JOHN PAUL ACADEMY

SENIOR PHASE

S5/6 OPTIONS BOOKLET 2022-23

Senior Phase Choices & Pathways

This booklet is designed to help learners decide on a course of study for S5 and S6, the final years of the Senior Phase.

In S5 and 6 learners will continue select 5 subjects, following on from successes at National 3/4/5 in S4 or S5. Subject teachers and Pupil Support Teachers will give advice to the young people on the subjects that best suit their talent and ability. There will also be time spent in PSE lessons discussing careers and subjects to ensure the young people are well prepared for making their choices.

In S6 there is an opportunity for learners to continue to Advanced Higher level in some subject areas, or to take up additional Highers in a subject that they have not studied before. They should be guided by Pupil Support and Curricular PTs on making the decision to take up a 'crash' higher as there are more demands on the learner where there has been no prior learning in a subject area.

Additional options in the Senior Phase include National Progression Awards and other alternative qualifications to the National Qualifications. NPAs and other qualifications offer learners the opportunity to study for Level 4/5/6 qualifications through continuous school based assessment. In most cases there is no external examination.

For further guidance and information please contact the pupil support teacher or depute head of year.

We look forward to working with you in ensuring the best possible curriculum pathway is offered to ensure a positive destination upon leaving school.

Contents

ART & DESIGN - ART

ADVANCED HIGHER
DESIGN OR EXPRESSIVE - LEVEL 7

PURPOSE AND AIMS OF THE COURSE

The course provides a broad, investigative and practical experience of expressive or Design work. Creativity is the key focus.

Candidates research expressive or design art contexts related to their theme or stimulus. They learn about expressive or design art practice by investigating how artists respond creatively to themes. They explore how artists integrate visual stimuli and other information from a variety of sources. Candidates apply their understanding of expressive art practice while responding to a theme or stimulus to communicate their thoughts and ideas.

COURSE CONTENT

The course combines investigative and practical learning with knowledge and understanding of expressive or design practice. Candidates develop a range of expressive or design techniques and creative skills.

Candidates select a theme or stimulus for their portfolio. If working in expressive, learners will create a design brief to solve if working in design.

They follow a creative process to develop ideas and resolve and realise artworks/design work which are influenced by their investigation into art practice. They produce a contextual analysis of a selected artwork by discussing related contexts and analysing their impact on the features of the artwork. Candidates reflect on and evaluate their creative decisions and artwork.

LEARNING AND TEACHING METHODS

There are a variety of approaches used in Art & Design;

- Active leaning through group work, problem solving activities and Making Thinking Visible Techniques.
- Personal experimentation is a key are of development.
- Creative workshops
- Visit's to Glasgow Print Studio.
- Group discussion, self and peer evaluation.
- Presentation of final work and written evaluation.

SKILLS DEVELOPED

The following provides a broad overview of the subject skills, knowledge and understanding developed in the course:

- producing relevant expressive / design investigative research that demonstrates an personalised response to their stimuli
- applying in-depth understanding of artists' / designers work and practice when creatively responding to their stimuli and developing expressive ideas and artwork

- skilfully and creatively using selected art materials, techniques and/or technology for expressive effect
- producing sustained lines of development
- planning, exploring and experimenting within the creative process
- creating original and creative artwork in 2D and/or 3D formats that demonstrates a personal response to their stimuli
- discussing the impact of relevant contexts through analysing the features of a selected artwork
- evaluating their creative decisions and expressing justified personal opinions on their own work

ASSESSMENT ARRANGEMENTS

Learners will self and peer-assess alongside department tracking, written feedback, report cards and target setting·

Expressive and Design finished work folios will be externally assessed by SQA
Art and Design Studies critical exam will also be externally assessed by SQA.

PROGRESSION PATHWAYS

Learners can dovetail this qualification by also working on Higher Photography. The award creates a portfolio of artwork / design work which prepares learner for further education or degree courses in the creative fields.

CAREERS USING ART AND DESIGN – CREATIVE PRINTMAKING

Graphic design, Web design, Animation, Filmmaking, Photography, Jewellery design, Fashion design, make up, special effects, textile design, museum curator, Fine art, Sculpture, Architecture, Product design, Teacher, Printmaker, Draftsman, illustration, Hair and Makeup artist, Buyer, Cartoonist.

LEVEL 5 (NAT 5) and LEVEL 6 (HIGHER)

PURPOSE AND AIMS OF THE COURSE

The course provides a broad, investigative and practical experience of art and design. Creativity is the key focus. Candidates develop knowledge of art and design practice by studying artists and designers and their work. They also develop an understanding of expressive art and design processes and gain related skills. The course provides opportunities for candidates to be inspired and creatively challenged as they communicate their personal thoughts, ideas and feelings through their work.

COURSE CONTENT

Expressive Activity - Drawing, painting, printmaking etc.

- Investigative drawing, developing skills of observation and drawing of line and tone.
- Developing a personal theme.
- Developing media handling techniques e.g. paint, oil pastel, print making.
- Using composition and picture making techniques in portraiture or still life.
- Presentation of work with written critical self –evaluation

Design Activity - Select – jewellery, Fashion/textile, graphics, Product design

- Following a design brief to solve a design problem.
- Researching the design market.
- Selecting a theme/ stimulus for design.
- Working through a design process to present a design solution.
- Creative use of materials to create 2D and 3D design work.
- Presentation of work with critical self –evaluation

Art and Design studies Critical Evaluation Exam
Learners will study the work of important artist and designers work
Develop the skills and language to discuss and analyse artists and designers work. for the external SQA exam.

LEARNING AND TEACHING METHODS

There are a variety of approaches used in Art & Design;

- Research tasks
- Active learning through group work, problem solving activities and Making Thinking Visible techniques
- Personal projects are a key are of development.
- Creative workshops and experiences e.g. printmaking, ceramics, 3D sculpture and acrylic painting.
- Written responses to artwork and exam question .

SKILLS DEVELOPED

In Art and Design learners develop a range of skills; Problem solving, planning and reflective skills within the creative process.

ASSESSMENT ARRANGEMENTS

Learners will self and peer-assess alongside department tracking, written feedback, report cards and target setting. Expressive and Design finished work folios will be externally assessed by SQA. Art and Design Studies critical exam will also be externally assessed by SQA.

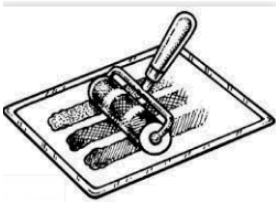
PROGRESSION PATHWAYS

National 5 will continue onto Higher Art and, or Photography Higher. Successful higher candidates can continue onto Advanced Higher and or Photography Higher.

CAREERS USING ART AND DESIGN

Graphic design, Web design, Animation, Filmmaking, Photography, Jewellery design, Fashion design, make up, special effects, textile design, museum curator, Fine art, Sculpture, Architecture, Product design, Teacher, Printmaker, Draftsman, illustration, Hair and Makeup artist, Buyer, Cartoonist.

ART & DESIGN - CREATIVE PRINT MAKING



PURPOSE AND AIMS OF THE COURSE

This Unit will enable the candidate to develop knowledge and understanding of printmaking skills for art and design applications. This will include experimentation with the creative potential of different methods of printmaking, allowing the candidate to develop awareness of related visual and compositional elements. Candidates will produce a folio of experimental prints and will apply acquired knowledge and skills in the planning, production and presentation of finished print(s).

COURSE CONTENT

Outcome 1

Learner will during term one learn a range of different experimental printmaking techniques. They will be required to look at the practice of other printmakers and learn how to evaluate their personal work. Calligraphic printing, mono printing, poly printing, lino printing, screen printing.

Outcome 2

Learners will create artwork and present 3 finished prints. Each must showcase different techniques.

LEARNING AND TEACHING METHODS

There are a variety of approaches used in Art & Design;

- Active learning through group work, problem-solving activities and Making Thinking Visible Techniques.
- Personal experimentation are a key are of development.
- Creative workshops
- Visit's to Glasgow Print Studio.
- Group discussion, self and peer evaluation.
- Presentation of final work and written evaluation.

SKILLS DEVELOPED

- Wide range of experimental printmaking techniques.
- Development of evaluation skill. Using subject specific vocabulary.
- Development of mounting and presentation skills for final work exhibition.

ASSESSMENT ARRANGEMENTS

Learners will self and peer-assess alongside department tracking, written feedback, report cards and target setting.

Outcome 1 and Outcome 2 are internally assessed by the class teacher. This full course is subject to internal verification and quality assurance by all Art and Design Department staff. The SQA may at any time visit the school to do an external verification.

PROGRESSION PATHWAYS

Learners may do this course in tandem with National 5 or Higher Art and Design. They may then go on to Advanced Higher.

CAREERS USING ART AND DESIGN – CREATIVE PRINTMAKING

Graphic design, Web design, Animation, Filmmaking, Photography, Jewellery design, Fashion design, special effects, textile design, museum curator, Fine art, Sculpture, Architecture, Product design, Teacher, Printmaker, Draftsman, illustration, Hair & Makeup artist, Buyer, Cartoonist.

ART & DESIGN – H PHOTOGRAPHY

PURPOSE AND AIMS OF THE PHOTOGRAPHY COURSE

The course encourages candidates to be inspired and challenged by visually representing their personal thoughts and ideas through photography. An integrated approach to learning means pupils plan, develop and produce creative and technically proficient photographs.

Pupils develop skills that are valuable for learning, life and work. The course allows them to broaden their skills base and to widen their horizons regarding the range of vocations available to them.

The aims of the course are for candidates to:

- communicate personal thoughts, feelings and ideas using photography
- develop technical and creative skills through using photographic media, techniques and processes
- develop knowledge and understanding of a range of photographic practices
- develop skills in problem solving, critical thinking and reflective practice
- develop an understanding of the impact of social, cultural, historical, and scientific influences on photographers' work and practice
- become critically self-reflective autonomous learners

COURSE CONTENT

The course has an integrated approach to learning. It combines practical learning activities that are underpinned by knowledge and understanding of photography.

Candidates learn how to plan and carry out practical photographic work. They investigate selected photographers' work and practice and explain how external influences impact on these. They use this understanding of photographers and their work when developing their own personal approaches to photography. They learn and apply a range of image-making techniques. Candidates develop their creative problem-solving skills as they resolve visual and technical problems. They also reflect on and evaluate the effectiveness of their practice and the qualities of their photographic work.

LEARNING AND TEACHING METHODS

Practical demonstration	Teachers and lecturers demonstrate a practical photographic technique. Demonstrations can be broken down into stages to make learning more accessible.
Practical activity	Candidates apply what they have learned in a practical photographic activity.

Question and answer	Candidates have the opportunity to ask and answer questions about aspects of the course. Teachers and lecturers can use simple, straightforward questions to test basic understanding and recall of facts. Higher-order questions are used to help candidates develop their understanding and gain new insights.
Personal investigation and research	Candidates have access to sources, for example books, print-outs, the internet so that they can gather information and learn about a topic independently.
Visual presentation	Teachers and lecturers, or candidates, could give a presentation, supported by diagrams, images, slides and/or video clips.

SKILLS DEVELOPED

- applying knowledge and understanding of the properties of light and image formation
- applying knowledge and understanding of camera controls and a range of photographic techniques and processes
- investigating and analysing the major historical, scientific, social, and cultural factors influencing photographers and their work
- producing investigative research for photography, and planning, shooting, printing and developing photographs
- exploring and experimenting with a range of photographic media, manipulation techniques and processes
- producing and presenting creative and technically proficient photographs
- effectively managing and storing photographic images
- critical self-reflecting and evaluating by candidates of their work and practice, and the photographic work of others

ASSESSMENT ARRANGEMENTS

Exam Paper: demonstrate knowledge and understanding of photographic practice in multiple-choice and extended-response formats in a question paper **30 Marks**

Photography Project: produce a photography project by applying and extending the skills and knowledge developed in the course **100 Marks**

PROGRESSION PATHWAYS

Progression should be developed at further education by applying for an HNC (SCQF Level 7), HND (SCQF Level 8) or Undergraduate Photography Course (SCQF Level 9/10)

CAREERS USING PHOTOGRAPHY

- Photojournalist. Photojournalist, a branch of journalism, is involved with capturing news stories in the form of images.
- Wedding Photography
- Portrait Photography
- Landscape Photography
- Real Estate Photography
- Forensic Photography
- Military Photography
- Sports Photography
- Wildlife PhotographY

BIOLOGY

PURPOSE AND AIMS OF THE COURSE

The Biology courses serve to equip all learners with an understanding of the impact of Biology on everyday life, and with the knowledge and skills to be able to evaluate media, make their own decisions on issues within a modern society where biological knowledge, its applications and implications are ever developing.

COURSE CONTENT

N3, N4 and N5 Biology courses are based on the following units:

- **Cell Biology**: What happens inside the tiny cells which make up our bodies, and the all other living things, which help to keep us alive? This unit will include: study of cell structure and function, transport in cells, DNA and protein production, enzymes and their role in cells, genetic engineering, and respiration.
- **Multi-cellular Organisms**: How do plants and animals control their systems and behaviour for survival? This unit will include: specialization of cells and tissues, the role of stem cells, and the production of new cells. The unit will then move on to look at controlling the body (role of the brain, nerves and hormones), reproduction, inheritance and transport systems in animals (heart and blood) and plants.
- **Life on Earth**: How is all life on the Earth interconnected? What are the current threats to life on earth? This unit will include: factors affecting Biodiversity and distribution of life on Earth, how energy moves in the ecosystem, photosynthesis, sampling and measuring of environmental factors, natural selection and evolution, and the human impact on the environment.

N5 HEALTH SECTOR

The emphasis of this course is to prepare learners for working in the health sector and develop employability skills valued by employers. Learners will develop a range of knowledge and skills required in this vocational area. Learners will investigate a range of job roles and career opportunities as well as participating in a job interview. Furthermore learners will also develop a wide range of skills, including research and self-evaluation skills. Emphasis throughout all Units is on the employability skills and attitudes which will help in preparation for the workplace.

HIGHER HUMAN BIOLOGY

Provides a broad based integrated study of a selected range of anatomical and physiological topics which build on previous study. The course provides the opportunity for learners to acquire a deeper understanding of DNA, the reproductive, nervous and cardiovascular systems, lifestyle diseases, personalised medicine and immunology. The course is based on the following units:

- **Human Cells** explores DNA, its organisation, replication and applications. Gene expression will be studied as well as protein expression and consequentially the unity of life. Differentiation, stem cells, ethical issues, the human genome including changes to the genome. Cellular respiration and the process of respiration in muscle cells will also be considered.
- **Physiology and Health** focuses on the anatomy and physiology of the reproductive and cardiovascular system. Students shall explore the cellular concepts of fertility as well as pre and postnatal screening. Lifestyle diseases such as type 2 diabetes, obesity and cardiovascular disease are covered as is treatment options for these diseases.

- **Neurobiology and immunology** looks at the complex interactions involved in neural pathways in the nervous system. Consideration is given to memory and neurotransmitters and their pharmacological applications. Student will also learn about the body defences including specific cellular responses to pathogens and immunisations. Neurobiology and immunology combine anatomy, physiology and pharmacology to give students a comprehensive understanding of the body's defences against pathogens.

LEARNING AND TEACHING METHODS

Learners will experience and participate in a variety of learning activities such as experiments, investigations, research, presentations and direct teaching that will develop their knowledge of biology and improve skills in problem solving.

SKILLS DEVELOPED

The following provides a broad overview of the subject skills, knowledge and understanding developed in the Biology courses:

- demonstrating knowledge and understanding of human biology by making accurate statements, describing information, providing explanations and integrating knowledge
- applying human biology knowledge to new situations, analysing information and solving problems
- planning and designing experiments/practical investigations to test given hypotheses or to illustrate particular effects
- carrying out experiments/practical investigations safely, recording detailed observations and collecting data
- selecting information from a variety of sources
- presenting information appropriately in a variety of forms processing information (using calculations and units, where appropriate)
- making predictions and generalisations from evidence/information drawing valid conclusions and giving explanations supported by evidence/justification evaluating experiments/practical investigations and suggesting improvements communicating findings/information effectively

ASSESSMENT ARRANGEMENTS

- N3 and N4 courses are internally assessed by unit tests and an Added Value research unit
- N5 and H courses are externally assessed by question paper and a practical assignment,
- N5 Health Sector has no external assessment. Learners must successfully complete each Unit to achieve the Course.

PROGRESSION PATHWAYS

- National 3 Biology progresses to National 4 Biology
- National 4 Biology progresses to National 5 Biology
- National 5 Biology progresses to Higher Human Biology

CAREERS USING BIOLOGY

Research, Health Care (doctor, nurse midwife, veterinary medicine), Conservation and Environmental management (marine biologist), Forensic Science, Quality Assurance, Education, Biotechnology, Bioinformatics, Genetic Scientist, Beauty Therapist, Physiotherapist, Occupational therapist and many more.

BUSINESS EDUCATION – ACCOUNTING

S6 HIGHER ONLY

PURPOSE AND AIMS OF THE COURSE

This course is only available to S6 students who are wishing to take up an additional higher on completion of either Higher Business Management or Higher Mathematics – it is offered as a 'crash' higher. The Higher Accounting course helps candidates understand and make use of financial information by preparing accounting statements, and analyse, interpret and report on an organisation's financial performance. A main feature of the course is developing numeracy and thinking skills. **This course requires good numerical/mathematical/problem-solving skills.**

Candidates develop understanding of:

- the function that accounting performs in business and society
- the need for accuracy in the preparation, presentation, interpretation and analysis of complex accounting information
- how to apply a systematic approach to solving financial problems
- a range of sources of finance available to organisations
- how to use spreadsheet software for complex accounting tasks

Entry Level / Suitability

S6 Learners will be suitable for study in this higher if they have achieved:

- **Higher Business Management** – at A/B level.
- **Higher Mathematics** – at A-C level.

COURSE CONTENT

There are 2 core areas (units) in the Accounting course:

FINANCIAL ACCOUNTING

Candidates develop their understanding of how to prepare routine and complex financial accounting information. They learn about current financial accounting regulations and apply them to a range of business structures. Stakeholders use this information to assess an organisation's current financial position.

MANAGEMENT ACCOUNTING

Candidates develop their understanding of internal accounting procedures. They learn how to prepare information using a range of routine and complex accounting techniques. Management use this information when making decisions about the planning, control and future direction of an organisation.

SKILLS DEVELOPED

A broad range of skills are gained in undertaking Higher Accounting;

- recording, presenting and interpreting complex accounting information to determine business profits and costs
- applying and relating knowledge and understanding of fundamental accounting concepts and theories to a range of accounting layouts
- using a variety of cost accounting techniques to facilitate decision making in both manufacturing and service related organisations

- calculating and interpreting an extensive range of accounting ratios
- accounting theory covering partnerships and limited companies
- analysing complex financial and management accounting information, including drawing conclusions and suggesting solutions where appropriate
- using digital technology to produce and communicate accounting information in a range of contexts
- analysing and evaluating a range of accounting procedures which may be used within cost and management accounting

LEARNING AND TEACHING METHODS

A combination of teacher led lessons and a high degree of independent learning is required to be successful in this course. Learners will undertake complex financial calculations and prepare financial reporting information to international accounting standard formats.

ASSESSMENT ARRANGEMENTS

Accounting is offered at Higher level. To gain the full course award learners must pass the Coursework Assignment and the Question Paper/Course assessment.

PROGRESSION PATHWAYS

The Higher Accounting course or its Units may provide academic progression to:

- further study at college or university; HNC, HND, BAcc or BA (Hons), MBA
- foundation and graduate apprenticeships in Accounting and Finance
- other qualifications in Accounting and Customer Services
- a wide range of employment opportunities

CAREERS USING ACCOUNTING

There is a very wide range of employment opportunities in Accounting with employers in all sectors of the economy. There a many opportunities within local authorities, the NHS, the civil service and private business organisations. By undertaking an Accounting degree at university professional qualifications such as Chartered Accountancy, Civil or Management Accounting are also possible.

Specific Accounting careers include;

- Auditing
- Banking (Commercial and Private)
- Investment / Wealth Management
- Insolvency / Corporate Recovery
- Management Consultancy
- Tax / Inland Revenue

BUSINESS EDUCATION – ADMINISTRATION & IT

Administration & IT is offered at Higher in S5/6. Learners progressing to Level 5 in S5/6 should opt for the NPA Business with Information Technology course (see page 17). **This is an IT based course and requires good ICT and problem-solving skills.**

PURPOSE AND AIMS OF THE COURSE

Administration is a growing sector with employment opportunities across the entire economy and offers wide-ranging employment opportunities. Administrative and IT skills have extensive application not only in employment but also in other walks of life.

The key purpose of the Higher Administration and IT course is to develop learners' administrative and IT skills and, ultimately, to enable them to contribute to the effective functioning of organisations in supervisory administrative positions.

The Course aims to enable learners to:

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

Entry Level / Suitability

Learners will be suitable for study at Higher

- **N6/Higher Administration & IT** – learners who have successfully passed N5 Admin & IT. 6th year 'crash' students may be accommodated at the discretion of the Faculty Head.

COURSE CONTENT

There are 3 core areas (units) in the Administration & IT course:

Administrative Theory and Practice - The purpose of this Unit is to enable learners to knowledge and understanding of administration in, and the impact of IT on, the workplace. At N4-6 aspects such as Customer Care, Skills of Administrators and Event Planning are covered. At N6/Higher Learners will acquire advanced knowledge and understanding of the factors contributing to the effectiveness of the administrative function, such as the strategies for effective time and task management and for complying with workplace legislation, and of what makes effective teams.

IT Solutions for Administrators - The purpose of this Unit is to develop learners' skills in IT, some of them advanced, and in organising and managing information in administration-related contexts. Learners will develop the ability to utilise a range of functions of IT applications covering word processing, spreadsheets, databases, presentation software and use of emerging equivalent technologies. These are used to analyse, process and manage information in order to create and edit relatively complex business documents.

Communication in Administration - The purpose of this Unit is to enable learners to develop a range of IT skills for communicating information to others. At N6 learners will develop an understanding of barriers to communication and ways of overcoming them to ensure communication is understood. The Unit will also develop learners' knowledge and understanding of how to maintain the security and confidentiality of information. This foundation will enable learners to communicate information in ways taking account of the needs of the audience.

SKILLS DEVELOPED

A broad range of skills are gained in undertaking Administration & IT;

- skills and understanding of how effective teams work
- time and task management
- skills required to ensure delivery of good customer care
- skills in using a range of complex functions of the following IT applications — word processing, spreadsheets, databases — to solve problems in an administration-related context
- skills in analysing, processing and managing information in order to create and edit relatively complex business documents
- advanced skills in using IT to communicate information with others in administration-related contexts

LEARNING AND TEACHING METHODS

Learners will undertake most of their work on the computer, there is a high degree of independent learning involving complex problem-solving activities using a range of industry standard software applications to solve business problems.

ASSESSMENT ARRANGEMENTS

To gain the full course award, the learner must pass the Coursework Assignment and the Question Paper. Learners who are also working towards the NPA Business with Information Technology at Level 6 will complete the Unit Assessments required for this qualification; Administrative Theory & Practice and Information Technology Solutions for Administrators. Emphasis on developing the necessary skills to undertake the question paper using higher order thinking skills based on MTV principles are also used in delivering lessons.

PROGRESSION PATHWAYS

The Higher Administration & IT course or its Units may provide academic progression to:

- further study; HNC, HND, BA (Hons) in Business, Business Administration, MBA etc
- other qualifications in Administration & IT and Customer Services
- a wide range of employment opportunities

CAREERS USING ADMINISTRATION & IT

Most careers require skills in Administration – everyone must learn how to organise their workload and be efficient to be successful. Nowadays most jobs require strong ICT skills to use applications at work, deliver presentations, communications with colleagues and customers.

If you can think of a career – then that job will require competent use of 'industry standard software' such as Microsoft Office. Administration and IT at Higher level gives learners the opportunity to gain advanced skills in using all MS Office Suite software.

There is a very wide range of employment opportunities with employers in all sectors of the economy. There a many opportunities within local authorities, the NHS, the civil service and private business organisations.

Specific administration careers include;

- Administration
- Banking
- Contact Centre
- Customer Services
- Legal Administration
- Medical Administration
- Personal Assistant
- Receptionist

BUSINESS EDUCATION – BUSINESS MANAGEMENT

Business Management is offered at Higher in S5/6 and Advanced Higher in S6. Learners progressing to Level 5 in S5/6 should opt for the NPA Business with Information Technology course (see page 17). **This is a theory / written based course and requires good extended writing skills.**

PURPOSE AND AIMS OF THE COURSE

The Higher course builds on the skills, knowledge and understanding gained in National 5 Business Management and can act as an entry to the study of business. Advanced Higher in S6 builds on the skills gained in the Higher course in S5.

Learners combine theoretical and practical aspects of learning through the use of real-life business contexts. The skills, knowledge and understanding will be embedded in current business theory and practice and reflect the integrated nature of organisations, their functions and their decision-making processes.

The courses aim to enable learners to develop and extend:

- knowledge of the ways in which society relies on business to satisfy our needs
- an understanding of how businesses ensure customers' needs are met
- understanding of enterprising skills and attributes
- understanding of ethical business practices
- understanding of business-related financial matters
- an understanding of the ways businesses can use ICT to achieve maximum efficiency
- an understanding of how to improve overall performance and effectiveness of business
- knowledge and understanding of the main effects that external influences, such as economic impact and sustainability, have on organisations
- an understanding of how to recruit, train and develop employees

Entry Level / Suitability

Learners will be suitable for study at Higher / Advanced Higher as follows;

- **N6/Higher Business Management** – learners who have successfully passed N5 Business Management.
  6th year 'crash' students may be accommodated at the discretion of the Principal Teacher – a pass at Higher English in S5 is a necessary requirement for crash students.
- **AH Business Management** – learners who have successfully passed Higher Business Management.

COURSE CONTENT

There are 3 core areas (units) in the Business Management course at **Higher Level**:

Understanding Business - In this Unit, learners will extend their understanding of the ways in which organisations in the private, public and third sectors operate. This Unit also allows learners to analyse and evaluate the impact that the external environment has on an organisation's activity, and to consider the implications of a range of external factors that affect an organisation's decision making. At Higher level learners will carry out activities that highlight the opportunities and constraints on these organisations in the pursuit of their strategic goals.

Management of People and Finance - In this Unit, learners will further develop skills and knowledge that will deepen their understanding and awareness of the issues facing organisations in the management of people and finance. This Unit will allow learners to carry out activities that will investigate how businesses recruit, train and develop employees as well as the influence of some key employment legislation. Financial costs, break-even, cash budget planning and reporting are covered at N5 level, with analysis of financial information covered at Higher. Ethical working practices and ICT in relation to HR and Finance are covered in this Unit.

Management of Marketing and Operations - In this Unit, learners will extend their knowledge of the Marketing concept; market research, market segmentation, the marketing mix. At higher they will deepen their understanding of the importance to organisations of having effective marketing systems. The Operations function outlines how businesses manufacture products, the influences of suppliers and stock-holding as well as how quality systems can be implemented in production. At higher the Unit will allow learners to undertake activities that will extend their grasp of theories, concepts and procedures used to improve and/or maintain quality and competitiveness. It will provide learners with a firm grasp of the importance of satisfying both internal and external customers' needs, along with a critical awareness of the issues facing organisations in relation to marketing and operations. Ethical working practices and ICT in relation to Marketing and Operations are covered in this Unit.

There are 3 core areas (units) in the Business Management course at **Advanced Higher Level**:

The Internal Environment – covering the concepts of leadership and management theories, functional activities of a business, employee relations, management of change, decision making and legislation impacting on large global businesses.

The External Environment – covering the impact of Multinational Corporations, Globalisations, International Trade, Government Policies and their impact on the operations of global businesses.

Researching a Business – learners will produce a business report of 2,500 words on the operations of a large multinational corporation, exploring the use of decision making models and analysing complex financial information evaluating business performance.

SKILLS DEVELOPED

A broad range of skills are gained in undertaking Higher and AH Business Management;

- **decision making** by applying the ideas of ethical and effective business decisions to solve strategic business-related problems
- **communicating** relatively complex business ideas and opinions from a range of information relating to the effects of opportunities and constraints on business activity — some of which may be unfamiliar
- **understanding** of how entrepreneurial attributes can assist in the management of risk and business development
- **understanding** of leadership styles and how they can be used to enhance the contribution of staff to business success
- **evaluating** detailed and relatively complex business financial data to draw conclusions and suggest solutions where appropriate
- **analysing** and evaluating the effectiveness of a range of marketing activities and understanding how they can be used to enhance customer satisfaction
- **analysing** and evaluating a range of activities which can be used during the production process to maximise the quality of goods/services
- **evaluating** the use of existing and emerging technologies to improve business practice

LEARNING AND TEACHING METHODS

A combination of teacher led lessons with group and individual learning forms the basis of the Business Management courses. Learners need to conduct research and prepare a report, therefore research based activities may be used for homework. Emphasis on developing the necessary skills to undertake the question paper using higher order thinking skills based on MTV principles are also used in delivering lessons.

ASSESSMENT ARRANGEMENTS

To gain the course award at each level the structure of course assessment is detailed below:

Higher – successful completion of Coursework Assignment and Question Paper
Advanced Higher - successful completion of Coursework Assignment and Question Paper

Learners who are also working towards the NPA Business with Information Technology at Level 6 will complete the Unit Assessments required for this qualification; Administrative Theory & Practice and Information Technology Solutions for Administrators.

PROGRESSION PATHWAYS

The Higher & AH Business Management course or their Units may provide academic progression to:

- further study; HNC, HND, BA (Hons), MBA
- professional qualifications in Business, Finance, Law, Banking, Investment
- a wide range of employment opportunities

Business is one of the categories with the highest number of students at universities across the UK. In addition, many other courses offer options to study business concepts.

CAREERS USING BUSINESS MANAGEMENT

Everyone requires good business skills to be successful. Regardless of which sector the skills developed in Business Management such as planning, organising, decision making, leadership, evaluating information and working with others are all key employments skills.

There is a very wide range of employment opportunities with employers in all sectors of the economy. There a many opportunities within local authorities, the NHS, the civil service and private business organisations.

Specific business careers include;

- Accountancy
- Banking
- Business Development
- Civil Service / Local Government
- Finance
- Hospitality
- Human Resources
- Industrial Relations
- Investment
- Insurance
- Law
- Manufacturing/Quality Assurance
- Marketing
- Procurement
- Retail

BUSINESS EDUCATION – BUSINESS WITH INFORMATION TECHNOLOGY (NPA)

What is an NPA? National Progression Awards (NPAs) are unit based qualifications. These can enable candidates to achieve Level 5 or 6 awards by receiving credit for Units passed. NPAs do not have an externally assessed exam although units are externally verified by the SQA. Candidates can achieve qualifications equivalent to National 5 or Higher at grade C. The Level 5 NPA is offered as a timetabled course in Business Education for candidates progressing from N4 in S4 in either Administration and IT or Business Management.

Note - The Level 6 NPA award can also be achieved by candidates who choose to study ***both*** Administration & IT and Business Management at Higher level. By completing the 'Freestanding Units' from both courses these can be combined to achieve the NPA at Level 5 or 6. At Level 6 the NPA qualification, which is equivalent to a grade C Higher, carries 21 UCAT points.

PURPOSE AND AIMS OF THE COURSE

Business with Information Technology is an NPA course at Level 5 combining 4 freestanding units from National Qualifications in Administration & IT and Business Management. It has employment opportunities across the entire economy and offers wide-ranging opportunities. Business and IT skills have extensive application not only in employment but also in other walks of life.

The key purpose of the course is to develop learners' business and IT skills and to enable them to contribute to the effective functioning of organisations in a range of positions.

The Course aims to enable learners to gain:

- knowledge of the ways in which society relies on business to satisfy our needs
- an understanding of how businesses ensure customers' needs are met
- understanding of enterprising skills and attributes
- understanding of ethical business practices
- understanding of business-related financial matters
- an understanding of the ways businesses can use ICT to achieve maximum efficiency
- an understanding of how to improve overall performance and effectiveness of business
- knowledge and understanding of the main effects that external influences on a business
- an understanding of how to recruit, train and develop employees develop knowledge and understanding of administration in the workplace and its importance
- develop a range of IT skills for processing and managing information
- develop a range of skills to communicate complex information effectively, making use of IT
- acquire skills in managing the organisation of events

Entry Level / Suitability

Learners will be suitable for study at Level 5.

- Learners who have successfully passed N4 Admin & IT and/or N4 Business.
- Learners who want to gain practical Business & IT skills to improve employability prospects.

COURSE CONTENT

There are 4 units in the Business with Information Technology course:

Understanding Business - In this Unit, learners will extend their understanding of the ways in which organisations in the private, public and third sectors operate. This Unit also allows learners to analyse and evaluate the impact that the external environment has on an organisation's activity, and to consider the implications of a range of external factors that affect an organisation's decision making. At Higher level learners will carry out activities that highlight the opportunities and constraints on these organisations in the pursuit of their strategic goals.

Management of People and Finance - In this Unit, learners will further develop skills and knowledge that will deepen their understanding and awareness of the issues facing organisations in the management of people and finance. This Unit will allow learners to carry out activities that will investigate how businesses recruit, train and develop employees as well as the influence of some key employment legislation. Financial costs, break-even, cash budget planning and reporting are covered at N5 level, with analysis of financial information covered at Higher. Ethical working practices and ICT in relation to HR and Finance are covered in this Unit.

IT Solutions for Administrators - The purpose of this Unit is to develop learners' skills in IT, some of them advanced, and in organising and managing information in administration-related contexts. Learners will develop the ability to utilise a range of functions of IT applications covering word processing, spreadsheets, databases, presentation software and use of emerging equivalent technologies. These are used to analyse, process and manage information in order to create and edit relatively complex business documents.

Communication in Administration - The purpose of this Unit is to enable learners to develop a range of IT skills for communicating information to others. At N6 learners will develop an understanding of barriers to communication and ways of overcoming them to ensure communication is understood. The Unit will also develop learners' knowledge and understanding of how to maintain the security and confidentiality of information. This foundation will enable learners to communicate information in ways taking account of the needs of the audience.

SKILLS DEVELOPED

A broad range of skills are gained in undertaking Business with Information Technology;

- skills required to ensure delivery of good customer care
- skills in using a range of functions of the following IT applications — word processing, spreadsheets, databases — to solve problems in an business-related context
- skills in analysing, processing and managing information in order to create and edit relatively complex business documents
- skills in using IT to communicate information with others in administration-related contexts
- understanding of how entrepreneurial attributes can assist in the workplace
- evaluating business financial data to draw conclusions and suggest solutions where appropriate
- analysing a range of activities which can be used during the production process to maximise the quality of goods/services
- evaluating the use of existing and emerging technologies to improve business practice

LEARNING AND TEACHING METHODS

A combination of teacher led lessons, with group work and research based activities are used in completing the business units. To complete the IT units, learners will work independently on computers through a range of problem solving activities covering the main industry standard software applications.

ASSESSMENT & COURSE AWARD

Business with Information Technology is a unit based course – there is no external examination. To gain the full course award, the learner must pass all of the 4 internally assessed Units.

PROGRESSION/FURTHER STUDY

The Business with Information Technology course or its Units may provide academic progression to:

- within the school into Highers Administration & IT and Business Management
- beyond - further study; HNC, HND, BA (Hons), MBA
- a wide range of employment opportunities

CAREERS USING BUSINESS WITH INFORMATION TECHNOLOGY

Most careers require skills in Business and IT skills – everyone must learn how to organise their workload and be efficient to be successful. Most jobs require strong ICT skills to use applications at work, deliver presentations, communicate with colleagues and customers.

If you can think of a career – then that job will require competent use of 'industry standard software' such as Microsoft Office. Business with IT at gives learners the opportunity to gain skills in using all MS Office Suite software.

There is a very wide range of employment opportunities with employers in all sectors of the economy. There a many opportunities within local authorities, the NHS, the civil service and private business organisations.

Careers include;

- Administration
- Banking
- Contact Centre
- Customer Services
- Legal Administration
- Medical Administration
- Personal Assistant
- Receptionist

CHEMISTRY

PURPOSE AND AIMS OF THE COURSE

The Chemistry courses serve to equip all learners with an understanding of the impact of Chemistry on everyday life, and with the knowledge and skills to be able to evaluate media, make their own decisions on issues within a modern society where chemical knowledge, its applications and implications are ever developing.

COURSE CONTENT

N3, N4 and N5 courses are based on the following units:

- **Unit 1: Chemical Changes & Structure**
  The study of the types of chemical reactions and how they occur. Throughout this unit we will also delve into the atom and look at its individual components. We will discover how to speed up and slow down chemical reactions and what causes explosions. The unit will also cover what chemical and physical properties different compounds have as well as build on your knowledge of acids and alkalis by giving you an insight into what they are made of and an opportunity to make your own acids and alkalis!
- **Unit 2: Natures Chemistry**
  The exciting study of organic chemistry where we discover what our Earth's fuels are made of and what happens when they burn! Throughout the topic we will be concentrating on fossil fuels and their products and properties. We will also look at making alcohols and their uses in making perfumes and various other compounds.
- **Unit 3: Chemistry in Society**
  This unit deals with how chemistry fits into everyday life. We will look at different chemical industries and how common compounds we take for granted are made. Throughout this unit we will research the chemistry of metals, plastics & polymers, nuclear chemistry, fertilisers and chemical analysis techniques.

The Higher course is based on the following units:

- **Unit 1: Chemical Changes and Structure**
  Takes an in-depth look at rates of reaction, including calculating the rate of reaction. You will advance on your knowledge of collision theory and trends in the periodic table. You will explore how catalysts are used in chemical reactions and we will also cover the structure and bonding properties of different compounds.
- **Unit 2: Nature's Chemistry**
  Studies the chemistry of food and kitchen chemistry. We will explore how different compounds provide different flavours. Throughout the unit you will study the chemistry of everyday consumer products such as shampoos, esters, fats, oils, proteins, soaps, emulsions and detergents.
- **Unit 3: Chemistry in Society**
  Covers the principles of physical chemistry which allow a chemical process to be taken from the researcher's bench through to industrial production. Learners will look at chemical reactions, chemical energy and chemical analysis.
- **Unit 4: Researching Chemistry**
  Students will collect information from different sources, plan and undertake a practical investigation, analyse results and communicate information related to their findings this unit will include familiarity with apparatus and techniques.

LEARNING AND TEACHING METHODS

Learners will experience and participate in a variety of learning activities such as experiments, investigations, research, presentations and direct teaching that will develop their knowledge of chemistry and improve skills in problem-solving.

SKILLS DEVELOPED

The following provides a broad overview of the subject skills, knowledge and understanding developed in the course:

- demonstrating knowledge and understanding of chemistry by making accurate statements
- demonstrating knowledge and understanding of chemistry by describing information, providing explanations and integrating knowledge
- applying knowledge of chemistry to new situations, analysing information and solving problems
- planning, designing and safely carrying out experiments/practical investigations to test given hypotheses or to illustrate particular effects
- carrying out experiments/practical investigation safely, recording detailed observations and collecting data
- selecting information from a variety of sources
- presenting information appropriately in a variety of forms
- processing information (using calculations and units, where appropriate)
- making predictions and generalisations from evidence/information
- drawing valid conclusions and giving explanations supported by evidence/justification
- evaluating experiments/practical investigations and suggesting improvements
- communicating findings/information effectively

ASSESSMENT ARRANGEMENTS

- N3 and N4 courses are internally assessed by unit tests and an Added Value research unit
- N5 and H courses are externally assessed by question paper and a practical assignment

PROGRESSION PATHWAYS

- National 3 Chemistry progresses to National 4 Chemistry
- National 4 Chemistry progresses to National 5 Chemistry
- National 5 Chemistry progresses to Higher Chemistry

CAREERS USING CHEMISTRY

- Manufacturing oil, chemical and mining industries, electronics, plastics, fibres and pharmaceuticals, research and development for medical purposes, or in the service sector (e.g. food science, pollution and energy).
- Examples of employment opportunities: Analytical Chemist, Chemical Engineer, Healthcare Scientist, Chemical Consultant, Textiles, Vet, Oil industry, Environmental health, Food science, Geologist, Lab Technician, Beautician, Dietician, Education, Nurse, Doctor, Food Science, Dentist, Pharmacology, Toxicology, Environmental Scientist and Forensic Scientist.

COMPUTING SCIENCE

PURPOSE AND AIMS OF THE COURSE

Our aims are to develop, maintain and stimulate learners' curiosity, interest and enjoyment in Computing Science and to encourage learners to have open, enquiring minds and to perceive Computing Science in the context of a wider body of knowledge, skills and vocabulary.

Our view is that learners should ideally become autonomous users of Computing Science with the associated skills supporting lifelong study, the pursuit of personal interests and prospective employment in a modern technological society. To enable learners to acquire appropriate, transferable Computing Science skills, knowledge and understanding – progression must feature in the acquisition of Computing Science skills.

Learners should feel confident enough with their transferable skills that they are encouraged to use unfamiliar software.

COURSE CONTENT – N4

There are **2 core units** in the Computing Science course:

Software Design and Development

This Unit explores software design and development. Learners will develop skills in problem solving and modelling through practical tasks using appropriate programming environments in a range of contexts, such as games development and intelligent systems. Learners will also explore the impact of emerging and innovative technologies on the environment and society.

Information System Design and Development

Learners will develop their knowledge and understanding of information system hardware, security, databases, web-based information systems and multimedia information systems through a range of practical and investigative tasks. Learners will also explore the impact of emerging technologies on the environment and society.

To gain National 4 learners must pass all Units and the Value Added Assignment

COURSE CONTENT – N5, N6/HIGHER, AH COMPUTING SCIENCE

The Computing Science Courses develop knowledge and understanding of key concepts and processes in Computing Science, enabling learners to apply skills and knowledge in analysis, design, implementation and evaluation to a range of digital solutions. Learners communicate computing concepts and explain computational behavior clearly and concisely using appropriate terminology, and develop an understanding of the role and impact of computing science in changing and influencing our environment and society.

Tasks involve some complex features (in both familiar and new contexts), that require some advanced interpretation by learners. They are expected to analyse problems, and design, implement, test and evaluate their solutions.

The course has four areas of study:

Software design and development

Learners develop their **Programming** and computational-thinking skills by implementing practical solutions and explaining how these programs work.

Computer systems
Learners develop an understanding of how data and instructions are stored in binary form and basic **Computer Architecture**. They gain an awareness of the environmental impact of the energy use of computing systems and security precautions that can be taken to protect computer systems.

Database design and development
Learners apply computational-thinking skills to analyse, design, implement, test, and evaluate practical solutions, using a range of development tools such as **Programming in SQL**.

Web design and development
Learners apply computational-thinking skills to analyse, design, implement, test and evaluate practical solutions to web-based problems, using development tools such as **Programming in HTML, CSS and JavaScript.**

LEARNING AND TEACHING METHODS

Learners in Computing Science will experience a wide range of teaching strategies aimed at stimulating and engaging learners to develop their knowledge of Computing Science and improve skills in problem solving.

- **Assessment Is For Learning** – self assessment/ peer assessment
- **Cooperative/ Collaborative Learning**- working in groups or pairs
- **Active Learning** – use of resources to support learning eg show me boards, highlighters, traffic lights
- **Making Thinking Visible** – variety of approaches to stimulate independent thinking.
- **Independent study** – time to think, reflect and work independently on what has been taught.
- **ICT –** Teachers use a variety of ICT to enhance learning
- **External Visits** – Teachers actively seek opportunities to enhance learning beyond the classroom.

SKILLS DEVELOPED

The following provides a broad overview of the subject skills, knowledge and understanding developed in the course:

- applying aspects of computational thinking across a range of contexts
- analysing problems within computing science across a range of contemporary contexts
- designing, implementing, testing and evaluating digital solutions (including computer programs) to problems across a range of contemporary contexts
- developing skills in computer programming and the ability to communicate how a program works, by being able to read and interpret code
- communicating understanding of key concepts related to computing science, clearly and concisely, using appropriate terminology
- understanding of legal implications and environmental impact of contemporary technologies
- applying computing science concepts and techniques to create solutions across a range of contexts

ASSESSMENT ARRANGEMENTS

Computing Science is offered at National Qualification Levels 4-7 within this school. To gain the course award at each level the structure of course assessment is detailed below:

N4 – successful completion of 2 units plus the Added Value Unit
N5 – successful completion of Coursework Assignment and Question Paper
N6 – successful completion of Coursework Assignment and Question Paper
At N4 Learners are awarded a Pass. At N5 and N6/H Learners are awarded a graded pass A-D.

NATIONAL PROGRESSION AWARDS (NPAs)
National Progression Awards are courses designed to equip learners with key employability skills. These courses are internally assessed by teachers and externally verified by awarding bodies (eg SQA)

NPA Computer Games Development SCQF Levels 4/5/6

The NPAs in Computer Games Development at SCQF levels 4, 5 and 6 introduce learners to the genres, trends and emerging technologies of the computer games industry. This suite of awards provides a foundation in techniques that are important to the sector, such as digital planning and design, creation of media assets, and development and testing — while also developing employability skills and Core Skills through enterprise activities.

This qualification covers core areas such as design, media assets and development. Coding is also an important part of this qualification. The award will improve learners' computational thinking skills — an area that is gaining recognition as a vital 21st century competence — and stimulate interest in computer science among young learners.

NPA PC Passport Levels 4/5

The aim of the NPA in PC Passport at SCQF levels 4, 5 and 6 is to provide knowledge and skills in using contemporary application packages such as word processing, spreadsheets and presentation software in a collaborative, cloud-based environment. It seeks to deliver up-to-date skills in using a range of popular software, such as Office 365, to prepare learners for employment or further studies or to improve their productivity skills.

- There are dedicated units on word processing, spreadsheets, and presentations.
- It embraces the latest developments in productivity software such as collaborative features and cloud storage. All Scottish schools and colleges have free access to Office 365 (via Glow) so PC Passport, Glow, Office 365 and MOS make an inexpensive and attractive learning path.

PROGRESSION PATHWAYS

This Course or its Units may provide academic progression to:

- **A qualification in Computing Science is highly sought after by all Universities, Colleges and Employers.**
- there is hierarchical progression from N4-6 within the school
- further study; HNC, HND, BSc (Hons)
- a wide range of employment opportunities
- The NPA will be embedded into the new Modern Apprenticeships in Digital Application Specialist qualifications as mandatory components.

CAREERS USING COMPUTING SCIENCE

These are some of the Computing Science jobs which are set to experience the fastest growth, pay salaries well above the national average, boast top employment rates and offer a range of advancement opportunities.

Specific Computing Science careers include;

- ✓ Video Game Designer/Programmer
- ✓ Cyber Security Specialist
- ✓ Software Designer
- ✓ Software Engineer
- ✓ Network Management
- ✓ Database Designer/Controller
- ✓ Systems Manager
- ✓ Mobile Application Developer
- ✓ Network Administrator
- ✓ Computer Systems Analyst
- ✓ Web Developer

DESIGN & MANUFACTURE

HIGHER

PURPOSE AND AIMS OF THE COURSE

The main purpose of the course is to allow candidates to develop the skills and knowledge associated with designing and manufacturing. Candidates study the lifecycle of products from their inception through design, manufacture, and use, including their disposal and/or re-use. It helps candidates to appreciate the impact commercial manufacture has on design and the need for balance and compromise when developing successful commercial products.

COURSE CONTENT

The course develops skills in two main areas.

Design

Candidates study the design process from brief to design proposal. This helps them to develop skills in initiating, developing, articulating and communicating design proposals. Candidates explore and refine design proposals, using the design/make/test process and by applying knowledge of materials, processes and design factors to reach a viable solution. This helps them to develop an understanding of the iterative nature of the design process. Candidates also develop an understanding of the factors that influence the design, marketing and use of commercial products.

Manufacture

Candidates study the manufacture of commercial products. They develop knowledge of materials, manufacturing and production processes and strengthen their understanding of how these influence the design of products. This provides candidates with the knowledge and understanding required to develop a viable design proposal for a commercial product and to plan its production. Integrating the two areas of study is fundamental to delivering the course successfully. Candidates also learn to appreciate the impact design and manufacturing technologies have on society, the environment and the world of work..

LEARNING AND TEACHING METHODS

Learners will experience and participate in a variety of learning activities such as design tasks, model making, manual graphics, research projects and presentations as well as direct teaching that will develop their knowledge of Design & Manufacture and improve skills in problem solving. Teachers will use a variety of approaches and cater for a variety of learning styles.

SKILLS DEVELOPED

The following provides a broad overview of the subject skills, knowledge and understanding developed in the course:

- researching and evaluating existing product types
- selecting and using a range of research techniques and evaluating their usefulness
- selecting and applying a range of idea-generation techniques
- writing a detailed specification based on research
- applying a range of creative design skills when refining and resolving product design tasks that cover key design challenges
- selecting and using graphic techniques to visually represent design solutions, justifying the techniques
- selecting, using, and evaluating a range of simple modelling and manufacturing techniques to represent design ideas in three dimensions
- planning the manufacture of a commercial product and analysing its effectiveness

ASSESSMENT ARRANGEMENTS

Assessment of this course is made up of two elements:
Component 1 – Question Paper **(80 marks)**
Component 2 – Assignment **(90 marks)**

PROGRESSION PATHWAYS

On completion of the Higher Design & Manufacture course the following progression routes are available:
Foundation Apprenticeships, NC/HNC/HND at College
Work Based Modern Apprenticeships/Apprenticeships
BEng/BA/BSc/MEng/MA/MSc Degree at University

CAREERS USING DESIGN & MANUFACTURE

Product Design, Architecture, Building Technology, Fabrication & Welding, Set Design, Furniture Design, Computer Aided Design, Industrial Design, Manufacturing Technology, Production Engineering, CNC Machining, Tool Making, Interior Design, Sign Maker, Heating Engineer, Plumber, Electrician, Joiner/Carpenter, Maintenance Fitter, Vehicle Body Repair, Cabinet Maker.

N4 & N5

PURPOSE AND AIMS OF THE COURSE

Candidates develop creative and practical skills by designing and making solutions to real problems. In addition, they gain an understanding of the impact of design and manufacture on everyday life. The course encourages candidates to take a broad view of design and manufacture, through making decisions and taking responsibility for their own actions, generating and developing ideas, applying knowledge, and justifying decisions. These transferrable skills place candidates in a strong position regardless of the career path they choose.

COURSE CONTENT

The course develops skills in two main areas:

Design

Candidates study the design process from brief to design proposal. This helps them develop skills in initiating, developing, articulating, and communicating design proposals. They gain an understanding of the design/make/test process and the importance of evaluating and resolving design proposals on an on-going basis. Candidates also develop an understanding of the factors that influence the design of products.

Manufacture

Candidates study the manufacture of prototypes and products. This helps them develop practical skills in the design/make/test process. They gain an appreciation of the properties and uses of materials, as well as a range of manufacturing processes and techniques, allowing them to evaluate and refine design and manufacturing solutions. Candidates also gain an understanding of commercial manufacture.

LEARNING AND TEACHING METHODS

Learners will experience and participate in a variety of learning activities such as design tasks, woodwork and metalwork, manual graphics, research projects and presentations as well as direct teaching that will develop their knowledge of Design & Manufacture and improve skills in problem solving. Teachers will use a variety of approaches and cater for a variety of learning styles

SKILLS DEVELOPED

The following provides a broad overview of the subject skills, knowledge and understanding developed in the course:

- analysing information
- applying knowledge and understanding of:
- idea-generation techniques
- design factors
- graphic techniques
- modelling techniques
- planning techniques
- evaluation techniques
- tools, materials, and processes
- manufacturing techniques
- knowledge and understanding of commercial manufacture
- knowledge and understanding of the impact of a range of design and manufacturing technologies on our environment and society knowledge and understanding of the impact of graphic communication technologies on our environment and society

ASSESSMENT ARRANGEMENTS

Assessment of this course is made up of three elements:
Component 1 – Question Paper **(80 marks)**
Component 2 – Assignment – Design **(55 marks)**
Component 3 – Assignment – Practical **(45 marks)**

PROGRESSION PATHWAYS

On completion of the N4/5 Design & Manufacture course the following routes are available:
National 5 Design & Manufacture
Higher Design & Manufacture
National 4/5 Practical Woodworking
Foundation Apprenticeships, NC/HNC/HND at College
Work Based Modern Apprenticeships/Apprenticeships

CAREERS USING DESIGN & MANUFACTURE

Product Design, Architecture, Building Technology, Fabrication & Welding, Set Design, Furniture Design, Computer Aided Design, Industrial Design, Manufacturing Technology, Production Engineering, CNC Machining, Tool Making, Interior Design, Sign Maker, Heating Engineer, Plumber, Electrician, Joiner/Carpenter, Maintenance Fitter, Vehicle Body Repair, Cabinet Maker.

ENGLISH

PURPOSE AND AIMS OF THE COURSE

The purpose of the course is to further develop and build on the skills taught in the BGE. The aim is to provide pupils with a successful pathway to qualification in:

N3/N4/ N5
Higher and Advanced Higher English

COURSE CONTENT

Folio – 2 pieces of writing: Broadly **creative** and broadly **discursive**
Critical Reading - has 2 elements : **Critical essay** and **Textual Analysis** of a Scottish text
Reading for Understanding, Analysis and Evaluation - Reading a non-fiction text and answering questions to show understanding, analysis and evaluation.
Internal assessment – Group Discussion on a selected topic

LEARNING AND TEACHING METHODS

Learners in English, at all levels, will experience a wide range of teaching strategies aimed at stimulating and engaging learners.

Assessment Is For Learning – self assessment/ peer assessment
Cooperative/ Collaborative Learning- working in groups or pairs
Active Learning – use of resources to support learning eg show me boards, highlighters, traffic lights
Making Thinking Visible – variety of approaches to stimulate independent thinking: Zoom in /Zoom out, CSI, NEWS, Mindmaps etc
Independent study – time to think, reflect and work independently on what has been taught.
ICT – Teachers use a variety of ICT to enhance learning: Video to support texts taught, on line resources, Edmodo, etc as well as pupils using ICT for research and redrafting folio.
Guest Speakers/ Workshops/ Theatre or Cinema Visits – Teachers actively seek opportunities to enhance learning beyond the classroom

SKILLS DEVELOPED

The courses are designed to cultivate pupils' skills in critical thinking and apply them to a range of texts. Pupils will also apply their creative skills in imaginative writing as well as writing to clearly express ideas and opinion.

ASSESSMENT ARRANGEMENTS

External Assessment
SQA Exam – consists of 2 papers: **Paper 1** – Reading for Understanding, Analysis and Evaluation
Paper 2 – Critical Reading: Critical essay and Textual Analysis
Folio produced in school throughout the year is externally assessed and contributes 30% to the overall mark.

Internal Assessment **Prelim Exam –** will follow the same outline as the SQA exam
Group Discussion assessment
Pupils' work will also be assessed throughout the year and feedback given on how to improve.

PROGRESSION PATHWAYS

Higher English is an essential qualification for acceptance on to many HND college and University Courses

CAREERS USING ENGLISH

Teaching	Advertising	Administration	Communications Officers
Journalism	Public Relations	Creative Industries	Social Media
Lawyer	Social Work	Retail	Civil Service

ESOL – ENGLISH FOR SPEAKERS OF ANOTHER LANGUAGE

PURPOSE AND AIMS OF THE COURSE

The purpose of the course is to further develop and build on the skills taught in the English BGE curriculum.

The aim is to provide pupils with a successful pathway to ESOL qualification at:
N3/N4/ N5 ESOL
Higher ESOL
Advanced Higher English

COURSE CONTENT

The course aims at building pupils' proficiency in English with a focus on vocabulary, grammar and pronunciation.

The course has two main units of work English for Everyday Life and English in Study Context:
English for Everyday Life focuses on everyday language and topics.
Study Context prepares pupils for their further education and focuses work/careers

LEARNING AND TEACHING METHODS

Pupils in ESOL will experience a wide range of teaching strategies aimed at stimulating and engaging learners.

Assessment Is For Learning – self assessment/ peer assessment
Cooperative/ Collaborative Learning- working in groups or pairs
Making Thinking Visible – variety of approaches to stimulate independent thinking: Zoom in /Zoom out, CSI, NEWS, Mindmaps etc
Independent study – time to think, reflect and work independently on what has been taught.
ICT – Teachers use a variety of ICT to enhance learning: film to support texts taught, on line resources, as well as pupils using ICT for research.

SKILLS DEVELOPED

The course is designed to focus on developing pupils' core literacy skills: Reading, Writing, Talking and Listening. Pupils will aim for accuracy in these core skills and in particular spelling, grammar and comprehension

ASSESSMENT ARRANGEMENTS

External Assessment
SQA Exam – pupils will be assessed in Reading
Writing
Listening
Speaking and Listening is internally assessed

Internal Assessment
Prelim Exam will follow the outline of the SQA exams
Pupils will also be assessed at the end of each area of Everyday Life and Study of the course.

PROGRESSION PATHWAYS

English for Speakers of Other Languages is accepted by colleges of further education and most universities in place of Higher English. Pupils considering this option should check with the school's Career Advisor.

CAREERS USING ESOL

Engineering
Construction
Retail

Administration
Social work
Computing

Hospitality
And many more

GRAPHIC COMMUNICATION

HIGHER

PURPOSE AND AIMS OF HIGHER GRAPHIC COMMUNICATION

The course provides opportunities for candidates to initiate and develop their own ideas graphically. It allows them to develop skills in reading and interpreting graphics produced by others. Candidates continue to develop graphic awareness, often in complex graphic situations, expanding their visual literacy. It combines elements of creativity and communicating for visual impact with elements of protocol and an appreciation of the importance of graphic communication standards.

COURSE CONTENT

The course develops skills in two main areas.

2D graphic communication

Candidates develop creativity and presentation skills within a 2D graphic communication context. They initiate, plan, develop and communicate ideas graphically, using 2D graphic techniques. Candidates develop skills and attributes including spatial awareness, visual literacy, and the ability to interpret given drawings, diagrams and other graphics. They evaluate the effectiveness of their own and given graphic communications to meet their purpose.

3D and pictorial graphic communication

Candidates develop creativity and presentation skills within a 3D and pictorial graphic communication context. They initiate, plan, develop and communicate ideas graphically, using 3D and pictorial graphic techniques. Candidates develop a number of skills and attributes including spatial awareness, visual literacy, and the ability to interpret given drawings, diagrams and other graphics. They evaluate the effectiveness of their own and given graphic communications to meet their purpose.

LEARNING AND TEACHING METHODS

Learners will experience and participate in a variety of learning activities such as 3D & 2D CAD work, manual graphics, investigations, research projects and presentations as well as direct teaching that will develop their knowledge of Graphic Communication and improve skills in problem solving. Teachers will use a variety of approaches and cater for a variety of learning styles.

SKILLS DEVELOPED

The following provides a broad overview of the subject skills, knowledge and understanding developed in the course:

- replicating familiar and some new graphic forms with some complex features in 2D, 3D and pictorial views
- applying recognised graphic communication standards, protocols and conventions in straightforward but unfamiliar contexts
- initiating, planning and producing preliminary, production, promotional, and informational graphics in both familiar and new contexts, with some complex features
- applying graphic design skills, including creativity, when developing solutions to graphic tasks with some complex features
- understanding the application of colour, illustration and presentation techniques in a broad range of graphic contexts
- critically reviewing graphics work as it progresses, and evaluating completed tasks suggesting strategies for improvement
- extending visual literacy by interpreting unfamiliar graphic communications — some with complex features or combinations of views
- extending graphic spatial awareness in unfamiliar 2D, 3D and pictorial graphic situations including those with complex features

ASSESSMENT ARRANGEMENTS

Assessment of this course is made up of two elements:
Component 1 – Question Paper **(90 marks)**
Component 2 – Assignment **(50 marks)**

PROGRESSION PATHWAYS

On completion of the Higher Graphic Communication course the following progression routes are available:

Foundation Apprenticeships, NC/HNC/HND at College
Work Based Modern Apprenticeships/Apprenticeships
BEng/BA/BSc/MEng/MA/MSc Degree at University

CAREERS USING GRAPHIC COMMUNICATION

Architecture, Mechanical Engineering, Graphic Designer, Product Designer, Animation, Digital Design, Multimedia Design, Advertising, Computer Aided Design, Construction, Games Designer, Electrical Engineering, Naval Architect, Illustrator, Surveyor, Civil Engineering, Design Engineering, City Planning, Exhibition Design, Construction, Web Design.

GRAPHIC COMMUNICATION

N4 & N5

PURPOSE AND AIMS OF N5 GRAPHIC COMMUNICATION

The course provides opportunities for candidates to gain skills in reading, interpreting and creating graphic communications. They also learn to apply knowledge and understanding of graphic communication standards, protocols and conventions. The course is practical, exploratory and experiential in nature and combines elements of recognised professional standards for graphic communication, partnered with graphic design creativity and visual impact.

COURSE CONTENT

The course develops skills in two main areas.

2D graphic communication

Candidates develop creativity and skills within a 2D graphic communication context. They initiate, develop and communicate ideas using graphic techniques in straightforward and familiar contexts, as well as in some less familiar or new contexts. Candidates also develop 2D graphic spatial awareness.

3D and pictorial graphic communication

Candidates develop creativity and skills within a 3D and pictorial graphic communication context. They initiate, develop and communicate ideas using graphic techniques in straightforward and familiar contexts, as well as in some less familiar or new contexts. Candidates also develop 3D graphic spatial awareness.

LEARNING AND TEACHING METHODS

Learners will experience and participate in a variety of learning activities such as 3D & 2D CAD work, manual graphics, investigations, research projects and presentations as well as direct teaching that will develop their knowledge of Graphic Communication and improve skills in problem solving. Teachers will use a variety of approaches and cater for a variety of learning styles.

SKILLS DEVELOPED

The following provides a broad overview of the subject skills, knowledge and understanding developed in the course:

- replicating basic, familiar and some new graphic forms in 2D, 3D and pictorials
- initiating and producing simple preliminary, production and promotional graphics in straightforward, familiar and some new contexts
- initiating and producing simple informational graphics in straightforward, familiar and new contexts
- visual literacy by interpreting simple but unfamiliar graphic communications
- spatial awareness in straightforward but unfamiliar 2D, 3D and pictorial graphic situations
- using standard graphic communication equipment, software and materials effectively for simple tasks with some complex features
- knowledge of graphic communication standards, protocols and conventions in straightforward but unfamiliar contexts
- applying design skills, including creativity, when developing solutions to simple graphics tasks with some complex features
- the ability to take initiative in evaluating work in progress and completed graphics and applying suggestions for improvement in presentation
- knowledge of a range of computer-aided graphics techniques and practices
- knowledge of colour, illustration and presentation techniques in straightforward, familiar and some unfamiliar contexts
- knowledge and understanding of the impact of graphic communication technologies on our environment and society

ASSESSMENT ARRANGEMENTS

Assessment of this course is made up of two elements:
Component 1 – Question Paper **(80 marks)**
Component 2 – Assignment **(40 marks)**

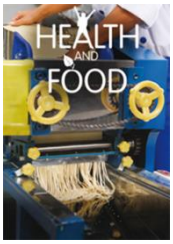
PROGRESSION PATHWAYS

On completion of the N5 Graphic Communication course the following progression routes are available:
National 5 Graphic Communication
Higher Graphic Communication
Foundation Apprenticeships, NC/HNC/HND at College
Work Based Modern Apprenticeships/Apprenticeships

CAREERS USING GRAPHIC COMMUNICATION

Architecture, Mechanical Engineering, Graphic Designer, Product Designer, Animation, Digital Design, Multimedia Design, Advertising, Computer Aided Design, Construction, Games Designer, Electrical Engineering, Naval Architect, Illustrator, Surveyor, Civil Engineering, Design Engineering, City Planning, Exhibition Design, Construction, Web Design.

HEALTH, FOOD AND TEXTILE TECHNOLOGY



PURPOSE AND AIMS OF THE COURSE

Health and Food Technology provides an opportunity to study the relationships between health, nutrition, and the functional properties of food, lifestyle choices and consumer issues. This course develops an awareness of informed food and dietary choices that can have a positive effect on the health of learners and enable them to advise others. Learners also develop a range of skills and applications of food preparation techniques, although it is more academic than practical. 80% Theory and written content with 20% practical cookery content.

COURSE CONTENT

Courses at National 4, 5 and Higher consist of the following three distinct topics:

- **Food for Health**
  Develop learners' knowledge and understanding of the relationship between food, health and nutrition; dietary needs for individuals at various stages of life and explain current dietary advice.
- **Food Product Development**
  Allow learners to develop knowledge and understanding of the functional properties of ingredients in food and their use in developing new food products; the stages involved in developing food products and, through a problem-solving approach, produce a food product to meet specified needs
- **Contemporary Food Issues**
  Learners will develop knowledge and understanding of consumer food choices; explore factors which may affect food choices and develop knowledge and understanding of contemporary food issues; consider technological developments in food and organisations which protect consumer interests; food labelling and how it helps consumers make informed food choices
- **AVU / Assignment**

The Course will attract learners who have an interest in health, food and consumer issues. It will also appeal to learners with relevant prior learning gained through life experience. It will particularly appeal to learners who have an ability to link theory to practice. The flexible context and breadth of learning experiences offered should be attractive to a variety of learners.

An understanding of dietary needs and knowledge of consumer choice and rights encourages individuals to develop positive attitudes and values towards factors which can impact on learners' own and others' health and food choices.

LEARNING AND TEACHING METHODS

Learners will experience and participate in a variety of learning activities such as;

- MTV Making Thinking Visible strategies – variety of approaches to stimulate independent thinking
- Direct teaching
- Self-assessment/ peer assessment
- Cooperative/ Collaborative Learning- working in groups or pairs
- Independent study – time to think, reflect and work independently on what has been taught
- Research and enquiry

This will develop their knowledge of health and food technology and improve skills in problem solving.

SKILLS DEVELOPED

- Subject Specific Skills – Evaluation and Analytical skills. Practical Cookery Skills
- Transferable Skills - Team Working, Cooperation, Problem Solving , Creativity, Time Management, Organisation, Leadership, Communication

ASSESSMENT ARRANGEMENTS

National 4 – Learners must pass the assessments on the information stated above in addition to the Added Value assignment. These three units are internally assessed on a pass/fail basis and there is no final exam.

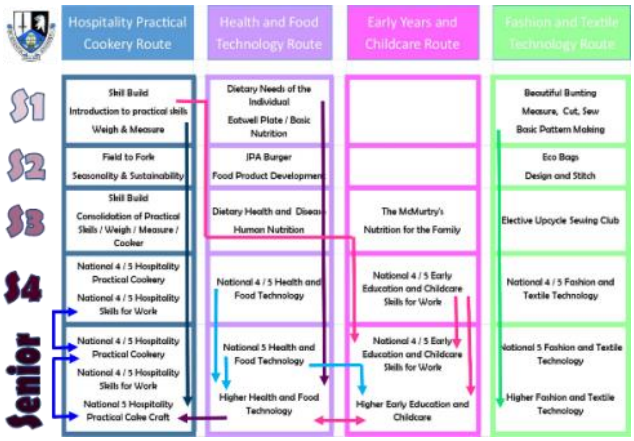
National 5 – Learners must complete the course with a good depth of knowledge on all of the above subjects. The SQA coursework assessment consists of an assignment (60 marks – worth 50%) and a 1 hour 50-minute question paper (60 marks – worth 50%); the course is graded A – D.

Higher - Learners must complete the course with a good depth of knowledge on all of the above subjects. The SQA coursework assessment consists of an assignment (60 marks – worth 50%) and a 2-hour question paper (60 marks – worth 50%); the course is graded A – D

National 5 and Higher -The assignment will require application of knowledge, understanding and skills from across All three topics in which learners will develop a food product or products to a given brief. The assignment will be sufficiently open and flexible to allow for personalisation and choice.

PROGRESSION PATHWAYS

National 4 progression to National 5
National 5 progression to National 6 Higher
National 6 Higher progression to Advanced Higher



CAREERS USING HEALTH AND FOOD TECHNOLOGY

- Nurse
- Dietician
- Care Service Managers
- Care Support Worker
- Early Years Practitioner
- Nursery Teacher
- Health, Food and Textile Technology Teacher
- Food Technologist
- Catering Manager
- Chef
- Food Product Development Manager
- Research and development Chef
- Sensory Food Analysis Tester
- Environmental Health Officer
- Micro-biologist
- Distillery Manager
- Horticulturalist
- Food Production Manager
- Food Quality Control Manager / Operative
- Sports Scientist
- Sports Nutritionist
- Personal Trainer
- Animal Technician
- Health Visitor
- Dental Nurse
- Offshore Medic
- Primary Teacher
- Pharmaceutical Sales Representative

https://www.myworldofwork.co.uk/my-career-options

HISTORY

National/Higher History aims to help pupils understand the political, social and economic forces which have affected individuals and groups throughout the passage of time. The subject offers opportunities for pupils to build their skills and knowledge as they progress through levels. Pupils in History will study a wide range of worldwide events in and their impact on society today. Alongside this knowledge, History provides pupils the skills to interpret these events and develops transferable skills such as making informed decisions, making a History qualification a desirable one in both further education and the job market.

In recent years the History department has also organised WW1 Battlefield Tours and has also sent pupils to visit Auschwitz as part of the Holocaust Education Trust scheme.

History is taught in senior level **at National 3/4/5 and Higher**

COURSE CONTENT

Scottish Context – Migration and Empire 1830 – 1939.
The Scottish context develops pupils' skills in using, evaluating and analysing sources through an investigation into the people who have shaped Scotland and Scotland's impact on the rest of the world. Pupils will study the period of 1830 – 1939 in which a huge number of immigrants entered Scotland including Irish, Lithuanian, Jewish and Italian settlers. Pupils will not only focus on the reasons for this movement but also the impact of these settlers on Scottish life, such as football teams. Then, pupils will examine Scottish emigration overseas once again focusing on not only the reasons for this but the impact Scots had on their new homelands.

British Context – The Making of Modern Britain, 1850 - 1951
Pupils will study the time period when Britain underwent a huge amount of change. During this unit pupils will focus on poverty around about the 1900's and changes introduced to help poverty. Pupils will be developing their source skills, research skills and analytical skills throughout in an attempt to better understand the Britain that we live in today.

World Context – Free at Last? Race relations in the USA 1918 – 68.
Pupils will examine various aspects of the Civil Rights Movement in America, beginning with immigration to America then focusing on the treatments of black American's and their struggle for civil rights. This unit is perfect for pupils to further develop their analytical skills and consequently communication skills as they are constantly asked to reflect on the events and their relevance to today's society.

LEARNING AND TEACHING METHODS

A combination of teacher led lessons and a high degree of independent learning is required to be successful in this course. Learners will have the opportunity to listen to guest speakers undertake their own research to develop their knowledge and understanding

SKILLS DEVELOPED

- an understanding of the past and an ability to think independently
- the ability to apply a detailed historical perspective and evaluate a variety of sources
- a detailed understanding of the factors contributing to, and the impact of, historical events
- the skills of investigating historical events and, on the basis of evidence, forming views
- the skills of explaining and analysing historical events and drawing reasoned conclusions

All skills developed in history are transferable meaning they are often of use in a variety of careers and everyday life.

ASSESSMENT ARRANGEMENTS

National 5 History involves a final assessment worth 80%. The remaining marks are gained through an Assignment which allows pupils to study a relevant topic of their choice analysing the key issues and also developing research skills. National 3/4 is assessed through internal unit assessments and a similar research project of pupils' choice in the form of an Added Value Unit.

HIGHER COURSE

Scottish Context – Migration and Empire 1830 – 1939.

The Scottish context develops pupils' skills in using, evaluating and analysing sources through an investigation into the people who have shaped Scotland and Scotland's impact on the rest of the world. Pupils will study the period of 1830 – 1939 in which a huge number of immigrants entered Scotland including Irish, Lithuanian, Jewish and Italian settlers. Pupils will not only focus on the reasons for this movement but also the impact of these settlers on Scottish life. Then, pupils will examine Scottish emigration overseas once again focusing on not only the reasons for this but the impact Scots had on their new homelands.

British Context – Britain 1851 – 1928.

The British context is essay based. Areas which pupils will study are reasons why women gained the vote in 1918 and examine the Liberal and Labour governments of 1906-1951 with a focus on their success in tackling poverty. Pupils will not only further their own research skills but gain valuable essay writing skills which are particularly desirable if pupils wish to continue to further or higher education.

European and World Context – Germany 1815-1939

The European and Worldwide context is also essay based. Areas which pupils will study are reasons why nationalist feeling grew in Germany and the rise and leadership of the German Nazi party.

ASSESSMENT ARRANGEMENTS

Higher History has a final assessment worth 70%. The final exam is made up of two papers, one source based and the other essay based. The remainder of the mark is an assignment where the student chooses a relevant topic of their choice and produces an essay addressing a topic of interest to the pupil.

PROGRESSION PATHWAYS

The Higher History course or its Units may provide academic progression to:

- further study at college or university; HNC, HND, MA/BA(Hons), Postgraduate degrees
- foundation and graduate apprenticeships in various careers
- a wide range of employment opportunities

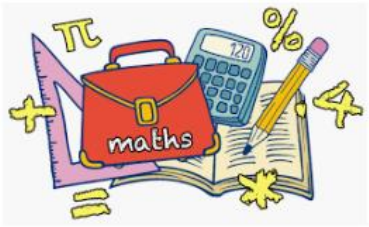
CAREERS USING HISTORY

A History qualification is highly regarded by colleges, universities and in many careers. This is because of the transferable skills learned in the course.

Careers where a History qualification would be both useful and welcomed include; Teaching, journalism and any media profession, historical researcher, lawyer, social work, archaeologist, archivist, administration, politics, politics, civil service, museum/gallery curator, academic librarian, intelligence services human resources, research work, communications, charity work, international development.

MATHEMATICS & NUMERACY

PURPOSE AND AIMS OF THE COURSE



Maths affects everything we do in our lives. It forms the basis for many other subjects. You may not need to use algebra when you go shopping, but the architects who designed the shop did, and so did the builders who built it, and so did the engineers who designed the machines which made the goods you buy. Physics, Chemistry and Biology all rely on Maths to some extent, and many subjects, such as Business, Computing Studies and Technical subjects will all be much easier if you have a good grasp of Maths.

If you're thinking of going straight from school into employment, then Maths is quite possibly the most important subject you can take, as the ability to understand and manipulate numbers and mathematical concepts is extremely useful for almost any job. Employers rate Maths skills very highly: there is always a demand for employees who can think logically and process information accurately.

COURSE CONTENT

In the Mathematics Department learners can progress from S4 into the following courses;

N3/N4/N5/Higher and Advanced Higher Mathematics
N3/N4/N5 Applications of Mathematics
Craft Maths at Level 5

Information on course content for all Mathematics courses is available from the SQA website.

LEARNING AND TEACHING METHODS

The Learning and Teaching strategies employed across the BGE and beyond are based on pupils being exposed to multiple representations of the skills being taught. This follows the CPA (concrete/pictorial/abstract) approaches, which have been shown to improve understanding of pupils. Pupils are encouraged to make links between these representations to deepen their understanding and their subsequent performance. Methodologies used include;

- investigative or project-based tasks such as investigating the graphs of quadratic functions, perhaps using calculators or other technologies
- a mix of collaborative and independent tasks which engage candidates, eg identifying gradient and y-intercept values from various forms of the equation of a straight line
- using materials available from service providers and authorities, eg working with real-life plans and drawings, using trigonometric skills to calculate line lengths and angle sizes
- problem-solving and critical thinking
- explaining thinking and presenting strategies and solutions to others — candidates may be provided with information which could be used to solve a problem, eg using simultaneous equations, and could then discuss their strategies in groups
- effective use of questioning and discussion to encourage more candidates to explain their thinking and to determine their understanding of fundamental concepts
- making links across the curriculum to encourage the transfer of skills, knowledge and understanding such as in science, technology, social subjects and health and wellbeing

SKILLS DEVELOPED

The Course allows learners to interpret, communicate and manage information in mathematical form, skills which are vital to scientific and technological research and development.

Mathematics at National 5:

- Learners should understand and use mathematical concepts and relationships
- select and apply numerical skills
- select and apply skills in algebra, geometry, trigonometry and statistics
- use mathematical models
- use mathematical reasoning skills to interpret information, to select a strategy to solve a problem, and to communicate solutions

Mathematics at Higher:

- Learners should 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

Every international study shows that the biggest influence on a person's earning potential is the level mathematics/numeracy that they achieved.

ASSESSMENT ARRANGEMENTS

Internal assessments will be used to track progress throughout the year. Assessment for levels is as follows:

- **N3 and N4** completion of SQA Units – internally assessed and externally verified by SQA
- N5 and Higher - SQA examination: both levels have 2 papers (Calculator and Non-Calculator)

PROGRESSION PATHWAYS

Learners can progress through Mathematics courses as follows:
Level 3 – National 4 Mathematics or Level 4 Applications of Maths
Level 4 – National 5 Mathematics or Level 5 Applications of Maths
Level 5 – Higher Mathematics

CAREERS USING MATHEMATICS

Most jobs require some level of Mathematics

Joiner	Plumber	Electrician	Nurse	Actuary	Chartered accountant
Data analyst	Investment analyst	Research scientist	Maths teacher	Statistician	Systems developer

MEDIA

N3/N4/N5 and HIGHER

PURPOSE AND AIMS OF THE MEDIA COURSE

The purpose of the course is to develop skills in the analysis, evaluation, creation and production of media texts. The aim is to provide pupils with a successful pathway to qualification in:

N3/N4/N5 Media
Higher Media

COURSE CONTENT

Media provides pupils at all levels with a wealth of varied learning opportunities included in the study of both film and printed media. Pupils are also required to engage in the creation of their own media content.

- Analysing Media Content – The focus in this area is heavily reliant on analysing the key aspects of film for example: film language and narrative structures.
- Creation and Production of a Media Text – The focus in this area is the creation of print media that is developed in its entirety by the pupil. This ensures that pupils are provided personalisation and choice.

LEARNING AND TEACHING METHODS

Pupils will experience a wide range of teaching strategies aimed at stimulating and engaging learners.

Assessment Is For Learning – self assessment/ peer assessment
Cooperative/ Collaborative Learning- working in groups or pairs
Active Learning – use of resources to support learning eg show me boards, highlighters, traffic lights
Making Thinking Visible – variety of approaches to stimulate independent thinking: Zoom in /Zoom out, CSI, NEWS headlines, Mindmaps etc
Independent study – time to think, reflect and work independently on what has been taught.
ICT – Teachers use a variety of ICT to enhance learning: Film to support texts taught, on line resources, Edmodo, camera equipment, as well as pupils using ICT for research and editing.
Guest Speakers/ Workshops/ Cinema Visits – Teachers actively seek opportunities to enhance learning beyond the classroom.

SKILLS DEVELOPED

The courses are designed to cultivate pupils' skills in critical thinking and apply them to a range of Media texts: film, television, print, radio and advertising. Pupils will also apply their creative skills in creating and producing their own media texts.

ASSESSMENT ARRANGEMENTS

N5 and Higher

SQA Exams will assess pupils on Analysing media content and context
Role of the media
Analysis of unseen print media

Prelim will follow the outline of the SQA Exam

N3 and N4 will be assessed internally at the end of each unit and must complete Added Value Unit

PROGRESSION PATHWAYS

Qualification in Media can lead to courses in digital or creative media at college and university.

CAREERS USING MEDIA

Broadcast engineer
Broadcast journalist
Broadcast presenter

Commissioning editor
Digital marketer
Editorial assistant

Event manager
Film director
Information officer

MODERN LANGUAGES

PURPOSE AND AIMS OF THE COURSE

Learning a language enables candidates to make connections with different people and their cultures and to play a fuller part as global citizens. The ability to use language effectively lies at the centre of thinking and learning. Candidates reflect, communicate and develop ideas through language.

This course provides candidates with the opportunity to develop skills in Reading, Listening, Talking and Writing, which are essential for learning, for work and for life; to use different media effectively for learning and communication; to develop understanding of how language works; and to 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, providing candidates with opportunities to enhance their understanding and enjoyment of other cultures and of their own.

The course offers candidates opportunities to develop and extend a wide range of skills. In particular, the course aims to develop:

- Reading, Listening, Talking and Writing skills in a Modern Language
- application of Knowledge and Understanding of a Modern Language
- the skill of Translation
- Literacy skills

Entry Level / Suitability

Learners will be suitable for study at N5 and H

- **N5 Spanish/French** – learners who have successfully passed N4 Spanish
- **Higher Spanish/French** – learners who have successfully passed N5 Spanish 6th year 'crash' students may be accommodated at the discretion of the PT.
- **Advanced Higher Spanish** - learners who have successfully passed H Spanish

COURSE CONTENT

The course provides candidates with the opportunity to develop Reading, Listening, Talking and Writing skills in the Modern Language, and to develop their knowledge and understanding of detailed and complex language in the contexts of society, learning, employability, culture.

The following provides a broad overview of the subject skills, knowledge and understanding developed in the course:

- Reading, Listening, Talking and Writing skills in a Modern Language in the contexts of society, learning, employability, culture
- applying knowledge and understanding of detailed and complex language to understand and use a Modern Language
- applying knowledge and understanding of language to translate detailed and complex language
- applying grammatical knowledge and understanding

By its very nature, through addressing and developing the core skills of Listening, Talking, Reading & Writing, Modern Languages learning allows for a development of essential, transferrable skills for work, such as presentation skills, communication skills – oral and written, planning and organising and working with others.

LEARNING AND TEACHING METHODS

Learners in Modern Languages will experience a wide range of teaching strategies aimed at stimulating and engaging them.

- ✓ **Assessment Is For Learning** – self assessment/ peer assessment
- ✓ **Cooperative/ Collaborative Learning**- working in groups or pairs
- ✓ **Active Learning** – use of resources to support learning e.g. show me boards, highlighters, traffic lights
- ✓ **Independent study** – time to think, reflect and work independently on what has been taught.
- ✓ **ICT –** Teachers use a variety of ICT to enhance learning
- ✓ **Foreign Language Assistant –** working with an FLA for an up-to-date insight on the Language studied .

SKILLS DEVELOPED

The course offers candidates opportunities to develop and extend a wide range of skills. In particular, the course aims to develop:

- ✓ Reading, Listening, Talking and Writing skills in a Modern Language
- ✓ Application of Knowledge and Understanding of a Modern Language
- ✓ Translation
- ✓ Literacy
- ✓ Communication
- ✓ Leadership
- ✓ Employability
- ✓ Time management

ASSESSMENT ARRANGEMENTS

Spanish is offered at National Qualification Levels N4-AH and French is offered at levels N4-H. To gain the full course award, the learner must pass the Course Assignment as well as the Course Assessment.

The structure of course assessment is detailed below:
N4 – successful completion of 2 units plus the Added Value Unit
N5 – successful completion of Coursework Assignment and Question Paper
H – successful completion of the Coursework Assignment and Question Paper
AH – successful completion of the Course Assignment and Question Paper

At N4 Learners are awarded a Pass. At N5, Higher and AH Learners are awarded a graded pass A-D.

This Course or its Units may provide academic progression to:

- there is hierarchical progression from N4-Higher within the school
- further study; HNC, HND, BA (Hons), MA (Hons)
- a wide range of employment opportunities

CAREERS USING MODERN LANGUAGES

There is a very wide range of employment opportunities with employers in all sectors of the economy. Specific Modern Language careers include;

PROGRESSION PATHWAYS

- Marketing
- Media
- Teaching
- Law
- Import/Export
- Civil Service
- Airline
- Retail
- Hospitality
- Journalism
- International Charities
- Interpreting

MODERN STUDIES

PURPOSE AND AIMS OF THE MODERN STUDIES COURSES

A good way to think about Modern Studies is that if History is about the way the world once was, Modern Studies is the way the world is and ought to be in the future. Modern Studies is the study of social, political and economic issues at local, national and international levels and enables pupils to understand the processes and institutions that play an important part in contemporary society. Their studies will support them in becoming successful and confident global citizens. In Modern Studies we aim to provide an open and friendly atmosphere, a well-resourced teaching environment, and up-to-date, stimulating courses. It is offered as a subject choice in S3-S6.

In recent years, the Modern Studies department has organised exchange visits with our partner school Lakshmi Girls' Hindu College in Trinidad & Tobago. We also organise visits to the Scottish Parliament and sometimes to the House of Commons.

LEARNING AND TEACHING METHODS

A combination of teacher led lessons and a high degree of independent learning is required to be successful in this course. Learners will have the opportunity to listen to guest speakers undertake their own research to develop their knowledge and understanding.

SKILLS DEVELOPED

Pupils will develop a range of research and information-handling skills including

- evaluating information/ evidence in order to support and oppose a view;
- making decisions and drawing conclusions;
- constructing detailed arguments;
- communicating views, opinions, decisions and conclusions based on evidence.
- Describing and explaining current events.

All skills developed in Modern Studies are transferable meaning they are of use in a variety of careers and everyday life.

COURSE CONTENT

NATIONAL COURSE

International issues –Terrorism

Pupils will study terrorism from 9/11 to the present day. They will study the cause of terrorism from nationalism and religious viewpoints. They will also look at the impact it has had on people and the world. Finally they will study government and international responses to terrorism and will assess if it has been effective. Examples will include the impact of the war in Syria, ISIS, Manchester and Nice.

Social Issues – Crime and the law

Pupils will study what crime is and why it happens. Pupils will also look at how crime is tackled through the Police and government policy. This will allow case studies on key areas such as knives, alcohol and drugs. Finally, pupils will study the legal system and how crime is dealt with in Scottish courts.

Democracy in Scotland and the UK
Pupils will study the nature of democracy in Scotland and the UK. How do people participate in our political system and can they make a difference. Pupils will also look at the relationship between the UK and Scottish parliaments including the recent independence debate. Pupils will investigate voting systems and why people vote, or don't. This topic also looks at citizen participation focusing on the media, trade unions and pressure groups.

ASSESSMENT ARRANGEMENTS

National 5 Modern Studies involves a final assessment worth 80%. The remaining marks are gained through an Added Value Unit/Assignment which allows pupils to study a relevant topic of their choice analysing the key issues and also developing research skills.
N4 Modern Studies is assessed unit by unit by the class teacher.

HIGHER COURSE

International issues – World Issue/Politics of Development/Global Security

Pupils will study, a world issue such as developing nations, conflict or terrorism and how organisations like UNITED NATIONS, NATO and the African Union tackle it. Pupils have recently been studying the Syrian conflict and the impact it has had in the Middle East and further afield.

Social Issues – Inequality in the UK

Pupils will study one of the above issues. Inequality in the UK explores how the richest in our society dominate the best houses, jobs, lifestyles and enjoy better health than the majority of the population. This includes a close look at Glasgow and Scotland, focusing on government attempts to reduce health and wealth inequality such as laws on smoking, employment and gender equality

Democracy in Scotland and the UK

A continuation of the National course going into further detail of our political system and how we can participate in it. This includes comparison of the Scottish and UK political systems and how laws are created. Evaluating of Brexit's implications will also be undertaken. Again, voting systems and the social, economic and historical factors involved in voting are studied.

ASSESSMENT ARRANGEMENTS

Higher Modern Studies has a final assessment worth 73%. The remainder of the mark is an assignment where the student chooses a relevant topic of their choice and advises the government on the best course of action to address the issue.

PROGRESSION PATHWAYS

The Higher Modern Studies course or its Units may provide academic progression to:

- further study at college or university; HNC, HND, MA/BA(Hons), Postgraduate degrees
- foundation and graduate apprenticeships in various careers
- a wide range of employment opportunities

Pupils successfully completing Modern Studies Higher in S5 can choose Higher Politics in S6.

CAREERS USING MODERN STUDIES - Law, teaching, journalism and media, social work, psychology, advertising, police, counselling, administration, market research, politics, care work, civil service, marketing, youth work, human resources, research work, communications, charity sector, international development support, planning and environmental careers.

Modern Studies skills are transferable to almost every possible career choice.

MUSIC

We offer 5 separate and very different courses: **Music, Music Technology, NPA Musical Theatre and NPA Music for Wellbeing.**

Students may opt for **Music and Music Technology**. **NPA Musical Theatre** can also be opted for on top of **Music and Music Technology**.

NPA Music for Wellbeing is during Wider Certification period only.

PURPOSE AND AIMS OF THE MUSIC COURSE

The main aims of Music are

- to develop performing skills on two selected instruments or one instrument and voice
- to perform music with accuracy
- to create original music through composing, arranging or improvising
- to develop a knowledge and understanding of the social and cultural factors which influence music
- to develop a knowledge and understanding of music and musical literacy by listening to music and identifying level specific music signs, symbols and concepts
- to reflect on your own work and the work of others

COURSE CONTENT

Composing Skills (Assignment)
Candidates will have the opportunity to build competence in handling a range of compositional techniques to produce a folio of original work. This area of the course presents candidates with the unique opportunity to explore musical ideas, solve problems and make personal decisions to develop creativity and express individuality.
For Advanced Higher, candidates will have the opportunity to explore and develop musical ideas to create music by composing/arranging one piece of music, reviewing the creative process of their composition or arrangement and analyse a chosen piece of music.

Understanding Music
The course provides scope to listen to a variety of music and develop discriminatory awareness of an increasing range of musical and stylistic concepts. Candidates have the opportunity to develop musical literacy, relating music heard to notated scores..

Performing Skills
Candidates have the opportunity to develop performance skills in one of the combinations below:

- 2 instruments or one instrument and voice

PERFORMING TIMINGS AND LEVELS

National 5
An 8 minute programme of music on 2 instruments or instrument and voice at Grade 3 level. Split may be in-equal with a minimum of 2 minutes on one instrument/voice.

Higher
A 12 minute programme of music on 2 instruments or instrument and voice at Grade 4 level. Split may be in-equal with a minimum of 4 minutes on one instrument/voice.

Advanced Higher
A 18 minute programme of music on 2 instruments or instrument and voice at Grade 5 level. Split may be in-equal with a minimum of 6 minutes on one instrument/voice.

SKILLS DEVELOPED

Through music, learners will develop their ability to express themselves and develop their personal creativity and self-confidence when performing and creating.

Across the course, skills and experiences which complement and supplement each other are developed. Performing and creating music allows learners to express themselves musically and to reflect on their learning. This encourages learners to think imaginatively and to explore and develop their own ideas, making use of their understanding of music concepts and applying this to their own practice.

Understanding music through listening enables learners to build their knowledge and understanding of music, bringing depth to their learning and raising their social and cultural awareness of the influences on musicians and composers.

The course also provides opportunities for learners to further acquire and develop the attributes and capabilities of the four capacities.

ASSESSMENT ARRANGEMENTS

Students will be assessed on each of the course elements previously listed and must pass each individual unit before they can be presented for the course award.

For National 5 and Higher, the external Performance exam is 50% of the final grade, the final Understanding Music Question Paper is 35% of the final grade and the Assignment is submitted to SQA is 15% of the final grade..

For Advanced Higher, the external Performance exam is 50% of the final grade, the final Understanding Music Question Paper is 35% of the final grade and the Assignment (Composing, Reviewing and Analysing Music) is 15% of the final grade.

PROGRESSION PATHWAYS

National 5 - entry to the course through

- National 4 or National 5 (C grade)
- The discretion of the school, based on students' musical experiences

Higher - entry to the course through

- National 5 (A-C grade)
- The discretion of the school, based on students' musical experiences

Advanced Higher - entry to the course through

- Higher (A-C grade)
- The discretion of the school, based on students' musical experiences

CAREERS USING MUSIC

It is clearly documented that studying music can lead to a strong and prosperous career in a number of industries, in and out with the music industry.

Within the music industry, these include; composition, performance, teaching, production, promotions, retailing, research, arts administration, music therapy among others.

MUSIC TECHNOLOGY

PURPOSE AND AIMS OF THE MUSIC TECHNOLOGY COURSE

The main aims of Music Technology are

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

COURSE CONTENT

Music Technology Skills
Candidates will develop skills and techniques relating to the use of music technology hardware and software to capture and manipulate audio. They will explore a range of uses of this technology through practical activities.

Understanding 20th and 21st Century Music
Candidates will develop knowledge and understanding of 20th and 21st century musical styles and genres, and an understanding of related music technology developments.

Music Technology in Context
Candidates will use music technology skills in a range of contexts such as live performance, radio broadcast, composing and/or sound design for film, TV themes, adverts and computer gaming.

Please Note – There is no Performing requirement for this course

SKILLS DEVELOPED

This Course is suitable for learners with a broad interest in music and for learners with a specific interest in music technology and 20th and 21st century music. **It should be noted that there is no requirement in this course for musical performance.**

Through music technology, learners will develop practical technical skills and creative use of music technology in a range of contexts. The course includes some opportunities for personalisation and choice in selecting varied contexts for learning. This makes it suitable for a variety of learners and a range of musical interests.

The course engages the learner through involvement in practical music technology based activities and tasks which are supported by knowledge and understanding of music technology and understanding of musical concepts, form and structures. Learners will develop their ability to express themselves through music, which encourages the development of creativity and independence. While developing original ideas for music and sound, learners will be able to express themselves musically and begin to critically reflect on their learning and the quality of their work.

The course encourages learners to become successful, independent and creative in their use of technologies and to continue to develop the attributes and capabilities of the four capacities, including creativity, flexibility and adaptability, enthusiasm and a willingness to learn, perseverance and resilience, responsibility, reliability, confidence and enterprise.

ASSESSMENT ARRANGEMENTS

Students will be assessed on each of the course elements previously listed and must pass each individual unit before they can be presented for the course award.

Course Assessment - You will draw on and apply the skills, knowledge and understanding you have developed during the Course. These will be assessed through a question paper and an assignment.

The question paper will assess breadth of knowledge and understanding of concepts related to music technology and 20th and 21st century music.(30 marks)
National 5 has **two assignments**, Higher has one assignment will demonstrate the ability to apply knowledge and skills to plan, implement and evaluate a completed creative sound production. This will be underpinned by knowledge and understanding of music and music technology equipment and techniques. It will be sufficiently open and flexible to allow for personalisation and choice. (70 marks)

PROGRESSION PATHWAYS

National 5 - entry to the course through

- ***National 4 or National 5 (C grade)***
- ***The discretion of the school, based on students' musical experiences***

Higher - entry to the course through

- ***National 5 (A or B grade)***
- ***The discretion of the school, based on students' musical experiences***

CAREERS USING MUSIC TECHNOLOGY

Studying music technology can lead to a career in a number of industries including sound engineer for live and recorded performance, radio broadcast, television, film, adverts and gaming among others.

NPA MUSICAL THEATRE (LEVEL 6) – S5/6 ONLY

PURPOSE AND AIMS OF THE MUSICAL THEATRE COURSE

The main aims of Musical Theatre are:

- The NPA in Musical Theatre is designed to equip candidates with an introduction to the knowledge, understanding and skills required for progression to further qualifications and/or potential employment within the performing arts industry.

- Specifically, it is one of a new suite of small NPAs which cover a range of aspects of the theatre industry.

COURSE CONTENT

At least 3 units – 1 mandatory, 2 own choice
Acting Through Song (Mandatory Unit)
Candidates will develop skills and techniques relating to the use of music technology hardware and software to capture and manipulate audio. They will explore a range of uses of this technology through practical activities.

Select two of the following Units from the following:

- Theatre Performers: Solo Singing Skills
- Theatre Performers: Group Singing Skills
- Group Dance Performance
- Preparation for Audition

The mandatory Unit *Acting through Song* encompasses the skill of singing with the understanding of text which is essential to Musical Theatre performance. The optional Units provide opportunities for personalisation, choice and specialisation.

SKILLS DEVELOPED

- Develop a range of skills associated with the triple discipline of Musical Theatre practice
- Develop a range of appropriate skills in voice, movement and acting
- Develop specific skills for presentation at audition
- Apply combined practical skills in audition format
- Develop self-presentation skills
- Work in rehearsal and performance creatively and innovatively
- Develop self-evaluation skills, enabling professional development
- Develop the ability to work independently and in groups
- Develop professional attitudes

The NPA also aims to allow candidates to:

- Develop communication and interpersonal skills
- Develop skills in music, acting and dancing

ASSESSMENT ARRANGEMENTS

The assessment strategy for this NPA aims for a balanced approach to assessment as well as complementary and supplementary methods of assessment which reflect the nature of the subject area. The majority of assessment is practical based with small written assignments and projects, where this is appropriate. All units are a Pass or Fail award.

CAREERS USING MUSIC TECHNOLOGY

The NPA in Musical Theatre is a qualification with a particular specialist focus, which will prepare candidates for both Musical Theatre performance and the professional audition process, thus opening up potential routes to employment.

PHYSICAL EDUCATION

PURPOSE AND AIMS OF THE COURSE

The Higher Physical Education course gives candidates the opportunity to develop and enhance their movement and performance skills. They develop knowledge and understanding and apply this to the analysis and evaluation of performance in physical activities.

COURSE CONTENT

The Higher course covers a variety of practical activities throughout the year – this varies dependent on the skills and experience of each class. Using practical performance as a vehicle, the course also explores how mental, emotional, social and physical factors impact on performance and the performance development process. The course is practically focussed with 3 performance and 2 classroom sessions per week

LEARNING AND TEACHING METHODS

Across all activities learners will experience develop skills and knowledge through individual tasks, guided discovery, problem solving, conditioned games, partner work, repetition drills and gradual-build up of skills.

SKILLS DEVELOPED

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 courses also promote mental, emotional, social and physical wellbeing. Candidates develop their thinking skills through planning, problem solving and analysing performance.

ASSESSMENT ARRANGEMENTS

Performance 60 marks

The performance assesses candidates' ability to perform in **two different** physical activities. – **each marked out of 30 marks.** The context for each single performance event must set it apart from normal learning and teaching activities so that it is **challenging, competitive and/or demanding**. This gives candidates an opportunity to demonstrate the following skills, knowledge and understanding:

- repertoire of skills — a broad and comprehensive performance repertoire (including complex movement and performance skills)
- control and fluency of complex movement and performance skills
- effective decision making and problem solving
- using and applying well established composition, tactics and roles
- extent to which rules and regulations are followed and etiquette is displayed (including working with others)
- extent to which emotions are controlled on the day of the performance

Question paper 50 marks

The question paper assesses the candidates' ability to integrate and apply knowledge and understanding from across the course. It gives candidates an opportunity to demonstrate the following skills, knowledge and understanding:

- analysing factors that impact on performance

- explaining a range of approaches for developing performance
- analysing the recording, monitoring and evaluation of performance development

The question paper has a total mark allocation of 50 marks. This is 50% of the overall marks for the course assessment.

PE PROGRESSION PATHWAYS

National 4 ⇨ **National 5** ⇨ **Higher** ⇨ **Advanced Higher**

CAREERS USING PHYSICAL EDUCATION

PE teaching, Sports Coaching, Personal Training, Primary Teaching, Sports Development, Professional Sport, Leisure attendant, Nursery Teaching.

PHYSICAL EDUCATION DANCE: NATIONAL 5

PURPOSE AND AIMS OF THE COURSE

The National 5 Dance course encourages candidates to become successful, independent and creative in their use of dance. They develop attributes and capabilities including creativity, flexibility and adaptability; enthusiasm and a willingness to learn; perseverance, independence and resilience; responsibility and reliability; confidence and enterprise.

COURSE CONTENT

The National 5 Dance course has an integrated approach to learning that develops practical and evaluative skills, knowledge and understanding of technical dance and performance and choreographic skills. Candidates learn how to evaluate their own work and the work of others and use this knowledge to inform and influence their own creative thinking and performance. Candidates experiment with a range of choreographic principles and consider the impact of theatre arts on performance. They also explore the origins of dance.

LEARNING AND TEACHING METHODS

The course is practical and experiential. Candidates develop a range of technical and choreographic skills in dance to produce creative and imaginative performances. The course provides scope for personalisation and choice.

The course encourages candidates to be creative and to express themselves in different ways. Learning through dance helps candidates to develop an appreciation of aesthetic and cultural values, identities and ideas.

SKILLS DEVELOPED

Candidates develop both their own work and the work of others. Candidates also developed creativity and problem solving when choreographing. Evaluating skills are also developed.

ASSESSMENT ARRANGEMENTS

Course assessment includes:

- Question Paper (20%)
- Choreography and review (45%)
- Performance (35%)

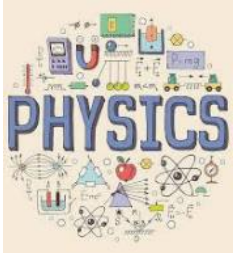
PROGRESSION PATHWAYS

- Higher Dance
- National Certificate in Dance (SCQF level 6)
- National Progression Award in Musical Theatre (SCQF level 6)
- National Progression Award in Dance (SCQF level 5)
- National Progression Award in Musical Theatre (SCQF level 6)

CAREERS

- Dancer
- Theatre
- Dance teacher

PHYSICS



PURPOSE AND AIMS OF THE PHYSICS COURSE

The Physics courses will enable learners to develop a deeper understanding of physics concepts and the ability to describe and interpret physical phenomena using mathematical skills. They will develop scientific methods of research in which issues in physics are explored and conclusions drawn.

SQA courses will be offered at National 3, National 4 National 5 and Higher.

COURSE CONTENT

N3 AND N4 PHYSICS

The courses develop skills in a physics context. Learners will gain an understanding of physics, and develop this through a variety of approaches, including practical activities.

The N3 and N4 Physics courses are based on the following units:

- Electricity and Energy: generation of electricity, electrical power, electromagnetism, practical electrical and electronic circuits, gas laws and the kinetic model.
- Waves and Radiation: wave characteristics, sound, electromagnetic spectrum and nuclear radiation.
- Dynamics and Space: speed and acceleration, relationships between forces, motion and energy, satellites and cosmology.

N5 PHYSICS COURSE

Learners gain an understanding of physics and develop this through a variety of approaches including practical activities, investigations and problem solving.

The course content includes the following areas of physics:

- Dynamics: vectors and scalars, velocity–time graphs, acceleration, Newton's laws, energy and projectile motion.
- Space: space exploration and cosmology.
- Electricity: electrical charge carriers, potential difference (voltage), Ohm's law, electrical power, practical electrical and electronic circuits.
- Properties of Matter: specific heat capacity, specific latent heat, gas laws and the kinetic model.
- Waves: parameters and behaviours, electromagnetic spectrum and refraction of light.
- Radiation: nuclear radiation.

N5 PRACTICAL ELECTRONICS

The course provides a broad practical introduction to electronics which encourages learners to become responsible and creative in their use of technologies and to develop attributes such as flexibility, enthusiasm, perseverance, reliability and confidence.

The course based on the following areas:

- Circuit design: key electrical concepts and electronic components, analysis, electronic problems, design solutions to these problems and explore issues relating to electronics.
- Circuit simulation: use simulation software to assist in the design, construct and test electronic circuits.
- Circuit construction: assemble a range of electronic circuits, using permanent and non-permanent methods. Developing skills in practical wiring and assembly techniques, carrying out testing and evaluating functionality.

HIGHER PHYSICS

Learners gain a deeper insight into the structure of the subject, and reinforce and extend their knowledge and understanding of the concepts of physics.

The course content includes the following areas of physics:

- Our Dynamic Universe: motion - equations and graphs, forces, energy, power, collisions, explosions, impulse, gravitation, special relativity and the expanding Universe.
- Particles and Waves: forces on charged particles, the Standard Model, nuclear reactions, inverse square law, wave-particle duality, interference spectra and refraction of light
- Electricity: monitoring and measuring AC, current, potential difference, power, resistance, electrical sources, internal resistance, capacitors, semiconductors and p-n junctions

LEARNING AND TEACHING METHODS

Learners will experience and participate in a variety of learning activities such as experiments, investigations, research, presentations and direct teaching that will develop their knowledge of physics and improve skills in problem solving.

SKILLS DEVELOPED

The following provides a broad overview of the subject skills, knowledge and understanding developed in the Physics courses

- demonstrating knowledge and understanding of physics by making accurate statements
- describing information, providing explanations and integrating knowledge
- applying physics knowledge to new situations, interpreting information and solving problems
- planning and designing experiments/practical investigations to test given hypotheses or to illustrate particular effects
- carrying out experiments/practical investigations safely, recording detailed observations and collecting data
- selecting information from a variety of sources
- presenting information appropriately in a variety of forms
- processing information (using calculations, significant figures and units, where appropriate)
- making predictions from evidence/information
- drawing valid conclusions and giving explanations supported by evidence/justification

- quantifying sources of uncertainty
- evaluating experimental procedures and suggesting improvements
- communicating findings/information effectively

The following provides a broad overview of the subject skills, knowledge and understanding developed in the **Practical Electronics** course:

- awareness of safe working practices in electronics
- analysing electronic problems and designing solutions to these problems
- simulating, testing and evaluating solutions to electronic problems ♦ skills in using a range of test equipment
- constructing electronic circuits using permanent (soldering) and non-permanent methods
- knowledge and understanding of the systems approach to electronics, including sub-systems
- knowledge and understanding of the use of concepts and principles associated with a range of electronic and electromagnetic components and circuits
- knowledge and understanding of combinational logic
- understanding of key electrical concepts — current, voltage, resistance, power, analogue/digital, capacitance, magnetic effect of current
- applying electronic knowledge and skills in a range of contexts

ASSESSMENT ARRANGEMENTS

- N3 and N4 courses are internally assessed by unit tests and an Added Value research unit
- N5 and H courses are externally assessed by question paper and a practical assignment.

PROGRESSION PATHWAYS

- National 3 Physics progresses to National 4 Physics
- National 4 Physics progresses to National 5 Physics or N5 Practical Electronics
- National 5 Physics progresses to Higher Physics

CAREERS USING PHYSICS

Apprenticeships, Auto-electrical repair, Buildings & Structures, Civil Aviation Computing Energy & Power Provision, Engineering, Finance, Manufacturing, Medical Technologies, Music Industry, New Technologies Renewable Energy, Robotics, Space Exploration Teaching, Telecommunications and Transport.

POLITICS

PURPOSE AND AIMS OF THE POLITICS COURSE

Politics makes a distinctive contribution to the curriculum through its study of important political concepts and ideologies, the comparison of different political systems, and the evaluation of factors that impact on the electoral performance of political parties.

This course builds upon the principles and practices of the social studies curriculum area. Candidates have opportunities to develop important attitudes, such as respect for the values, beliefs and cultures of others; openness to new thinking and ideas; and a sense of responsibility and global citizenship. In Politics we create a mature environment that is open to discussion on current affairs, whilst delivering high quality learning alongside the course which candidates often find interesting and stimulating. This subject is offered at Higher only and candidates are eligible if they are in S6 and have passed either Higher Modern Studies or Higher History. The course is appropriate for a range of candidates, from those who wish to achieve a greater understanding of politics in order to engage as active and informed members of society, to those who wish to progress to more specialised training or higher education or employment.

LEARNING AND TEACHING METHODS

A combination of teacher led lessons and a high degree of independent learning is required to be successful in this course. Learners will have the opportunity to listen to guest speakers undertake their own research to develop their knowledge and understanding.

SKILLS DEVELOPED

Pupils will develop a range of skills including:

- researching, analysing, evaluating and synthesising information from a wide range of political sources
- using a wide range of sources of information to draw detailed and balanced conclusions about political concepts and ideologies
- comparing and contrasting different political systems, making generalisations, where appropriate, on the political process
- interpreting and evaluating a wide range of electoral data
- drawing on knowledge of political theory, political systems, and political parties and elections

All skills developed in Politics are transferable meaning they are of use in a variety of careers and everyday life.

COURSE CONTENT - HIGHER

Section 1 – Political Theory

Candidates study the key political concepts of power, authority and legitimacy, and analyse the relevance of these concepts today. They study the nature of democracy and the arguments for and against direct and representative democracy. Finally they study the key ideas of two political ideologies (from Liberalism, Conservatism, Socialism, Nationalism, and Fascism) including the works of relevant theorists, and draw balanced conclusions about the chosen ideologies.

Section 2 – Political Systems
Candidates study the constitutional arrangements in different political systems. The detailed study of the political systems focuses on the roles of the executive and legislative branches within each system. Candidates compare and contrast the respective powers of individual branches of government within the two political systems, and draw balanced conclusions about these. They also study two political systems: the UK political system and the political system of the United States of America.

Section 3 – Political Parties and Elections
Candidates compare the electoral impact of two different dominant ideas. This can either be from within one political party or between two different political parties. Candidates can choose from the following: the Conservative Party, Labour Party, Liberal Democrats or Scottish National Party. These ideas are studied alongside the impact of political campaign management strategies and theoretical analyses of voting behaviour.

ASSESSMENT ARRANGEMENTS

Higher Politics has a final assessment worth 73%. The remainder of the mark is an assignment where the student chooses a relevant topic of their choice and advises the government on the best course of action to address the issue.

PROGRESSION PATHWAYS

The Higher Politics course may provide academic progression to:

- further study at college or university; HNC, HND, MA/BA(Hons), Postgraduate degrees
- foundation and graduate apprenticeships in various careers
- a wide range of employment opportunities

CAREERS USING POLITICS

Law, teaching, journalism and media, social work, psychology, advertising, police, counselling, administration, market research, politics, care work, civil service, marketing, youth work, human resources, research work, communications, charity sector, international development support, planning and environmental careers. Politics skills are transferable to almost every possible career choice.

A number of former John Paul pupils have gone on to enjoy successful careers in politics.

TRAVEL AND TOURISM

PURPOSE AND AIMS OF THE TRAVEL AND TOURISM COURSE

The National Skills for Work: Travel and Tourism Course is an introductory qualification in travel and tourism. It develops the skills, knowledge and attitudes, needed for work in the travel and tourism industry which employs approximately 200,000 Scots. However, many of the skills taught are about research and information handling which are valuable transferable skills. Pupils may be involved in out of school visits to Glasgow/Scottish tourist sites as part of their studies.

Travel and Tourism is available at National 4/5

COURSE CONTENT

Employability

Pupils will research various job roles within the travel and tourism industry and the qualities and qualifications needed to pursue a career in any of these roles. Pupils will then review their own employability skills and attitudes in relation to these jobs, allowing them to further develop their understanding of the necessary skills and qualities needed to do well in the world of work.

Customer Service

This part of the course will require pupils to take part in various scenarios where they are able to display the appropriate skills and attitude required when dealing with customers in the workplace. This can be demonstrated in various methods and usually involves pupils working together to resolve various problems and solutions that may arise in any workplace.

Scotland

Pupils will study 3 tourist locations throughout Scotland and will look at the various attractions on offer to tourist who visit there and also the impacts of tourism on these locations. Again pupils will take part in various mock scenarios where using the knowledge they have gained they must picked detailed travel itineraries for people who choose to travel to the areas studied, taking into account their various needs and specifications.

UK and Worldwide

Similar to the Scotland unit pupils will study 3 UK and Worldwide tourist locations and will look at the various attractions on offer to tourist who visit there as well as current tourism trends. Pupils will use the knowledge they have gained to create detailed travel itineraries as well as providing information for people who choose to travel to the areas studied, taking into account their various needs and specifications.

LEARNING AND TEACHING METHODS

Learners in History will experience a range of teaching strategies aimed at stimulating and engaging learners.

- **Teacher exposition** – Teacher-led learning and notetaking skills
- **Cooperative/ Collaborative Learning**- working in groups or pairs

- **Independent study** – time to think, reflect and work independently on what has been taught.
- **ICT –** Teachers use a variety of ICT to enhance learning: iPads, Film to support topics taught, on line resources,
- **Guest Speakers/ Workshops/**– Teachers actively seek opportunities to enhance learning beyond the classroom.

SKILLS DEVELOPED

- skills to become effective job-seekers and employees
- skills to deal effectively with all aspects of customer care and customer service in travel and tourism
- the product knowledge and skills to deal effectively with customer enquiries in relation to travel and tourism in Scotland, the rest of the United Kingdom and worldwide
- research and information handling

ASSESSMENT ARRANGEMENTS

There **is no external assessment** for this Course. Learners must successfully complete assessments in class for each unit to achieve the course.

PROGRESSION PATHWAYS

Post school – N6/HNC/HND Travel and Tourism/university courses and a wide range of tourism and hospitality based courses.

CAREERS USING TRAVEL AND TOURISM INCLUDE

Holiday representative, tour manager, tourism officer, tourist information centre manager, travel agency manager and hotel and events work and/or management, tourist guide

Skills developed throughout the course such as customer service and employability are relevant to all jobs and professions making Travel & Tourism a very useful practical stepping stone to the world of work.