 4 and 5.

Pupils will also be able to opt to choose an additional social subject in S5 at National 4 or National 5.

The purpose of this course is to develop the learner's knowledge and understanding of our changing world and its human and physical processes. Opportunities for practical activities, including fieldwork, will be encouraged, so that learners can interact with their environment. In the 21<sup>st</sup> century, with growing awareness of the impact of human activity upon the environment and scarce resources, the study of Geography fosters positive life-long attitudes of environmental stewardship, sustainability and global citizenship. The contexts for study are local, national and global. Through the successful completion of this course, learners will develop a range of skills including: using and interpreting a range of geographical information; using a range of maps; and researching skills, including fieldwork.

#### Recommended entry

Pupils must have studied Geography in S3 in order to progress to National 5 in S4. Entry into National 5 will be agreed between the learner and teacher dependant on performance in S3.

#### Course Content

The course has four mandatory units:

- 1. Physical Environments: formation of 2 different landscape types and features, land use and management, sustainability and weather.
- 2. Human Environments: Urban, Rural and Population changing urban and rural landscapes, population distribution and change.
- 3. Global Issues: 2 selected from 6 options eg. Climate change, Environmental Hazards, Health.
- 4. Added Value Unit: Choice of field work investigation based on a physical or human landscape topic.

#### Assessment

There are two formal assessments in National 5 Geography:

- 1. External Examination question paper worth 80 marks.
- 2. Assignment completed in class under controlled conditions and marked by the SQA 20 marks.

Learners will be assessed on an on-going basis which will include a formal assessment at the end of each topic as well as a preliminary exam in preparation for the final exam.

## Progression

Dependent upon successful completion of the course, pupil will be able to progress to Higher Geography in S5 or to another Social Subject at National 5 level.

The course contributes to the learner's understanding of the society in which they live and work by helping them to develop a map of the past, an appreciation and understanding of the forces which have shaped the world today. The purpose of History is to open up the world of the past for learners. History provides learners with insights into their own lives and of the society and the wider world in which they live. By examining the past, learners can better understand their own communities, their country and the wider world. Through an understanding of the concept of continuity, they can better appreciate change and its significance, both in their own times and in the past.

#### Recommended entry

Pupils must have studied History in S3 in order to progress to National 4 in S4.

## **Course Content**

The course has four mandatory units:

- 1. Historical Study: Scottish The Era of the Great War, 1910-1928
- 2. Historical Study: British The Atlantic Slave Trade, 1770-1807
- 3. Historical Study: European and World Hitler and Nazi Germany, 1919-1939
- 4. Added Value Unit: written piece of work on The Era of the Great War.

#### Assessment

All units are internally assessed as there is no formal examination in National 4.

At the end of each unit pupils will undertake a formal assessment. Pupils will also undertake additional assessments throughout each unit in various formats including oral presentations and poster work.

## Progression

Pupils will be able to progress to National 5 History in fifth year, and possibly Higher History in sixth year depending upon success at National 4 and 5.

Pupils will also be able to opt to choose an additional social subject in S5 at National 4 or National 5.

The course contributes to the learner's understanding of the society in which they live and work by helping them to develop a map of the past an appreciation and understanding of the forces which have shaped the world today. The purpose of History is to open up the world of the past for learners. History provides learners with insights into their own lives and of the society and the wider world in which they live. By examining the past, learners can better understand their own communities, their country and the wider world. Through an understanding of the concept of continuity, they can better appreciate change and its significance, both in their own times and in the past.

#### Recommended entry

Pupils must have studied History in S3 in order to progress in National 5 in S4. Entry into National 5 will be agreed between the learner and teacher dependant on performance in S3.

#### **Course Content**

The course has four mandatory units:

- 1. Historical Study: Scottish The Era of the Great War, 1910-1928
- 2. Historical Study: British The Atlantic Slave Trade, 1770-1807
- 3. Historical Study: European and World Hitler and Nazi Germany, 1919-1939
- 4. Assignment: written piece of work on any Historical Study.

#### Assessment

There are two formal assessments in National 5:

1. External Examination – question paper worth 80 marks.

2. Assignment – completed in class under controlled conditions and marked by the SQA – 20 marks.

Learners will be assessed on an on-going basis which will include a formal assessment at the end of each topic as well as a preliminary exam in preparation for the final exam.

## Progression

Dependent upon successful completion of the course, pupil will be able to progress to Higher History in S5 or to another Social Subject at National 5 level.

The purpose of this CfE course is to encourage learners to develop informed attitudes, an open mind and respect for the values, beliefs and cultures of others; openness to new thinking and ideas and a sense of responsibility and global citizenship. The course develops a greater understanding of the contemporary world and learners' place in it. The purpose of Modern Studies is to develop the learner's knowledge and understanding of contemporary political and social issues in local, Scottish, United Kingdom and international contexts. Modern Studies makes a distinctive contribution to the curriculum by drawing on the social sciences of politics, sociology and economics.

## **Recommended entry**

Pupils must have studied Modern Studies in S3 in order to progress to National 4 in S4.

## Course Content

The course has four mandatory units:

- 1. Democracy in Scotland and the United Kingdom.
- 2. Social Issues in the United Kingdom Crime and the Law.
- 3. International Issues World Powers: USA.
- 4. Added Value Unit Choice of investigation on a chosen Modern Studies Topic.

#### Assessment

All units are internally assessed as there is no formal examination in National 4.

At the end of each unit pupils will undertake a formal assessment. Pupils will also undertake additional assessments throughout each unit in various formats including oral presentations, practice describe & explain questions, as well as enquiry skills and poster work.

## Progression

Pupils will be able to progress to National 5 Modern Studies in S5, and possibly Higher Modern Studies in S6 depending upon success at National 4 and 5.

Pupils will also be able to opt to choose an additional Humanities subject in S5 at National 4 or National 5.

The purpose of this course is to encourage learners to develop informed attitudes, an open mind and respect for the values, beliefs and cultures of others; openness to new thinking and ideas and a sense of responsibility and global citizenship. The course develops in learners a greater understanding of the contemporary world and their place in it. The purpose of Modern Studies is to develop the learner's knowledge and understanding of contemporary political and social issues in local, Scottish, United Kingdom and international contexts. Modern Studies makes a distinctive contribution to the curriculum by drawing on the social sciences of politics, sociology and economics.

#### Recommended entry

Pupils must have studied Modern Studies in S3 in order to progress to National 5 in S4. Entry into National 5 will be agreed between the learner and teacher dependant on performance in S3.

#### Course Content

The course has four mandatory units:

- 1. Democracy in Scotland and the United Kingdom
- 2. Social Issues in the United Kingdom Crime and the Law.
- 3. International Issues World Powers: USA.
- 4. The assignment.

#### Assessment

There are two formal assessments in National 5 Modern Studies:

- 1. External Examination question paper worth 80 marks, to be completed in 2 hours and 20 minutes
- 2. Assignment completed in class under controlled conditions and marked by the SQA 20 marks.

Learners will be assessed on an on-going basis which will include a formal assessment at the end of each topic as well as a preliminary exam in preparation for the final exam.

## Progression

Dependent upon successful completion of the course, pupil will be able to progress to Higher Modern Studies in S5 or to another Humanities Subject at National 5 level.

The Course will help learners to become numerate, to make sense of the world around them and to function responsibly and independently in everyday life. It will motivate and challenge learners by enabling them to select and apply mathematical and numerical skills in a variety of mathematical and real-life situations.

The Course includes the study of number, money, shape, space and measurement in everyday life, allowing individuals to interpret data and tackle real-life situations. It is designed to develop the learners' skills relevant to learning, life and work in an engaging and enjoyable way. The Course develops confidence in the subject and a positive attitude towards further study in mathematics and other subject areas which use mathematics.

The aims of this Course are to enable learners to:

- interpret real-life situations involving mathematics
- investigate the use of basic mathematical ideas and number processes in real-life contexts
- select and apply basic mathematical and numeracy skills in real-life contexts
- interpret and use the results of calculations, measurements and data to make informed decisions
- communicate mathematical information in an appropriate way.

## **Recommended entry**

Entry to this Course is at the discretion of the centre. However, relevant experiences and outcomes covered in S1, S2 and S3 will provide an appropriate basis for doing this Course.

## Course Content

Application of Mathematics: Manage Money and Data (National 3/4) The general aim of this Unit is to enable learners to apply their skills, knowledge and understanding of mathematics and numeracy to manage money and data in real-life contexts. Learners will build on their mathematical and numerical skills to determine factors affecting income and expenditure, budgeting and saving. Learners will also organise, present and interpret data based on real-life contexts.

Application of Mathematics: Shape, Space and Measures (National 3/4) The general aims of this Unit is to enable learners to apply their skills, knowledge and understanding of shape, space and measures in real-life contexts. Learners will build on their mathematical and numerical skills by using measures and elementary geometry to tackle real-life situations.

**Numeracy (National 3/4)** The general aim of this Unit is to develop learners' numerical and information handling skills to solve simple, real-life problems involving number, money, time and measurement. As learners tackle real-life problems, they will use their knowledge of number processes, information handling and probability to make informed decisions.

## Assessment

To achieve the Application of Mathematics Course, learners must pass all of the required Units, including the Added Value Unit for National 4 Applications of Maths. The required Units are shown in the Course outline section.

National 3/4 Courses are not graded.

## Progression

On successful completion of this Course, the learner could progress to:

♦ National 4/5 Application of Mathematics

Learners will acquire and apply operational skills necessary for developing mathematical ideas through symbolic representation and diagrams. They will select and apply mathematical techniques and will develop their understanding of the interdependencies within mathematics. Learners will develop mathematical reasoning skills and will gain experience in making informed decisions.

## Recommended entry

Entry to this Course is at the discretion of the centre. However, learners would normally be expected to have attained the skills and knowledge required by the following or by equivalent qualifications and/or experience:

- ♦ completion of 3<sup>rd</sup> Level Pathway
- undertaking of some National 4 coursework in S3

## **Course Content**

This Course will develop skills for further learning, as well as skills for life and work.

**Mathematics: Expressions and Formulae (National 4)** The general aim of this Unit is to develop skills linked to straightforward mathematical expressions and formulae. These include the manipulation of abstract terms, the simplification of expressions and the evaluation of formulae. The Outcomes cover aspects of algebra, geometry, statistics and reasoning.

**Mathematics: Relationships (National 4)** The general aim of this Unit is to develop skills linked to straightforward mathematical relationships. These include solving equations, understanding graphs and working with trigonometric ratios. The Outcomes cover aspects of algebra, geometry, trigonometry, statistics and reasoning.

**Numeracy (National 4)** The general aim of this Unit is to develop learners' numerical and information handling skills to solve straightforward, real-life problems involving number, money, time and measurement. As learners tackle real-life problems, they will decide what numeracy skills to use and how to apply these 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.

Mathematics Test (National 4) This is the Added Value Unit of the National 4 Mathematics Course. The general aim of this Unit is to enable the learner to provide evidence of added value for the National 4 Mathematics Course through the successful completion of a test which will allow the learner to demonstrate breadth and challenge. Breadth and challenge will be demonstrated through the use and integration of mathematical ideas and strategies linked to straightforward mathematical expressions, formulae and relationships. This will include the application of algebraic, geometric, trigonometric, statistical and reasoning skills. Numerical skills underpin all aspects of the Course, and the ability to use these without the aid of a calculator will also be assessed. Assessment

# To achieve the National 4 Mathematics Course, learners must pass all of the required Units, including the Added Value Unit. The required Units are shown in the Course outline section.

National 4 Courses are not graded.

## Progression

On successful completion of this Course, the learner could progress to:

- National 5 Mathematics
- National 5 Application of Mathematics

# **APPLICATIONS OF MATHEMATICS NATIONAL 5**

#### Aims of the course

The Course will help learners to become numerate, to make sense of the world around them and to function responsibly and independently in everyday life. It will motivate and challenge learners by enabling them to select and apply mathematical and numerical skills in a variety of mathematical and real-life situations.

The Course includes the study of number, money, shape, space and measurement in everyday life, allowing individuals to interpret data and tackle real-life situations. It is designed to develop the learners' skills relevant to learning, life and work in an engaging and enjoyable way. The Course develops confidence in the subject and a positive attitude towards further study in mathematics and other subject areas which use mathematics.

The aims of this Course are to enable learners to:

- interpret real-life situations involving mathematics
- investigate the use of basic mathematical ideas and number processes in real-life contexts
- select and apply basic mathematical and numeracy skills in real-life contexts
- interpret and use the results of calculations, measurements and data to make informed decisions
- communicate mathematical information in an appropriate way.

## **Recommended entry**

Entry to this Course is at the discretion of the centre. However, learners would normally be expected to have attained the skills and knowledge required by the following or by equivalent qualifications and/or experience:

- completion of 3<sup>rd</sup> level pathway or exposure to 4<sup>th</sup> level pathway.
- Undertaking of some National 5 Applications of Maths coursework in S3.

## **Course Content**

**Application of Mathematics: Finance and Statistics (National 5)** The general aim of this Unit is to enable learners to apply their skills, knowledge and understanding of mathematics and numeracy to manage money and data in real-life contexts. Learners will build on their mathematical and numerical skills to determine factors affecting income and expenditure, budgeting and saving. Learners will also organise, present and interpret data based on real-life contexts.

Application of Mathematics: Geometry and Measure (National 5) The general aims of this Unit is to enable learners to apply their skills, knowledge and understanding of shapes and measurements in real-life contexts. Learners will build on their mathematical and numerical skills by using measures and elementary geometry to tackle real-life situations.

**Numeracy (National 5)** The general aim of this Unit is to develop learners' numerical and information handling skills to solve simple, real-life problems involving number, money, time and measurement. As learners tackle real-life problems, they will use their knowledge of number processes, information handling and probability to make informed decisions.

# Assessment

To gain the award of the Course, the learner must pass all of the Units as well as the Course assessment. Course assessment will provide the basis for grading attainment in the Course award.

Learners gain a graded (A-D) course award via an external assessment.

The course enables learners to select and apply mathematical techniques in a variety of mathematical and real-life situations. Learners interpret, communicate and manage information in mathematical form.

#### Recommended entry

Entry to this Course is at the discretion of the centre. However, learners would normally be expected to have attained the skills, knowledge and understanding required by the following or equivalent qualifications and/or experience:

- ♦ completion of 3<sup>rd</sup>/4<sup>th</sup> Level Pathway
- completion of some National 5 Applications of maths coursework in S3

# **Course Content**

Learners will acquire and apply operational skills necessary for developing mathematical ideas through symbolic representation and diagrams. They will select and apply mathematical techniques and will develop their understanding of the interdependencies within mathematics. Learners will develop mathematical reasoning skills and will gain experience in making informed decisions.

**Mathematics: Expressions and Formulae (National 5)** The general aim of this Unit is to develop skills linked to mathematical expressions and formulae. These include the manipulation of abstract terms, the simplification of expressions and the evaluation of formulae. The Outcomes cover aspects of number, algebra, geometry and reasoning.

**Mathematics: Relationships (National 5)** The general aim of this Unit is to develop skills linked to mathematical relationships. These include solving and manipulating equations, working with graphs and carrying out calculations on the lengths and angles of shapes. The Outcomes cover aspects of algebra, geometry, trigonometry and reasoning.

**Mathematics: Applications (National 5)** The general aim of this Unit is to develop skills linked to applications of mathematics. These include using trigonometry, geometry, number processes and statistics within real-life contexts. The Outcomes cover aspects of these skills and also skills in reasoning.

# Assessment

To gain the award of the Course, the learner must pass all of the Units as well as the Course assessment. Course assessment will provide the basis for grading attainment in the Course award.

Learners gain a graded (A-D) course award via an external assessment.

#### Progression

On successful completion of this Course, the learner could progress to:

Higher Mathematics

The aim of this course is to further develop the skills of reading, listening, talking and writing in order to understand and use the foreign language in a variety of contexts. Learners will have the opportunity to extend their skills in communication, independent learning, critical literacy, personal, interpersonal and team working and creative thinking.

The Course contributes towards the development of literacy skills by providing learners with opportunities to read, listen, talk and write in a modern language, and to reflect on their use of English.

#### Recommended entry

Entry to this course would be the completion of introductory language skills as taught in S1–S3.

#### **Course Content**

There are 3 units in this course :

#### **Understanding Language (National 4)**

The purpose of this Unit is to provide learners with the opportunity to develop reading and listening skills in the modern language and to develop their knowledge of straightforward language in the contexts of society, learning, employability, and culture.

#### Using Language (National 4)

The purpose of this Unit is to provide learners with the opportunity to develop talking and writing skills in the modern language, and to develop their knowledge of straightforward language in the contexts of society, learning, employability, and culture.

#### Added Value Unit: Assignment (National 4)

The purpose is to provide learners with the opportunity to apply their language skills to investigate a chosen topic in a familiar context in the modern language.

#### Assessment

All Units are internally assessed on a pass/fail basis.

#### Modern Languages: Understanding Language (National 4)

Learners will be required to provide evidence of their **reading** and **listening** skills in the modern language, using straightforward language, in two or more of the following contexts: society, learning, employability, or culture.

#### Modern Languages: Using Language (National 4)

Learners will be required to provide evidence of their **talking** and **writing** skills in the modern language, using straightforward language, in two or more of the following contexts: society, learning, employability, or culture.

#### Added Value Unit

Learners will be required to provide evidence of their ability to apply their reading, listening, talking and writing skills in the modern language on a chosen topic.

#### Progression

This Course or its Units may provide progression to Nat 5 in the foreign language or to the study of other languages.

The aim of this course is to further develop the skills of reading, listening, talking and writing in order to understand and use the foreign language in a variety of contexts. Learners will have the opportunity to extend their skills in communication, independent learning, critical literacy, personal, interpersonal and team working and creative thinking.

# The Course contributes towards the development of literacy skills by providing learners with opportunities to read, listen, talk and write in a modern language, and to reflect on their use of English.

#### **Recommended entry**

Entry to this course would be the successful completion of introductory language skills as taught in S1 – S3.

#### **Course Content**

There are 3 units in this course :

#### **Understanding Language (National 5)**

The purpose of this Unit is to provide learners with the opportunity to develop reading and listening skills in the modern language and to understand detailed written and spoken language in the contexts of society, learning, employability, and culture.

#### Using Language (National 5)

The purpose of this Unit is to provide learners with the opportunity to develop talking and writing skills in the modern language, and to use detailed written and spoken language in the contexts of society, learning, employability, and culture.

#### **Course assessment (National 5)**

An external exam will take place after the successful completion of the Understanding Language and Using Language units.

#### Assessment

Two units are internally assessed on a pass/fail basis. These are :

#### **Understanding Language (National 5)**

Learners will be required to provide evidence of their **reading** and **listening** skills in the modern language, using detailed language, in two or more of the following contexts: society, learning, employability, or culture.

#### Using Language (National 5)

Learners will be required to provide evidence of their **talking** and **writing** skills, including a folio piece on a topic of their choice in the modern language, using detailed language, in two or more of the following contexts: society, learning, employability, or culture.

#### **Course Assessment (National 5)**

The external exam has 3 components : Talking, Reading and Writing, Listening. Talking will be carried out internally with the class teacher and will be in the form of a short presentation followed by a short conversation.

The assessment will be graded A - D. The pupil's overall grade will be based on their performance across the three sections of the course assessment.

#### Progression

This Course may provide progression to Higher in the foreign language or to the study of other languages.

## Why study Biology National 4?

Biology is the study of all living things. Estimates of the total number of species on Earth range from five to 30 million, and less than two million species have been formally identified. You will learn about organisms that live on land and sea, and the ecological complexes of which they are part. You will also find out how Biology is helping to find solutions to world problems.

There are many career opportunities connected with biology, including health care sector, veterinary work, food science, sport science, pharmacology and beauty therapy.

#### **Course Details**

Biology is a practical, hands-on subject that develops your skills of scientific enquiry, and helps you to solve problems and make decisions. You will learn about plants, animals and people. You will find out how population growth is affecting the variety of life on earth (known as biodiversity). You will develop your skills in carrying out biological experiments in laboratories.

## Recommended Entry

Learners would normally be expected to have attained the skills, knowledge and understanding required by the following or by equivalent qualifications and/or experience:

National 3 Biology or related Component Units.

The course has three compulsory units plus an added value unit that assesses your practical skills.

Biology: Cell Biology (6 SCQF credit points)

Cell division, cell membranes, DNA, genes, enzymes, chromosomes, enzymes, microorganisms, and photosynthesis.

Biology: Multicellular Organisms (6 SCQF credit points)

Sexual and asexual reproduction, growing plants, commercial use of plants, genetic information, stable body conditions.

Biology: Life on Earth (6 SCQF credit points)

Animal and plant species, population growth and biodiversity, nitrogen cycle, fertilisers, adaption and survival.

Added Value Unit : Biology Assignment (6 SCQF credit points)

Carry out an investigation topic on a biological topic, drawing on the skills you have learned from other units and present your findings in a written summary.

#### Assessment

Your work will be assessed by your teacher on an ongoing basis throughout the course Items of work might include:

practical experiments research assignments and reports projects classed based exams

#### **Progression Routes**

If you complete the course successfully, it may lead to National 5 Biology, National 5 Environmental or further study, training or employment with Animals, Land and Environment, Health and Medicine, Science and Mathematics.

## Why study Biology National 5?

Biology – the study of living organisms – affects us all. You will find out how Biology is helping to find solutions to world problems. Advances in technology mean biologists are exploring the use of genetic modification to produce new plants and drugs, solving crimes by understanding crime scene material, and developing new sources of food for our growing population.

There are many career opportunities connected with biology, including health care sector, veterinary work, physiotherapy, food science, sport science, pharmacology and beauty therapy.

## Course Details

Biology is a hands-on subject that develops your analytical thinking, and helps you to solve problems through experiments and research. You will learn about living systems and their interdependence. You will find out about evolution of species, and how humans impact on the environment. You will develop your practical and investigation skills by carrying out biological experiments in laboratories.

#### Recommended Entry

Learners would normally be expected to have attained the skills, knowledge and understanding required by the following or by equivalent qualifications and/or experience:

National 4 Biology or related Component Units.

In terms of prior learning and experience, relevant level 3 and level 4 experiences and outcomes may also provide an appropriate basis for studying this course.

The course has three compulsory units. The units are similar to those for National 4 but you will be expected to produce a higher standard of work.

#### Biology: Cell Biology (6 SCQF credit points)

Cell structure, cell membranes, DNA, proteins, enzymes, photosynthesis, respiration, genetic engineering.

<u>Biology: Multicellular Organisms (6 SCQF credit points)</u> Cells, cell tissue, organs, stem cells, meristems, control, communication, reproduction, variation, inheritance, animal transport, lifestyle choices, exchange systems.

Biology: Life on Earth (6 SCQF credit points)

Biodiversity, distribution of life, energy and ecosystems, sampling techniques, measurement of abiotic and biotic factors

# Assessment

Your work will be assessed on an ongoing basis throughout the course.

Items of work might include:

practical experiments research assignments and reports projects guestion papers/tests

The course assessment for this course consists of two components:

Question paper plus Assignment (20marks)

For the assignment component, you will be asked to choose a topical issue in biology to investigate and produce a written summary of your research and development ideas. The assignment component will be set and externally marked by the Scottish Qualifications Authority (SQA).

The question paper will be set and marked externally by the SQA. The course assessment is graded A - D.

# **Progression Routes**

If you complete the course successfully, it may lead to Higher Biology, Higher Human Biology or further study, training or employment with Animals, Land and Environment, Health and Medicine, Science and Mathematics

## Why Study Chemistry National 4?

Chemistry is vital to everyday life. No matter what you look at, a chemist has probably been involved in manufacturing or developing it. Chemistry is a very practical subject and you will have the opportunity to carry out experiments and practical investigations. You will learn to think in a scientific and analytical way.

Chemistry is an important subject in many careers, such as medicine, pharmaceuticals, the food industry and the manufacture of plastics.

## **Course Details**

You will learn about how we use the Earth's resources, the chemistry of everyday products and environmental analysis. You will find out how chemistry affects our environment and our everyday lives. This will help you to make your own decisions on contemporary issues where scientific knowledge is constantly developing.

## Recommended Entry

Learners would normally be expected to have attained the skills, knowledge and understanding required by the following or by equivalent qualifications and/or experience:

National 3 Chemistry or related Component Units.

The course has three compulsory units :

Chemistry: Chemical Changes and Structure (6 SCQF credit points)

Chemical reactions, rates of reaction, energy changes of chemical reaction, reactions of acids and bases, atomic structure, bonding, properties of materials.

Chemistry: Natures Chemistry (6 SCQF credit points)

Research the Earths rich supply of natural resources, investigate fossil fuels, plants as fuels, carbohydrates, everyday products.

Chemistry: Chemistry in Society (6 SCQF credit points)

Chemical reactions, properties and applications of metals and alloys, plastics, fertilisers, background radiation, use chemical analysis for monitoring the environment.

Added Value Unit: Chemistry Assignment (6SCQF credit points)

Carry out an investigation on a chemistry topic, drawing on the skills you have learned from other units and present your findings in a written summary.

#### Assessment

Your work will be assessed by your teacher on an ongoing basis throughout the course Items of work might include:

practical experiments research assignments and reports projects classed based exams

## Progression Route

If you complete the course successfully it may lead to National 5 Chemistry or National 5 Environmental Science or further study, training or employment in Engineering, Health and Medicine, Manufacturing, Science and Mathematics.

## Why study Chemistry National 5?

Chemistry is vital to everyday life and allows us to understand and shape the world in which we live. You will learn about the applications of chemistry in everyday contexts such as medicine, energy and industry, as well as its impact on the environment and sustainability. You will learn how to think creatively and independently, and analyse and solve problems.

#### Course Details

You will learn about how we use the Earth's resources, the chemistry of everyday products and environmental analysis. You will find out how chemistry affects our environment and our everyday lives. This will help you to make your own decisions on contemporary issues where scientific knowledge is constantly developing.

## **Recommended Entry**

Learners would normally be expected to have attained the skills, knowledge and understanding required by the following or by equivalent qualifications and/or experience:

National 4 Chemistry or related Component Units.

In terms of prior learning and experience, relevant level 3 and level 4 experiences and outcomes may also provide an appropriate basis for studying this course.

The course has three compulsory units. The units are similar to those for National 4 but you will be expected to produce a higher standard of work.

Chemistry: Chemical Changes and Structure (6 SCQF credit points)

Chemical reactions, rates of reaction, energy changes of chemical reaction, reactions of acids and bases, atomic structure, bonding, properties of materials.

Chemistry: Natures Chemistry (6 SCQF credit points)

Earths natural resources, fossil fuels, homologous series, hydrocarbons, alcohols, carboxyllic acids and energy from fuels.

Chemistry: Chemistry in Society (6 SCQF credit points)

Chemical reactions, properties and applications of metals and alloys, plastics, fertilisers, background radiation, chemical analysis.

#### Assessment

Your work will be assessed on an ongoing basis throughout the course.

Items of work might include:

practical experiments research assignments and reports projects question papers/tests

The course assessment for this course consists of two components:

Question paper plus Assignment (20marks)

For the assignment component, you will be asked to choose a topical issue in chemistry to investigate and produce a written summary of your research and development ideas. The assignment component will be set and externally marked by the Scottish Qualifications Authority (SQA).

The question paper will be set and marked externally by the SQA. The course assessment is graded A - D.

# **Progression Route**

Students who pass National 5 Chemistry course can progress on to Higher Chemistry or other qualifications in chemistry or related areas.

# Why Study Physics National 4?

Physics is the most basic and fundamental science. You will learn how Physics is applied in society and the environment. From curing disease to developing sustainable energy solutions, Physics leads to discoveries that change our lives.

Physicists are problem solvers. The ability to think 'outside the box' makes people who have studied physics desirable in many career areas including all branches of engineering, telecommunications, clinical science, medicine, computer science, astronomy and renewable energy.

#### **Course Details**

From the sources of the energy we use to the exploration of space, advances in Physics mean that our view of what is possible is continually progressing. You will have the opportunity to design and carry out experiments and investigations to help you understand the role of Physics in scientific issues and in our lives.

#### Recommended Entry

Learners would normally be expected to have attained the skills, knowledge and understanding required by the following or by equivalent qualifications and/or experience:

National 3 Physics or related Component Units.

The course has three compulsory units, plus an added value unit that assesses your practical skills. Good quality summary notes and learning outcomes accompany each unit.

#### Physics: Waves and Radiation (6 SCQF credit points)

Explore the applications of waves and radiation, wave characteristics, sound, electromagnetic spectrum and nuclear radiation. Areas studied include :

<ul> <li>Wave Energy</li> <li>Longitudinal Waves</li> <li>Transverse Waves</li> <li>Ultrasound and Sonar</li> <li>Refraction Of Light</li> </ul>	<ul> <li>Electromagnetic Spectrum</li> <li>Ray Diagrams</li> <li>Medical Radiation Applications</li> <li>Radiation Hazards</li> <li>Electricity and Nuclear Power</li> </ul>	E = mc <sup>2</sup>	
<b>Physics: Electricity and Energy (6 SCQF credit points)</b> Applications of electricity and energy, generation of electricity, electrical power, electromagnetism, practical electrical and electronic circuits, gas laws and kinetic model. Areas studied include :			
<ul> <li>Conductors</li> <li>Insulators</li> <li>Electric Current</li> <li>Voltage</li> <li>Gas Laws</li> </ul>	<ul> <li>Series Circuits</li> <li>Electrical Power</li> <li>Power and Household Appliances</li> <li>Electronic Systems</li> <li>Kinetic Theory</li> </ul>		
<b>Physics: Dynamics and Space (6 SCQF credit points)</b> Explore the applications of dynamics and space, speed and acceleration, relationship between forces, motion and energy, satellites and cosmology. Areas studied include :			
<ul> <li>Average Speed</li> <li>Instantaneous Speed</li> <li>Speed Time Graphs</li> <li>Forces</li> <li>Weight and Mass</li> </ul>	<ul> <li>Space Satellites</li> <li>Global Satellite Communications</li> <li>Planets, Galaxies, Solar System</li> <li>The Light Year</li> <li>Space Crafts and Exploration</li> </ul>		

# Added Value Unit : Physics Assignment (6 SCQF credit points)

Carry out an investigation on a physics topic, drawing on the skills you have learned from other units and present your findings in a written summary.

#### Assessment

Your work will be assessed by your teacher on an ongoing basis throughout the course Items of work might include:

practical experiments research assignments and reports projects classed based exams

# Progression

If you complete the course successfully, it may lead to National 5 Physics or further study, training or employment in Engineering, Health and Medicine, Science and Mathematics.

# Why study Physics National 5?

Physics is the study of the universe, from the largest galaxies to the smallest subatomic particles. Physicists play a key role in meeting society's needs in areas such as medicine, energy, industry, material development, the environment and sustainability.

### **Course Details**

Studying Physics allows you to gain an insight into the underlying nature of our world and its place in the universe. It will help you to develop your logical and critical thinking, solve problems and make decisions.

#### **Recommended Entry**

Learners would normally be expected to have attained the skills, knowledge and understanding required by the following or by equivalent qualifications and/or experience:

National 4 Physics or related Component Units.

In terms of prior learning and experience, relevant level 3 and level 4 experiences and outcomes may also provide an appropriate basis for studying this course.

The course has three compulsory units. The units are similar to those for National 4 but you will be expected to produce a higher standard of work. Good quality summary notes and learning outcomes accompany each unit.

#### Physics: Electricity and Energy (6 SCQF credit points)

Applications of electricity and energy. Energy transfer, heat and the gas laws. Areas studied include :

<ul> <li>Conductors</li> <li>Series Circuits</li> <li>Insulators</li> <li>Electrical Power</li> <li>Electric Current</li> <li>Power and Household Appliances</li> <li>Kinetic Theory</li> <li>Kinetic Theory</li> </ul> Physics: Waves and Radiation (6 SCQF credit points) Applications of waves and radiation. Areas studied include : <ul> <li>Half Life</li> <li>Radiation Types</li> <li>Nuclear Dosimetry</li> <li>Nuclear Fission and Fusion</li> </ul> Physics: Dynamics and Space (6 SCQF credit points) Nuclear Fission and Fusion Physics: Dynamics and Space (6 SCQF credit points) Applications of kinematics, dynamics, forces and space. Areas studied include : <ul> <li>Origin Of The Universe</li> <li>Technology and Space</li> <li>Exploration</li> <li>Velocity Time Graphs</li> </ul>	Aleas studied include .		
Applications of waves and radiation.         Areas studied include :         • Diffraction         • Medical Radiation Applications         • Refraction         • Critical Angle         • Background Radiation         • Nuclear Dosimetry         • Nuclear Dosimetry         • Nuclear Dosimetry         • Nuclear Fission and Fusion             Physics: Dynamics and Space (6 SCQF credit points)         Applications of kinematics, dynamics, forces and space.         Areas studied include :         • Origin Of The Universe         • Rocket Flight         • Vector Diagrams         • Technology and Space         Exploration         • Velocity Time Graphs	<ul> <li>Series Circuits</li> <li>Insulators</li> <li>Electrical Power</li> <li>Electric Current</li> <li>Power and Household</li> </ul>	<ul> <li>♦ Electronic Systems and Components</li> <li>♦ Gas Laws</li> </ul>	Cassionic Hip Alt Composition
<ul> <li>Medical Radiation Applications</li> <li>Refraction</li> <li>Critical Angle</li> <li>Background Radiation</li> <li>Radiation Types</li> <li>Nuclear Dosimetry</li> <li>EM Spectrum Waves</li> <li>Nuclear Fission and Fusion</li> </ul> Physics: Dynamics and Space (6 SCQF credit points) Applications of kinematics, dynamics, forces and space. Areas studied include : <ul> <li>Origin Of The Universe</li> <li>Technology and Space Exploration</li> <li>Velocity Time Graphs</li> <li>Origin Space Crafts and Exploration</li> </ul>	Applications of waves and ra		
<ul> <li>Applications of kinematics, dynamics, forces and space.</li> <li>Areas studied include :</li> <li>Scalars and Vectors</li> <li>Rocket Flight</li> <li>Vector Diagrams</li> <li>Technology and Space</li> <li>Exploration</li> <li>Velocity Time Graphs</li> <li>A Origin Of The Universe</li> <li>Terminal Velocity</li> <li>Projectile Motion</li> <li>Weight and Mass</li> <li>Space Crafts and Exploration</li> </ul>	<ul> <li>Medical Radiation Applicat</li> <li>Refraction</li> <li>Critical Angle</li> </ul>	ons ◆ Radiation Types ◆ Nuclear Dosimetry ◆ EM Spectrum Waves	n
<ul> <li>Rocket Flight</li> <li>Vector Diagrams</li> <li>Technology and Space Exploration</li> <li>Velocity Time Graphs</li> <li>Terminal Velocity</li> <li>Projectile Motion</li> <li>Weight and Mass</li> <li>Space Crafts and Exploration</li> </ul>	Applications of kinematics, d	ace (6 SCQF credit points) namics, forces and space.	
	<ul> <li>Rocket Flight</li> <li>Vector Diagrams</li> <li>Technology and Space</li> <li>Exploration</li> </ul>	<ul> <li>Terminal Velocity</li> <li>Projectile Motion</li> <li>Weight and Mass</li> <li>Space Crafts and Exploration</li> </ul>	

#### Assessment

Your work will be assessed on an ongoing basis throughout the course.

Items of work might include:

practical experiments research assignments and reports projects question papers/tests

The course assessment for this course consists of two components:

Question paper plus Assignment (20marks)

For the assignment component, you will be asked to choose a topical issue in physics to investigate and produce a written summary of your research and development ideas. The assignment component will be set and externally marked by the Scottish Qualifications Authority (SQA).

The question paper will be set and marked externally by the SQA. The course assessment is graded A - D.

# **Progression Routes**

If you complete the course successfully, it may lead to Higher Physics or further study, training or employment in Engineering, Health and Medicine, Science and Mathematics.

#### Aim(s) of course

The aim of this course is to develop confident and creative learners with an interest and passion for Computing Science through a rich and engaging curriculum. Pupils are encouraged to research, investigate and develop key skills and learning as they go. We strive to ensure that our young people have the computing and technological skills required in order to be best prepared for the pace and challenges of our ever changing world.

One of the fastest growing areas of employment in recent years relates to computer science. The government and business have voiced concerns over the lack of Computer Science skills in our young people. Pupils need to acquire both skills and understanding when using computers not merely be end users.

## Learning and Teaching Content

Computing Science has an effect on all aspects of our lives. It is both a science and a technology, and has a wide-ranging impact on society. The course is designed to develop Computing Science skills such as programming, web development and database.

The National 4 and 5 courses contain 2 units:

- Software Design and Development
- Information System Design and Development

with an added value unit at National 4

Computing Science Assignment

The S4 Computing Science course will allow pupils to study Databases, Programming in Python, HTML, CSS, JavaScript and Computer Systems,.

Learners will achieve programming skills by designing and developing code by creating software and websites. They will develop their digital skills, using databases to sort and search for information, and learn more about physical computer systems.

Learners will gain an awareness of the importance that computing professionals play in our society today and for the future, in fields which include science, education, business and industry.

#### Assessment

All learners will be internally assessed using unit assessments, National 4 learners will also complete an Added Value unit. At National 5 level, learners will also complete a practical Assignment and a written exam in May which will contribute to their final grade at National 5 Level.

## Homework

Homework is issued regularly and will include individual research, writing reports, traditional questions, past exam papers and reviewing class notes.

#### Progression into S5 Senior Phase

This Course or its components may provide progression to: Course Level National 4 Computing Science – Progress to PC Passport Course Level National 5 Computing Science – Progress to Higher Computing Science Other SQA Qualifications in Computing Science or related areas Further study, employment or training

# Aims of course

The course develops learners' interest and enthusiasm for environmental science in a range of contexts, as well as their investigative and experimental skills. Environmental science takes a problem-solving approach to attempt to develop solutions that prevent or reverse environmental deterioration and aim for sustainable practices.

# Inquiry and Investigative Skills Developed During S4 Environmental Science

- develop skills for learning, life and work.
- develop skills of scientific inquiry and investigation using practical techniques.
- develop skills in the accurate use of scientific language, formulae and equations.
- develop skills in scientific literacy and numeracy.
- apply safety measures and take necessary actions to control risk and hazards.
- express opinions and make decisions on environmental and economic issues.
- develop an understanding of environmental science health and wellbeing issues.

## Knowledge and Understanding Developed During S4 Environmental Science

- develop curiosity and understanding of Environmental Science
- demonstrate a secure knowledge and understanding of Environmental Science.
- recognise the impact Environmental Science makes on life, the environment and society.
- establish the foundation for progression with learning in environmental science to National Awards.

# Learning and Teaching Content

The Course covers areas of environmental science ranging from how living things adapt to how humans impact the environment up to cycles and balances of gases. The course content builds on work taught during S3 Environmental Science.

Several areas of Environmental Science will be covered in fourth year and pupils will develop skills of scientific inquiry, investigation, and analytical thinking, along with knowledge and understanding in the context of the environmental science. The Environmental Science course will be delivered by Science and Geography teachers.

The key areas covered in **Sustainability** are: the sustainability of key natural resources and possible implications for human activity; the interaction between humans and the environment and the impact of human activity on

an area; the role of agriculture in the production of food and raw material and its environmental impacts and sustainability; society's energy needs and the impact of developments in transport infrastructure in a selected area; and development of sustainable systems.

#### Added Value Unit: Environmental Science Assignment (National 4)

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.

#### Interdisciplinary Learning

The S4 environmental science curriculum includes opportunity for scientific learning so that young people can make connections between different aspects of study. Experiences and outcomes from within environmental science and across science, geography, numeracy,

literacy health and wellbeing provides our learners with challenging and enjoyable learning experiences that develop different perspectives and deepens understanding to help promote the importance of environmental science in our society.

# <u>Assessment</u>

Will be internally assessed within the school.

Learners will be expected to:

- Pass end of unit test.
- Successfully complete Inquiry and Investigative tasks including completing the added value unit.
- Use self-evaluation to rate and assess their progress in active learning, homework and unit assessments.

# <u>Homework</u>

Learners are encouraged to extend the work in class to home and develop their skills by

- Completing formal homework exercises.
- Completing experimental write-ups and research items at home.
- Reviewing class notes to highlight and learn key areas for study.

Encourage your child to practice problem solving skills needed for environmental science such as calculations, drawing of graphs or completion of experimental write-ups.

## **Progression**

This course or its units may provide progression to:

- National 5 Environmental Science.
- National 5 Course in another science subject.
- National 4 Course in another science subject.

Pupils should continue to reflect on potential future career areas and courses of study required to meet the needs of their career plan and lifelong learning.

## Aims of course

The NPA in Applied Sciences at SCQF level 5 will provide you with knowledge and understanding of biology, chemistry and physics as well as practical laboratory skills in each area.

You will use a variety of scientific techniques incorporating a range of equipment which will aid and enhance your learning experience and development. In addition, you will develop effective preparation skills and an awareness of health and safety required to carry out safe scientific work.

It is anticipated that this group award can also open up opportunities for employment at trainee or apprentice level with science, technology, engineering and mathematics (STEM) employers.

The general aims of the NPA in Applied Sciences at SCQF level 5 group award are to:

- Provide an entry level point for learners who wish to pursue a career in STEM related areas. These may be secondary school pupils for whom the existing national qualifications do not meet their needs or college applicants who lack formal STEM qualifications.
- Provide a route into vocational based STEM qualifications, Skills for Work courses or Foundation Apprenticeships.
- Provide a route into academic qualifications in STEM.
- Provide a group award structure that has sufficient flexibility to allow for various modes of delivery and target groups, with multiple options for entry and certificated exit points.
- Provide structured group awards that recognise existing skills and competences.
- Provide a range of development opportunities in core and essential skills, thus enhancing employability prospects.

Specific aims of the NPA in Applied Sciences at SCQF level 5 group award are to:

- Develop knowledge and understanding of biology, chemistry and physics.
- Prepare learners for progression to extended qualifications at SCQF level 5 and above.
- Develop skills in good laboratory practice.
- Develop an understanding of science health and safety practices.

## Recommended Entry

For the S4 NPA in Applied Sciences at SCQF level 5 it would be expected that learners have successfully completed the S3 NPA in Applied Sciences at SCQF level 5 - this involved the study of Cell Biology and Laboratory Skills.

# Core Skills Developed

Report writing.

Numeracy - Recording measurements, processing information using numerical calculations, reading information from graphs and drawing graphs.

Information and Communication Technology (ICT)- Accessing information from the internet. Problem Solving - Interpret data and draw conclusions.

Working with Others - Working in pairs or groups to carry out practical tasks/investigations.

# Progression Pathways

The NPA in Applied Sciences at SCQF level 5 is a recognised qualification and will give you a platform which may allow progression into further education. This could involve progression to qualifications in science or it may also facilitate progression qualifications in other disciplines related to science, e.g. engineering, nursing and sports science.

# Learning and Teaching Content

The following is a summary of the content of each unit for the complete course. In S3 the Cell Biology Unit and its associated Practical Skills will be completed. The remaining units and Practical Skills will be completed in S4:

# Cell Biology (J4A9 75) – completed in S3

This unit covers the key areas of cell structure; transport across cell membranes; DNA and the production of proteins; proteins; genetic engineering and respiration. Learners will research issues, apply scientific skills and communicate information related to their findings, which will develop skills of scientific literacy.

## Chemical Changes and Structure (J239 75) - S4

This unit covers the key areas of rates of reaction, atomic structure and bonding related to properties of materials, formulae and reaction quantities and acids and bases.

## Physics: Waves and Radiation (J2CL 75) – S4

This unit covers the key areas of waves and nuclear radiation including wave parameters, the electromagnetic spectrum and light.

# Laboratory Science: Practical Skills (J2W3 75) – completed in S3 and S4

This unit will provide you with the opportunity to develop the skills most commonly used in laboratories. You will learn how to work safely with potentially hazardous materials such as microorganisms, measure radioactivity, develop competence using laboratory equipment, perform a titration, chromatographic separation and distillation.

# <u>Assessment</u>

The NPA in Applied Sciences at SCQF level 5 will be assessed via a combination of practical and knowledge assessments under closed - and open-book assessment conditions.