Kilmarnock Academy



S5-S6 Option Choice Booklet 2015-2016

PARTI

S5 Option Process

- This S5 Option booklet provides information about all the courses and levels available for study in S5 and S6.
- Throughout S5 we use a monthly tracking system to allow teachers, pupils and parents to monitor progress.
- S4/5 options deadline Friday 27th February 2015. All option forms must be completed and returned by this date.
- SQA Examination diet takes place during April/May 2015.
- New timetable for S4, 5 and 6 pupils begins on Tuesday 2rd June 2015. S4 pupils move to an S5 timetable, S5 to S6.
- SQA Examination results. These will be published early August. Based on these results students may wish to reconsider their options choices.
- Option changes. At the start of the new term in August DHT's and pastoral care staff will meet with those pupils wishing to renegotiate option choices.

We do our very best to provide first choices for all pupils but should numbers in courses be very small such courses may have to be withdrawn. Places on courses are confirmed based on final SQA examination results.

General Information

All S5 pupils will follow a school timetable which includes 5 certificate subjects along with 1 period of elective and 1 of PSE.

All pupils in new S5 should select English as one of their options.

All National Qualifications require that pupils pass 'unit assessments' in school before they can be awarded course passes in SQA examinations.

Pupils entering S5 must be aware that not only does the level of difficulty of courses increase but they pace of learning will also increase.

Course Entry Requirements

Pupils must select subjects from the 8 they have studied throughout S4.

Requirements for entry to Higher courses

A or B pass at National 5

Requirements for entry to National 5 courses

Pass at National 4 level

Requirements for entry to National 4 courses

Pass at Access 3 / National 3

S6 Pupils only

There are some courses, run in conjunction with Ayrshire College, Kilmarnock Campus, which may be of interest to S6 pupils.

AH Biology and AH Chemistry will be delivered by Ayrshire College at Kilmarnock Campus. AH Biology on a Tuesday 9.00am -11.15am and Thursday 11.15am-1.00pm, AH Chemistry on a Tuesday from 11.15am-1.00pm and Thursday 9.00am-11.15am

AH Physics will also be available at both Ayrshire College and St Joseph's Academy. Times have still to be confirmed.

It is likely that some of the advanced higher courses will be delivered out with our school. If you choose to study an advanced higher subject at another school/college **you** will be responsible for any transport arrangements and/or costs.

All S6 pupils must select a full timetable i.e. one subject from each column. Only students selecting 1 or more advanced Higher are permitted a study column.

PART II

SUBJECT DESCRIPTIONS

ADMINISTRATION & IT

Higher & National 5

Recommended Entry Requirement

National 5 pass in S4/5. However, consideration will be given to students who wish to crash National 5 and have demonstrated success elsewhere in the school.



Course Aims and Description

This qualification has now become more ICT/Practical based than was previously the case. If you enjoy working on computers using MS Office packages then this would be an excellent choice. By studying Administration, pupils will learn a variety of crucial skills which are required for a range of jobs.

The Course aims to enable learners to:

- develop knowledge and understanding of administration in the workplace and its importance
- develop a range of advanced IT skills for processing and managing information
- develop a range of skills to communicate complex information effectively, making appropriate use of IT
- acquire skills in managing the organisation of events

Course Assessment (Higher)

Component one — (Practical Assignment) worth 70% The purpose of this assignment is to address challenge and application. It will assess learners' ability to apply their problem solving and advanced IT skills in the context of a complex scenario, which may be an event.

This assignment will give learners an opportunity to demonstrate:

- use of complex IT functions in word processing, spreadsheets, databases, desktop publishing, and presentation software to produce, process and manage information and solve problems in unfamiliar contexts
- skills in electronic research to source complex information
- skills in effective communication, taking account of its context, purpose and audience
- a wide range of administrative skills related to planning and organising to complete the assignment

Component two — Question Paper (worth 30%)

The purpose of this question paper is to address breadth and application. Breadth will be assessed by drawing on, and by sampling, the knowledge and understanding from across the Course. Learners will also be required to apply their knowledge and understanding of administrative theory.

The question paper will consist of a mixture of mandatory shortand extended-response questions. The duration for this is 1 hour. The questions will be drawn from any aspect of the Course on a sampling basis.

Course Assessment (National 5)

At National 5 level there is no theory element within this course. The course is assessed by a 4 hour (2 x 2 hours) practical coursework which is completed in class – there is no theory element however the assessment will usually have tasks covering health and safety and customer care. The coursework will consist of a range of tasks including word processing, powerpoint, spreadsheets, databases, email and electronic diaries.

ART & DESIGN

Advanced Higher, Higher and National 4, National 5



Recommended Entry Requirement

Advanced Higher Art & Design – Higher A or B (upper pass)
Higher Art & Design – National 5 A or B pass
National 5 Art & Design – National 4 pass
National 4 – a healthy interest and commitment to Art & Design

<u>Course Content</u> - Higher, National 4 and National 5 courses have the same format, an Expressive Folio, a Design Folio and a Critical Unit. The grade awarded is based on attainment of all three units. There is also practical and written exam which occurs at the end of unit.

The units are made up of distinct areas of study which follow on from each other. Throughout the year there are also many opportunities for specialised visits and guest lectures.

Design Folio

Research and Investigation, Development, Final Solution and Evaluation.

Art & Design Studies (Written)

Expressive Folio

Investigation, Development and Expressive Outcome Art & Design Studies (Written)

Assessment

Assessment is based upon the quality of the units plus a written examination. The written Art & Design paper is 1 - 1½ hours long (National 5/Higher)

This subject offers activities which promote discovery and an understanding of ideas. It provides a means of expressing creativity visually. This course encourages individuality, problem solving and the ability to express themselves through a range of media and techniques. It is a subject covering many aptitudes, interests and abilities which provides the opportunity for a range of young people to achieve a national qualification. Art & Design qualifications are accepted points for all Colleges and Universities.

Advanced Higher Art & Design

There are two major units of work an 80 hour practical folio and a 40 hour critical folio. The units have to be linked. The folio has to follow either a Design or Expressive theme. The choice of theme or topic is the candidate's personal choice. This course requires self-motivation and extra work to be produced at home. This course is suitable for pupils to create a folio of work required for entry to Art College, Architecture courses and Product Engineering.

Recommended Entry

A or B pass at Higher Art and Design

Positive destinations/Further Education: Heriot Watt University (Galashiels – school of Textiles and Design), Glasgow School of Art, Duncan of Jordanstone University of Art and Design, Cardonald College, Edinburgh School of Art, Langside college – make up artistry.

Career Options: Fine Art – Sculpture, Painting, Printmaking, Environmental Studies, Fine Art Photography, Stained Glass.

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

BIOLOGY

Advanced Higher - delivered by Kilmarnock College

Course Content

The Advanced Higher course is made up of several parts.

Two mandatory units of 40 hours duration.

- Cell and Molecular Biology
- Environmental Biology

One mandatory investigation of 20 hours duration, which will be in an area of Biology, which is of particular interest to the individual student. One optional unit of 20 hours duration chosen from the following

- Biotechnology
- Animal Behaviour
- Physiology and Exercise

There are a further 40 hours for revision etc.

Assessments

End of Unit tests form the internal assessment.

An investigation report must be produced.

There is also an external exam at the end of the course.

Higher

Higher Biology for CfE is a new course specifically designed to offer a natural progression from National 5 Biology.

Recommended entry: pupils should ideally have achieved a grade A or B at National 5 Biology.

It is possible to do a "crash" course on S6 or to sit the course over two years if pupils have demonstrated success in other subjects.

The Higher Course consists of three units which encompass some of the latest developments in Biology. These units of study include:

- DNA and the Genome
- Metabolism and survival and
- Sustainability and Interdependence

The course is designed to expand pupils' knowledge of cuttingedge Biological developments. It also placed great emphasis on how that biological knowledge can be applied to provide solutions to many of the difficult challenges faced by today's society. Pupils will have opportunities to research the facts behind controversial issues arising from new technologies and to take part in debates over scientific ethics in addition to the experimental and problem solving skills that they continue to develop. The course is very interesting but demanding. Pupils should expect to put in a lot of study time at home as well as in school.

Course work is assessed in a variety of ways. Three Unit tests (NARS) must be passed and a biological experiment carried out with a scientific report of the findings written up under exam conditions.

An assignment, on a relevant topic of interest, involving a research phase and a write up phase has to be completed at the beginning of March. The writing up of this is also carried out under exam conditions. It is marked externally by the SQA. This contributes marks towards the final award. The remainder of the final assessment consists of an externally marked exam of multiple choice questions and extended answer questions.

The Higher Biology exam takes place in May.



National 5 Biology in S5/6

Recommended entry: This course follows naturally on from National 4 Biology, but would be suitable for pupils who have achieved success at National 5 in other subjects.

This is a one year course and involves three units of study: Cell Biology, Multicellular Organisms and Life on Earth.

In other words, the study of life at three levels: the tiny and fascinating world of the cell; in depth studies of how whole organisms work, both plants and animals and a study of how life on our planet interacts in complex ways.

It is a very intensive course that involves study, experimental work, opportunities for research and debate and the development of many practical science skills. It is interesting and varied.

Assessment consists of three unit tests (NARS), the completion of an experiment and a written scientific report on it; a piece of research into a scientific topic.

The added value unit is an assignment, to be researched by pupils and written up under exam conditions in school. This is externally marked and contributes to the final assessment which is an exam sat in May.

BUSINESS MANAGEMENT

National 5 and Higher

Recommended Entry Requirement



Pass at National 5 in S4/5. However, consideration will be given to students who wish to crash Higher/Nat 5 and have demonstrated success elsewhere in the school.

Course Aims and Description

This is an excellent subject to choose if you see yourself managing your own business or pursuing a career in the business world, but it is also of general interest, as it deals with many issues which we all encounter in our everyday lives. We feel that this course opens the door for you to a wide range of careers while also providing you with a valuable insight into the running of a business – something which it would be of great benefit to have.

This course enables students to understand the role and operation of business, to exercise problem-solving skills and to employ these skills to communicate by means of written or spoken language. Most college and university courses have a business component – so this course will be of great benefit to you.

You will also get the opportunity to take part in a variety of business challenges including the Tom Hunter Challenge and the Coca Cola Real Business Challenge.

Course Assessment (both Nat 5 and Higher)

Assignment

30% of the course award is allocated to a research project which is carried out in class on a local business.

External Assessment

An external examination worth 70% of the course award will be completed during the SQA exam diet in May/June.

Careers – could lead to employment within HR Management, Marketing Management, Sales Management, Bank, Insurance, Administration and Accountancy to name a few.

CHEMISTRY

Advanced Higher Chemistry

(will be delivered by Kilmarnock College as usual)

Recommended Entry Requirement

Higher Chemistry course or its component units or equivalent.

Course Content

The course has 4 units:

Electronic Structure and the Periodic Table Principles of Chemical Reactions, Organic

Assessment

There is a closed book test at the end of each unit and one practical write up must be completed from unit 1. A project of 20 hours also must be completed.

There will be an external exam which the pupils will be able to sit after passing each of the unit tests. The pupil is accredited for each test they pass.

Higher Chemistry (new revised higher qualification)

Recommended Entry Requirement

Candidates will normally have passed the new National 5 Chemistry course at A or B together with a good Mathematics pass at National 5 Higher Chemistry involves interesting practical work which would be well suited for a career involving any science at all. It teaches positive attitudes and an open minded approach to recognise alternative points of view.

Some of the skills taught involve; solving chemical problems, using different chemical techniques, planning and evaluation of experiments, drawing conclusions, analysing results, presenting information and drawing valid conclusions.

All of which could support the pupil in their chosen career. The interesting and motivating course material, which the pupil must study, relates Chemistry to everyday issues in society, and gives the pupil the ability to see how much Chemistry impacts on the world as a whole.

Course Content

The course consists of four Mandatory units and an added value unit

Chemical Changes and Structure Nature's Chemistry

Researching Chemistry Chemistry in Society

Assessment

You will be assessed throughout the course in a variety of ways. Some of the assessments are for formative purposes to produce a profile report for you and your parents/guardians to show how you are getting on in each unit. These assessments will also help us decide what help you to pass the final Higher exam.

There are three end of Unit tests and an external exam. The added value unit consists of an assignment which will be marked externally and an external exam.

These requirements may change according to SQA decisions. The external question paper will have 100 marks (84 % of the total mark) this will consist of 20 marks multiple choice and 80 marks written response questions.

The exam will contain assorted question type and content from the whole of the course lasting 2 hours and 30 minutes

The assignment will have 20 marks (16% of the total marks) and will be more demanding than the National 5 assignment. This also will be externally assessed.

National 5

Recommended Entry Requirement

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 Course or relevant component Units

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

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

Skills in investigation will be encouraged and developed. The course also gives them a suitable base for training and science related work in the future.

Course Content

The course consists of **three** Mandatory units and an added value unit

Chemical Changes and Structure Nature's Chemistry
Chemistry in Society

<u>Assessment</u>

You will be assessed throughout the course in a variety of ways. Some of the assessments are for formative purposes to produce a profile report for you and your parents/guardians to show how you are getting on in each unit. These assessments will also help us decide what help you to pass the final national 5

There are three end of Unit tests (NARS), a report, an investigation, an assignment and an external exam.

These requirements may change according to SQA decisions
The external question paper will have 80 marks this will consist of 20
marks multiple choice and 60 marks written response questions.
The exam will contain assorted question type and content from the
whole of the course lasting 2 hours

The assignment will have 20 marks which will be externally assessed.

DESIGN & MANUFACTURE

<u>Higher</u>



Entry requirements:

SG (credit) Craft & Design or National 5 (A or B) Design & Manufacture, or, SG (credit) or National 5 (A or B) Art & Design, or SG (credit) or National 5 (A or B) Graphic Communication.

Course content

The Course offers pupils opportunities to explore the impact of design and technological activities in everyday life. Candidates will consider the complete life of a product from its initial conception through manufacture and marketing, to its impact on society. Pupils will further develop an ability to produce solutions to design tasks by applying knowledge, understanding and problem solving skills. They will also improve their knowledge and understanding of the process and principles of designing, their ability to analyse and clarify problems in a design context.

They will gain an understanding of the issues which influence the design of products and be taught how to apply effective graphic and modelling techniques.

Industrial manufacturing processes and materials properties will be studied and an understanding of the economic, social and environmental considerations, and their implications on design and manufacture of everyday products will also be taught.

<u>Assessment</u>

The Course consists of two individual units: **Design** and **Materials and Manufacturing.** The course assessment consists of an externally marked SQA exam (50%) and a Course Assignment (50%).

DUKE OF EDINBURGH AWARD



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 and 24 and realise there's more to life than sitting on a sofa watching life pass you by.

Levels

You can do programmes at three levels, which when completed, lead to a Bronze, Silver or Gold Duke of Edinburgh's Award. At Kilmarnock Academy we will be aiming to achieve Bronze awards or Silver awards this coming year but in future years it may be possible to work towards the Gold award.

Bronze Award

- A Bronze DofE programme has 4 sections, Volunteering, Physical, Skills and Expedition. You must do a minimum of 3 months activity for each of the Volunteering, Physical and Skills sections, and plan, train for and do a 2 day (1 night) Expedition.
- You also have to spend an extra three months on one of the Volunteering, Physical or Skills sections. It's your choice which one and, though you can change your mind later, you should decide which section you want to do for longer at the beginning. Knowing how long you're going to do it for will help you to choose your activity and set your goals for each section.
- It will usually take you at least 6 months to complete your Bronze programme.

Silver Award

- The next step up from Bronze... you need to be at least 15 to start doing your Silver DofE programme. If you've achieved your Bronze Award, your Leader may allow you to start your Silver a month or two before your 15th birthday.
- A Silver DofE programme has 4 sections, Volunteering, Physical, Skills and Expedition. You need to do at least 6 months Volunteering and a minimum of 6 months on either Physical or Skills and 3 months on the other. It's up to you which one you do for longer.
- The Expedition section involves planning, training for and doing a 3 day (2 night) expedition.
- If you start your Silver without doing Bronze first you'll have to do an extra 6 months volunteering or doing whichever of the Physical or Skills sections you have spent more time on. Though you can change your mind later, you should decide which section you want to do for longer at the beginning.

Knowing how long you're going to do it for will help you to choose your activity and set your goals for each section.

 It will take you at least 6 months for Silver if you've already achieved your Bronze, or 12 months if you've jumped straight into Silver.

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. Achieving an Award will give you skills, confidence and a view on life that everyone is looking for, from employers to colleges and universities.

S5/6 EMPLOYABILITY



This course is designed to develop pupils' transferable skills such as communication, teamwork, problem solving. Pupils are made aware of what employers are looking for in an employee.

Confidence building plays a central role in the course and the ability to deliver a prepared talk is one of the assessments. The prelim is a mock interview and the pupils prepare an application form which leads to an interview. Preparation is the key for the interview and pupils learn to understand the application/interview process.

There will be input from local businesses where possible and different interview situations will be explored – individual, group, aptitude tests etc. Visits to businesses will be arranged to see the world of world as it happens. Work experience placements may be offered as appropriate.

There will opportunities to help with school activities for younger pupils. This is a learning situation also. Organisational tasks will be given. Pupils need to understand that no task is too small or unimportant if an event is to be well run and successful.

ENGLISH

Advanced Higher



Why Advanced Higher English?

This course is designed to build on the knowledge and skills you have gained in Higher English and allow you to pursue particular interests in more specialised areas of study. The course presents considerable academic and personal challenges and requires pupils to think and work independently. It also provides a sound base for further study of English and also gives pupils a level of linguistic competence, which is extremely valuable for a wide range of other studies and employment situations.

Course content

The course is made up of three units

- Specialist study
 You get to choose a topic and analyse how authors
 respond to this. After studying their literature you will
 produce a dissertation of 3,500 4,000 words. This is
 externally assessed by SQA.
- Literature
 You will study literature from a prescribed list. In the final exam you will write an extended critical essay
- Creative Writing
 Rather like the folio for Higher you will write creatively across a variety of genres. A folio of 2 pieces will be submitted to SQA for assessment.

Higher

Why Higher English?

Entry requirement – National 5 (Grades A – C)
Being competent in English is the key to success in many aspects of life and work. A qualification in English is often required for entry to further and higher education.

This is a demanding course which aims to improve and extend your vocabulary and understanding of written texts and further your experience of English literature: prose, poetry and drama.

Course content

There are 2 core units:

Analysis and Evaluation – (Reading and Listening) and

Creation and Production – (Writing and Talking)
As in National 5, a number of unit assessments have to be successfully passed throughout the course.
A Writing folio of 2 pieces will be submitted to SQA for assessment.

Again, like National 5 the final exam will have a Close Reading test, a critical essay test and a Scottish set text test.

National 5

Entry requirement – National 4

If you studied National 4 last year you may be able to progress to National 5. You will be involved in the same type of work but, remember, the level of difficulty will be significantly greater. There are 2 core units:

Analysis and Evaluation – (Reading and Listening) and

Creation and Production – (Writing and Talking)

As in National 4 a number of unit assessments have to be successfully passed throughout the course **but**, unlike National 4 where all the units are assessed in school, you will have to prepare for a final exam.

For those pupils who do not follow through to the final exam there is the option to complete the National 5 Literacy unit.

FASHION AND TEXTILE TECHNOLOGY

National 4 and National 5

Course Content

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

Assessment

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

Entry Requirements Fashion and Textile Technology is suitable for students who have achieved a qualification in Art and Design at any level and who have an interest in this area.

FRENCH

CfE Higher

Recommended Entry Requirement

National 5 pass at A or B



Course Content

Once a pupil has successfully completed the CfE Higher course, he or she will be at a stage where he/she can begin to use the language independently in confident and flexible ways. The aim of the course is for the candidate to develop communicative abilities to a fairly sophisticated level through study of defined, relevant and useful contexts. There are many benefits to language learning – study of a language widens horizons to include an awareness of aspects of European culture and also contributes to a wider knowledge of how language works. Pupils can improve their self-confidence and their ability to build new relationships is enhanced. Learning a language improves literacy and reading skills in English and enhances problem solving, interpersonal and communication skills. A modern language qualification on your CV enhances your employment prospects and most employers are not looking for fluency but conversational ability! Pupils will study various topics such as teenage problems, the four broad contexts of Society, Learning, Employability and Culture. Pupils preparing for university may wish to return to the study of a foreign language in S6 to add another higher to their CV.

Assessment

Assessment is at National Qualifications CfE Higher Level. The exam reflects the content of the course and pupils are required to sit two external papers – one is Reading, Translation and Directed Writing and the second is Listening and Writing. The Talking element of the exam is assessed internally. Pupils must also pass Internal Unit Assessments in all four skills – Reading, Listening, Talking and Writing. Those who find the challenges of Higher too demanding may be presented for National 5 in 2015.

National 5

Recommended Entry Requirement

National 4 - Pass

This course has been designed as a stepping stone to Higher and focuses on the same Higher contexts of Society, Learning, Employability and Culture. Study of a language at National 5 brings the same benefits with regard to cultural awareness, knowledge about language, employability and communication skills.

<u>Assessment</u>

The National 5 exam consists of two external papers: Reading and Writing and Listening. The Talking element is a performance and is internally assessed. Internal Unit Assessments in all four skills are also requirements of the course.

GEOGRAPHY

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



Why Geography?

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

Higher

Recommended Entry Requirement

Entry level is a pass at National 5 Geography. In S6 a Higher in another Social Subject would be acceptable.

Course Content

The Higher course involves the study of three core units.

- Physical Environments (Biosphere, Lithosphere, Hydrosphere and Atmosphere).
- Human Environments (Population, Urban and Rural)
- Environmental Interactions takes the basic knowledge from the Physical and Human Environments and applies it to real life situations. Pupils in Kilmarnock Academy study River Basin Management and Development and Health.

Assessment

Higher is assessed with internal unit assessments and an external exam.

National 5

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

<u>Assessment</u>

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

National 4

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

Assessment

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

GRAPHIC COMMUNICATION

Advanced Higher/ Higher/ National 5

Entry requirements:

<u>Advanced Higher</u> - Higher (A or B) Graphic Communication



<u>Higher</u> – SG (credit) or National 5 (A or B) Graphic Communication, or SG (credit)/National 5 (A or B) Art & Design

National 5 – National 4 Graphic Communication or National 4 Art & Design

Course content:

The purpose of the Advanced Higher Course is to develop learners' skills in communicating using graphic media, and in interpreting, understanding and critically evaluating graphic media created by others. Further information on specific content details can be sought from any Technical teacher.

At Higher and National 5 level, pupils will develop knowledge and a practical application of how to use graphics to communicate more clearly and effectively. Computers will be used in learning and teaching and candidates will work with 3D solid modelling and desktop publishing software packages, thus widening their experience of information technology within graphic communication and the world today.

In addition, candidates will have the opportunity to develop analytical thinking and creativity. The Course makes a significant contribution to developing technological capability. Further information on specific content details can be sought from any Technical teacher.

Assessment:

At **Advanced Higher**, pupils will be assessed over two individual units; **Technical Graphics and Commercial and Visual Media Graphics**.

The final award for the course consists of an externally marked SQA exam (40%) and an internally marked course project (60%)

At **Higher** and **National 5**, pupils will be assessed over two individual units; **2D Graphic Communication** and **3D and Pictorial Graphic Communication**.

The assessment approach in Higher Graphic Communication is similar to, and progresses from, the National 5 Graphic Communication Course. The question paper will not include drawing activities. Learners will provide written responses to questions, although these may be supported by sketches and/or diagrams to amplify or provide a response if required. The quality of any sketching will not be assessed in the examination. The final award for all levels of course consists of an externally marked SQA exam (50%) and a Course Assignment (50%).

HISTORY

<u>Higher</u>



Recommended Entry Requirement:

Students would be expected to have attained National 5 in History or similar or better in other Social Subject.

Students will study option C: Later Modern History Within this option students will study the following units:

Unit 1: Britain and Scotland 1850's – 1979

Unit 2: The Growth of Nationalism in Germany 1815 – 1939

Unit 3: Scotland's Treaty of Union 1689-1740.

Assessment

To gain the course award students must pass an assessment on each of the above units and the external assessment. External assessment consists of:

- 1. Extended essay (prepared and written up in school)
- 2. Paper 1 (covers Units 1 and 2)
- 3. Paper 2 (covers unit 3)

National 5

Recommended Entry Requirement:

Students would normally be expected to have attained National 4 History or similar or better in another social subject

Students will study the following units:

Unit 1 – Britain: from the Cradle to the Grave: Social Welfare in Britain 1890's – 1930's.

Unit 2: The Growth of Nationalism in Germany 1815 – 1939

Unit 3: Scotland's Treaty of Union 1689-1740.

Assessment

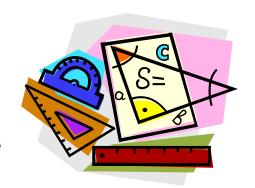
To gain the course award students must pass an assessment on each of the above units and the external assessment. External assessment consists of:

- 1. Added value unit (prepared an written up in school)
- 2. Written paper covering all units studied

MATHEMATICS

Advanced Higher

The Advanced Higher Course extends learners' mathematical knowledge in algebra, geometry and calculus. It includes matrix algebra, complex numbers and vectors and formalises the concept of mathematical proof.



Advanced Higher Mathematics emphasises the need for candidates to undertake extended thinking and decision making, to solve problems and integrate mathematical knowledge. The course offers candidates, in an interesting and enjoyable manner, an enhanced awareness of the range and power of mathematics. It will meet the needs of those going into a wide variety of courses as well as those preparing for further study in maths, science or engineering. There is a need to develop independent study skills similar to those required at University. Advanced Higher Mathematics is designed to provide a broadened understanding of algebra, geometry and calculus for those candidates wishing to develop the experience they gained through the Higher Course.

The Course will consolidate and extend the candidates' existing mathematical skills, knowledge and understanding in a way that recognises problem solving as an essential skill and that will allow them to integrate their knowledge of different areas of the subject.

The Course is made up of three forty-hour mandatory Units. Each Unit will culminate in a 'closed-book' assessment, and the Course as a whole will be assessed by means of an external examination. The external examination consists of one three hour examination with a total of 100 marks. The candidate must pass all the assessments to gain the Course award.

Higher

The requirement for entry to the Higher Mathematics course is a pass at National 5 or Intermediate 2, with a grade of A or B.

As with all Mathematics courses, Higher Mathematics aims to build upon and extend candidates' mathematical skills, knowledge and understanding in a way that recognises problem solving as an essential skill and enables them to integrate their knowledge of different aspects of the subject. Mathematics is important in everyday life, allowing us to make sense of the world around us and to manage our lives. Using mathematics enables us to model real-life situations and make connections and informed predictions. It equips us with the skills we need to interpret and analyse information, simplify and solve problems, assess risk and make informed decisions.

The Higher Mathematics course aims to:

- motivate and challenge learners by enabling them to select and apply mathematical techniques in a variety of mathematical situations
- develop confidence in the subject and a positive attitude towards further study in mathematics and the use of mathematics in employment
- deliver in-depth study of mathematical concepts and the ways in which mathematics describes our world
- allow learners to interpret, communicate and manage information in mathematical form; skills which are vital to scientific and technological research and development
- deepen the learner's skills in using mathematical language and exploring advanced mathematical ideas

The Higher Mathematics course has the particular objective of meeting the needs of candidates at a stage of their education where career aspirations are particularly important. The course has obvious relevance for candidates with interests in fields such as commerce, engineering and science where the Mathematics learned will be put to direct use. For other candidates, the course can be used to gain entry to a Higher Education institution. All candidates taking the Higher Mathematics course, whatever their career aspirations, should acquire an enhanced awareness of the importance of Mathematics to technology and to society in general.

The course comprises of 3 units which consist of a combination of outcomes in algebra, geometry, trigonometry and elementary calculus. All 3 units are mandatory as are the three unit assessments.

Mathematics: Expressions and Functions

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. The Outcomes cover aspects of algebra, geometry and trigonometry, and also skills in mathematical reasoning and modelling.

Mathematics: Relationships and Calculus

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.

The Outcomes cover aspects of algebra, trigonometry, calculus, and also skills in mathematical reasoning and modelling.

Mathematics: Applications

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.

To gain the award of the course, the candidate must pass all the unit assessments as well as the external assessment. External assessment will provide the basis for grading attainment (A - D) in the course award.

The external assessment will take the form of an examination which consists of 2 papers. The first paper consists of short answer and extended response questions. It is non-calculator and is worth 60 marks. The second paper is extended response questions and is worth 70 marks. Candidates are allowed a calculator for this paper.

Higher Mathematics progresses on to Advanced Higher Mathematics.

National 5

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

In following the Mathematics National 5 course pupils should be:

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

The Mathematics National 5 course consists of 3 Units:

- Expressions and Formulae
- Relationships
- Applications

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

National 5 progresses onto Higher Mathematics

National 4

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

In following the Mathematics National 4 course pupils should be:

- Developing their understanding of straightforward mathematical skills in Algebra, Geometry, Trigonometry and Statistics
- Using mathematical techniques and reasoning skills to solve mathematical problems
- Developing a positive attitude to mathematics based on an understanding of its use in real-life situations.
- Becoming skilled in the use of mathematical vocabulary and exploring mathematical ideas.

- Becoming confident in problem solving.
- Developing an understanding of the importance of accuracy
- Interpreting, communicating and managing information in mathematical form
- Developing logical reasoning skills
- Communicating solutions using presentation skills
- · Developing decision making skills
- Developing leadership and teamwork skills through group activities.

The Mathematics National 4 course consists of 3 Units:

- Expressions and Formulae
- Relationships
- Numeracy

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

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

National 4 should progress onto National 5.

National 5 Lifeskills Mathematics

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

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

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

The mathematical skills within this course are underpinned by numeracy, and are designed to develop learners' mathematical reasoning skills relevant to learning, life and work in an engaging and enjoyable way.

To gain the award of the Course, the learner must pass all of the Units as well as the end of the year Course assessment. The Course assessment will be set in two components; Paper 1 (non-calculator) and Paper 2 (case studies). This will provide the basis for grading attainment in the Course award.

Lifeskills Mathematics does not provide progression to Higher Mathematics.

Unit 1: Numeracy

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

Unit 2: Geometry & Measure

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

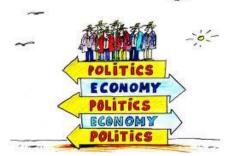
Unit 3: Managing Finance & Statistics

The general aim of this Unit is to develop skills that focus on the use of mathematical ideas and valid strategies that can be applied to managing finance and statistics in real-life contexts which may be new to the learner. This includes skills in analysing financial positions, budgeting as well as organising and presenting data to justify solutions and/or draw conclusions. The Outcomes cover aspects of finance and statistics in real-life situations requiring mathematical reasoning.

MODERN STUDIES

Higher

Entry Requirements



Students would normally be expected to have achieved a pass at National 5 Modern Studies or in any other social subject.

Course Content

There are three units in the Higher course:

- 1) Democracy in Scotland and the UK students will study topics such as the UK constitutional arrangement, 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.
- 2) Social Issues in the UK students have a choice of studying either social inequality or crime and the law. In the social inequality context, learners will focus on a contemporary aspect of social inequality in the UK and the impact on a group in society. In the crime and the law context, learners will focus on topics such as the role of law in society, crime statistics, causes of crime, the impact of crime and methods of tackling crime and their effectiveness.

3) International Issues – students have a choice of studying either a political and socio-economic case study of a major world power or the study of a significant contemporary world issue. The study of a world power will focus on a study of its political system, contemporary socio-economic issues and its role in international relations. The study of a world issue will focus on a significant recent issue or conflict which has a global impact.

<u>Assessment</u>

To pass Higher Modern Studies, students must pass all the units as well as the course assessment. The course assessment comprises an externally marked question paper (60 marks) and an assignment (30 marks).

The question paper is made up of limited and extended response questions requiring the learner to draw on the knowledge and understanding and apply the skills acquired during the course.

For the assignment, students choose a Modern Studies-related issue for study which is both contemporary and relevant. The purpose of the assignment is to demonstrate challenge and application by demonstrating skills, knowledge and understanding within the context of a chosen research issue.

National 5

Entry Requirements

Students would normally be expected to have achieved a pass at National 4 Modern Studies or in any other social subject.

Course Content

There are three units in the National 5 Modern Studies course:

1) Democracy in Scotland and the UK – students will develop a detailed knowledge and understanding of democracy in Scotland and the UK. This includes the UK political structure and the place of Scotland within this as well as the debates around this arrangement. Learners will then have a choice of contexts for study which will be drawn from either the Scottish political system or the UK political system. Students will develop knowledge and understanding of the main institutions and organisations which make up political life in their chosen context. They will develop knowledge and understanding of the ways in which society is informed about the political system, and able to participate in, and influence, the political system.

They will also develop an understanding of their rights and responsibilities in contemporary democratic political society.

2) Social Issues in the UK – students will develop detailed knowledge and understanding of social issues in the UK. They have a choice of social issues within Scotland and the UK. Contexts for study will focus on either social inequality or crime and the law.

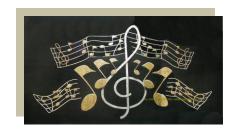
In the social inequality context, learners will develop knowledge and understanding of the causes and consequences of social inequality and attempts by government, other organisations and individuals to tackle it. In the crime and the law context, students will develop knowledge and understanding of the causes of crime, the impact of crime on individuals and society and the role of individuals, the police, the legal system and the state in tackling crime.

3) International Issues – students will develop a detailed knowledge and understanding of international issues. They have a choice of contexts for study; contexts for study can be either a socio-economic and political study of a significant world power or a contemporary world issue. The study of a world power will focus on contemporary socio-economic issues and a study of its political system. The study of a world issue will focus on a significant contemporary issue, its causes and consequences, and attempts at resolution.

Assessment

To pass National 5 Modern Studies, students must pass all the units as well as the course assessment. The course assessment comprises an externally marked question paper (60 marks) and an assignment (20 marks). The assignment is based on a piece of research carried out by students on a contemporary Modern Studies-related issue. The assignment requires learners to extend and apply their skills, knowledge and understanding and is sufficiently flexible to allow for personalisation and choice.

MUSIC



Advanced Higher, Higher and National 5

The Advanced Higher, Higher and National 5 Music course provides a broad experience of performing, listening and composing music. Learners develop skills as musicians, enabling them to achieve the ability required to perform and create music. Learners will expand their knowledge and understanding of music, gaining experience of identifying music concepts and styles.

Advanced Higher, Higher and National 5 Unit passes in each element are assessed internally and must be gained before a course award is presented. Assessments in course work are indicated for each element.

Element 1

Music: Performing Skills

Advanced Higher = Grade 5 Higher = Grade 4 National 5 = Grade 3

Either performing on two instruments or performing on one instrument plus accompanying.

External assessment of live performances (added value)

Element 2

Music: Understanding Music

The Listening assessment takes the form of a question paper which is externally assessed.

Element 3

Music: Composing Skills

Composition is an internally pass/fail assessment, which may be moderated externally.

Marks for elements 1 and 2 are aggregated to assess overall grade.

Element 1 – 60 marks in total

Element 2 – 40 marks in total

MUSIC TECHNOLOGY

In the Music Technology course, learners develop skills in the use of music technology hardware and software to capture and manipulate audio, and in analysis of 20th and 21st century musical styles and genres. Learners use music technology creatively in sound production in a range of contexts and develop a broad understanding of the music industry.

Course structure

The Course consists of 3 Units:

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

To gain the award of the course, the learner must pass all of the units as well as the Course assessment.

Course Assessment structure

Assignment = 70 marks Question paper = 30 marks

National 5

Course structure

The Course consists of 3 Units:

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

Course assessment structure

Component 1 — assignment 70 marks

Component 2 — question paper 30 marks

Total marks: 100 marks

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

MUSIC TECHNOLOGY

The National 4 & 5 Music Technology Course enables learners to develop skills in the use of music technology hardware and software to capture and manipulate audio, and to use music technology creatively in sound production.

The Course also enables learners to analyse a range of 20th and 21st century musical styles and genres, and to develop a broad understanding of the music industry.

National 4

Course structure

The Course consists of 3 Units:

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

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

PERSONAL FINANCE AWARD

The importance of financial education in schools is widely recognised as an important and necessary life skill for young people. The



Personal Finance award will equip candidates with the skills to cope confidently and effectively with basic financial encounters as well as managing money.

This qualification suits a wide range of candidates:

- It adds extra breadth to those studying mathematics or business studies.
- It can provide progression in numeracy for candidates who are no longer studying mathematics.

The Personal Finance Award is at SCQF level 4 (equivalent to National 4) and consists of the following Units:

Money Management

This Unit focuses on managing money and equips candidates with the skills required to deal with everyday financial encounters. Candidates will learn about bills and budgeting and will look at the costs involved with borrowing money. They will consider insurance and long term financial planning and will look at different ways of buying goods and how to compare different deals.

The Principles of Money

This Unit will help candidates to gain a better understanding of what money is and where it comes from. It will help candidates to understand sources of income, how to store and access their money and how to use a budget. Candidates will also learn about foreign exchange.

During the course we would hope to bring in some external speakers from financial institutions to discuss in practical terms how to set up a bank account, seek approval for a loan, get advice on budgeting and other practical aspects of financial management.

Assessment

The Personal Finance Award has been designed for on-line testing via SOLAR, SQA's platform for formative and summative e-assessment. The assessments are automatically marked and results given to learners immediately. The assessments themselves are generated dynamically from an item bank which means in practice that every learner gets their own unique assessment every time it is attempted.

PHOTOGRAPHY

<u>Higher</u>

Recommended entry required.

Candidates should have attained an Art & Design qualification (Nat4, Nat5 Higher), or Physics qualification.

You need to be motivated and provide your own digital camera.

Course structure

The Course consists of three mandatory units.

Unit 1

Basic camera techniques, which covers exposure, aperture, shutter speed, light, composition and camera lens.

<u>Digital imagery</u>, which will look at importing, file handling, file management and digital manipulation of photographic images.

Unit 2

Photography: Research Project

Fully research on photography unit of work. The theme will be chosen by the candidate with consultation. Investigate appropriate techniques to photography produce photographic work and present. Pupils need to be able to print their own development photographs (150-200)

PHYSICAL EDUCATION

Higher

In this course, learners are provided with the opportunity to build physical competencies, improve aspects of fitness, and maximise activity in and enjoyment of physical activities. The Course will give learners the opportunity to develop and enhance movement and performance skills and to develop and apply knowledge and understanding to the analysis and evaluation of performance in physical activities. Learners will develop their thinking skills through planning, problem solving and analysing performance. Physical Education acts as a stimulus for personal achievement, and this makes it an ideal platform for developing confidence, resilience, responsibility and working co-operatively with others. The Course also promotes mental, emotional, social and physical wellbeing.

Learners will be able to contribute effectively in a range of contexts, and will develop the ability to provide explanations for, and reflect on, their own performances and those of others. The insights gained from the Course will enable learners to progress confidently onto further study, training or employment.

The course has two mandatory Units:

Physical Education: Performance Skills (Higher)

In this Unit, learners will develop a broad and comprehensive range of complex movement and performance skills through a range of physical activities. They will select, demonstrate, apply and adapt these skills, and will use them to make informed decisions. They will also develop their knowledge and understanding of how these skills combine to produce effective outcomes. Learners will develop consistency, precision, control and fluency of movement.

They will also learn how to respond to and meet the demands of performance in a safe and effective way. The Unit offers opportunities for personalisation and choice throughout the selection of physical activities used for learning and teaching.

Physical Education: Factors Impacting on Performance (Higher)

In this Unit, learners will develop their knowledge and understanding of mental, emotional, social and physical factors that impact on performance in physical activities. Learners will consider how these factors can influence effectiveness in performance. They will develop knowledge and understanding of a range of approaches for enhancing performance and will select and apply these to factors that impact on their personal performance. They will create personal development plans, modify these and justify decisions relating to future personal development needs.

Course Requirements

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

National 5

<u>Units</u>

Performance Skills

- on-going assessment
- assessed in a minimum of 2 activities throughout the year.

<u>Demonstate (consistency in):</u>

- a comprehensive range of movement and performance skills
- working cooperatively with others
- body and spatial awareness
- techniques, compositions and tactics

Factors Impacting on Performance

- on-going assessment through log book
- demonstrate knowledge and understanding of the Mental, Emotional, Social and Physical factors
- investigate the effects of MESP factors on performance
- prepare and implement a development plan to improve performance

<u>Assessment</u>

<u>Portfolio</u>

• 40% of overall grade (A-D)

Understanding

- factors that impact on performance
- planning, developing and implementing approaches
- monitoring, recording and evaluating performance
- 40 marks out of 100

Performance

- 60% of overall grade (A-D)
- one off special performance
- · list of activities given to perform in
- 10 marks for planning/preparation
- 40 marks for performance
- 10 marks for evaluation
- 60 marks out of 100

Course Requirements

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

National 4

Units

Performance Skills

experience MESP factors across a range of activities

Demonstate

- a range of movement and performance skills
- working cooperatively with others
- some body and spatial awarenesss
- techniques, composition and tactics

Factors Impacting on Performance

- learning through theory and practical lessons
- collect data on performance
- understand some of the Mental, Emotional, Social and Physical factors that impact on performance
- describe the effects of MESP factors on performance

Added Value Units

Performance

- competitive and demanding environment for performance
- · choice of activity to perform in
- Prepare → Perform → Evaluate
- compete with and against neighbourhood high schools

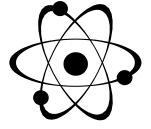
Course Requirements

- Pupils must have a good track record of bringing PE kit.
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- It is strongly discouraged that pupils get piercings during the course whereupon they are unable to remove the piercing.

PHYSICS

<u>Higher</u>

Introduction



The course is designed to build on the student's knowledge of the subject as acquired at National 5. A grade A at National 5 Mathematics is strongly recommended and students would normally be taking Higher Mathematics. An A or B pass in National 5 Physics is required for entry to this course.

Aims

The course aims to give a deeper insight into the subject and to encourage the student to undertake experimental and investigative work. As in the National 5 course, it emphasises the principles of the subject, rather than concentrating on the applications. Every opportunity is taken, nonetheless, to illuminate the theoretical work with examples of situations where the principles of physics are applied and used. The course is designed as a suitable basis for further study.

Course Details

The course comprises two 40 hour units and two 20 hour units.

Unit - Title, Length and Brief Description

Our Dynamic Universe: 40 hours

Content outline: equations of motion, motion-time graphs, Newton's laws of motion, energy, momentum and impulse, projectiles and satellite motion, special relativity, Doppler effect, Hubble's Law and the expanding Universe, Big Bang theory.

Particles and Waves: 40 hours

Content outline: the Standard model of particles, electric & magnetic fields, particle accelerators, nuclear reactions, wave particle duality, interference and diffraction, refraction, irradiance, light spectra.

Electricity: 20 hours

Content outline: monitoring & measuring a.c., circuitry, electrical sources & internal resistance, capacitors, semiconductors.

Researching Physics: 20 hours

Content outline: Pupils will research the physics underlying a topical issue, they will plan and carry out investigative practical work related to a topical issue in physics and prepare a scientific communication which presents the aim, results and conclusions from this investigation. This assignment will contribute 20 marks towards the final grade and will be carried out in school under exam conditions.

Assessment

All pupils must pass three internal assessments, one for each unit (NARs); they will then sit a final 2.5 hour examination which consists of a multiple choice paper worth 20 marks and an extended answer paper worth 80 marks. Pupils will achieve an overall grade for this course awarded by SQA.

National 5

Introduction

The National 5 course will provide a basis for those pupils who wish to further their understanding of Physics in S3 and S4. It is recommended that pupils studying this course are also undertaking the National 5 Maths course as it contains significant mathematical content. Pupils will be expected to be able to learn how to rearrange formula, solve equations and use scientific notation. It is the recommended course for those wishing to proceed to Higher Physics.

Through learning in physics, learners develop their interest in and understanding of the world. They engage in a wide range of investigative tasks, which allows them to develop important skills to become creative, inventive and enterprising, in a world where the skills and knowledge developed by physics are needed across all sectors of society. Physics courses should encourage resourcefulness, which leads to becoming a confident individual. Successful learners in physics think creatively, analyse and solve problems. Physics can produce responsible citizens, through studying the impact it makes on their lives, on the environment, and on society.

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

Course Content and Details

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

Dynamics and Space: 40 hours

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

Electricity and Energy: 40 hours

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

Waves and Radiation: 40 hours

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

In all 3 units, pupils will further their understanding of units and prefixes, significant figures and scientific notation. Pupils will improve their practical laboratory skills by carrying out experiments on a regular basis and analysing the data that they generate.

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

POLITICS

Higher



This course comprises three units: political theory, political systems and political parties. Within the *political theory* unit the major political ideologies such as socialism, fascism and liberalism are compared and contrasted. There is discussion over how each set of ideas leads to the formulation of political party beliefs and policies that affect our everyday lives. The *political systems* course offers an investigation into the structure of government existing in Scotland, the UK and the USA. Topics covered include a discussion as to who is more powerful, the President of the USA or the British Prime Minister? The third unit focuses on the way in which political parties present their policies in order to be elected to form the government and examines areas such as the effect the media can have on a political party's prospects and what determines the way the people vote.

PRACTICAL CAKE CRAFT

National 5

Recommended Entry Requirement

No specific entry requirement .However, learners would normally be expected to have attained National 4/5 Hospitality Practical Cookery.

This integrated course which is practical and experimental develops a range of cake baking and cake finishing skills. It enables learners to develop, consolidate and demonstrate creative techniques in the production of cakes and other baked items. It develops a range of thinking skills, employability skills, aspects of numeracy and the ability for learners to work safely and hygienically.

Assessment

Learners will be assessed at the end of each Outcome. Learners will keep a folio of evidence to display their competence.

NB: Pupils will be expected to contribute towards materials.

PRACTICAL METALWORKING

National 4 and National 5

<u>Entry requirement:</u> No specific entry requirements apart from an interest in craft and making quality objects from metal.



Rationale:

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

Course content:

The course comprises of three units: Bench Skills - Metal, Machine Processes – Metal, and Fabrication and Thermal Joining Techniques. The Bench Skills and Machine Processes units include developing experience of reading and interpreting drawings, marking out, and manufacturing using common metalwork hand tools and machines. Pupils will make a range of metal models.

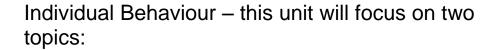
They will also learn how to apply practical skills and adopt safe working practices in the use of common machine and power tools for the manufacture of a finished machined product. The course project, combining the skills learned from the individual course units, is the assessable element that will provide the overall course award.

Assessment:

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

PSYCHOLOGY

New Higher





- 1. Sleep and dreams
- 2. Memory

They will focus on how these areas affect the individual Research – this unit focuses on the process of research and investigation preparing candidates for the methodology of reporting psychological experiments.

Social Behaviour – social psychology and psychology of individual differences.

This area can look at conformity and obedience as well as a second area which will be chosen from a set list. Tis section focuses on how these different factors can influence us in the social context.

Assessment:

Outcomes will be assessed during the course of the year. Final assessment will take place through a question papers and assignment.

Recommended entry for Higher -

N5 in a social subject - and N5 English

RELIGIOUS MORAL AND PHILOSOPHICAL STUDIES

Higher

Entry Level: N4 or 5 in S4 (Pupils who achieved a N3 level qualification would be invited to attempt N5 in the same class as Higher pupils).



Qualities you need: A willingness to reason, discuss, at times debate and engage with views.

Higher and N5 comprise of 4 units.

Unit 1: *Buddhism* – this unit looks at beliefs, practices and sources within the context of religion. The senior phase allows more scope for visits to different locations to observe beliefs and practices in context for example, Holy Isle, New Lanark, St Mungo's Museum, Glasgow Cathedral, Mount Stewart.

Unit 2: *Medical Ethics.* This unit explores factual and theoretical knowledge that surround ethics. It looks at three stances for decision making: Utilitarianism, Moral relativism and divine command in the context of embryo research and euthanasia.

Unit 3: *Philosophical Questions.* This unit explores unanswerable questions and how philosophers have attempted to answer them. Pupils will focus their attention on one aspect.

- The origins of life
- The existence of God(s)
- The problem of evil and suffering
- Miracles

Unit 4: Assignment. This is worth 30 marks of the final 90. It is research project that you will choose what area you wish to study further. You will research that topic (with support) and present your findings under exam conditions.

Religious beliefs and values award:

Pupils can choose to either complete this award as part of the Higher course or as an elective 1 period a week.

The award has 2 units.

Unit 1: this is a reflective paper on a question that they have chosen. Pupils will reflect on their own personal beliefs and values in relation to the topic they have chosen. This is primarily a research unit.

Unit 2: Is about beliefs and values in the community. Pupils are required to engage in some form of community work for a short or longer placement. Pupils have worked with brownies, guides, volunteered in charity shops, or have volunteered in primary schools.

They are then required to reflect on why they took part in their chosen activity, what values they have and the values of other groups that also take part in community work (religious or nonreligious)

Benefits of this award: Pupils can reflect on themselves in relation to others, they can build up experience outside or inside school that can be used in UCAS applications, college applications or job applications as evidence of wider achievement.

SPANISH



National 4

Modern Languages are important for all sorts of things – holidays, meeting new people, future employment and further study. Did you know that you can earn an extra 10-15% on your salary if you are proficient in the use of a modern foreign language? Languages are being increasingly used on the internet and knowing another language can open up lots of new opportunities.

Myths about Language Learning

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

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

Benefits of Language Learning

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

No previous knowledge of the language is required.

National 4 Spanish covers the broad contexts of society, learning, employability and culture. At the end of the National 4 course, pupils will be able to use the foreign language to communicate in simple situations which might be encountered on a holiday to Spain.

<u>Assessment</u>

All assessment is internal – there is no external SQA exam. Unit assessments have to be completed in all four skills, Reading, Talking, Listening and Writing. Pupils have to complete an Added Value unit which tests three of the four skills, Reading, Talking and Listening.

SPORTS LEADER AWARD

SCQF Level 5 Award in Sports Leadership

Are you interested in working with young people? Becoming a teacher? Involved in leadership roles? If so Sports Leaders is for you.

Sports Leadership is a nationally recognised qualification that will give learners the chance to develop their organisation, motivation and communication skills, whilst also focusing on positive role models in sport. This is largely a practical course, where you will develop a range of leadership skills which will prepare you for life in the workplace.

As part of the course requirement you will be expected to complete a placement with either a primary school, secondary school or a sports club, whereupon you will assist and deliver sessions.

For further information see Mrs Black (PE Department)

YASS Courses

Young Applicants in Schools Scheme



YASS courses are offered to S6 pupils by The Open University. It is an opportunity for S6 students to bridge the gap between school and full time university; a chance to study a range of first year university level modules in school alongside their other studies. YASS enables students to experience learning at university level and develop important skills such as independent study and time management.

Modules that are offered include:

- Arts and Humanities
- Business Studies
- Computing and ICT
- Education
- Engineering & Technology
- Environment
- Financial Management
- Health and Social Care
- Languages
- Law
- Mathematics
- Science
- Social Science
- Sport & Fitness

Modules can last for between 10 and 40 weeks. Shorter modules normally require 10 hours of study per week. Students opting for a YASS course have to be self-motivated, hardworking and able to work independently.