JOHN PAUL ACADEMY

BGE PATHWAYS

S2

PERSONALISATION & CHOICE SUBJECT OPTIONS BOOKLET 2023-24

PERSONALISATION & CHOICE IN THE FINAL YEAR OF THE BGE

This booklet is designed to help students decide on a course of study for S3, the final year of the Broad General Education (BGE).

In S3 all students will continue to study English, Maths, Spanish, RE and PE while being able to personalise their learning by selecting additional courses.

There will be 5 additional choices, one from each of the following 4 curricular areas:

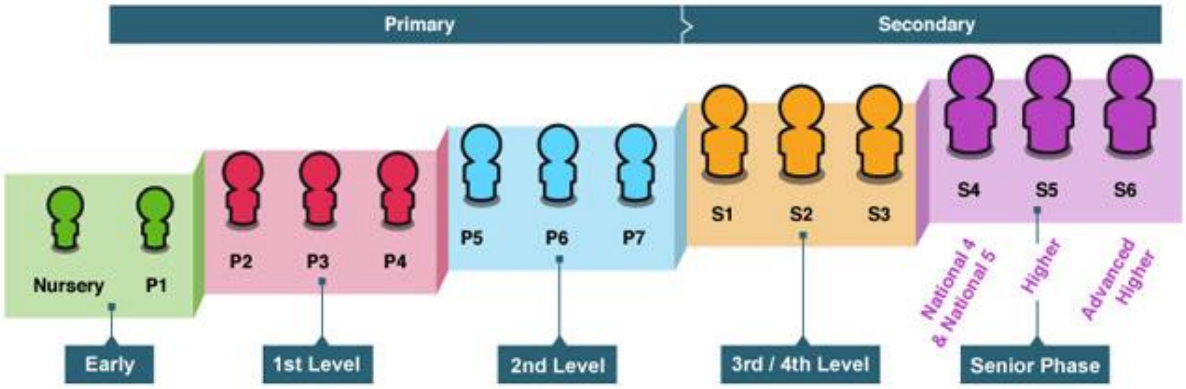
- Science
- Technology
- Social Subjects
- Expressive Arts

and <u>one</u> personal choice subject.

This enables the young people to begin to specialise in their learning by studying fewer subjects in greater depth.

The options form is shown on the last page of this booklet.

Subject 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.



Contents

ART & DESIGN

PURPOSE AND AIMS OF THE S3 ART & DESIGN COURSE

The aims of the Course are to enable learners to communicate personal thoughts, feelings and ideas through the imaginative use of art and design materials, techniques and/or technology. Develop knowledge and understanding of art and design practice. Plan, develop, produce and present creative art and design work.. Develop understanding of the social and cultural influences on artists and designers and their work and develop problem solving, critical thinking and reflective practice skills

COURSE CONTENT

At Level 3 and 4 in S3 learners will study the following themes:

Still Life or Portraiture

- 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.

Lighting, Costume, Jewellery or Graphics

- 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.

LEARNING AND TEACHING METHODS

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

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

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

PROGRESSION PATHWAYS IN S4

On completion of the BGE course at Level 3 or 4 the following progression routes are available:
Level 3 – National 4 Art & Design
Level 4 – National 5 Art & Design

CAREERS USING ART & 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,

BIOLOGY

PURPOSE AND AIMS OF THE S3 BIOLOGY COURSE

The purpose of the Course is to develop learners' interest and enthusiasm for biology in a range of contexts. The skills of scientific inquiry and investigation are developed, throughout the Course, by investigating the applications of biology. This will enable learners to become scientifically literate citizens, able to review the science-based claims which they will meet.

COURSE CONTENT

The Level 3 and Level 4 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.

LEARNING & TEACHING METHODS

Learners will experience and participate in a variety of 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

Inquiry and investigative skills: As they experiment and carry out practical scientific investigations and other research to solve problems and challenges, learners: Plan and design scientific investigations and inquiries. Carry out practical activities. Analyse, interpret and evaluate scientific findings. Present scientific findings.

Scientific analytical thinking skills: Learners will develop a range of analytical thinking skills that will prepare learners to recognise the impact Biology makes on their lives, the lives of others, the environment and on society. Learners also develop scientific literacy and numeracy skills to express opinions and make decisions on social, moral, ethical, economic and environmental issues based on evidence.

ASSESSMENT ARRANGEMENTS

All Levels are internally assessed by unit tests.

PROGRESSION PATHWAYS IN S4

On completion of the BGE course at Level 3 or 4 the following progression routes are available:
Level 3 – National 4 Biology
Level 4 – National 5 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 – ADMINISTRATION & IT

PURPOSE AND AIMS OF THE BUSINESS EDUCATION COURSES IN S3

In S3 learners will continue to cover both Social Studies and Technologies experiences and outcomes started in the S2 Business and IT course. As learners complete the Broad General Education – they will be moving into the Senior Phase. At this point Business Studies subjects are separated into discreet subjects in **Administration & IT** and **Business Management**. In S3 learners may choose either **or both** subjects.

The Administration and IT course aims to enable learners to develop understanding of administration in the workplace and key legislation affecting employees. To develop an appreciation of good customer care.. To develop IT skills and use them to perform straightforward administrative tasks. To acquire organisational skills in the context of organising and supporting small-scale events.

COURSE CONTENT – ADMINISTRATION & IT

Learners will be working on Level 3 and 4 experiences and outcomes in S3. The course content includes the following topics from the following 2 units;

- **Information Technology in Administration**
- **Administrative Practices**

Information Technology in Administration – learners will develop more complex skills in MS Word, Excel and Access including;

- **MS Word** – learners will be able to prepare business communications; notices, minutes of meetings, letters, forms and how to use software features to present information in a professional manner.
- **MS Excel** – learners will be able to prepare financial information and use formatting functions to display information and how to use a range of formulae to perform calculations.
- **MS Access** – learners will be able to update and edit files, how to use more complex sorting and searching functions and how to prepare forms and reports using features of the software.

Administrative Practices - learners will understand how administrative procedures lead to the efficient running of a successful organisation. This includes covering topics such as;

- **Skills and Duties of Admnistrators** – understanding the range of skills developed and tasks undertaken by administrative workers.
- **Health & Safety** – understanding the key legislation covering the modern workplace and its impact on employers and employees.
- **Security of People, Property and Information** – understanding the legislation covering the collection, storage and use of information in organisations along with measure that should be taken to comply with legislation such as security systems.

LEARNING AND TEACHING METHODS

Learners will be working on ICT based activities for most lessons with a high degree of independent learning. Resources are shared via the school network and can be accessed from home via Glow. Theory lessons involve a range of methods involving teacher led discussion, pupil investigation/research, MTV practices to encourage critical thinking and problem-solving in learners are also used.

SKILLS DEVELOPED

- skills in using the following IT applications: word processing, spreadsheets, databases, presentations and desktop publishing software
- skills in using technology for electronic communication and investigation in familiar administrative contexts
- skills in organising, processing and communicating simple information in familiar administrative contexts

- knowledge and understanding of key legislation affecting employees in the
- workplace
- knowledge and understanding of the key features of good customer care

ASSESSMENT ARRANGEMENTS

A range of formative and summative assessment techniques are used to monitor progress throughout the S3 course. The S3 exam at the end of the year reflects the format of the National examinations learners will undertake in S4. A combined assessment covering all software applications as well as theory principles is undertaken on the computer, learners will be assessed at Level 3 or Level 4 as appropriate.

PROGRESSION PATHWAYS IN S4

On completion of the BGE course at Level 3 or 4 the following progression routes are available:
Level 3 – National 4 Administration and IT
Level 4 – National 5 Administration and IT
Level 4 – Level 5 NPA Business with Information Technology can also be gained by learners who undertake both Administration and IT and Business Management as an additional qualification.

CAREERS USING ADMINISTRATION & IT

The skills developed in Administration and IT are essential in all careers in a modern workplace. Specific careers using Administration & IT include;

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

BUSINESS EDUCATION – BUSINESS MANAGEMENT

PURPOSE AND AIMS OF THE S3 BUSINESS MANAGEMENT COURSE

In S3 learners will continue with their studies of Business and IT from S2 with an increased time allocation in the department. As learners complete the Broad General Education – they will be moving into the Senior Phase. At this point Business Studies subjects are separated into discreet subjects in **Administration & IT** and **Business**. In S3 learners may choose either **or both** subjects.

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

COURSE CONTENT – BUSINESS MANAGEMENT

Learners will be working on Level 3 and 4 experiences and outcomes in S3. The course content includes the following topics;

Business in Action – learners will understand the main activities of a business as well as exploring the key functional areas.

Influences on Business – learners will explore a range of internal and external influences impacting on a business.

Topics covered:

- **Human Resources** - managing and developing people – including recruitment, selection, training, employee motivation and develop and employee relations.
- **Financial Management** – including sources of finance, business costing, break=even, cashflow management and financial reporting.
- **Marketing** – including market research, the marketing mix; Product, Price, Promotion and Place
- **Operations** - manufacturing and quality management – including purchasing stock, stock management, methods of production, quality systems and ethical manufacturing.
- **Internal and external Influences** – understanding how finance, employees, managers, government, the economy, social trends, technology, competition and the environment affect a business.
- **Role of stakeholders** – understanding the key stakeholders and their influence in the success of a business.

Learners will bring together their understanding of business activities in a project investigation of a small local business.

LEARNING AND TEACHING METHODS

A variety of learning and teaching methods are used including teacher led discussion, group work, independent research, MTV strategies to encourage critical thinking.

SKILLS DEVELOPED

- understanding of the ways in which business operates to meet customers' needs
- understanding of entrepreneurial attributes in the context of business start-up
- understanding of the key functional areas of business
- understanding of the effects of internal and external influences on business activity
- interpreting and drawing conclusions from business information
- demonstrating independence and communication skills, including the ability to use ICT and work with others, through applying straightforward knowledge of business related concepts

ASSESSMENT ARRANGEMENTS

A range of formative and summative assessments are using throughout the course to assess knowledge and understanding of topics. There is a written topic test at the end of each unit of learning as well as a written summative assessment / S3 exam at the end of S3. S3 learners will also undertake a research assignment into a business issue at the end of S3.

PROGRESSION PATHWAYS IN S4

On completion of the BGE at Level 3 or 4 the following progression routes are available:
Level 3 – National 4 Business
Level 4 – National 5 Business Management
Level 4 – Level 5 NPA Business with Information Technology can also be gained by learners who undertake both Administration and IT and Business Management as an additional qualification.

CAREERS USING BUSINESS MANAGEMENT

As everyone works in a business environment, a knowledge of how businesses operate is beneficial in all career paths. Specific careers using a Business Management qualification include;

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

CHEMISTRY

AIMS OF THE S3 CHEMISTRY 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

The Level 4 course is based around 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.

LEARNING & 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

Inquiry and investigative skills: As they experiment and carry out practical scientific investigations and other research to solve problems and challenges, learners: Plan and design scientific investigations and inquiries. Carry out practical activities. Analyse, interpret and evaluate scientific findings. Present scientific findings.

Scientific analytical thinking skills: In order to make sense of scientific evidence and ideas learners will develop a range of analytical thinking skills that will prepare learners to recognise the impact Chemistry makes on their lives, the lives of others, the environment and on society. Learners will also develop scientific literacy and numeracy skills to expressing opinions and making decisions on social, moral, ethical, economic and environmental issues based on evidence.

ASSESSMENT ARRANGEMENTS

Courses are internally assessed by class tests.

PROGRESSION PATHWAYS IN S4

On completion of the BGE course at Level 3 or 4 the following progression routes are available:
Level 3 – National 4 Chemistry
Level 4 – National 5 Chemistry

CAREERS IN CHEMISTRY

- Manufacturing oil, chemical and mining industries, electronics, plastics, fibres and pharmaceuticals.
  - They may be involved in 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 S3 COMPUTING SCIENCE 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

The main areas of study are in the S3 Computing Science course are:
Computer Games Programming - Software design and development

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

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

A variety of learning and teaching methods are used, including teacher led exposition, independent learning, individual research and project work.

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

Learners in Computing Science combine theoretical and practical aspects of learning through the use of real-life Computing Science contexts. The skills, knowledge and understanding will be embedded in lessons with continuous Assessment throughout both formative and summative.

PROGRESSION PATHWAYS IN S4

On completion of the BGE at Level 3 or 4 the following progression routes are available:

- **Level 3 Computing Science** – National 4 Computing Science
- **Level 4 Computing Science** – National 5 Computing Science

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 & TECHNOLOGY – GRAPHIC COMMUNICATION

PURPOSE AND AIMS OF THE S3 GRAPHIC COMMUNICATION COURSE

The course provides opportunities for learners to gain skills in reading, interpreting and creating graphics. They learn to apply knowledge and understanding of graphic communication standards, protocols and conventions. Our Learners develop:

- skills in graphic communication techniques, including the use of equipment, graphics materials and computer graphics
- the ability to extend and apply knowledge and understanding of graphic communication standards, protocols and conventions
- an understanding of the impact of graphic communication technologies on our environment and society

COURSE CONTENT

The course develops skills in two main areas.

2D graphic communication
Learners 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. Learners also develop 2D graphic spatial awareness.

3D and pictorial graphic communication
Learners 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. Learners 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
- spatial awareness in straightforward but unfamiliar 2D, 3D and pictorial graphic situations
- using standard graphic communication equipment, software and materials
- knowledge of graphic communication standards, protocols and conventions
- knowledge of a range of computer-aided graphics techniques and practices
- knowledge of colour, illustration and presentation techniques in familiar and some unfamiliar contexts
- knowledge and understanding of the impact of graphic communication technologies on our environment and society

ASSESSMENT ARRANGEMENTS

Learners will be assessed in various ways during the year; this includes computer assignments, manual drawing assessments and written assessments.

PROGRESSION PATHWAYS IN S4

On completion of the BGE course at Level 3 or 4 the following progression routes are available:
Level 3 – National 4 Graphic Communication
Level 4 – National 5 Graphic Communication

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.

DESIGN & TECHNOLOGY – DESIGN & MANUFACTURE

PURPOSE AND AIMS OF S3 DESIGN & MANUFACTURE COURSE

The main purpose of the course is to allow learners to develop the skills and knowledge associated with designing and manufacturing. The course enables learners to develop:

- skills in designing and manufacturing models, prototypes and products
- knowledge and understanding of manufacturing processes and materials
- an understanding of the impact of design and manufacturing technologies on our environment and society

COURSE CONTENT

The course comprises two areas of study:
Design: Learners 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. Learners also develop an understanding of the factors that influence the design of products.

Manufacture: Learners 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. Learners 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 subject skills, knowledge and understanding are developed during 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

ASSESSMENT ARRANGEMENTS

Learners will be assessed in various ways during the year; this includes folio work, manual drawing assignments and practical and written assessments.

PROGRESSION PATHWAYS IN S4

On completion of the BGE course at Level 3 or 4 the following progression routes are available:
Level 3 – National 4 Design & Manufacture
Level 4 – National 5 Design & Manufacture

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 S3 ENGLISH COURSE

The Level 3 and Level 4 courses are designed to cultivate learners' skills in critical thinking and apply them to a range of texts. Learners will also apply their creative skills in imaginative writing as well as writing to clearly express ideas and opinion. In order to prepare learners to study for National Qualifications in S4, the S3 course covers the following elements;

- **Critical Reading** - **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 METHODOLOGIES

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, kindles, Edmodo, etc as well as learners 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

A range of skills are developed in English: Literacy (Reading, Writing, Talking and Listening) Higher Order Thinking Skills (eg. creation, analysis and evaluation), Health and Wellbeing, Numeracy as well as Emotional and Digital literacy skills**.**

ASSESSMENT ARRANGEMENTS

Pupils are assessed throughout the year in Reading, Writing, Talking and Listening.

PROGRESSION PATHWAYS IN S4

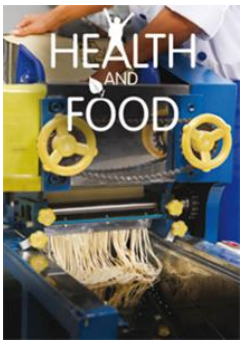
On completion of the BGE at Level 3 or 4 the following progression routes are available:
Level 3 – National 4 English
Level 4 – National 5 English

CAREERS USING ENGLISH

- Teaching
- Media
- Librarian
- Public Relations
- Advertising
- Journalism
- Publishing
- Law
- Marketing
- Accountancy

HEALTH, FOOD AND TEXTILE TECHNOLOGY

PURPOSE AND AIMS OF THE S3 COURSES



The Health Food and Textile Technology department S3 Broad General Education curriculum offering is set out to offer a wide range of interconnected subjects that gives learners several pathways though to a range of National Qualifications in the senior phase.

All BGE courses work directly into all routes, S1 and S2 core will allow for learners who do not pick Health, Food and Textile Technology to pick up most of the routes in S4 even if they do not take Health, Food and Textile Technology in S3.

COURSE CONTENT

S3 learners will undertake a course that will enable them to move into the senior phase prepared for each of the senior phase course.

- **Skills Building** – Consolidation of Practical Skills. This unit will run throughout the year and will build the practical skill needed to attain a National qualification in Practical Cookery.
- **Dietary needs of the individual** – Human Nutrition. This unit runs throughout the year and will build knowledge and understanding that will be used primarily to attain a National qualification in Health and Food Technology, but also is setting knowledge and understanding for Hospitality Practical Cookery.
- **REHISS** – This will enable the learners to undertake the Elementary Food Hygiene certificate that will be useful in the work of work. This unit will be one of the first to be undertaken with the exam in May
- **Fashion and Textiles** – S3 will be given the opportunity attend textile days with future textiles to develop skills, the department will also run an elective from April to June to upskill learners who are interested in continuing on in the department in the Fashion and Textile route .

LEARNING AND TEACHING METHODS

Learners in Health Food and Textile Technology, will experience a wide range of teaching strategies aimed at stimulating and engaging learners.

- **Assessment Is For Learning** – self assessment/ peer assessment
- **Independent practical activity** – practical
- **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: What I think I know ...What I know Now / Connect …Sort…Evaluate
- **ICT –** Teachers use a variety of ICT to enhance learning: Video and on line resources, as well as learners using ICT for research and and development for Food Product Development.

SKILLS DEVELOPED

Learners at all levels, will develop a wide range of Skills

- **Practical**
- **Transferable**

ASSESSMENT ARRANGEMENTS

From March until May in S3, dependent on each individual pupil learning journey units will be attempted and completed at Level 3 and 4 to prepare learners for their progression into the department and the specific courses that they will be successful in for their senior phase course in S4. The S3 prelim exam assessment will consist of a practical skill exam for 1hour 30mins a 2-course meal for 2 people, There will also be a written content to this exam.

PROGRESSION PATHWAYS IN S4

The senior routes available from achieving Level 3 or 4 in the BGE;

- Practical Cookery Route - National 4 & National 5 – S4
- Fashion and textile technology - National 4 & National 5 – S4
- Health and Food Technology Route – National 5
- Fashion and Textile Technology Route – National 5

CAREERS USING HEALTH, FOOD AND TEXTILE TECHNOLOGY COURSES

There are a large range of careers where HFTT courses would be useful; food preparation and service, food and drink manufacturing, food science and technology and dietetics and nutrition.

HISTORY

PURPOSE AND AIMS OF S3 HISTORY COURSE

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 offered at all levels and all year groups.

COURSE CONTENT

Scottish Context – Migration and Empire 1830 – 1939.

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, most notably that of Irish immigrants whose impact is still evident today for example on our football clubs. 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. Pupils will be developing their source skills, research skills and analytical skills throughout.

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 the reasons why attitudes changed from 'laissez-faire'. The course also focuses on the Liberal and Labour Reforms, more specifically the impact this had on social reform in Britain. Pupils will be developing their source skills, research skills and analytical skills throughout in an attempt to contextualise the Britain that we live in today.

World Context – Free at Last? Race relations in the USA 1918 – 68.

As stated, this unit ties in very closely to an area of previous study. 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 under the system of 'Jim Crow' where pupils will look at various groups such as the KKK. The remainder of this unit focuses on the struggle for civil rights by either peaceful or violent means such as the methods of the Black Panther movement.. 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

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

- **Teacher exposition** – Teacher-led learning and notetaking skills
- **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: Film to support topics taught, on line resources, as well as learners using iPads in class and at home to support research skills and improve communication between pupils and staff.
- **Guest Speakers/ Workshops/ Cinema Visits** – Teachers actively seek opportunities to enhance learning beyond the classroom.

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

At Level 3 and 4 learners will be assessed at the end of each unit via a test of knowledge, understanding and evaluation skills. There will also be ongoing assessment through class and homework.

PROGRESSION PATHWAYS IN S4

On completion of the BGE course at Level 3 or 4 the following progression routes are available:
Level 3 – National 4 History
Level 4 – National 5 History

CAREERS USING HISTORY

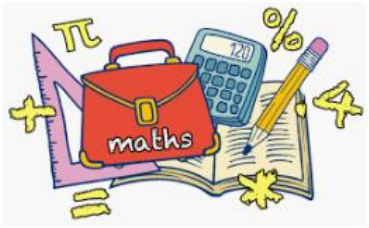
A History qualification is highly regarded by colleges, universities and in many careers. This is because of the transferable skills learned in the course.

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, politics, administration, civil service, museum/gallery curator, academic librarian, intelligence services human resources, research work, communications, charity work, international development., various trade apprenticeships. And many others.

Many former John Paul Academy History pupils have gone on to be successful at college and university and in careers such as teaching, office work, journalism and politics.

MATHEMATICS & NUMERACY



PURPOSE AND AIMS OF THE S3 MATHEMATICS 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

Students will follow a Mathematics course as part of a broad general education, covering level 3 and 4 outcomes and experiences.

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.

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. It is designed to develop the learner's skills in using mathematical language, to explore mathematical ideas, and to develop skills relevant to learning, life and work in an engaging and enjoyable way. It will build on prior learning and develop:

- operational skills in algebra, geometry, trigonometry and statistics
- reasoning skills of investigation, problem solving, analysis and modelling
- some numeracy skills in number processes and information handling

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

ASSESSMENT ARRANGEMENTS

For BGE there are initial diagnostic assessments in each topic. There are end of topic checkers, as well as more significant end of unit assessments.

PROGRESSION PATHWAYS IN S4

On completion of the BGE course at Level 3 or 4 the following progression routes are available:
Level 3 – National 4 Mathematics and/or National 4 Applications of Mathematics
Level 4 – National 5 Mathematics and/or National 5 Applications of 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

PURPOSE AND AIMS OF THE S3 MEDIA COURSE

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

COURSE CONTENT

Media provides learners at all levels with a wealth of varied learning opportunities included in the study of both film and printed media. Learners 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 learners are provided personalisation and choice.

LEARNING AND TEACHING METHODS

Learners in Media 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 learners using ICT for research and editing.
- **Guest Speakers/ Workshops/ Cinema Visits** – Teachers actively seek opportunities to enhance learning beyond the classroom.

SKILLS DEVELOPED

Include understanding of the terminology used with in Media, analysis and evaluation of the different forms of Media, application and creation of own media.

ASSESSMENT ARRANGEMENTS

At Level 3 and 4 learners will be assessed at the end of each unit using a variety of assessment methods contributing towards an assignment

PROGRESSION AND PATHWAYS IN S4

On completion of the BGE course at Level 3 or 4 the following progression routes are available:

Level 3 – National 4 Media
Level 4 – National 5 Media

CAREERS USING MEDIA

MODERN LANGUAGES

PURPOSE AND AIMS OF THE S3 MODERN LANGUAGES COURSE

The S3 course covers a range of topics and encourages learners to engage with both familiar topics and to increase their cultural awareness of the countries where the Language they are studying is spoken. Throughout the S3 Languages course you will develop your Listening, Talking, Reading & Writing skills, bringing more complexity and detail into your own work and being able to understand more unfamiliar resources.

COURSE CONTENT

You will study **three units** covering language in the following topic areas: Society /Learning/Employability/Culture

1. **Understanding language** (assessed through Reading and Listening)
2. **Using language** (assessed through Writing and Talking)
3. **Added value unit** – you will study a film in the Language you study (assessed through Reading/Talking)

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

Fact: Learning a language aids key parts of the brain to grow larger (Lund University, Sweden)

- ✓ Communication
- ✓ Thinking skills
- ✓ Working with Others
- ✓ Leadership
- ✓ Employability
- ✓ Literacy
- ✓ Time Management

ASSESSMENT ARRANGEMENTS

At Level 3 and 4 learners will be assessed formally 3 times on each skill (Reading, Listening, Talking and Writing) alongside continuous formative assessment throughout the course.

PROGRESSION PATHWAYS IN S4

On completion of the BGE at Level 3 or 4 the following progression routes are available:
Level 3 – National 4 French and/or Spanish
Level 4 – National 5 French and/or Spanish

CAREERS USING MODERN LANGUAGES

- Marketing
- Media
- Teaching
- Law
- Hospitality
- Journalism
- Travel and Tourism
- Import, Export
- Civil Service
- Airline
- Retail
- International Charities

MODERN STUDIES

PURPOSE AND AIMS OF S3 MODERN STUDIES COURSE

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.

For example:

- What will be the impact of Brexit on Scotland and the UK?
- Does prison work?
- Should Americans have the right to bear arms?
- Will Scotland become an independent country?
- How much has social media influenced Covid information?

All courses seek to encourage the formation of open, respectful and tolerant attitudes. Students will also develop skills in critical-thinking, research, analysis and communication, which will allow them to participate in society as truly confident and responsible global citizens.

COURSE CONTENT

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 and recent terror attacks such as Tunisia, Manchester and London.

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. Pupils will evaluated if Scotland and Britain has successfully tackled knife crime amongst other crimes. 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 ongoing Scottish independence debate. Brexit might get a wee mention too. Pupils will investigate voting systems and why people vote, or don't. This topic also looks at citizen participation focusing on the media and pressure groups such as Extinction Rebellion.

LEARNING AND TEACHING METHODS

Learners in Modern Studies will experience a range of strategies aimed at stimulating and engaging learners.

- **Teacher exposition** – Teacher-led learning and notetaking skills
- **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: Film to support topics taught, on line resources, as well as learners using their iPads for research and to communicate with staff.
- **Guest Speakers/ Workshops/ Cinema Visits** – Teachers actively seek opportunities to enhance learning beyond the classroom.

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;
- expressing 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.

ASSESSMENT ARRANGEMENTS

At Level 3 and 4 learners will be assessed at the end of each unit via a test of knowledge, understanding and evaluation skills. There will also be ongoing assessment through class and homework.. Pupils will also be assessed on a research task which will prepare them for the National courses.

PROGRESSION PATHWAYS IN S4

On completion of the BGE course at Level 3 or 4 the following progression routes are available:
Level 3 – National 4 Modern Studies
Level 4 – National 5 Modern Studies

CAREERS USING MODERN STUDIES

A Modern Studies 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 modern studies qualification would be both useful and welcomed include;
Law, teaching, journalism and media work, social work, psychology, care work, administration, advertising, police, counselling, market research, politics, civil service, marketing, youth work, human resources, research work, communications, intelligence services, c harit sector, international development support, publishing, trade apprenticeships.

In recent years, John Paul Modern Studies pupils have gone on to successful careers in journalism, politics, teaching and law amongst others.

MUSIC

PURPOSE AND AIMS OF S3 MUSIC COURSE

In Music, we aim to provide you with a variety of rich opportunities to be creative and experience inspiration and enjoyment.

COURSE CONTENT

Performing
You will be encouraged to sing/play music on two instruments, or one instrument and voice, performing music from a range of styles and cultures. You will also have the opportunity to perform with others as part of a group. All pupils are encouraged to take part in extra-curricular activities such as choirs, percussion groups, bands etc.

Composing
Through building musical literacy skills, you will learn to create your own music.
This area of the course gives you the opportunity to explore musical ideas, solve problems and make personal decisions to develop creativity and express individuality.

Understanding Music
You will listen to a variety of music and learn to identify concepts from different styles and genres.
Throughout the course, you will also be encouraged to give constructive feedback on you own work and the work of others, including professionals.

SKILLS DEVELOPED

Through music, you will develop your ability to express yourself and develop your 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 you to express yourself musically and to reflect on your learning. This encourages you to think imaginatively and to explore and develop your own ideas, making use of your understanding of music concepts and applying this to your own practice.

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

As well as equipping you with the skills and knowledge to enter the music industry, Music provides you with a range of transferable skills which are valuable to any employer. These include team working, verbal and communication skills, problem solving, time management and research skills.

ASSESSMENT ARRANGEMENTS

All pupils will be experience a variety of formative and summative assessment on each of the course elements previously listed.

PROGRESSION PATHWAYS IN S4

On completion of the BGE at Level 3 or 4 the following progression routes are available:
Level 3 – National 4 Music/F3F4 Performing Unit
Level 4 – National 5 Music

CAREERS USING MUSIC

Music Teaching, Music Performance, Music Publishing, Music Management, Music Therapy, Composition, Music Administration, Primary Teaching, Arts Officer

MUSIC TECHNOLOGY

PURPOSE AND AIMS OF S3 MUSIC TECHNOLOGY COURSE

In Music Technology, we aim to expose you to as many of the areas of the music industry as possible, giving you an in-depth understanding of the technology behind the music production process.

COURSE CONTENT

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

Understanding 20th and 21st Century Music – You 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 – You 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.

SKILLS DEVELOPED

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.

As well as equipping you with the skills and knowledge to enter the music industry, Music Technology provides you with a range of transferable skills which are valuable to any employer. These include ICT skills, Communication skills Team-working skills, Research/critical thinking skills, Creativity/problem-solving skills, Organisational/time management skills, Commercial awareness

ASSESSMENT ARRANGEMENTS

All pupils will be experience a variety of formative and summative assessment on each of the course elements previously listed.

PROGRESSION PATHWAYS IN S4

On completion of the BGE at Level 3 or 4 the following progression routes are available:
Level 3 – National 4 Music Technology
Level 4 – National 5 Music Technology

CAREERS USING MUSIC TECHNOLOGY

Producer, Recording Engineer, Video Game sound designer, Music Therapist, ADR recordist – film industry, Acoustical Engineer, Dialogue Editor (Film, TV and Video Games), Sound designer (Theatre)

PHYSICAL EDUCATION

PURPOSE AND AIMS OF THE S3 PHYSICAL EDUCATION COURSES

The aim of the S3 Physical Education course is to build on the skills and knowledge acquired in S1 and S2. In S3, learners focus on taking responsibility to develop their physical, emotional, mental and social skills through a wide range of activities. In S3, learners will also be encouraged to focus on their two strongest activities as we look towards potential assessment in the S4 National courses.

COURSE CONTENT

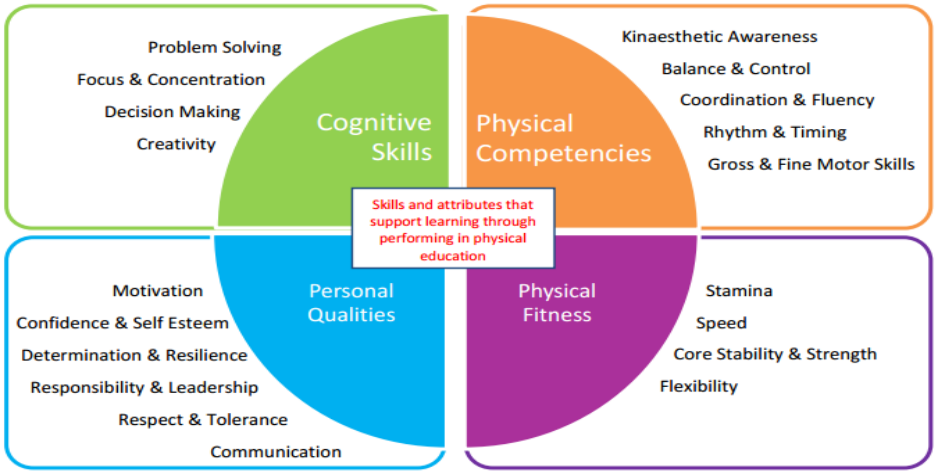
Leaners will cover a broad curriculum including basketball, badminton, gymnastics, volleyball, fitness, rugby, football

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

SKILLS DEVELOPED

Throughout the BGE, learners will develop a range of significant aspects of learning that are not only vital to fulfilling their potential in PE, but also be successful in other areas of the curriculum.



ASSESSMENT ARRANGEMENTS

Learners are assessed through a range of methods including teacher observation of performance, tournaments, questioning, learner conversation exit passes, learner Log

PROGRESSION PATHWAYS IN S4

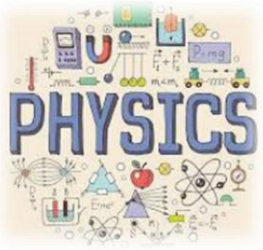
On completion of the BGE at Level 3 or 4 the following progression routes are available:
Level 3 – National 4 Physical Education
Level 4 – National 5 Physical Education

CAREERS USING PHYSICAL EDUCATION

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

PHYSICS

PURPOSE AND AIMS OF THE S3 PHYSICS COURSE



The Course is practical and experiential, and develops scientific understanding of issues relating to physics. It aims to generate interest and enthusiasm in physics, and to enable learners to develop confidence in recognising and communicating ideas on scientific phenomena. Learners will develop the ability to solve problems and establish relationships in physics by acquiring a broad knowledge base, practical skills and basic mathematical skills.

COURSE CONTENT

The Level 3 and 4 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 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.

LEARNING & 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

Inquiry and investigative skills: As they experiment and carry out practical scientific investigations and other research to solve problems and challenges, learners:

- plan and design scientific investigations and inquiries
- carry out practical activities
- analyse, interpret and evaluate scientific findings
- present scientific findings.

Scientific analytical thinking skills: In order to make sense of scientific evidence and ideas learners will develop a range of analytical thinking skills that will prepare learners to recognise the impact Chemistry makes on their lives, the lives of others, the environment and on society. Learners will also develop scientific literacy and numeracy skills to expressing opinions and making decisions on social, moral, ethical, economic and environmental issues based on evidence.

ASSESSMENT ARRANGEMENTS

All Levels are internally assessed by unit tests

PROGRESSION PATHWAYS IN S4

On completion of the BGE course at Level 3 or 4 the following progression routes are available:
Level 3 – National 4 Physics
Level 4 – National 5 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.

SCIENCES – MAKING THE RIGHT CHOICES

Transition from S2 to S3: Science Pathway Information

In order to help learners choose the appropriate Science course(s) in S3, the following summaries are provided of each course. Please speak to your Science teacher or Mr McGorry – PT Science, if you wish more information before making your choices.

BIOLOGY

The course covers three main subject areas:

- **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.

CHEMISTRY

The course covers three main subject areas.

- 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 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 and chemical analysis.

PHYSICS

The course covers three main subject areas.

- Unit 1 **Electricity and Energy** –learners consider the applications of electricity and energy in our lives as well as the implications on society and the environment. Throughout the topic there will be a focus on practical work including investigations and problem solving. The unit covers the following key areas: generation of electricity, electrical power, electromagnetism, practical electricity, electronic circuits and Gas Laws.
- Unit 2 **Dynamics and Space** –learners will develop skills of scientific enquiry, investigation and analytical thinking, along with the knowledge and understanding of dynamics and space. The unit covers the following keys areas: speed and acceleration, relationships between forces, energy and the movement of objects, satellites and cosmology.
- Unit 3: **Waves and Radiation** - learners consider the many applications of waves and radiation on our lives, as well as the benefits and risks to society and the environment. This unit also develops practical and investigative skills. The unit covers the following key areas: wave characteristics, sound waves, nuclear radiation, nuclear power and the electromagnetic spectrum (Radio, TV, Microwaves, Infra-red, Visible Light, Ultraviolet, X rays and Gamma rays.)