

**Northfield Academy  
Senior Phase Subject  
Choice Information Booklet 2016**



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# CREATIVE & EXPRESSIVE ARTS FACULTY

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## ART AND DESIGN

### **NATIONAL 5**

#### **PURPOSE:**

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 be inspired and creatively challenged as they explore how to visually represent and communicate their personal thoughts, ideas and feelings through their work. Learners will investigate the factors influencing artists and designers' work and practise and will use this understanding when developing and producing their creative expressive and design work.

#### **RECOMMENDED ENTRY:**

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

National 4 Art and Design Course or relevant component Units.

#### **COURSE DETAILS:**

The course comprises two mandatory 80-hour units.

#### **STRUCTURE:**

Expressive Unit  
Design Unit

#### **EXPRESSIVE UNIT:**

This Unit helps learners to develop their personal thoughts and ideas in visual form. In the Unit, learners will develop critical understanding of artists' working practices and the social and cultural influences affecting their work. They will select Stimuli and produce analytical drawings and studies. They will develop and refine their expressive ideas and artwork, experimenting with and using a range of materials, techniques and/or technology in 2D and/or 3D formats when responding to stimuli.

#### **ASSESSMENT EVIDENCE:**

Folio of Practical and Written work.

#### **DESIGN UNIT:**

In this Unit learners will plan, research and develop creative design work in response to a design brief. They will develop their creativity, problem solving and critical thinking skills as they consider design opportunities, and work to resolve design issues and constraints. In the Unit, learners will develop critical understanding of designers' working practices and the main social and cultural influences affecting their work. They will experiment with, develop and refine their design ideas, using a range of materials, techniques and/or technology in 2D and/or 3D formats.

#### **ASSESSMENT EVIDENCE:**

Folio of Practical and Written work.

#### **EXTERNAL EXAMINATIONS:**

A completed folio will be submitted to SQA for external marking.

Question paper will be conducted in centres under SQA external examination conditions. Set and marked by the SQA.

# ART AND DESIGN

## HIGHER

### **PURPOSE:**

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 be inspired and creatively challenged as they explore how to visually represent and communicate their personal thoughts, ideas and feelings through their work. Learners will investigate the factors influencing artists and designers' work and practise and will use this understanding when developing and producing their creative expressive and design work.

### **RECOMMENDED ENTRY:**

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

National 5 Art and Design Course or relevant component Units.

### **COURSE DETAILS:**

The course comprises two mandatory 80-hour units.

### **STRUCTURE:**

Expressive Unit  
Design Unit

### **EXPRESSIVE UNIT**

This Unit helps learners to develop their personal thoughts and ideas in visual form. In the Unit, learners will develop critical understanding of artists' working practices and the social and cultural influences affecting their work. They will select Stimuli and produce analytical drawings and studies. They will develop and refine their expressive ideas and artwork, experimenting with and using a range of materials, techniques and/or technology in 2D and/or 3D formats when responding to stimuli.

### **ASSESSMENT EVIDENCE:**

Folio of Practical and Written work.

### **DESIGN UNIT**

In this Unit learners will plan, research and develop creative design work in response to a design brief. They will develop their creativity, problem solving and critical thinking skills as they consider design opportunities, and work to resolve design issues and constraints. In the Unit, learners will develop critical understanding of designers' working practices and the main social and cultural influences affecting their work. They will experiment with, develop and refine their design ideas, using a range of materials, techniques and/or technology in 2D and/or 3D formats.

### **ASSESSMENT EVIDENCE:**

Folio of Practical and Written work.

### **EXTERNAL EXAMINATIONS:**

A completed folio will be submitted to SQA for external marking.

Question paper will be conducted in centres under SQA external examination conditions. Set and marked by the SQA.

# FASHION AND TEXTILES

## **NATIONAL 5**

### **PURPOSE**

The main purpose of the Course is to develop the practical skills, construction techniques and knowledge and understanding which support fashion/textile-related activities. The knowledge, understanding and skills that learners acquire by successfully completing the Course will be valuable for learning, for life and for the world of work.

This Course is practical and experiential. Learners will plan, make and evaluate fashion/textile items.

### **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 by equivalent qualifications and/or experience:

- National 4 Fashion and Textile Technology Course or relevant component Units

In terms of prior learning and experience, relevant experiences and outcomes may also provide an appropriate basis for doing this Course.

### **PROGRESSION**

This Course or its Units may provide progression to:

- Higher Fashion and Textile Technology Course
- Other SQA qualifications in health and wellbeing, technologies or related areas
- Further education and employment or training

The aims of the Course are to enable learners to develop:

- Detailed textile construction techniques
- The ability to plan and make detailed fashion/textile items
- Detailed knowledge of textile properties and characteristics
- Detailed understanding of factors that influence fashion/textile choices
- Detailed understanding of fashion/textile trends
- The ability to select, set up, adjust and use relevant tools and equipment safely and correctly
- Detailed investigation, evaluation and presentation skills

# MUSIC

## **NATIONAL 5**

### **PURPOSE**

The purpose of the Course is to provide a broad practical experience of performing and creating music and to develop related knowledge and understanding of music.

This Course is practical and experiential in nature and includes flexibility in the contexts for learning. It helps learners to develop a general interest in music, and to develop performing skills on two selected instruments, or on one instrument and voice. The Course also provides opportunities for learners to develop composing skills and their understanding of music through listening and music literacy.

### **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 one or more of the following or equivalent qualifications and/or experience:

National 4 Music Course or relevant component Units

In terms of prior learning and experience, relevant experiences and outcomes may also provide an appropriate basis for doing this Course.

### **COURSE DETAILS**

The Course has an integrated approach to learning and includes a mixture of practical learning, and understanding of music. In the Course, learners will draw upon their understanding of music styles and concepts as they experiment with using these in creative ways when performing and creating music.

To achieve the Course, learners must successfully complete the three mandatory Units, and the Course assessment.

### **MUSIC: PERFORMING SKILLS (NATIONAL 5)**

In this Unit, learners will develop performing skills on two selected instruments, or on one selected instrument and voice. They will perform level-specific music with sufficient accuracy and will maintain the musical flow. Learners will, through regular practice and self-reflection, develop technical and musical performing skills.

Two instruments, or one instrument and voice at ABRSM Grade 3 standard (or above)

### **MUSIC: COMPOSING SKILLS (NATIONAL 5)**

In this Unit, learners will experiment with, and use a range of compositional methods and music concepts to realise their intentions when creating original music. Learners will self-reflect on the impact and effectiveness of their creative choices and decisions and develop understanding of how composers create music in different ways and the things that influence their work.

### **UNDERSTANDING MUSIC (NATIONAL 5)**

In this Unit, through listening, learners will develop knowledge and understanding of a variety of level-specific music concepts, and music literacy. They will identify and recognise specific music styles and concepts, and music signs and symbols used in music notation.

Learners will complete a performing exam with an external SQA examiner in February/March and complete a final understanding music (listening) exam during the diet of exams. Composing is marked internally by the centre.

# MUSIC

## HIGHER

### **PURPOSE**

The purpose of the Course is to provide a broad practical experience of performing and creating music and develop related knowledge and understanding of music. Course activities allow learners to work independently or in collaboration with others, and can help learners to plan and organise, to make decisions and to take responsibility for own learning.

This Course is practical and experiential in nature and includes flexibility in the contexts for learning. It helps learners to develop and extend their interest in music, and to develop performing skills on their two selected instruments or on one instrument and voice. It also helps them to acquire more specialist skills in an area which may be of particular interest to them. The Course also provides opportunities for learners to develop composing skills and broaden their understanding of music concepts and styles.

Performing music, for example, demands skills of autonomy, interpretation and creativity, as well as providing the opportunity to increase confidence and self-esteem. The practice required to develop these skills can promote perseverance, among other things, as well as helping learners to learn how to learn. The skills that learners gain throughout the Course will be valuable for learning, life and work.

### **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:

National 5 Music Course or relevant component Units

### **COURSE DETAILS**

The Course has an integrated approach to learning and includes a mixture of practical learning, and related understanding of music. In the Course learners will draw upon their understanding of music styles and concepts as they experiment with using these in creative ways when performing and creating music.

### **MUSIC: PERFORMING SKILLS**

In this Unit, learners will develop performing skills two selected instruments, or on one selected instrument and voice. They will perform challenging level-specific music with sufficient accuracy and will maintain the musical flow realising the composers' intentions. Learners will, through regular practice and critical reflection and evaluation, develop their technical and musical performing skills.

Two instruments, or one instrument and voice at ABRSM Grade 4 standard (or above)

### **MUSIC: COMPOSING SKILLS**

In this Unit, learners will experiment with, and creatively use complex compositional methods and music concepts to realise their intentions when creating original music. Learners will critically reflect on and evaluate the impact and effectiveness of their creative and musical choices and decisions. They will analyse how musicians and composers create music in different ways and how music styles are shaped by social and cultural influences.

### **MUSIC: UNDERSTANDING MUSIC**

In this Unit, learners will experiment with, and creatively use complex compositional methods and music concepts to realise their intentions when creating original music. Learners will critically reflect on and evaluate the impact and effectiveness of their creative and musical choices and decisions. They will analyse how musicians and composers create music in different ways and how music styles are shaped by social and cultural influences.

Learners will complete a performing exam with an external SQA examiner in February/March and complete a final understanding music (listening) exam during the May diet of exams. Composing is marked internally by the centre.





# ENTERPRISE & TECHNOLOGY FACULTY

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## Business Management - National 5

### WHAT ARE THE BENEFITS OF STUDYING THIS COURSE?

Business plays an important role in society. We rely on businesses and entrepreneurs to create wealth, prosperity, jobs and choices. The purpose of the course is to develop learners' understanding of the way in which businesses operate in the current dynamic, changing, competitive and economic environments and to encourage entrepreneurial attitudes.

### WHAT WILL I STUDY

- You will develop enterprising skills by participating in activities in practical and realistic business situations
- You will develop knowledge and understanding of business terms and concepts
- You will develop an awareness into the systems organisations use to ensure customer satisfaction
- You will develop an understanding of financial awareness through a business context
- You will develop an awareness of how external influences impact on organisations, including economic impact

*You will have a greater understanding of how people contribute positively to business success. As a result you will be better informed about business and be able to make effective contributions to society as a consumer, employee, employer or self-employed.*

### SKILLS DEVELOPED

Enterprise; Employability, Communication, ICT; Interpreting, analysing and evaluating.

### PERSONAL QUALITIES DEVELOPED

Team working; decision making; taking responsibility, self discipline, leadership.

### HOW WILL I LEARN? THE ACTIVITIES AND TASKS I CAN EXPECT?

- Discussion with teacher/learners/in groups
- Research with feedback to group/class.
- Interpreting, analysing and evaluating information from a variety of sources.
- Use of IT to carry out research and prepare presentations.

### CONTRIBUTION TO LIFE IN AND BEYOND SCHOOL:

Skills for Learning	Skills for Work	Skills for Life
Group Work	Citizenship	Working co-operatively
Understanding	Employability	Communication
Applying	ICT	Working independently
Analysing and evaluating	Enterprise	Being creative and resourceful

### EVIDENCE OF LEARNING IS GATHERED BY:

Evidence can be drawn from a variety of sources and presented in a variety of formats. This can include written responses, participation in group tasks, presenting information to others, case studies, business assignment etc.

### ASSESSMENT:

Assessment will take place regularly to allow you to assess your progress and feedback will be given to assist you. At National 5 level there will be an external examination to provide a more formal measure of your attainment

**POSSIBLE PROGRESSION ROUTES:**

Within school progression is as follows:

National 4 > National 5 > Higher > Advanced Higher

Learners' progress will depend on their attainment within the course.

On leaving school your Business qualifications could lead you on to employment, college/university courses.

**SOME POSSIBLE CAREERS INCLUDE WORKING IN THE FOLLOWING AREAS:**

- Human resources management.
- Marketing/research.
- Public relations.
- Events management
- Manufacturing.
- Recreation and Leisure.
- Sales and retail.

## BUSINESS MANAGEMENT

### **HIGHER**

#### **PURPOSE AND AIMS OF THE COURSE**

The study of business management is suitable for all learners interested in entering the world of business, whether that be as a manager, employee or self-employed person, as it gives learners knowledge of the business environment.

The Course develops an in-depth understanding of how people contribute to business success. As a consequence, learners will be better informed about business and able to make an effective contribution to society as consumers, employees, employers or self-employed people. The combination of knowledge of current business theory with practical aspects of learning will enable learners to apply their skills and knowledge to real-life business situations. By developing many transferable skills, the Course prepares learners for everyday life, the world of work or further study of business and other business-related disciplines. It extends and deepens their understanding of business and highlights a range of business-based career opportunities that are available within all business sectors. The Course develops the necessary skills of numeracy, enterprise, employability, ICT and citizenship and supports literacy. It takes into account the needs of all learners by providing sufficient flexibility to enable them to achieve in different ways and at a different pace.

By studying this Course, learners will develop skills and attributes which include: an enterprising attitude and critical appreciation of taking calculated risks in a business context; an in-depth understanding of the importance to businesses of being customer-focused; and decision making, by interpreting, analysing and evaluating a range of complex business-related information to make critical, ethical, responsible and effective business decisions.

Other skills developed by learners will include: numeracy, which supports and further develops personal financial management through improving their knowledge of financial management in a business contexts; and the ability to use ICT to investigate, analyse, evaluate and communicate business information efficiently and effectively. Learners will also develop of the ability to communicate effectively in a business context by working co-operatively with others to complete activities, and by being able to work independently or to lead activities, when appropriate.

Successful completion of this Course opens up a range of vertical and lateral progression routes for learners. These include National Qualifications, National Certificates, Higher National Certificates, Higher National Diplomas and degrees in business-related subjects. It may also lead to employment and/or training in various industries.

#### **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 one or more of the following or equivalent qualifications and/or experience:

- National 5 Business Management Course or relevant component Units

#### **PROGRESSION**

This Course or its Units may provide progression to:

- other SQA qualifications in Business Management or related areas
- further study, employment and/or training

#### **MANDATORY UNITS**

Understanding Business (Higher)  
Management of People and Finance (Higher)  
Management of Marketing and Operations (Higher)

#### **COURSE ASSESSMENT**

This Course includes six SCQF credit points to allow additional time for preparation for Course assessment. The Course assessment covers the added value of the Course. Further information on the Course assessment is provided in the Assessment section.

## **ADMINISTRATION & ICT**

### **NATIONAL 5**

This course is aimed at National 5. Any pupil failing to cope with this level may drop to National 4.

### **ENTRY LEVELS FOR NATIONAL 5**

- Relevant Experiences and Outcomes in IT and Business
- National 4 Administration and IT
- Interest in IT and completing a vocational IT course

### **COURSE CONTENT**

The course is a practical course which focuses on Administration in the workplace. Its key purpose is to develop IT skills using commonly used business applications and emerging technologies. It contains 3 units:

- Administrative Practices
- IT Solutions for Administrators
- Communication in Administration

### **ASSESSMENTS**

All units are internally assessed.

To gain a course award, pupils must pass all units **and** the Course Assessment. The Course Assessment takes the form of an Assignment which requires pupils to complete a series of tasks based around the context of organising an event using skills developed in word processing, spreadsheets and databases to see the relevance of how these skills are used in a work-based context.

The Course Assessment is set and marked by the SQA but takes place during class time under exam conditions.

### **PROGRESSION**

Higher Admin & IT

Provides pupils with skills for learning, work and life which will allow them to pursue employment in the business sector eg Administration, Banking, Accounts etc

University/College to study HNC/D or degree courses in Accounting, Business or Management Studies.

# ADMINISTRATION AND IT

## **HIGHER**

### **PURPOSE AND AIMS OF THE COURSE**

This Course is designed for those who are interested in the management aspects of administration and advanced uses of IT and who want to develop their administrative and IT skills further. Learners who have completed the Course will be able to utilise the acquired administration- and IT-related knowledge, understanding and skills at home, in the wider community and, ultimately, in employment.

Learners will develop a range of both generic and subject-specific skills, including the ability to use a range of functions, some of them complex, of the following IT applications: word processing, spreadsheets, databases, desktop publishing, presentation; the ability to take responsibility for key administrative tasks; and the ability to organise, manage and communicate relatively complex information.

Learners will also develop the ability to manage the organisation of events; the ability to comply with relevant health, safety and security legislation and workplace procedures; and the ability to solve problems in the context of administration.

The Course will support learners' personal and social development and will serve them very well in their day-to-day lives, as well as preparing them for the next stage in their education and for entering the world of work. Whatever path they choose, those who have completed this Course will thus be able to play their part in the economic and social life of the 21st century effectively.

The Course opens up a range of progression routes — both vertical and lateral — to further and higher education. It may also lead to employment and/or training in various industries.

### **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:

- National 5 Administration and IT Course or relevant component Units

### **PROGRESSION**

This Course or its Units may provide progression to:

- other qualifications in Administration and IT or related areas
- further study, employment and/or training

### **MANDATORY UNITS**

Administrative Theory and Practice (Higher)  
IT Solutions for Administrators (Higher)  
Communication in Administration (Higher)

### **COURSE ASSESSMENT**

This Course includes six SCQF credit points to allow additional time for preparation for Course assessment. The Course assessment covers the added value of the Course. Further information on the Course assessment is provided in the Assessment section.

# Graphic Communication

## **NATIONAL 5**

### **RECOMMENDED ENTRY**

This course is aimed at National 5. Any pupil failing to cope with this level may drop to National 4.

### **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 equivalent qualifications and/or experience: National 3 Design and Technology Course or relevant component Units up to level 4. In terms of prior learning and experience, relevant experiences and outcomes may also provide an appropriate basis for doing this Course.

### **THE AIMS OF THIS COURSE ARE TO ENBLE LEARNERS TO:**

- gain skills in reading, interpreting, and creating graphic communications. Learners will initiate, develop and communicate ideas graphically. They will develop spatial awareness and visual literacy through graphic experiences.
- develop skills in graphic communication techniques, including the use of equipment, graphics materials and software
- extend and apply knowledge and understanding of graphic communication standards, protocols, and conventions where these apply
- develop an understanding of the impact of graphic communication technologies on our environment and society

### **WHAT TOPICS ARE COVERED?**

**2D Graphic Communication**  
**3D and Pictorial Graphic Communication**  
**Course Assessment**

### **WHICH SKILLS ARE TAUGHT?**

On completing the Course, learners will have developed skills in 2D and 3D graphics, as well as pictorial graphics. They will be able to apply these skills in order to produce graphics that require relevant visual impact and graphics that transmit information.

### **WHAT TYPE OF ASSESSMENT IS USED?**

The Course consists of two mandatory Units including the Added Value Unit at N4. Each of the component Units of the Course is designed to provide progression to the corresponding units at Higher. All Units are internally assessed against the requirements shown in the *Unit Specification*. They can be assessed on a Unit-by-Unit basis or by combined assessment. They will be assessed on a pass/fail basis within centres. SQA will provide rigorous external quality assurance, including external verification; to ensure assessment judgments are consistent and meet national standards.

### **WHAT TYPE OF HOMEWORK IS GIVEN?**

- Weekly homework in line with subject concepts
- Revision before end of unit test

### **HOW CAN PUPILS PROGRESS WITH THIS SUBJECT?**

Students achieving a National 5 would progress to Higher and Advanced Higher ([See Technology Course Progression Diagram](#))

### **WHICH CAREERS MIGHT BENEFIT FROM THE KNOWLEDGE OF THIS SUBJECT?**

Students can be employed in Education, commercial printing, digital imaging, financial printing, magazine and book printing, industrial designer, drafter, architect, desktop publisher, multimedia artist and animator to name a few.

# ENGINEERING

## NATIONAL 5

### **COURSE DETAILS**

This course is aimed at National 5. Any pupil failing to cope with this level may drop to National 4.

Engineering consists of four mandatory Units of 40 hours each. The mandatory Units are:

<b>Engineering Skills:</b> Mechanical and Fabrication	1 Unit credit
<b>Engineering Skills:</b> Electrical and Electronic	1 Unit credit
<b>Engineering Skills:</b> Maintenance	1 Unit credit
<b>Engineering Skills:</b> Design and Manufacture	1 Unit credit

### **RECOMMENDED ENTRY**

The Engineering Skills Course has been designed to provide a basis for progression into further education or for moving directly into training or employment within an engineering sector. The overall purpose of the Course is to ensure that candidates start to develop the generic and practical skills, knowledge and understanding and employability skills needed within an engineering sector. This Course focuses on the broad areas of Mechanical, Fabrication, Electrical, Electronic, Maintenance and an element of Design and Manufacture. This will allow the candidates to gain basic transferable skills which can be applied to any of the above engineering areas.

The primary target group for this Course is school candidates in S4 and above. It is anticipated that, for this group of candidates, the Course will rely on and build on existing partnerships between schools and colleges and employers (or other agencies).

A partnership approach would still be necessary in order to provide the contact with the workplace which is an essential part of the experience for candidates. The Course is also suitable for adult candidates who are seeking to enhance their employability and develop introductory vocational skills in an engineering sector.

### **ASSESSMENT**

All of the Units focus on the development of specific engineering skills. Assessment follows a similar pattern involving a range of practical activities which will produce evidence for all the Outcomes. The evidence will be confirmed by the use of an assessor checklist which will cover:

- interpretation of a drawing or specification
- the appropriate use of tools, materials and equipment
- successful involvement in the completion of a task, product or assembly
- quality checking of their work by the candidate
- attention to health and safety aspects of working in a workshop type of environment

The assessment of employability skills is integrated in all of the Units and is based on assessor checklists and the completion of a candidate review sheet on one occasion within each unit of the Course. This review allows the candidate to record development of employability skills in the context of different skill areas. In addition to the above the Design and Manufacture Unit selected will also include an introduction to design using a CAD software package.

Each Unit will be supported by a National Assessment Bank (NAB) item which will provide an assessment package and will exemplify the national standard

### **HOW CAN PUPILS PROGRESS WITH THIS SUBJECT?**

Students achieving a National 5 would progress to higher levels of study. (See [Technology Course Progression Diagram](#))

### **WHICH CAREERS MIGHT BENEFIT FROM THE KNOWLEDGE OF THIS SUBJECT?**

Students can be employed in any Engineering related business for commercial manufacture, construction trades or industry.



# PRACTICAL METALWORKING SKILLS

## **NATIONAL 5**

### **INFORMATION ABOUT TYPICAL LEARNERS WHO MIGHT DO THE COURSE**

This Course is a broad-based qualification for learners with an interest in Engineering. It is suitable for learners with an interest in practical metalworking and those wanting to progress to higher levels of study or a related career.

The Course provides opportunities to develop and enhance psychomotor skills, practical creativity, practical problem-solving skills, an appreciation of safe working practices in a workshop environment, and an understanding of sustainability issues in a practical metalworking context.

Course activities also provide opportunities to build self-confidence and to enhance generic and transferable skills in numeracy, employability skills, thinking skills, planning and organising of work tasks, working independently and in collaboration with others, as well as skills in communication and skills in self- and peer-evaluation.

### **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 up to level 4 Technology.

### **THE AIMS OF THIS COURSE ARE:**

- skills in metalworking techniques
- skills in measuring and marking out metal sections and sheet materials
- safe working practices in workshop environments
- practical creativity and problem-solving skills
- an understanding of sustainability issues in a practical metalworking context

### **WHAT TOPICS ARE COVERED?**

Practical Metalworking: Bench Skills (National 5), Practical Metalworking: Machine Processes (National 5), Practical Metalworking: Fabrication and Thermal Joining (National 5)

### **WHICH SKILLS ARE TAUGHT?**

Numeracy, Interpreting drawings, Problem Solving Skills, Engineering craft skills, Safe-working practices, skills in measuring, marking out, cutting and thermal joining technique- welding, brazing etc.

### **WHAT TYPE OF ASSESSMENT IS USED?**

All Units are internally assessed against the requirements within *Unit Specifications*. They can be assessed on a Unit-by-Unit basis or by combined assessment. They will be assessed on a pass/fail basis. SQA will provide rigorous external quality assurance, including external verification, to ensure assessment judgments are consistent and meet national standards.

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. In the National 5 Practical Metalworking Course, added value will focus on:

- challenge
- application

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 metal to a given standard.

# PRACTICAL WOODWORKING SKILLS

## NATIONAL 5

### RECOMMENDED ENTRY

### INFORMATION ABOUT TYPICAL LEARNERS WHO MIGHT DO THE COURSE

This Course is a broad-based qualification for learners with an interest in crafts. It is suitable for learners with an interest in practical woodworking and those wanting to progress to higher levels of study or a related career. The Course provides opportunities to develop and enhance psychomotor skills, practical creativity, practical problem-solving skills, an appreciation of safe working practices in a workshop environment, and an understanding of sustainability issues in a practical woodworking context.

Course activities also provide opportunities to build self-confidence and to enhance generic and transferable skills in numeracy, employability skills, thinking skills, planning and organising of work tasks, working independently and in collaboration with others, as well as skills in communication and skills in self- and peer-evaluation.

### 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 up to level 4 Technology.

### THE AIMS OF THIS COURSE ARE:

- 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
- an understanding of sustainability issues in a practical woodworking context

### WHAT TOPICS ARE COVERED?

Practical Woodworking: Flat-frame Construction (National 5) Practical Woodworking: Carcase Construction (National 5) Practical Woodworking: Machining and Finishing (National 5)

### WHICH SKILLS ARE TAUGHT?

Numeracy, Interpreting drawings, Problem Solving Skills, Craft skills, Safe-working practices, skills in measuring, marking out, cutting and jointing techniques.

### WHAT TYPE OF ASSESSMENT IS USED?

All Units are internally assessed against the requirements within *Unit Specifications*. They can be assessed on a Unit-by-Unit basis or by combined assessment. They will be assessed on a pass/fail basis. SQA will provide rigorous external quality assurance, including external verification, to ensure assessment judgments are consistent and meet national standards.

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. In the National 5 Practical Woodworking Course, added value will focus on:

- challenge
- application

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.

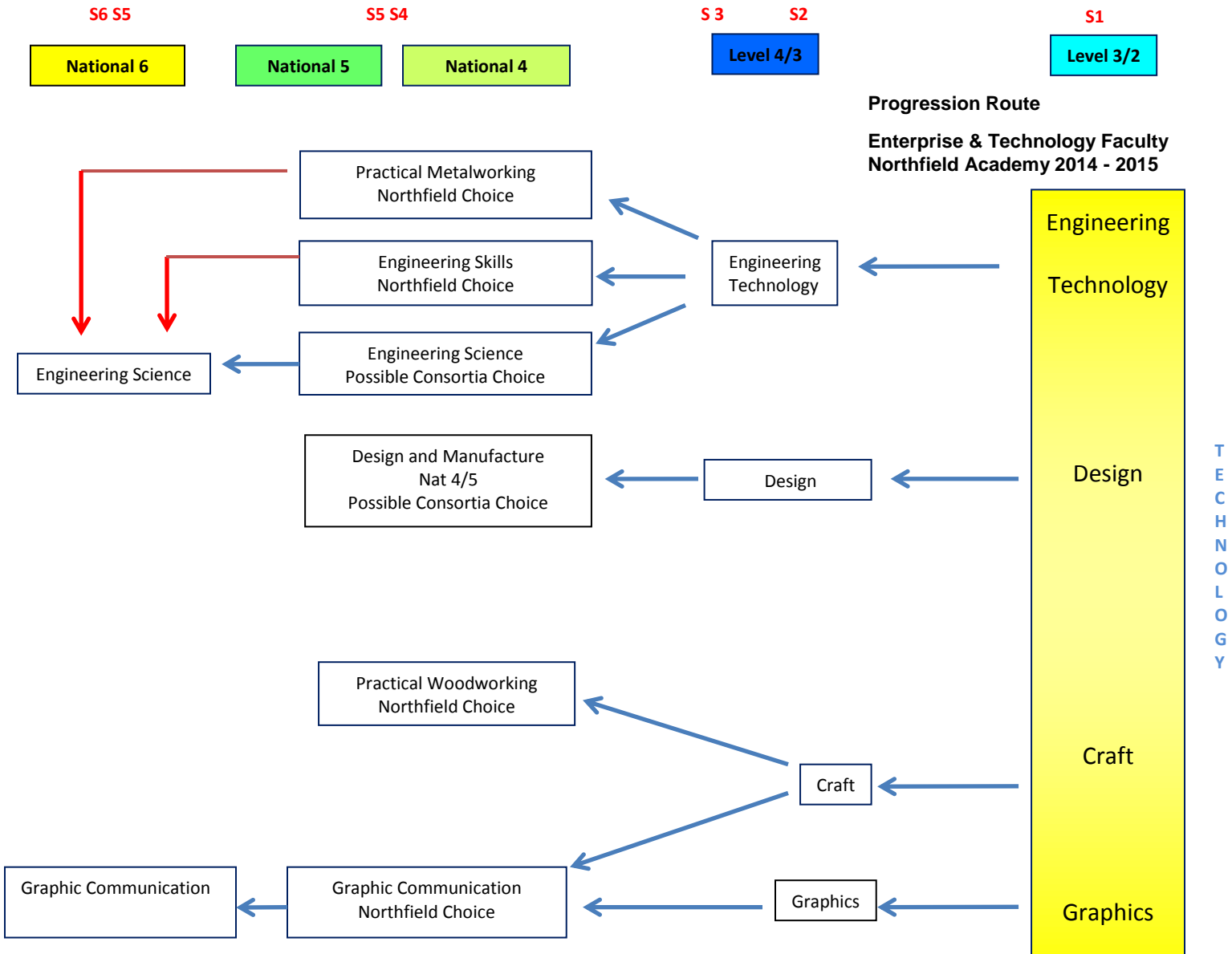
### HOW CAN PUPILS PROGRESS WITH THIS SUBJECT?

Students achieving a National 5 would progress to other National 5 Technology courses, higher levels of study or a related career. (See [Technology Course Progression Diagram](#))

### WHICH CAREERS MIGHT BENEFIT FROM THE KNOWLEDGE OF THIS SUBJECT?

Students can be employed in any craft related business for commercial manufacture, construction trades or industry.

# Progression Route Technology



**NOTE :** →

Progression from Nat 5 Engineering Skills or Practical Metalworking to Higher Engineering Science will require Nat 5 Maths or Nat 5 Physics in addition as entry level to Higher Engineering Science



# HEALTH & WELL-BEING FACULTY

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# PHYSICAL EDUCATION

## **NATIONAL 5**

### **PURPOSE**

This course will offer students the opportunity to take part in activities which they enjoy and help them develop their skills and performance in that activity. It will also provide them with the opportunity to gain a better knowledge and understanding of how to investigate factors affecting their performance such as strengths and weaknesses. This will allow pupils to evaluate and enhance their own personal performance.

### **RECOMMENDED ENTRY**

For entry students would normally be expected to have:

An interest in Physical Education and a good practical ability in two or more activities  
A desire to develop, analyse and improve practical performance  
General/ Credit Level in Standard Grade/ Intermediate English

### **COURSE DETAILS**

This course contains two units:  
Performance Skills - 60%  
Factors Impacting on Performance - 40%

### **The practical activities covered are for example:**

Football, Basketball, Badminton, Volleyball and Gymnastics.

The activities will be discussed as a class and the students will take part in activities that we feel will give them the best mark for their practical performance.

Within each activity students will work on developing a range of skills that will improve their practical performance of the activity. The Factors Impacting performance section is classroom based with 1 theory lesson per week. Pupils will investigate their strengths and weaknesses in an activity and complete a both a booklet and Portfolio in order to pass the course.

### **ASSESSMENT**

The first unit – Performance Skills will be assessed internally on their personal performance across two activities where we would be looking at their skills and decision-making in game situations. This mark will contribute to 60% of their overall mark.

The second unit – Factors Impacting on Performance will be assessed externally through a portfolio, prior to this pupils must pass an internal assessment booklet. The portfolio will make up the further 40% of their mark.

### **NEXT STEPS**

After gaining National 5 Physical Education this will help you in future to:  
Take Higher Physical Education within School

Or help apply to these College courses:

Introducing to Sport, Leisure and Fitness  
National Certificate in Sport and Fitness  
HND in Sports Coaching and Development

# PHYSICAL EDUCATION

## HIGHER

### **PURPOSE**

The Physical Education Higher course will focus on development of performance. Through practical learning pupils will develop their own performance and learn the knowledge and understanding required for this development. Pupils will be given opportunities to engage in activities which they enjoy to develop their individual interests and talents in a variety of ways. Pupils will also learn how to analyse their performance by gathering and interpreting data, identifying needs and planning training to develop performance through 3 key areas Preparation of the Body, Skills and Technique and Structures, Strategies and Composition.

### **COURSE DETAILS**

This course contains two units:

- Performance Skills - 40%
- Analysis and Development of Performance- 60%

The practical activities covered are:

- Football, Basketball and Badminton

However, the activities will be discussed as a class and the students will take part in activities that we feel will give them the best mark for their practical performance.

Within each activity students will work on developing a range of skills that will improve their practical performance of the activity. In the Analysis and Development of performance unit, the work will be classroom based where we will be carrying out research and gaining evidence on their performance and how to analyse performance in order to develop.

### **ASSESSMENT**

The first unit – Performance Skills will be assessed internally on their personal performance across two activities. This mark will contribute to 40% of their overall mark.

The second unit – Analysis and Development of Performance will also be assessed both through internally as a NAB and externally through an end of course exam. This mark will contribute to 60% of their overall mark.

### **RECOMMENDED ENTRY**

For entry students would normally be expected to have:

- An interest in Physical Education and a good practical ability in one or more activities.
- A desire to develop, analyse and improve practical performance
- National 5 Physical Education award
- General/ Credit Level in Standard Grade/ Intermediate English

### **NEXT STEPS**

After gaining Higher Physical Education this will help you in future to apply to these College courses:

- Introducing to Sport, Leisure and Fitness
- National Certificate in Sport and Fitness
- HND in Sports Coaching and Development
- University courses.

# **SPORT AND RECREATION (Skills for Work)**

## **NATIONAL 5**

### **PURPOSE**

This Skills for Work Course is aimed to help candidates to develop practical skills, knowledge and understanding in Sport and Recreation. The course will develop core skills including communication, numeracy, information technology, problem solving and working with others.

During the course students will develop an understanding of the workplace through a work experience placement, which will allow them to develop a positive attitude towards learning and appropriate skills and attitudes for employment.

### **COURSE DETAILS**

Students will complete four units over the duration of the course:

*Assist with a Component of Activity Sessions:* Students will plan, prepare and deliver activity sessions to their class and local primary schools.

*Employment Opportunities in the Sport and Recreation Industry:* Students will explore the Sport and Recreation industry through research and in visiting other Sport and Recreation Centres.

*Assist with Fitness Programming:* Students will plan, prepare and deliver a fitness programme for themselves and their class.

*Assist with Daily Centre Duties:* Students will assist in general duties while taking part in a Sport and Recreation placement.

### **ASSESSMENT**

As the course is practical based there is no final exam, however, assessments will be based on pupils showing the following evidence in a portfolio: practical assessments, observation checklists, lesson plans and evidence of planning. To be able to produce the portfolio full attendance and a positive attitude to learning is essential.

### **RECOMMENDED ENTRY**

Pupils should demonstrate a positive attitude towards physical activity and sport in school and beyond. This course is suitable for those students who want to develop leadership qualities.

### **PROGRESSION**

After gaining National 5 Sport and Recreation this will help you in future to:  
Take Higher Physical Education within School.

Or help apply to these College courses:

Introduction to Sport, Leisure and Fitness  
National Certificate in Sport and Fitness  
HND in Sports Coaching and Development.  
Training/employment.

# HOSPITALITY PRACTICAL COOKERY

## **NATIONAL 5**

### **PURPOSE**

To develop a range of cookery skills, food preparation techniques and cookery processes  
To plan and produce meals and present them appropriately  
To develop understanding of the impact of the choice of ingredients on health and wellbeing

### **RECOMMENDED ENTRY**

A genuine interest in food preparation  
A desire to work in the Hospitality Industry

*N.B. There is a £1 per dish charge for this course.*

### **COURSE DETAILS**

There are 4 mandatory units:

#### Cookery Skills, Techniques and Processes

Students will further develop their cookery skills, food preparation techniques and cookery processes.  
Students will further develop their ability to work safely and hygienically.

#### Understanding and Using Ingredients

Students will enhance their knowledge and understanding of sources, characteristics and sustainability of ingredients.

#### Organisational Skills for Cookery

Students will extend their planning, organisational and time management skills.

#### Assessment (added value unit)

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Students will be required to plan, produce and present a 3 course meal, for 4 people, to meet a given brief and within a restricted time.

### **NEXT STEPS**

Once you have gained your National 5 Hospitality course you will be able to advance to:  
National 5: Practical Cake Course  
College courses in Hospitality  
Careers in Home Economics, Catering, Hospitality, Tourism or Retail





# HUMANITIES FACULTY

## CONTENTS:

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# GEOGRAPHY

## **NATIONAL 5**

### **PURPOSE**

The focus of the course will be on the development of geographical skills and techniques in the context of physical and human environments and global issues. Pupils will develop knowledge and understanding of the processes and interactions in these contexts.

### **COURSE DETAILS**

This course includes three mandatory units plus a course assessment:

Geography: Physical Environments

Geography: Human Environments

Geography: Global Issues

### **PHYSICAL ENVIRONMENTS UNIT**

Key topics will include: location of landscape types; formation of key landscape features; land use management and sustainability; and weather. Pupils will study a selection of landscape types from contexts within Scotland and/or the UK and will be chosen from: either glaciated upland and coastlines of erosion and deposition; or rivers and their valleys and upland limestone.

### **HUMAN ENVIRONMENTS UNIT**

Pupils will study and compare developed and developing countries drawn from a global context. Key topics will include: contrasts in development; world population distribution and change; and issues in changing urban and rural landscapes.

### **GLOBAL ISSUES UNIT**

The focus will be on the use of numerical and graphical information in the context of global issues. Pupils will develop knowledge and understanding of significant geographical issues. The key topics will include two of the following: climate change and sustainability; the impact of world climates; environmental hazards; trade and globalisation; and development and health. Pupils will study major global issues and the strategies adopted to manage these.

### **ADDED VALUE UNIT: GEOGRAPHY: PROJECT (NATIONAL 4)**

In this unit, pupils will choose an issue for personal study drawn from physical environments, human environments or global issues contexts. They will research their issue and communicate their findings. Through this activity they will have opportunities to experience challenge and application as they further develop and apply the knowledge, understanding and skills acquired in the other three units of the course.

### **UNIT ASSESSMENT**

There will be an internal assessment for each of the three units.

### **COURSE ASSESSMENT (NATIONAL 5) IS IN TWO PARTS**

Course examination

Controlled assessment assignment

### **PROGRESSION**

This course or Units may provide progression to:

- Higher course Geography Course or its Units
- Higher Environmental Science Course or its Units
- Further study, employment and/or training

# HISTORY

## NATIONAL 4/5

### **WHAT ARE THE MAIN AIMS OF THE COURSE?**

- To acquire breadth and depth in their knowledge and understanding of History
- 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.

### **WHAT TOPICS ARE COVERED?**

Three units:

1. Atlantic Slave Trade 1770-1807
2. Migration and Empire 1830-1939
3. Hitler & Nazi Germany 1919-1939

### **PURPOSE OF COURSE?**

To develop important attitudes, including: 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.

### **WHICH SKILLS ARE TAUGHT?**

Learners will acquire attributes that will be important for their life and work. Through the skills and content of this Course, learners will develop a coherent and balanced understanding of Scottish, British, European and World History. They will develop analytical skills, improve literacy and combine information in a variety of ways.

### **WHAT TYPE OF ASSESSMENT IS USED?**

Historical Study: Scottish:

- evaluating historical sources taking into account their origin, purpose, content and/or context

Historical Study: British:

- explaining the impact of a historical development in a structured manner

Historical Study: European

- analysing the factors contributing towards a historical

World Study:

- development, drawing a reasoned conclusion

### **What type of homework is given?**

- Preparation for lessons
- Research
- Question practice

### **How can pupils progress with this subject?**

Progress to Higher.

### **WHICH CAREERS MIGHT BENEFIT FROM THE KNOWLEDGE OF THIS SUBJECT?**

History can make a significant contribution to' life after school. There is a wide range of jobs to which the knowledge and skills gained in History can be applied. These include; Journalism and Broadcasting; The Law and Legal affairs; Local Government; Civil Service; Public Relations; Research; Personnel Management; Police, Armed Forces, Banking, Hospital and Hotel Administration, Museum and Theatre and Drama work.

# HISTORY

## HIGHER

### **WHAT ARE THE MAIN AIMS OF THE COURSE?**

- To acquire breadth and depth in their knowledge and understanding of History
- To develop analytical and communication skills

### **WHAT TOPICS ARE COVERED?**

Three units:

1. Britain 1851-1951
2. USA 1918-1968
3. Scotland and the Impact of the Great War 1914-1928

### **WHICH SKILLS ARE TAUGHT?**

Analytical skills including information gathering, organisation and essay writing skills.

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

- National 5 History Course or relevant component Units

### **WHAT TYPE OF ASSESSMENT IS USED?**

Internal – all learning outcomes.

External – One Exam Paper of 2 hours and 20 minutes.

Assignment (essay) externally marked – 1 hour 30 minutes.

### **WHAT TYPE OF HOMEWORK IS GIVEN?**

- Preparation for lessons
- Research
- Essay planning and writing

### **HOW CAN PUPILS PROGRESS WITH THIS SUBJECT?**

Pupils may be able to progress to Advanced Higher in S6 or 1<sup>st</sup> Year University

### **WHICH CAREERS MIGHT BENEFIT FROM THE KNOWLEDGE OF THIS SUBJECT?**

History can make a significant contribution to life after school. There is a wide range of jobs to which the knowledge and skills gained in History can be applied. These include; Journalism and Broadcasting; The Law and Legal affairs; Local Government; Civil Service; Public Relations; Research; Personnel Management; Police, Armed Forces, Banking, Hospital and Hotel Administration, Museum and Theatre and Drama work.

SCQF Level 5/6 (Nat 5 / Higher level)

## Leadership



### What are the main aims of the course?

This award helps learners to understand the concept of leadership and gives them the opportunity to examine their own leadership skills/potential. This course also helps learners understand their roles as leaders in life and recognise the leadership contribution of others. This award will also provide evidencing of leadership work to employers and those outside education. **NOTE: There is no requirement for pupils to already be, or planning to be, in a leadership role prior to choosing the course.**

### What topics are covered?

**Leadership: An introduction** – Pupils will learn leadership styles, skills and qualities. Through completing case studies of leaders and episodes of leadership in a variety of roles in society (from sport, business, the military, emergency services and many, many more) pupils will reflect on their preferred leadership styles and what their personal strengths and development points are.

**Leadership in practice** - Pupils will gather evidence of leadership activities from their contribution to the school (prefect work, student council, charities committee, enterprise group etc) or outside school (youth clubs, sports teams, scouts, guides, cadets etc). Pupils will also undertake practical leadership tasks within the school as part of their class time. They will then reflect on their leadership contribution to their activities and analyse their own performance and the performance of others.

### Which skills are taught?

Leadership, Self reflection, Reflective Learning and Personal Development.

### What type of Assessment is used?

Pupils are required to record and evidence both leadership activity and self reflection. Throughout the course pupils will build up a portfolio which once completed, and signed off by the teacher, will lead to successfully gaining the Leadership level 5 or 6 qualification. There is no exam.

### What type of homework is given?

Pupils will be expected to complete homework continually throughout the course. Especially in the construction of their portfolios. Failure to complete these tasks will lead to not completing the course and gaining the award.

### How can pupils progress with this subject?

The SCQF Level 5/6 course provides pupils with an evidence based qualification which will enhance their employability and provide them with a skill set to play a leading role in their wider life and personal interests.

### Which careers might benefit from the knowledge of this subject?

As leadership is a widely recognised skill for education, employment and life there are a multitude of practical applications for the skills taught in this course in all walks of life.

## MODERN STUDIES

### **NATIONAL 5**

#### **PURPOSE**

The purpose of this course is to develop knowledge and understanding of political, social and international issues and to promote the development of critical skills. This course will encourage learners to develop important attitudes including: 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.

This course provides learners with opportunities to continue to acquire and develop skills for learning, skills for life and skills for work.

#### **COURSE DETAILS**

This Course has three mandatory Units.

##### Unit 1

Democracy in Scotland and the United Kingdom.

The main aims of this unit are to enable learners to develop:

- A range of research and information handling skills.
- A detailed knowledge and understanding of the democratic process at Local, Scottish and National levels as well as an understanding of their political systems..
- A detailed understanding of social and economic issues at Local, Scottish and National level.

##### Unit 2

Social Issues in the United Kingdom – Crime and Law.

The main aims of this Unit are to enable learners to:

- Use a range of sources of information to make and justify decisions about social issues in the United Kingdom focussing on either crime and law or social inequality.
- Develop a knowledge and understanding of social issues in the United Kingdom focussing on either crime and law or social inequality.

##### Unit 3

International Issues – Conflict Resolution

The main aims of this unit are to enable learners to:

- Use a range of sources and information to draw and support conclusions about international issues, focussing on either a major world power or a significant world issue.
- Develop a detailed knowledge and understanding of international issues.

#### **ASSESSMENT**

Learners will be required to pass internal unit assessments and a course assessment, which will take the form of:

- Question paper under external exam conditions.
- Assignment, which will be externally assessed.

In addition all learners will be required to complete the Added Value Unit for National 4.

#### **PROGRESSION**

Successful learners who have gained a full Course award can progress to National 6- Higher.

## MODERN STUDIES

### **HIGHER**

#### **PURPOSE**

The Purpose of this course is to develop knowledge and understanding of political, social and international issues and to promote the development of the critical skills of analysis, synthesis, evaluating and decision making.

#### **RECOMMENDED ENTRY**

While entry is at the discretion of the department, students would normally be expected to have attained a pass at National 5 Modern studies or in another social subject. For S6 pupils a credit pass from Standard Grade in modern studies or another social subject is required.

#### **COURSE DETAILS**

The course comprises three units.

##### Unit 1 - Political Issues in the United Kingdom (40 hours)

In this Unit, learners will evaluate a range of written, numerical and graphical sources of information in order to detect and explain the degree of objectivity in contemporary Scottish and UK political contexts. Learners will apply a knowledge and understanding of democracy in Scotland and the United Kingdom.

Learners will study topics such as: the United Kingdom constitutional arrangement including the role of the Scottish Parliament and other devolved bodies and the impact of UK membership of the European Union; the study of political institutions and processes; voting systems and their impact; the impact of a range of factors which affect voting behaviour; and the ways in which citizens are informed about, participate in, and influence the political process.

##### Unit 2 - Social Issues in the United Kingdom (40 hours)

Students will study the following themes:

1. Evidence of inequalities in wealth and health; causes and consequences of inequalities in wealth and health.
2. With reference to ethnicity and gender; the extent of social and economic inequalities; the nature and effect of government responses to deal with these.
3. The principles of the Welfare State. Debate over provision of and funding of health care and welfare; individual and collective responsibility.

##### Unit 3 - International Issues - A political and socio-economic study of a major world power

Students will study world power focusing on the following themes:

1. The political system and process.
2. Recent socio-economic issues.
3. The role of the world power in international relations.

#### **ASSESSMENT**

Assessment is by end of unit assessment during the year and final course assessment at its completion. End of course assessment is through two written assessments:

Question Paper is 2 hour 15 minutes.

Assignment is 1 hour 30 minutes.

# RELIGIOUS, MORAL & PHILOSOPHICAL STUDIES

## **NATIONAL 5**

### **PURPOSE**

The course enables learners to:

- Develop the ability to analyse and reflect on religious and philosophical questions and their impact.
- Develop a range of skills including investigating and explaining religious, moral and philosophical questions and responses, making comparisons and the ability to express detailed and reasoned views.
- Develop detailed factual and abstract knowledge and understanding of beliefs, practices and sources related to world religions.
- Develop detailed factual and theoretical knowledge and understanding of religious, moral, and philosophical questions and responses to them.

### **COURSE DETAILS**

The course comprises three units.

World Religions

Morality and Belief – Religion and conflict

Religious and Philosophical Questions

#### **World Religion**

In this unit learners will complete an in-depth and detailed analysis of Christian Beliefs. Questions about the human condition, the goals of existence and the means of enhancing these goals are studied.

#### **Morality and Belief**

In this unit learners will develop skills necessary to explain and express reasoned views about contemporary moral questions and responses. They will develop detailed factual and theoretical understanding of contemporary moral questions and religious and non-religious responses.

#### **Religious and Philosophical Questions**

In this unit learners will develop the skills to analyse religious and philosophical questions and responses. Pupils will be required to analyse the level of conflict and competition between religious and scientific understanding of the origins of life, and the impact on people's attitudes and beliefs towards religion and science.

### **ASSESSMENT**

Assessment is by end of unit assessment during the year, by the production of a assignment and final exam.

Question Paper is 1 hour 30 minutes

Assignment is 1 hour



# RELIGIOUS, MORAL & PHILOSOPHICAL STUDIES

## HIGHER

### **PURPOSE**

The course allows learners to:

- Develop a philosophical approach to the study of beliefs, values and issues which are of importance in the world today.
- Develop knowledge and understanding of religious beliefs and values.
- Develop analytical skills in relation to the sacred writings, beliefs and values of world religions.
- Gain insight into the way in which beliefs and values affect the lives of followers of one world religion.
- Develop skills which can be applied to the study of beliefs and values of a variety of world religions.
- Develop knowledge and understanding of moral, philosophical and theological issues which arise from religious and non-religious beliefs.
- Analyse and think critically about their own beliefs and those of others.
- Gain insight into, an appreciation of, ideas, arguments and viewpoints which may conflict with their own.
- Formulate reasoned and structured responses to religious, moral and philosophical issues.
- Engage personally with a range of important questions and issues in order to inform their own beliefs and values in a way which contributes to personal and social development.

### **RECOMMENDED ENTRY**

- A pass in English at National 5 or Higher
- Social Subject at National 5.

### **COURSE DETAILS**

The course comprises three mandatory units.

World Religions  
Morality and Belief  
Religious and Philosophical Questions

#### World Religion

In this unit learners will complete an in-depth and detailed analysis of Christian Beliefs. Questions about the human condition, the goals of existence and the means of enhancing these goals are studied.

#### Morality and Belief

In this unit learners will develop the knowledge and skills necessary to understand theories about the relationship between religion and moral values. Crime and Punishment is the moral issue studied.

#### Religious and Philosophical Questions

In this unit learners will develop the knowledge and skills necessary to understand the contemporary relationship between Christian belief and scientific theory. Pupils will be required to analyse the level of conflict and competition between religion and science, and the impact on people's attitudes and beliefs towards religion and science.

### **ASSESSMENT**

Assessment is by end of unit assessment during the year and final course assessment at its completion. End of course assessment is through two written assessments:

Question Paper is 2 hour 15 minutes  
Assignment is 1 hour 30 minutes.

# SCOTTISH STUDIES

## **NATIONAL 5**

### **PURPOSE**

The purpose of this Award is to allow learners to broaden their knowledge of Scotland whilst developing and applying the skills, knowledge and understanding relevant to their chosen subject areas.

### **COURSE DETAILS**

This course includes one mandatory units plus three others taken from other subjects in the school:

Scottish Studies: Scotland in Focus

Scottish Studies: Historical Study: Scottish

Scottish Studies: Travel and Tourism: Scotland

Scottish Studies: Investigating Religion and Belief with a Scottish Context

### **SCOTTISH STUDIES UNIT**

Pupils will broaden their knowledge of Scotland in terms of its people, languages, society, culture, natural and built environment, and/or heritage. They will also research and select relevant information by planning and completing an activity that has a Scottish focus. The activity will involve presenting information in, for example, a written, oral and/or electronic format.

#### **HISTORICAL STUDY: SCOTTISH**

Pupils will study the story of Mary Queen of Scots, analysing sources, describing and explaining events.

#### **TRAVEL AND TOURISM: SCOTLAND**

Pupils identify current tourist trends, investigate tourist destination and create an itinerary and brochure for a tourist visit to Scotland.

#### **INVESTIGATING RELIGION AND BELIEF WITH A SCOTTISH CONTEXT**

Pupils will investigate the religious diversity in Scotland and compare the religious profile of Scotland to their own beliefs.

### **COURSE ASSESSMENT**

The course is internally assessed using a variety of methods including the building of a portfolio across the topics studied. There is no exam for Scottish Studies.

### **PROGRESSION**

This course or Units may provide progression to:

- Higher Scottish Studies or its Units
- Further study in a Humanities subject
- Further study, employment and/or training



# ICT & MATHEMATICS FACULTY

## CONTENTS:

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## **NATIONAL 5**

### **WHAT ARE THE MAIN AIMS OF THE COURSE?**

- To further develop knowledge and understanding gained during S1- S3.
- To further develop problem solving skills gained during S1- S3
- To further develop knowledge, skills and attribute developed during National 4 Computing Science

### **WHAT TOPICS ARE COVERED?**

1. Software Design and Development
2. Information System Design and Development
3. Course Assessment

### **WHICH SKILLS ARE TAUGHT?**

The Software Design and Development Unit covers skills in creating software solutions to real-life problems using JavaScript and Python, through the steps of analysis, design, implementation, testing, documentation and evaluation.

The Information System Design and Development Unit covers aspects of building usable Information Systems and looks at Database and User Interface design, for example, for dynamic websites

The Course Assessment provides an opportunity to develop a piece of software that brings together aspects of both units and contributes towards the final grade.

### **ENTRY REQUIREMENT**

Either National 4 Computer Science Units or equivalent  
Level 4 Consolidating/ Secure in a Computing Science context

### **WHAT TYPE OF ASSESSMENT IS USED?**

Formal assessment takes place at the end of each unit.

The final grade is a combination of the external exam mark (out of 90) and an internal coursework mark (out of 60).

### **WHAT TYPE OF HOMEWORK IS GIVEN?**

- Weekly homework tasks are issued through the supporting website, with deadlines clearly marked.
- Students on this course will have access to the complete on-line course and will be expected to make regular use of this outside the classroom

### **HOW CAN PUPILS PROGRESS WITH THIS SUBJECT?**

Progression from National 5 Computing Science is to National 6 Computing Science or college or university courses.

### **WHICH CAREERS MIGHT BENEFIT FROM THE KNOWLEDGE OF THIS SUBJECT?**

Software Engineer, Computer Technician, Multimedia Designer

## HIGHER

### **WHAT ARE THE MAIN AIMS OF THE COURSE?**

- To further develop knowledge and understanding gained during S1- S3.
- To further develop problem solving skills gained during S1- S3
- To further develop knowledge, skills and attribute developed during National 5 Computing Science

### **WHAT TOPICS ARE COVERED?**

1. Software Design and Development
2. Information System Design and Development
3. Course Assessment

### **WHICH SKILLS ARE TAUGHT?**

The Software Design and Development Unit covers skills in creating software solutions to real-life problems using JavaScript and Python, through the steps of analysis, design, implementation, testing, documentation and evaluation.

The Information System Design and Development Unit covers aspects of building usable Information Systems and looks at Database and User Interface design, for example, for dynamic websites

The Course Assessment provides an opportunity to develop a piece of software that brings together aspects of both units and contributes towards the final grade.

### **ENTRY REQUIREMENT**

Either National 5 Computer Science Units or equivalent

### **WHAT TYPE OF ASSESSMENT IS USED?**

Formal assessment takes place at the end of each unit.

The final grade is a combination of the external exam mark (out of 90) and an internal coursework mark (out of 60).

### **WHAT TYPE OF HOMEWORK IS GIVEN?**

- Weekly homework tasks are issued through the supporting website, with deadlines clearly marked.
- Students on this course will have access to the complete on-line course and will be expected to make regular use of this outside the classroom

### **HOW CAN PUPILS PROGRESS WITH THIS SUBJECT?**

Progression from Higher Computing Science is to Advanced Higher Computing Science or college or university courses.

### **WHICH CAREERS MIGHT BENEFIT FROM THE KNOWLEDGE OF THIS SUBJECT?**

Software Engineer, Computer Technician, Multimedia Designer

# MATHEMATICS

## **NATIONAL 5**

### **WHAT ARE THE MAIN AIMS OF THE COURSE?**

- motivate and challenge learners by enabling them to select and apply mathematical techniques in a variety of mathematical and real-life situations
- develop confidence in the subject and a positive attitude towards further study in mathematics
- develop skills in manipulation of abstract terms in order to solve problems and to generalise
- allow learners to interpret, communicate and manage information in mathematical form, skills which are vital to scientific and technological research and development
- develop the learner's skills in using mathematical language and to explore mathematical ideas
- develop skills relevant to learning, life and work in an engaging and enjoyable way

### **WHAT TOPICS ARE COVERED?**

- Expressions and Formulae
- Relationships
- Applications

### **WHICH SKILLS ARE TAUGHT?**

- Use of various problem solving skills.
- Extending reasoning skills.
- Understanding links between different topics.

### **ENTRY REQUIREMENT**

- Evidence of consistent success at CfE level 4 or Pass at National 4 Mathematics

### **WHAT TYPE OF ASSESSMENT IS USED?**

- Component 1 — question paper: Paper 1 (Non-Calculator) 40 marks
- Component 2 — question paper: Paper 2 (50 marks)

### **WHAT TYPE OF HOMEWORK IS GIVEN?**

- Completion of class work
- Topic and unit homework
- Revision

### **HOW CAN PUPILS PROGRESS WITH THIS SUBJECT?**

National 5 progresses to Higher

### **WHICH CAREERS MIGHT BENEFIT FROM THE KNOWLEDGE OF THIS SUBJECT?**

Accountancy, architecture, banking, electronics, engineering, teaching, insurance.

# MATHEMATICS

## HIGHER

### WHAT ARE THE MAIN AIMS OF THE COURSE?

- To build on prior knowledge and reasoning skills
- To enhance problem solving skills
- To prepare pupils for further and higher education, and the world of work

### WHAT TOPICS ARE COVERED?

Unit 1: Expressions and Functions (Higher)

The general aim of this Unit is to develop knowledge and skills that involve the manipulation of expressions, the use of vectors and the study of mathematical functions.

Unit 2: Relationships and Calculus (Higher)

The general aim of this Unit is to develop knowledge and skills that involve solving equations and to introduce both differential calculus and integral calculus.

Unit 3: Applications (Higher).

The general aim of this Unit is to develop knowledge and skills that involve geometric applications, applications of sequences and applications of calculus. The Outcomes cover aspects of algebra, geometry, calculus, and also skills in mathematical reasoning and modelling.

### WHICH SKILLS ARE TAUGHT?

- understand and use a range of complex mathematical concepts and relationships
- select and apply operational skills in algebra, geometry, trigonometry, calculus and statistics within mathematical contexts
- select and apply skills in numeracy
- use mathematical reasoning skills to extract and interpret information and to use complex mathematical models
- use mathematical reasoning skills to think logically, provide justification or proof and solve problems
- communicate mathematical information with complex features

### ENTRY REQUIREMENT

National 5 Mathematics Course or relevant component Units

### WHAT TYPE OF ASSESSMENT IS USED?

- End of Unit assessments (internal) which will test minimum competence
- End of Course examination (external) which will be graded A, B, C, D, or fail.
- To gain the award of the Course, the learner must pass all of the Units as well as the course assessment.

### WHAT TYPE OF HOMEWORK IS GIVEN?

- Completion of class work
- Topic and unit homework
- Revision

### HOW CAN PUPILS PROGRESS WITH THIS SUBJECT?

Higher progresses to Advanced Higher or further/higher education.

### WHICH CAREERS MIGHT BENEFIT FROM THE KNOWLEDGE OF THIS SUBJECT?

Accountancy, architecture, banking, electronics, engineering, teaching, insurance.



# LANGUAGE & LITERACY FACULTY

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## **NATIONAL 5**

### **PURPOSE AND AIMS OF THE COURSE**

The main purpose of the Course is to provide learners with the opportunity to develop the skills of listening, talking, reading and writing in order to understand and use language.

As learners develop their literacy skills, they will be able to process information more easily, apply knowledge of language in practical and relevant contexts, and gain confidence to undertake new and more challenging tasks in a variety of situations.

Building on literacy skills, the Course develops understanding of the complexities of language, including through the study of a wide range of texts. The Course develops high levels of analytical thinking and understanding of the impact of language.

The Course offers learners opportunities to develop and extend a wide range of skills. In particular, the Course aims to enable learners to develop the ability to:

listen, talk, read and write, as appropriate to purpose, audience and context understand, analyse and evaluate texts, including Scottish texts, as appropriate to purpose and audience in the contexts of literature, language and media create and produce texts, as appropriate to purpose, audience and context apply knowledge and understanding of language.

### **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:

National 4 English Course or relevant component Units

### **COURSE DETAILS**

The Course provides learners with the opportunity to develop their listening, talking, reading and writing skills in order to understand and use language. The two Units include the four language skills of listening, talking, reading and writing.

This Course is made up of two units. Both of these are assessed internally under exam conditions. The units are:

#### English: Analysis and Evaluation (National 5)

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

#### English: Creation and Production (National 5)

The purpose of this Unit is to provide learners with the opportunity to develop talking and writing skills in a range of contexts. Learners develop the skills needed to create and produce detailed texts in both written and oral forms.

The units enable learners to focus on the skills required to understand and use language, and to integrate listening, talking, reading and writing skills across the Units. Each Unit also offers opportunities for learners to focus on particular skills

In addition, pupils will be required to submit a folio of work to the SQA prior to the final exam. The folio will be written under controlled conditions and assessed by the SQA,

## ENGLISH CONTINUED

### INTERNAL 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.

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

#### English: Analysis and Evaluation

Through the study of detailed texts in the contexts of literature, language or media, learners will use their listening and reading skills to provide evidence of understanding, analysis and evaluation, as appropriate to purpose and audience.

#### English: Creation and Production

Learners will be required to provide evidence of their talking and writing skills to create and produce detailed texts in a chosen context. Learners will be required to demonstrate technical accuracy in written texts.

### EXTERNAL ASSESSMENT

The final course assessment will take the form of a folio through which learners will demonstrate their writing skills and a question paper through which learners will demonstrate their reading skills. Learners will answer at least one question on a Scottish text.

## HIGHER

### **WHAT ARE THE MAIN AIMS OF THE COURSE?**

The Higher English Course provides learners with the opportunity to develop the skills of listening, talking, reading and writing in order to understand and use language. Building on literacy skills, learners develop understanding of the complexities of language, including through the study of a wide range of texts, and develop high levels of analytical thinking and understanding of the impact of language.

### **WHAT TOPICS ARE COVERED?**

Poetry, Prose, Drama, Non-Fiction, Language and Media

### **WHICH SKILLS ARE TAUGHT?**

The Course offers learners opportunities to develop and extend a wide range of skills. In particular, the Course aims to enable learners to develop the ability to:

- listen, talk, read and write, as appropriate to purpose, audience and context
- understand, analyse and evaluate texts, including Scottish texts, as appropriate to purpose and audience in the contexts of literature, language and media
- create and produce texts, as appropriate to purpose, audience and context
- apply knowledge and understanding of language

### **ENTRY REQUIREMENT**

Pupils are expected to have achieved either an A or B pass at National 5 English

### **WHAT TYPE OF ASSESSMENT IS USED?**

- Two internal unit assessments which must be passed throughout the year and prior to the exam
- A portfolio of pupil's writing
- A final exam paper in Reading and Writing

### **WHAT TYPE OF HOMEWORK IS GIVEN?**

Homework at this level is more demanding than pupils will have experienced previously: this is in order to practise and develop skills taught in class. Expected homework can range from the following:

Essay writing  
Research  
Reading  
Exam practice

### **HOW CAN PUPILS PROGRESS WITH THIS SUBJECT?**

Pupils can progress with this subject at Advanced Higher level, or in further education courses at college.

### **WHICH CAREERS MIGHT BENEFIT FROM THE KNOWLEDGE OF THIS SUBJECT?**

All career paths will benefit from a Higher qualification in English, as being literate increases opportunities for the individual in all aspects of life, and lays the foundations for lifelong learning and work. This is a qualification that will be invaluable for access to all levels of university and college courses, as well as facilitating access to the world of work.

# MODERN LANGUAGES NATIONAL 5 FRENCH

## **NATIONAL 5**

### **RATIONALE**

Language is at the core of thinking. Learners reflect, communicate and develop ideas through language. The Course provides learners with the opportunity to develop skills in listening and talking, reading and writing, which are essential for learning, work and life; to use different media effectively for learning and communication; and to develop understanding of how language works, and use language to communicate ideas and information.

The study of a modern language has a unique contribution to make to the development of cultural awareness, as it provides learners with a means of communicating directly with people from different cultures, enhancing their understanding and enjoyment of other cultures and of their own. They gain insights into other ways of thinking and other views of the world, and therefore develop a much richer understanding of active citizenship.

Learners encounter a wide range of different types of texts in different media. Building on the four capacities, the Course enables learners to communicate, be critical thinkers, develop cultural awareness, and be creative.

### **PURPOSE AND AIMS OF THE COURSE**

The main purpose of the Course is to develop the skills of reading, listening, talking and writing in order to understand and use the French language.

The Course offers learners opportunities to develop and extend a wide range of skills. In particular, the Course aims to enable learners to develop the ability to:

- read, listen, talk and write in a modern language
- understand and use a modern language
- apply knowledge and understanding of a modern language

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 how this relates to English.

### **RECOMMENDED ENTRY**

Entry to this Course is at the discretion of the school. However, learners would normally be expected to have attained the skills, knowledge and understanding required by the National 4 Modern Languages Course or equivalent S3 attainment in relevant experiences and outcomes.

### **PROGRESSION**

This Course or its Units may provide progression to Higher French.

### **ASSESSMENT**

This Course is made up of two mandatory Units which are assessed internally:

#### **MODERN LANGUAGES: 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 develop their knowledge and understanding of detailed language in the contexts of society, learning, employability, and culture.

#### **MODERN LANGUAGES: 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 develop their knowledge and understanding of detailed language in the contexts of society, learning, employability, and culture.

### **EXAM**

The final course assessment takes the form of externally assessed exams in Listening Reading and Writing.

# MODERN LANGUAGES NATIONAL 5 SPANISH

## **NATIONAL 5**

### **RATIONALE**

Language is at the core of thinking. Learners reflect, communicate and develop ideas through language. The Course provides learners with the opportunity to develop skills in listening and talking, reading and writing, which are essential for learning, work and life; to use different media effectively for learning and communication; and to develop understanding of how language works, and use language to communicate ideas and information.

The study of a modern language has a unique contribution to make to the development of cultural awareness, as it provides learners with a means of communicating directly with people from different cultures, enhancing their understanding and enjoyment of other cultures and of their own. They gain insights into other ways of thinking and other views of the world, and therefore develop a much richer understanding of active citizenship.

Learners encounter a wide range of different types of texts in different media. Building on the four capacities, the Course enables learners to communicate, be critical thinkers, develop cultural awareness, and be creative.

### **PURPOSE AND AIMS OF THE COURSE**

The main purpose of the Course is to develop the skills of reading, listening, talking and writing in order to understand and use the Spanish language.

The Course offers learners opportunities to develop and extend a wide range of skills. In particular, the Course aims to enable learners to develop the ability to:

- read, listen, talk and write in a modern language
- understand and use a modern language
- apply knowledge and understanding of a modern language

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 how this relates to English.

### **RECOMMENDED ENTRY**

Entry to this Course is at the discretion of the school. However, learners would normally be expected to have attained the skills, knowledge and understanding required by the National 4 Modern Languages Course or equivalent S3 attainment in relevant experiences and outcomes.

### **PROGRESSION**

This Course or its Units may provide progression to Higher Spanish.

### **ASSESSMENT**

This Course is made up of two mandatory Units which are assessed internally:

#### **MODERN LANGUAGES: 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 develop their knowledge and understanding of detailed language in the contexts of society, learning, employability, and culture.

#### **MODERN LANGUAGES: 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 develop their knowledge and understanding of detailed language in the contexts of society, learning, employability, and culture.

### **EXAM**

The final course assessment takes the form of externally assessed exams in Listening Reading and Writing.

# MODERN LANGUAGES HIGHER SPANISH

## **HIGHER**

### **RATIONALE**

All new and revised National Courses reflect the Curriculum for Excellence values, purposes and principles. They offer flexibility, provide more time for learning, more focus on skills and applying learning, and scope for personalisation and choice.

In this Course, and its component Units, there will be an emphasis on skills development and the application of those skills. Assessment approaches will be proportionate and fit for purpose and they will promote best practice, enabling learners to achieve the highest standards they can.

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.

All Courses provide opportunities for learners to develop breadth, challenge and application, but the focus and balance of the assessment will be appropriate for the subject area.

### **PURPOSE AND AIMS OF THE COURSE**

The main purpose of the Course is to develop the skills of reading, listening, talking and writing in order to understand and use the Spanish language.

The Course offers learners opportunities to develop and extend a wide range of skills. In particular, the Course aims to enable learners to develop the ability to:

- read, listen, talk and write in a modern language
- understand and use a modern language
- apply knowledge and understanding of a modern language

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 how this relates to English.

### **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 by equivalent qualifications and/or experience:

- National 5 Modern Languages Course or relevant component Units

### **PROGRESSION**

This Course or its Units may provide progression to Advanced Higher Spanish or university level courses.

### **ASSESSMENT**

This Course is made up of two mandatory Units which are assessed internally:

#### **Modern Languages: Understanding Language (Higher)**

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

#### **Modern Languages: Using Language (Higher)**

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

### **EXAM**

The final course assessment takes the form of externally assessed exams in Listening Reading and Writing.

## **NATIONAL 5**

### **RATIONALE**

The Course enables learners to analyse and create media content. Learners think critically about the media and its role in everyday life and develop an appreciation of media content in a cultural context and in the context of the media industry. Through analysing and creating media content, learners develop skills that enable them to engage more fully in society and in learning.

The Course provides learners with the opportunity to develop knowledge of media contexts, roles and the key aspects of media literacy: categories, language, representation, narrative, audience and institution.

### **PURPOSE AND AIMS OF THE COURSE**

The main purpose of this Course is to analyse and create media content. It provides learners with opportunities to develop both knowledge and understanding of the media and the ability to create media content.

This Course offers learners opportunities to develop and extend a wide range of skills, including communication, independent learning, critical literacy, personal, interpersonal and team working, and creative thinking. In particular, this Course aims to enable learners to develop:

- the ability to analyse and create media content, as appropriate to purpose, audience and context
- knowledge and understanding of the key aspects of media literacy
- knowledge and understanding of the role of media within society
- the ability to plan and research when creating media content, as appropriate to purpose, audience and context
- the ability to evaluate the learners' practice

### **RECOMMENDED ENTRY**

Entry to this Course is at the discretion of the school. However, learners would normally be expected to have attained the skills, knowledge and understanding required by the National 4/5 English Course.

### **PROGRESSION**

This Course or its Units may provide progression to Higher Media.

### **ASSESSMENT**

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

#### **Analysing Media Content (National 5)**

Learners will be required to provide evidence of the skills that are needed to analyse media content. Learners will demonstrate knowledge of the relevant media contexts, roles and key aspects of media literacy central to the detailed analysis of media content.

#### **Creating Media Content (National 5)**

Learners will be required to provide evidence of the skills and knowledge that are needed to plan and create media content, and evaluate production processes. Learners will apply knowledge of the relevant key aspects of media literacy central to creating media content.

### **EXAM**

The final course assessment takes the form of an externally assessed exam.

## **HIGHER**

### **RATIONALE**

Higher Media enables learners to analyse and create media content. Learners think critically about the media and its role in everyday life, and develop an appreciation of media content in a cultural context and in the context of the media industry. Through analysing and creating media content, learners develop skills that enable them to engage more fully in society and in learning.

The Course provides learners with the opportunity to develop knowledge of the key aspects of media: categories, language, representation, narrative, audience and institution.

### **PURPOSE AND AIMS OF THE COURSE**

The main purpose of this Course is to analyse and create media content. The Course enables learners to understand and develop their media literacy skills and appreciate the opportunities and challenges that occur within the media industry. The Course provides learners with opportunities to develop both theoretical knowledge of the media and the ability to create media content.

This Course offers learners opportunities to develop and extend a wide range of skills, including communication, independent learning, critical literacy, personal, interpersonal and team working, and creative thinking.

In particular, this Course aims to enable learners to develop:

- the ability to analyse and create media content, appropriate to purpose, audience and context
- knowledge and understanding of the key aspects of media literacy
- knowledge and understanding of the role of media within society
- the ability to plan and research when creating media content, as appropriate to purpose, audience and context
- the ability to evaluate learners' practice

### **RECOMMENDED ENTRY**

Entry to this Course is at the discretion of the school. However, learners would normally be expected to have attained the skills, knowledge and understanding required by the National 5 Media or English Course.

### **PROGRESSION**

This Course or its Units may provide progression to higher education or Advanced Higher Media.

### **ASSESSMENT**

This course is based around two compulsory units:

#### **Analysing Media Content (Higher)**

The purpose of this Unit is to develop the skills to analyse media content. This Unit provides learners with the opportunity to develop knowledge and understanding of the key aspects of media literacy central to the detailed and complex analysis of media content.

#### **Creating Media Content (Higher)**

The purpose of this Unit is to develop the skills to create media content and evaluate production processes. This Unit provides learners with the opportunity to develop knowledge and

### **EXAM**

The final course assessment takes the form of an externally assessed exam.





# SCIENTIFIC STUDIES FACULTY

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## **NATIONAL 5**

### **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 one or more of the following or by equivalent qualifications and/or experience:

National 4 Biology or related component Units

There may also be progression from National 4 Chemistry, National 4 Physics, National 4 Environmental Science and National 4 Science Courses.

### **THE AIMS OF THIS COURSE ARE:**

Develop and apply knowledge and understanding of biology

Develop an understanding of the role of biology in scientific issues and relevant applications of biology, including the impact these could make on society and the environment

Develop scientific inquiry and investigative skills

Develop scientific analytical thinking skills in a biology context

Develop the use of technology, equipment and materials, safely, in practical scientific activities

Develop planning skills

Develop problem solving skills in a biology context

Use and understand scientific literacy, in everyday contexts, to communicate ideas and issues and to make scientifically informed choices

Develop the knowledge and skills for more advanced learning in biology

Develop skills of independent working

### **WHAT TOPICS ARE COVERED?**

Cell Biology

Biology: Multicellular Organisms

Biology: Life on Earth

Added Value Unit

### **WHICH SKILLS ARE TAUGHT?**

Numeracy, Investigation Skills, Problem Solving Skills

Literacy, Practical techniques and applications.

### **WHAT TYPE OF ASSESSMENT IS USED?**

End of unit tests Nat 5 level

Carry out a practical or experiment

Research report 70-100 words

External exam at end of S4

### **WHAT TYPE OF HOMEWORK IS GIVEN?**

Weekly homework in line with subject concepts

Revision before end of unit test

### **HOW CAN PUPILS PROGRESS WITH THIS SUBJECT?**

Students achieving a National 5 would progress to Higher Biology

Which careers might benefit from the knowledge of this subject?

Students can be employed in Health and Medicine, Education, Transport, Mechanics and Engineering, Industry, Research and Development, Design, Astronomy, Computer, Music, Sport, Media and many others.

## **HIGHER**

### **PURPOSE**

To contribute to the student's general and vocational education through the acquisition of relevant biological knowledge and skills, and to provide a general basis for further study or employment in areas related to biology. The course provides a broad-based, integrated study of a wide range of biological topics emphasising the importance of biology as an area of fundamental investigative science and as a basis of study in a wide range of applied fields. The course develops an understanding of the way in which biological principles can be applied to the issues facing the individual and society and fosters positive attitudes to others and the environment.

### **RECOMMENDED ENTRY**

While entry is at the discretion of the department, students would normally be expected to have attained an award at National 5 Biology at C pass or above.

### **COURSE DETAILS**

#### **DNA and the Genome**

In this Unit, learners will develop knowledge through study of DNA and the genome. The Unit covers the key areas of structure of DNA; replication of DNA; control of gene expression; cellular differentiation; the structure of the genome; mutations; evolution; genomic sequencing.

This Unit explores the molecular basis of evolution and biodiversity, while the unity of life is emphasised in the study of gene expression. This approach enables the development of both analytical thinking and problem solving skills in context. An understanding of gene expression, at the cellular level, leads to the study of differentiation in organisms. In addition, the Unit covers the evolution and structure of the genome and genomics, including personal genomics.

#### **Metabolism and Survival**

In this Unit, learners will develop knowledge by investigating the central metabolic pathways of ATP synthesis by respiration and how control of the pathways is essential to cell survival.

The Unit covers the key areas of metabolic pathways and their control; cellular respiration; metabolic rate; metabolism in conformers and regulators; metabolism and adverse conditions; environmental control of metabolism; genetic control of metabolism; ethical considerations in use of microorganisms, hazards and control of risks. Analytical thinking and problem solving skills will be developed in context, through investigation of how cellular respiration is fundamental to metabolism and by examining the stages of respiration. In whole organisms, it considers adaptations for the maintenance of metabolism for survival. In addition, it examines the importance of the manipulation of metabolism in microorganisms, both in the laboratory and in industry, including ethical considerations.

#### **Sustainability and Interdependence**

In this Unit, learners will develop knowledge by investigating how humans depend on sufficient and sustainable food production from a narrow range of crop and livestock species, focusing on photosynthesis in plants. The Unit covers the key areas of food supply, plant growth and productivity; plant and animal breeding; crop protection; animal welfare; symbiosis; social behaviour; mass extinction and biodiversity.

Analytical thinking and problem solving skills will be developed contextually within these topics. The importance of plant productivity and the manipulation of genetic diversity to maintain food security are emphasised. The Unit also covers interrelationships and dependence, through symbiosis and social behaviour. By studying biodiversity, the Unit attempts to measure, catalogue, understand and address the human impact, including mass extinction

### **To achieve the Higher Course**

To gain the award of the Course, the learner must pass all of the Units as well as the Course assessment. The required Units are shown in the Course outline section.

Course assessment will provide the basis for grading attainment in the Course award.

## **NATIONAL 5**

### **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 one or more of the following or by equivalent qualifications and/or experience:

National 4 Chemistry or related component Units

There may also be progression from National 4 Physics, National 4 Biology, National 4 Environmental Science and National 4 Science Courses.

### **THE AIMS OF THIS COURSE ARE:**

Develop and apply knowledge and understanding of chemistry

Develop an understanding of chemistry's role in scientific issues and relevant applications of chemistry, including the impact these could make in society and the environment

Develop scientific inquiry and investigative skills

Develop scientific analytical thinking skills in a chemistry context

Develop the use of technology, equipment and materials, safely, in practical scientific activities

Develop planning skills

Develop problem solving skills in a chemistry context

Use and understand scientific literacy, in everyday contexts, to communicate ideas and issues and to make scientifically informed choices

Develop the knowledge and skills for more advanced learning in chemistry

Develop skills of independent working

### **WHAT TOPICS ARE COVERED?**

Chemical Changes and Structure

Nature's Chemistry

Chemistry in Society

Added Value Unit

### **WHICH SKILLS ARE TAUGHT?**

Numeracy, Investigation Skills, Problem Solving Skills

Literacy, Practical techniques and applications.

### **WHAT TYPE OF ASSESSMENT IS USED?**

End of unit tests Nat 5 level

Carry out a practical or experiment

Research report 70-100 words

External exam at end of S4

### **WHAT TYPE OF HOMEWORK IS GIVEN?**

Weekly homework in line with subject concepts

Revision before end of unit test

### **HOW CAN PUPILS PROGRESS WITH THIS SUBJECT?**

Students achieving a National 5 would progress to Higher Chemistry

### **WHICH CAREERS MIGHT BENEFIT FROM THE KNOWLEDGE OF THIS SUBJECT?**

Students can be employed in Health and Medicine, Education, Transport, Mechanics and Engineering, Industry, Research and Development, Design, Astronomy, Computer, Music, Sport, Media and many others

**HIGHER****PURPOSE**

The course is designed for students who wish to continue their study of Chemistry beyond National 5 and who may wish to progress to Advanced Higher

As a one-year course the study of Chemistry at Higher can make an important contribution to the student's knowledge and understanding of the physical and natural world. The course provides a good grounding for further study of Chemistry in Higher Education. The Higher Chemistry Course develops learners' curiosity, interest and enthusiasm for chemistry in a range of contexts. The skills of scientific inquiry and investigation are developed throughout the Course, and the relevance of chemistry is highlighted by the study of the applications of chemistry in everyday contexts. This would include pure Chemistry, Chemistry-related subjects such as chemical engineering, and medicine.

**RECOMMENDED ENTRY**

While entry is at the discretion of the Chemistry department, students would normally be expected to have attained an award at National 5 Chemistry at C pass or above.

**COURSE DETAILS****Chemical Changes and Structure**

This Unit covers the knowledge and understanding of controlling reaction rates and periodic trends, and strengthens the learner's ability to make reasoned evaluations by recognising underlying patterns and principles. Learners will investigate collision theory and the use of catalysts in reactions. Learners will explore the concept of electronegativity and intra-molecular and intermolecular forces. The connection between bonding and a material's physical properties is investigated.

**Researching Chemistry**

This Unit covers the key skills necessary to undertake research in chemistry. Learners will research the relevance of chemical theory to everyday life by exploring the chemistry behind a topical issue. Learners will develop the key skills associated with collecting and synthesising information from a number of different sources. Equipped with the knowledge of common chemistry apparatus and techniques, they will plan and undertake a practical investigation related to a topical issue.

**Nature's Chemistry**

This Unit covers the knowledge and understanding of organic chemistry within the context of the chemistry of food and the chemistry of everyday consumer products, soaps, detergents, fragrances and skincare. The relationship between the structure of organic compounds, their physical and chemical properties and their uses are investigated. Key functional groups and types of organic reaction are covered.

**Chemistry in Society**

This Unit covers the knowledge and understanding of the principles of physical chemistry which allow a chemical process to be taken from the researcher's bench through to industrial production. Learners will calculate quantities of reagents and products, percentage yield and the atom economy of processes. They will develop skills to manipulate dynamic equilibria and predict enthalpy changes. Learners will investigate the ability of substances to act as oxidising or reducing agents and their use in analytical chemistry through the context of volumetric titrations. Learners will use analytical chemistry to determine the purity of reagents and products.

**To gain the award**

To gain the award of the Course, the learner must pass all of the Units as well as the Course assessment. The required Units are shown in the Course outline section. Course assessment will provide the basis for grading attainment in the Course award.

**NATIONAL 5**

**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 one or more of the following or by equivalent qualifications and/or experience:

National 4 Physics or related component Units

There may also be progression from National 4 Chemistry, National 4 Biology, National 4 Environmental Science and National 4 Science Courses.

**THE AIMS OF THIS COURSE ARE:**

Develop and apply knowledge and understanding of physics

Develop an understanding of the role of physics in scientific issues and relevant applications of physics, including the impact these could make on society and the environment

Develop scientific inquiry and investigative skills

Develop scientific analytical thinking skills in a physics context

Develop the use of technology, equipment and materials, safely, in practical scientific activities

Develop planning skills

Develop problem solving skills in a physics context

Use and understand scientific literacy, in everyday contexts, to communicate ideas and issues and to make scientifically informed choices

Develop the knowledge and skills for more advanced learning in physics

Develop skills of independent working

**WHAT TOPICS ARE COVERED?**

Electricity and Energy

Waves and Radiation

Dynamics and Space

Added Value Unit

**WHICH SKILLS ARE TAUGHT?**

Numeracy,

Investigation Skills,

Problem Solving Skills

Literacy,

Practical techniques and applications.

**WHAT TYPE OF ASSESSMENT IS USED?**

End of unit tests Nat 5 level

Carry out a practical or experiment

Research report 70-100 words

External exam at end of S4

**WHAT TYPE OF HOMEWORK IS GIVEN?**

Weekly homework in line with subject concepts

Revision before end of unit test

**HOW CAN PUPILS PROGRESS WITH THIS SUBJECT?**

Students achieving a National 5 would progress to Higher Physics

**WHICH CAREERS MIGHT BENEFIT FROM THE KNOWLEDGE OF THIS SUBJECT?**

Students can be employed in Health and Medicine, Education, Transport, Mechanics and Engineering, Industry, Research and Development, Design, Astronomy, Computer, Music, Sport, Media and many others

## **HIGHER**

### **PURPOSE**

This course reinforces and extends the knowledge and understanding of the concepts of physics and related problem solving skills and practical abilities acquired through the Credit work of the S-grade or Intermediate 2. A thorough understanding of Credit S-grade or Intermediate 2 Physics is therefore assumed.

### **RECOMMENDED ENTRY**

While entry is at the discretion of the Physics department, students would normally be expected to have attained an award at National 5 Physics at C pass or above. National 5 Mathematics would be useful.

### **COURSE DETAILS**

#### **Our Dynamic Universe**

The general aim of this Unit is to develop skills of scientific inquiry, investigation and analytical thinking, along with knowledge and understanding of our dynamic universe.

Learners will apply these skills when considering the applications of our dynamic universe on our lives, as well as the implications on society/the environment. This can be done by using a variety of approaches, including investigation and problem solving. The Unit covers the key areas of kinematics, dynamics and space time. Learners will research issues, apply scientific skills and communicate information related to their findings, which will develop skills of scientific literacy.

#### **Particles and Waves**

The general aim of this Unit is to develop skills of scientific inquiry, investigation and analytical thinking, along with knowledge and understanding of particles and waves.

Learners will apply these skills when considering the applications of particles and waves on our lives, as well as the implications on society/the environment. This can be done by using a variety of approaches, including investigation and problem solving. The Unit covers the key areas of particles and waves.

Learners will research issues, apply scientific skills and communicate information related to their findings, which will develop skills of scientific literacy.

#### **Electricity**

The general aim of this Unit is to develop skills of scientific inquiry, investigation and analytical thinking, along with knowledge and understanding of electricity. Learners will apply these skills when considering the applications of electricity on our lives, as well as the implications on society/the environment. This can be done by using a variety of approaches, including investigation and problem solving.

The Unit covers the key areas of electricity, and electrical storage and transfer. Learners will research issues, apply scientific skills and communicate information related to their findings, which will develop skills of scientific literacy.

#### **Researching Physics**

The general aim of this Unit is to develop skills relevant to undertaking research in Physics. Learners will collect and synthesize information from different sources, plan and undertake a practical investigation, analyse results and communicate information related to their findings. They will also consider any applications of the physics involved and implications for society/ the environment.

The Unit offers opportunities for collaborative and for independent learning. Learners will develop knowledge and skills associated with standard laboratory apparatus and in the recording and processing of results.

#### **To gain the award**

To pass the course, a pupil must successfully pass all three unit tests, the practical assessment and the final examination. The final examination will be used to determine the grade of the pass.

## **NATIONAL 5**

### **RECOMMENDED ENTRY**

Entry to this Course is at the discretion of the centre.

### **THE AIMS OF THIS COURSE ARE:**

The National 5 Energy Skills Course has been designed to provide a basis for progression into further education or for moving directly into training or employment within the Energy sector.

Candidates will explore a variety and range of industries and career opportunities which exist within the energy sector.

They will also become familiar with key words and terms used in the sector, and will develop an awareness of the impact of the energy sector on the environment.

Personal development of employability skills will be the main focus across the Course with each Unit aiming to enhance such skills.

The development of teamwork and practical skills and carrying out test procedures are also given a high profile.

The mandatory Units in this Course introduce the various energy industries based in the UK and develop practical skills by building a small scale solar hot water system and wind turbine.

Candidates will also review their employability skills and strengths and weaknesses which will be used to help select the most appropriate career for them within the energy sector.

### **WHAT TOPICS ARE COVERED?**

Energy: An Introduction

Energy: Domestic Solar Hot Water Systems

Energy: Domestic Wind Turbines Systems

Energy: Employability and Careers

Energy: Oil and Gas Extraction

### **WHICH SKILLS ARE TAUGHT?**

Numeracy,

Research Skills,

Problem Solving Skills,

Literacy,

Practical techniques and applications.

### **WHAT TYPE OF ASSESSMENT IS USED?**

Carry out a practical continuous assessment on given briefs

### **WHAT TYPE OF HOMEWORK IS GIVEN?**

Mainly research

### **HOW CAN PUPILS PROGRESS WITH THIS SUBJECT?**

A National Progression Award

A National Certificate programme in Further Education

Employment with training in the Energy sector 3

### **WHICH CAREERS MIGHT BENEFIT FROM THE KNOWLEDGE OF THIS SUBJECT?**

Students can be employed in the Energy sector, Oil and Gas sector, renewable sector or go on to further education to study Engineering, mechanics, electrician, plumbing, and joinery.



## **LABORATORY SKILLS (Skills for Work)**

### **NATIONAL 5**

#### **RECOMMENDED ENTRY**

Entry to this Course is at the discretion of the centre.

#### **THE AIMS OF THIS COURSE ARE:**

National 5 Skills for Work: Laboratory Science is an introductory qualification. The Course provides a broad experiential introduction to laboratory science. Candidates will explore a variety of industries and services, and career opportunities, in science laboratories locally, nationally, and globally.

They will develop the basic practical skills and knowledge needed for working in a laboratory: measuring, weighing and preparing compounds and solutions; and health and safety requirements. Practical skills in microbiology, measuring radioactivity, chemical handling and laboratory instrumentation will be developed. Candidates will work with others to produce a plan to undertake a practical investigation to test scientific hypotheses. This will also involve reporting of the results, conclusions and evaluations of the investigation. Throughout all Units the Course emphasises the employability skills and attitudes valued by employers which will help to prepare candidates for the workplace. Candidates will review their own employability skills, and will seek feedback from others on their strengths and weaknesses.

#### **WHAT TOPICS ARE COVERED?**

Laboratory Science: Careers using Laboratory Science  
Laboratory Science: Working in a Laboratory  
Laboratory Science: Practical Skills  
Laboratory Science: Practical Investigation

#### **WHICH SKILLS ARE TAUGHT?**

Numeracy,  
Research Skills,  
Problem Solving Skills,  
Literacy,  
Practical techniques and applications.

#### **WHAT TYPE OF ASSESSMENT IS USED?**

Carry out a practical continuous assessment on given briefs

#### **WHAT TYPE OF HOMEWORK IS GIVEN?**

Mainly research

#### **HOW CAN PUPILS PROGRESS WITH THIS SUBJECT?**

A National courses or units  
A National Certificate programme in Further Education  
Vocational training or Employment

#### **WHICH CAREERS MIGHT BENEFIT FROM THE KNOWLEDGE OF THIS SUBJECT?**

Students can be employed in research, or entry to further education in a Science Field.

## DUKE OF EDINBURGH AWARD SCHEME

### DOING YOUR DUKE OF EDINBURGH (DofE)

By doing your DofE, you're in for an amazing adventure and masses of fun as you take part in a range of activities, all leading to the achievement of an award that's recognised and highly regarded by colleges, universities and employers alike.

A DofE programme is a real adventure from beginning to end. It doesn't matter who you are or where you're from. You just need to be aged between 14 to 24 and realise there's more to life than sitting on a sofa watching life pass you by.

### LEVELS

There are three levels, which when completed, lead to a Bronze, Silver or Gold Duke of Edinburgh's Award.

### SECTIONS

You achieve your Award by completing a personal programme of activities in four sections (five if you're going for Gold) – Volunteering, Physical, Skills, Expedition and for Gold, a Residential.

You'll find yourself helping people and your community, getting fitter, developing skills that you may never knew you had, going on expeditions and taking part in a residential activity (Gold only).

*THE BEST BIT IS – YOU GET TO CHOOSE WHAT YOU DO!*

Your programme can be full of activities and projects that get you buzzing, and along the way you'll pick up experiences, friends and talents that will stay with you for the rest of your life.

If you need any further information, talk to your DofE Leader (Mr Turley)

### CHOOSING ACTIVITIES FOR SECTIONS

You will need to choose for yourself what you are going to do as part of your DofE programme. There are so many different activities to choose from, just go and chat with your DofE leaders for more information, ideas and advice. You can also check out the DofE website to help you identify the activities you want to do, who's assessing you and what goals you're setting for yourself.

There is fantastic list of activities to choose from and most activities can count towards your DofE.

The Duke of Edinburgh Award Scheme is an exciting and challenging way of gaining a highly valued qualification. Not only will you gain an award, you will have developed skills that will help you on life's adventures.