KNOX ACADEMY

2017 2018

S3

CURRICULUM BOOKLET

East Lothian Council

KNOX ACADEMY

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March 2017

Dear Parent/Carer,

It is a great pleasure to introduce the S3 Curriculum Booklet 2017. This is a time of evolution in Scottish Education and this booklet is one element of the information available.

This booklet contains details of the S3 courses planned in each faculty of the school. Also, there is information on the subjects and courses likely to be offered for further study in S4.

We appreciate that this is an important time for you, so do not hesitate to get in touch with any queries you might have.

Partnership with parents is an important part of Knox Academy and I look forward to seeing you at parents' evenings, school functions or on an individual basis. This Curriculum Booklet is one element of our communications with parents and I commend it to you.

With best wishes,

S Ingham
Headteacher

AIMS OF KNOX ACADEMY

At the end of their time at Knox Academy we aim that young people will…

- Have a strong sense of who they are, where their strengths lie and their role in a community.
- Realise that they have potential and know how to go about realising it.
- Have been challenged and know how to go about meeting challenge in the future.
- Have been happy, having experienced positive relationships and will know how to form positive relationships with others.
- Have the qualifications and skills to move on to the next phase in their lives.

INFORMATION FOR PARENTS AND PUPILS

Curriculum for Excellence:

The Scottish Government's lifelong learning strategy aims to ensure that everyone develops the attributes, knowledge and skills they will need for life, learning and work. The curriculum is all the experiences that are planned for learners to support the development of these skills. The curriculum provides a coherent curriculum from 3-18 years:

Early Level: -Pre-school and P1
First Level: -To the end of P4
Second Level: -To the end of P7
Third and Fourth Levels: -S1-S3 (broad general education)
Senior Phase: -S4-S6 and college

The knowledge, skills and attributes learners will develop will allow them to demonstrate four key capacities – to be successful learners, confident individuals, responsible citizens and effective contributors. The experiences and outcomes are essential components of the curriculum and apply wherever learning is planned; they indicate progression in learning and set challenging standards that will equip young people to meet the challenges of the 21st century. The curriculum includes all of the experiences that are planned for children and young people through their education, wherever they are being educated. These experiences are grouped into four categories:

Curriculum areas and subjects

- The curriculum areas are the organisers for setting out the experiences and outcomes. Each area contributes to the four capacities.

Interdisciplinary learning

- How the curriculum should include space for learning beyond subject boundaries.

Ethos and life of the school

- The starting point for learning is a positive ethos and climate of respect and trust based upon shared values across the school community.

Opportunities for personal achievement

- Pupils need opportunities for achievements both in the classroom and beyond, giving them a sense of satisfaction and building motivation, resilience and confidence.

Curriculum areas:

The curriculum areas are the organisers for ensuring that learning takes place across a broad range of contexts, and offer a way of grouping experiences and outcomes under recognisable headings and the eight curriculum areas are:

- Expressive Arts
- Health and Wellbeing
- Languages and Literacy
- Mathematics and Numeracy
- Religious and Moral Education
- Sciences
- Social Studies
- Technologies

At Knox Academy, the eight curriculum areas are arranged in six faculties:

- Communication: Support for Learning, English and Modern Languages
- Expressive Arts: Art, Drama and Music
- Health and Wellbeing: PSE, Food and Health and PE
- Numeracy and Technologies: Mathematics, Computing and Technologies
- Science: Biology, Chemistry and Physics
- Social Studies: Business Education, Geography, History, Modern Studies and RMPS

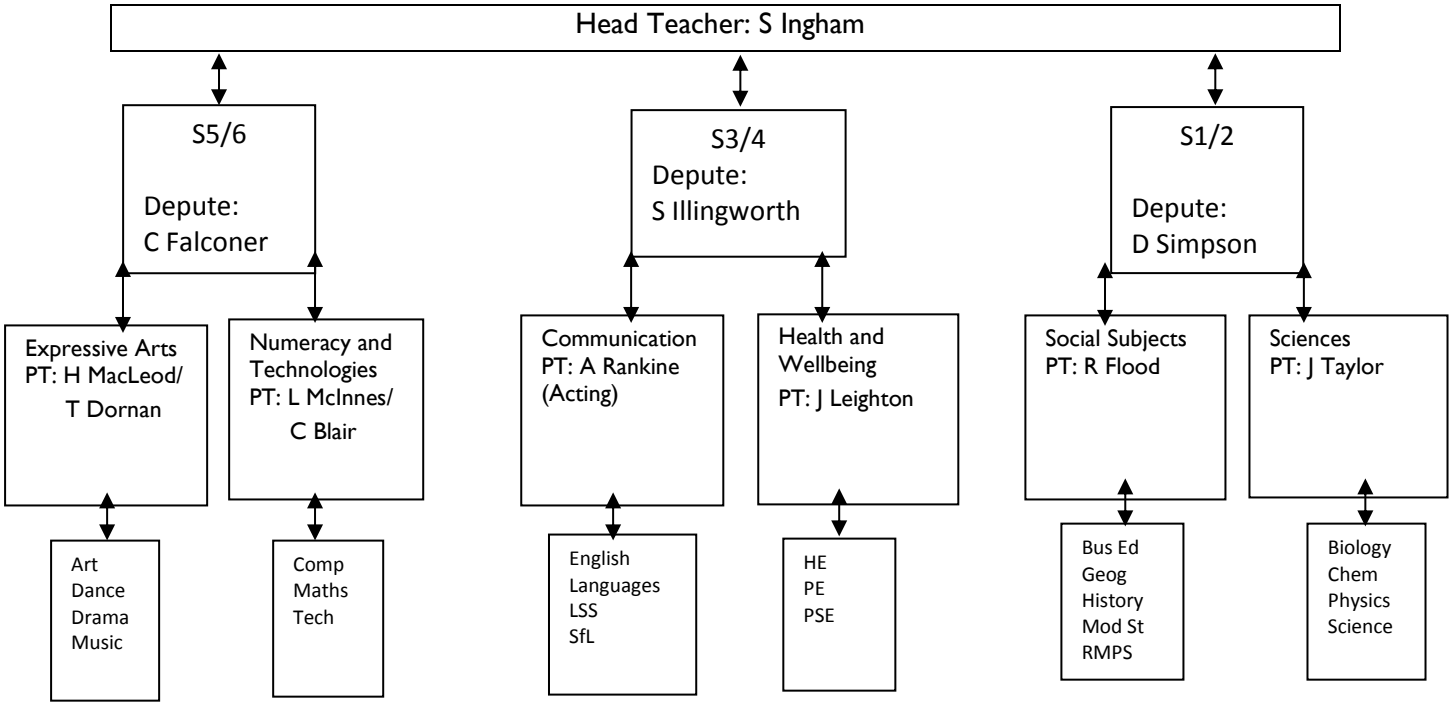
The table below is a general guide to the five curriculum levels with progression to qualifications. The framework is designed to be flexible to permit careful planning for those with additional support needs, including those who have a learning difficulty and those who are particularly able or talented.

Level	Stage
	← BROAD GENERAL EDUCATION →
Early	The pre-school years and P1, or later for some.
First	To the end of P4, but earlier or later for some.
Second	To the end of P7, but earlier or later for some.
Third and Fourth	S1 to S3, but earlier for some. The fourth level broadly equates to Scottish Credit and Qualifications Framework Level 4. The fourth level experiences and outcomes are intended to provide possibilities for choice and young people's programmes will not include all of the Fourth Level outcomes.
	← SENIOR PHASE →
	S4 to S6, and college or other means of study.

Scotland's National Qualifications are being changed as part of Curriculum for Excellence. Building on the strengths of the current system, some new qualifications are being introduced while others are being revised.

- **Standard Grade (Credit and General) and Intermediates**
  has been replaced by new National 4 and 5 qualifications.
- **Standard Grade (Foundation)**
  has been replaced by a new National 3 qualification.
- **Higher and Advanced Higher** have been revised to reflect Curriculum for Excellence ensuring good articulation between courses and most up to date content.

The structure at Knox Academy:



S3 Profiles:

S3 marks the end of pupils' broad general education phase and is a time when they are choosing their future learning paths for the senior phase. It is a unique point both to reflect on learning that has taken place to date and to plan for future learning and development. At the end of S3, each pupil will have their progress and achievements recognised by an S3 Profile. It could be used to inform future decisions through personal learning planning, by helping the learner to identify areas for development, qualification and award choices and to decide on possible future learning paths.

Timescales:

2017: (for S2 moving into S3 in August 2017)

8th February: S2 reports issued
15th March: S2 Consultation Evening
24th March: S2 Choices made and returned to school
June: Pupils timetabled into each faculty

During S3, pupils will have the opportunity to specialise in subject areas in preparation for further study in S4 at qualification Levels 4/5. It is expected that pupils will be able to study up to 7 subjects in S4, depending on career requirements and personal needs.

COMMUNICATION FACULTY

Rationale:
Language and Literacy are of personal, social and economic importance. Our ability to use language lies at the centre of the development and expression of our emotions, our thinking, our learning and our sense of personal identity. Language is itself a key aspect of our culture. Through language, children and young people can gain access to the literary heritage of humanity and develop their appreciation of the richness and breadth of Scotland's literary heritage. Children and young people encounter, enjoy and learn from the diversity of language used in their homes, their communities, by the media and by their peers.

Skills:
The Communication Faculty will continue to work in partnership with pupils and parents on the further development of the key skills of Reading, Writing, Talking and Listening. This will be done in the subject areas of English, Modern Languages and Support for Learning. Concentration on these four key skills will help pupils to develop their own Literacy capabilities that will, in turn, help them to achieve their potential in other subject areas of the school, as well as providing further preparation for life, work and positive destinations post school. A key aim for the Communication Faculty is to guide pupils towards making effective contributions as citizens of the future. We aim to broaden the horizons of our young people both culturally and linguistically through the development of their Literacy skills.

Experiences and Outcomes:
Pupils will follow courses which provide coherent progression through the Experiences and Outcomes of each subject area. It is our aim that pupils should be aware of, and take responsibility for, the next steps in their learning. In order to do so, pupils' progress will be monitored by summative assessment and a formative pupil profile that is the joint responsibility of pupils and teachers.

Pupils will begin S3 by continuing to follow a broad, general education, which will continue to offer breadth, depth and challenge across subject areas within the Faculty. Personalisation and choice will be offered where appropriate, and pupils will be offered guidance on individual strengths and development needs as the year progresses.
All pupils will follow English courses in S3 and will have the opportunity to specialise in the study of a language other than English. (For some pupils the study of a language other than English may not be appropriate).
It is our intention that all pupils will achieve success in the appropriate National Qualification by the end of S4, in English, and, for most pupils, in a language other than English. Pupils will be entered for the appropriate National Level, and support will be offered according to current need. Decisions about presentation levels will be made in partnership with pupils and parents.

S4:
It is planned to offer the following subjects for further study in S4:
English
French

Contact: A Rankine

EXPRESSIVE ARTS FACULTY

Rationale:
The inspiration and power of the arts play a vital role in enabling our young people to enhance their creative talent and develop their artistic skills.

By engaging in experiences within the Expressive Arts, young people will recognise and represent feelings and emotions, both their own and those of others. The Expressive Arts play a central role in shaping our sense of our personal, social and cultural identity. Learning in the Expressive Arts also plays an important role in supporting young people to recognise and value the variety and vitality of culture locally, nationally and globally.

Skills:
Learning in, through and about the Expressive Arts enables pupils to:

- be creative and express themselves in different ways
- experience enjoyment and contribute to other people's enjoyment through creative and expressive performance and presentation
- develop important skills, both those specific to the Expressive Arts and those that are transferable
- develop an appreciation of aesthetic and cultural values, identities and ideas and, for some, prepare for advanced learning and future careers by building foundations for excellence in the Expressive Arts.

At all levels pupils will develop new skills and consolidate prior learning. Some of these skills (such as skills of communication, evaluation and leadership) are transferable while others (such as performance and technical skills) are specific to one or more of the Expressive Arts.

Experiences and Outcomes:

Through Expressive Arts pupils will become:

- **successful learners**, who can express themselves, think innovatively, meet challenges positively and find imaginative solutions to problems. They will develop knowledge and skills related to the different arts and broader skills such as the use of technologies.
- **confident individuals**, who have developed self-awareness, self-discipline, determination, commitment and confidence through drawing on their own ideas, experiences and feelings, and through successful participation.
- **responsible citizens**, who can explore ethical questions, respond to personal and social issues, and develop stances and views. They will deepen their insight and experiences of cultural identities and come to recognise the importance of the arts to the culture and identities of Scotland and other societies.
- **effective contributors**, who can develop and express their creativity, work cooperatively and communicate with others. In so doing, they will show initiative, dependability, leadership and enterprise.

Subjects

Art and Design:
Art and Design provides pupils with a broad practical "hands on" experience of Art and Design skills and also related critical activities that explore the role of Art and Design in society.
Pupils will have the opportunity to be inspired and creatively challenged as they explore how to visually represent and communicate their personal thoughts, ideas and feelings through their work.
Pupils will also learn about the working styles and influences of artists and designers, while developing their own expressive and design projects.
Art and Design offers a coherent progression through National 3 to Advanced Higher, providing added value assessments that allow personal choice in the practical activity at National 4, and in the portfolios at National 5 and Higher that also have added value question papers.
In summary, the aim of all courses is to encourage creativity, develop confident practical and analytical skills through a series of activities that are stimulating, enjoyable and involve personal choice and research. S3 courses prepare pupils for possible future study at National 4/5 level.
Please note pupils will be asked to contribute £5 towards the cost of materials.

Drama:
Pupils studying Drama will develop a range of voice, movement and characterisation skills through experimenting with form and structure including scripted plays and mask work. Pupils will work with others in the production areas of sound, costume, props and make-up. Learners will prepare for, participate in and reflect on a small-scale Drama performance in an acting role. As learners develop practical skills creating and presenting Drama, they will also develop an understanding of cultural and social influences on Drama. The small scale performance at the end of S3 prepares learners for the experience of working through the Drama Skills and Productions Skills units at National 3/4/5 levels in S4 and the experience of performance assessment, at Higher and Advanced Higher levels.

Music:
This Course enables learners to develop skills in creating, understanding and performing music. It allows for a flexible approach, which can meet the needs of learners with a range of musical interests.

The Course engages the learner through practical musical activities and provides scope for personalisation and choice. Learners can, for example, perform music in a variety of styles on their own choice of instrument. Learners will develop their ability to express themselves through music, which encourages creativity and self-confidence. The Course also enables learners to gain the knowledge and understanding of music concepts and styles of music.

The aims of the Course are to: enable learners to perform music on their chosen instrument, instruments and/or voice with accuracy; develop skills in creating music, using simple compositional techniques; develop their appreciation and understanding of music through an understanding of music concepts and learn to discriminate between different styles and genres of music; reflect on their own work and that of others

S4:
It is planned to offer the following subjects for further study in S4:

Art and Design
Drama
Music

Contact: H MacLeod

HEALTH AND WELLBEING FACULTY

Rationale:
Through a variety of teaching strategies pupils will develop the knowledge and understanding, skills, capabilities and attributes that they need for mental, emotional, social and physical wellbeing now and in the future.

Skills - Pupils will develop a range of skills including:

- development of self-awareness, self-worth and respect for others
- meeting challenges, managing change and building relationships
- experiencing personal achievement and building resilience and confidence
- understand and develop physical, mental and spiritual wellbeing and social skills
- understand how what I eat, how active I am and how decisions I make about my behaviour and relationships affect my physical and mental wellbeing
- participate in a wide range of activities which promote a healthy lifestyle
- understand that adults in my school community have a responsibility to look after me, listen to my concerns and involve others where necessary
- learn about where to find help and resources to inform choices
- assess and manage risk and understand the impact of risk-taking behaviour
- reflect on my strengths and skills to help me make informed choices when planning my next steps
- acknowledgment of diversity and understand that it is everyone's responsibility to challenge discrimination.

Experiences and Outcomes - Pupils will:

- make informed decisions in order to improve their mental, emotional, social and physical wellbeing
- be challenged both mentally and physically
- experience positive aspects of healthy living and activity for themselves
- apply their mental, emotional, social and physical skills to pursue a healthy lifestyle
- make a successful move to the next stage of education or work
- establish a pattern of health and wellbeing which will be sustained into adult life, and which will help to promote the health and wellbeing of the next generation of Scottish children.

For some, performance at high levels in sport will be supported and pupils can be helped to prepare for careers within the health and leisure industries

Subjects - brief summary of content:

Personal and Social Education
Learning in PSE will focus on the main topics of substance misuse, sexual health and relationships, physical, mental and emotional wellbeing. At times we use outside speakers to help provide expert advice and an opportunity for pupils to ask questions.

In addition pupils will gain guidance in planning for choices and change and preparation for Work Experience and course choice. The Work Experience week is right at the start of S4 in June 2017.

Physical Education

Core PE

The Physical Education Department will provide opportunities for pupils to hone their practical skills and perhaps learn new skills through a variety of activities with the core PE programme. Pupils will have 2 periods per week on their timetable for this.

S3 Performance Course

In addition to Core, pupils can **opt in** to an enhanced opportunity to explore practical performance in greater depth. Initially pupils will focus on improvement in 2 activities, but there may be opportunities to try others throughout the course. Furthermore, pupils will gain an insight into the theoretical elements that underpin the subject at National 4 and 5 levels such as;

- Performance Analysis
  Over the past twenty years statistics have grown in importance and are now arguably the most influential factor in performance appreciation; as they underpin the success and failure of an athlete/team. There is no hiding from the barefaced facts and the data collection and analysis process is one which captures the imagination of most.

Pupils must show a genuine interest in this subject and will not be considered if their previous commitment (bringing kit and/or participation) has been an issue.

S4:

All pupils will engage with a core programme in PE and PSE (including an SQA certificated Work Experience module).

In addition it is planned to offer the following subjects for further certificated study in S4:
National 4/5 level Physical Education

Prince's Trust – XL Programme

Since 1998, The Prince's Trust has been working in partnership with schools across the UK, building young people's personal and social skills and developing their confidence to move into a positive future.

The XL programme offers pupils a broad and balanced course covering five activity areas;

- Personal, Interpersonal and Team Skills
- Active Citizenship
- Entrepreneurship and Enterprise
- Preparation for Work
- Enrichment Projects

The emphasis is very much on youth-led learning, essentially this is a programme that can be designed and led by the pupils themselves. Pupils will work together to plan, lead and execute projects, developing a culture of mutual respect and cooperation. The programme aims to provide space for pupils to develop the key 'soft' skills that further education and employers are looking for *(for example; confidence, communication, information handling, adaptable, problem solving, cooperation, team work, respect, negotiation, leadership, mediation, self-motivated, etc).*

Pupils will get involved in their local community through project work and through work shadow of their choice. It is hoped pupils will also have a residential experience where they will be challenged physically as well as mentally.

As evidence for this award pupils will have a portfolio of work they must collate throughout the year, the complexity of this portfolio along with the level of practical work they have done *(leader or group member)* will determine the level of award.

Numbers are limited for this course and pupils will be interviewed before ensuring they have a place.

Contact: J Leighton

Enhanced Curriculum

The S3 curriculum has been designed to give pupils the option of taking courses out-with the 'traditional' range of subjects. These are designed to develop wider skills; including confidence; independence; responsibility and self-awareness; and allow for a tailored curriculum, which is built around the needs and ambitions of the individual pupil.

If a pupil wants to choose one of these options it is important that they discuss this with their Guidance teacher to make sure it is a suitable course for them.

Contact: C Falconer

NUMERACY AND TECHNOLOGIES FACULTY

Mathematics

Rationale:

Mathematics is important in our everyday life, allowing us to make sense of the world around us and to manage our lives. Using Mathematics enables us to model real-life situations and make connections and informed predictions. It equips us with the skills we need to interpret and analyse information, simplify and solve problems, assess risk and make informed decisions.

Mathematics plays an important role in areas such as Science and Technologies, and is vital to research and development in fields such as engineering, computing science, medicine and finance. Learning Mathematics gives children and young people access to the wider curriculum and the opportunity to pursue further studies and interests.

To face the challenges of the 21st century, each young person needs to have confidence in using Mathematical skills, and Scotland needs both specialist Mathematicians and a highly numerate population.

Mathematics equips us with many of the skills required for life, learning and work. Understanding the part that Mathematics plays in almost all aspects of life is crucial. This reinforces the need for Mathematics to play an integral part in lifelong learning and be appreciated for the richness it brings.

In S3 pupils will be following a Mathematics course which builds upon their earlier knowledge and achievements. They will be consolidating previous learning and moving on through Levels 3 and 4 as appropriate. The main aim of the course in third and fourth year is to help pupils learn how to tackle problems that require the use of mathematical knowledge and techniques. A further aim is mastery of the mathematical knowledge/skills required in everyday life. It is hoped that pupils will come to appreciate that conclusions should be supported by evidence.

Skills:

Pupils will develop a range of skills including:

- logical reasoning
- analysis
- problem-solving skills
- creativity and the ability to think in abstract ways
- investigative strategies
- using a universal language of numbers and symbols which enables the communication of ideas in a concise, unambiguous and rigorous way

Experiences and Outcomes

The Mathematics experiences and outcomes are structured within three main organisers, each of which contains a number of subdivisions:

Number, money and measure

- Estimation and rounding
- Number and number processes
- Multiples, factors and primes
- Powers and roots
- Fractions, decimal fractions and percentages
- Money
- Time
- Measurement
- Mathematics – its impact on the world, past, present and future
- Patterns and relationships
- Expressions and equations.

Shape, position and movement

- Properties of 2D shapes and 3D objects
- Angle, symmetry and transformation.

Information handling

- Data and analysis
- Ideas of chance and uncertainty

Teaching Strategies:

There will be a variety of approaches including:

- planned active learning, which provides opportunities to observe, explore, investigate, experiment, play, discuss and reflect
- modelling and scaffolding the development of mathematical thinking skills
- learning collaboratively and independently
- opportunities for discussion, communication and explanation of thinking
- developing mental agility
- using relevant contexts and experiences, familiar to young people
- making links across the curriculum to show how mathematical concepts are applied in a wide range of contexts, such as those provided by science and social studies
- using technology in appropriate and effective ways
- building on the principles of Assessment is for Learning, ensuring that young people understand the purpose and relevance of what they are learning
- developing problem-solving capabilities and critical thinking skills.

ASSESSMENT

Formal assessments will take place around December and March/April each year. Transfer of pupils between classes will be possible after each of these assessments.

Technologies:

Rationale:
Scotland has a strong tradition of excellence and innovation in technological research. Scotland's people need to be skilled in Technologies and to be aware of the impact of technologies on society and the environment, now and in the future. Learning in the Technologies provides a strong foundation for the development of skills and knowledge that are, and will continue to be, essential in maintaining Scotland's economic prosperity.

Within Curriculum for Excellence, the Technologies curriculum area relates particularly to contexts that provide scope for developing technological skills, knowledge, understanding and attributes through creative, practical and work-related activities. For this reason, the framework provides experiences and outcomes which can be applied in computing science, craft, design, engineering, graphics and applied technologies. These experiences and outcomes offer a rich context for the development of all of the four capacities and for developing the life skills that are recognised as being important for success in the world of work. They also offer an excellent platform for a range of technology-related careers.

The Technologies framework offers challenging activities which involve research, problem solving, exploration of new and unfamiliar concepts, skills and materials, and the rewarding learning which often results from creating products which have real applications. It provides progression in cognitive skills. Children and young people will develop their creativity and be encouraged to become innovative and critical designers of the future. These attributes are essential if, in the future, our children and young people are to play a major part in the global economy and embrace technological developments in the 21st century.

Skills:

- develop an understanding of the role and impact of Technologies in changing and influencing societies
- contribute to building a better world by taking responsible ethical actions to improve their lives, the lives of others and the environment
- gain the skills and confidence to embrace and use Technologies now and in the future, at home, at work and in the wider community
- become informed consumers and producers who have an appreciation of the merits and impacts of products and services
- be capable of making reasoned choices relating to the environment, to sustainable development and to ethical, economic and cultural issues
- broaden their understanding of the role that Information and Communications Technology (ICT) has in Scotland and in the global community
- broaden their understanding of the applications and concepts behind technological thinking, including the nature of engineering and the links between the Technologies and the Sciences
- experience work-related learning, establish firm foundations for lifelong learning and, for some, for specialised study and a diverse range of careers.

Teaching Strategies:

The experiences and outcomes are intended to tap into young people's natural inventiveness and their desire to create and work in practical ways. They act as a motivation for progressively developing skills, knowledge, understanding and attitudes, and so maximise achievement. Effective learning and teaching will draw upon a wide variety of approaches to enrich the experience of children and young people, particularly through collaborative and independent learning.
The experiences and outcomes are well suited for learning beyond school: in colleges, in the voluntary sector and in partnership with businesses, where young people may experience learning activities that are relevant to employment or future vocational learning.

Computing:
Pupils will progress through Level 3 and may begin some Level 4 work. They will be working on 2 units.

1) Designing and creating a web site. By the end of the unit pupils should be able to:

- Identify what makes a good and a bad web site
- Design a web site on paper
- Show contents of individual pages and structure of site
- Work with others to provide feedback to allow design to be improved
- Use a variety of software to create a web site
- Evaluate the web site that has been created and look at ways in which it could be improved
- Use simple HTML to enhance their web site

2) Programming .
Pupils should be able to design, implement, test and evaluate software. This will enable them to work collaboratively to design, implement, test and evaluate software. They will also learn the basics of programming including use of variables, iteration and selection.

The course in computing is continually under review.

Problem solving
Due to the nature of this work pupils will learn to develop essential characteristics such as resilience and perseverance.

Assessment
Pupils will undertake continuous assessment regularly in the year as well as formal assessment activities such as class tests and practical assessments

Homework
As appropriate pupils will be issued with homework tasks both written and electronically. Pupils may require internet access to complete homework activities and will make use of the Edubuzz Google Apps system.

Design and Technology:
Students will progress through Level 3 and on to Level 4 work. They will be working on two units, covering work from two discreet subject areas: Design and Manufacture and Graphic Communication.

Design and Manufacture

By the end of the unit pupils should be able to:

- Interpret and write simple design briefs and specifications.
- Carry out effective product research.
- Using a variety of techniques produce creative and innovative design ideas.
- Evaluate design ideas, selecting appropriate ideas to develop.
- Develop ideas using a variety of techniques, including modelling and sketching.
- Create working drawings and cutting lists.
- Manufacture effective and high quality final products using a variety of materials.
- Test and evaluate final design and products.

Graphic Communication

By the end of the unit pupils should be able to:

- Draw a variety of different 2D and 3D sketches by hand.
- Incorporate the use of colour to enhance the sketches and presentation of work to create visual impact and clarity.
- Develop skills and knowledge of a range of computer drawing and computer modelling packages.
- Create promotional drawings.
- Understand and use graphic communication standards, protocols and conventions in straightforward but unfamiliar contexts

There will also be the opportunity for some pupils to study Practical Craft Skills if appropriate.

Note: There will be a nominal charge of £10 per year to contribute to the cost of materials.

S4:

It is planned to offer the following subjects for further study in S4:

Mathematics National 4 and 5

Mathematics: Life Skills National 3

Computing Science National 4 and 5

Design and Manufacture National 4 and 5

Practical Woodworking National 4 and 5
Practical Craft Skills National 3

Other levels will be offered as appropriate to the ability of the pupils.

Contact: Mrs L McInnes

SCIENCE FACULTY

Rationale

Pupils will be given the opportunity to specialise in S3 allowing them to focus on one or more of Biology, Chemistry, Physics and Environmental Science. These branches of Science will help the pupils build upon their experiences gained in S1 and S2 Science.

The pupils will have subject specialist teachers in S3 and will have two periods per week in each Science they decide to specialise in.

The S3 Science courses offer progression and development from S1 and S2. They are designed to be rich, relevant, progressive and topical courses with which we strive to cultivate the pupils' interest in each branch of Science. Central to the courses are for pupils to see the relevance of Science in everyday life and the potential career options.

Skills

Pupils will develop a range of skills including:

- Practical experimental skills
- Ability to design and carry out investigations
- Developing skills to draw conclusions from experiments
- Recognition of variables which need to be controlled and how best to do this
- Observing, describing and recording
- Comparing and contrasting to draw valid conclusions
- Development of curiosity and problem solving skills and the capacity to take initiatives
- Cooperating with others and developing an awareness of self and others
- Developing research skills; using a range of sources to collate information
- Recognition of reliable sources of scientific information online
- Developing research skills through books and journal articles
- Developing the capacity for critical thinking through accessing, analysing and using information from a wide variety of sources
- Discussion and informed debate
- Developing reasoned and justified points of view
- Developing and applying skills in interpreting and displaying graphical representation of information
- Developing scientific numeracy skills
- Developing literacy skills by presenting scientific information in various formats
- Presentation skills – oral, written, multimedia

Teaching Strategies:

There will be a variety of approaches including:

- Practical work designed to illustrate concepts
- Investigative practical work designed by the pupils
- Active learning which provides opportunities to observe, explore and experiment.
- Research based activities
- Appropriate and effective use of technology
- Both collaborative and independent learning
- Creative and imaginative tasks.
- Peer teaching and assessment
- Game based learning
- Discussion and informed debate
- Pupil presentations – visual, artistic, computer based, film and dramatic
- Learning outdoors, field trips, visits and input by external contributors.

Subjects:

Biology:

Biology is the study of all forms of life from single celled organisms, such as bacteria, through to multicellular organisms, like animals and plants up to the larger units of life such as communities and ecosystems. There are two main areas of study in S3. We begin by studying the smallest unit of Biology, the cell. We will then move on to the largest unit of study, the ecosystem. Both units address current areas of controversy and introduce recent developments in these areas.

Cell Biology
In this unit we start by thinking about the very small building blocks that make up all living things - cells. These simple building blocks make up every living thing from tiny bacteria, to enormous trees to complex thinking living things like ourselves. We will think about how cells make more of themselves, how a whole organism is coded for by our DNA and then finish with some of the important chemical reactions which are essential to life and how they are controlled. Throughout we will engage with some current biological controversies such as gene therapy, cancer treatment and the use of stem cells.

Life on Earth
This unit explores the vast subject of ecology and our relationship with the biosphere. We will learn about how organisms interact and depend on each other for survival. We will find out about: the range of living things on our planet; the important relationships that exist between them; and how they are adapted to survive in the different regions of our planet. We will also examine some of the key ecological issues such as sustainable use of our fish resources, food security and sustainable agriculture.

Chemistry:

Introduction to Chemistry
In Chemistry we will learn how to identify a chemical reaction or a physical change. Developing skills in utilising the Periodic Table to predict the types of chemical reactions an element may be involved in.

Atoms and Ions
We will develop an in depth knowledge of the structure of an atom and how the structural features of atoms influence their chemical reactivity. We will also investigate the properties of acids and why they behave in the manner they do.

Fuels and Energy
In this unit we will investigate the properties of fuels and the current reliance on fossil fuels utilised by society. By examining the environmental consequences of different fuel sources and methods of electricity production we will develop informed attitudes towards future energy schemes proposed.

Metals
Here we will investigate the chemical reactions in which metal elements and compounds participate. We will establish patterns of reactivity amongst groups of metal elements and use these to predict how individual elements will behave.

Physics:

Introduction to Waves
In this topic we will learn about different types of waves and how to identify features of wave. We will introduce the wave equation and look at diffraction.

Sound
In this unit we will develop an in depth knowledge of sound waves; how they travel, what speed they travel at and apply the wave equation to sound. We will analyse the pitch and volume of sounds and learn how humans and musical instruments produce notes. We will find out about about the risks of noise pollution and research how sound recording and reproduction, noise cancelation, ultrasound and the Doppler effect can be used in the music industry, car engineering, navigation, medicine and space exploration.

Light
Here we will investigate the wave nature of light, learning how it travels and the properties of different colours of light. We will look at reflection and refraction and apply these concepts to practical applications such as how we see, lenses & their uses and how sight defects can be corrected.

The Electromagnetic Spectrum
In this section we will develop an understanding of different types of electromagnetic radiation and investigate the risks and benefits of members of the electromagnetic spectrum. We will research uses of Electromagnetic radiation, including medical, telecommunication, space exploration, industrial and household applications and discuss the impact on society.

Electricity
In this topic we will further enhance our understanding of electricity by investigating the efficiency of electrical appliances, the movement of charged particles in electric fields and an introduction to digital electronics.

Kinematics and Dynamics
Here we will investigate the relationships between speed, time and acceleration and the forces that cause a change in motion of any object. Newton's laws will help explain these changes.

Space Exploration
Here we investigate the risks and benefits of space exploration. We build on the Kinematics and Dynamics section by understanding how rockets move and satellites stay in orbit, helping with communications amongst a wide range of other uses. We also look deep into space to try to understand what would be required for life to exist on another planet.

Environmental Science:

The Living Environment
Here we consider how to identify living things from different habitats and to compare their differences. We will study the factors influencing the distribution of living things, the process of photosynthesis and why plants are vital to sustaining life on Earth.

The Earth's Resources
This topic covers the area of renewable energy sources including the benefits and potential problems. We will study the formation, characteristics and uses of minerals, common rocks and soils and the useful substances which can be extracted from natural resources.

Sustainability
In this topic you will study the processes which may contribute to climate change and the possible effect this can have on the survival of living things.

S4:

It is planned to offer the following subjects for further study in S4:

Biology (National 3, 4 and 5)
Chemistry (National 3, 4 and 5)
Physics (National 3, 4 and 5)
Environmental Science (National 3, 4 and 5)

Contact: J Taylor

SOCIAL SUBJECTS FACULTY

Rationale

Pupils will develop their understanding of the world by learning about other people and their values, in different times, places and circumstances; they will develop their understanding of their environment and of how it has been shaped. As they mature, pupils' experiences will be broadened using Scottish, British, European and wider contexts for learning, while maintaining a focus on the historical, social, geographic, economic and political changes that have shaped Scotland. They will learn about human achievements and about how to make sense of changes in society, of conflicts and of environmental issues. With greater understanding comes the opportunity and ability to influence events by exercising informed and responsible citizenship.

Skills

Pupils will develop a range of skills including:

- observing, describing and recording
- comparing and contrasting to draw valid conclusions
- exploring and evaluating different types of sources and evidence
- development of curiosity and problem solving skills and capacity to take initiatives
- interacting with others and developing an awareness of self and others
- planning and reviewing investigation strategies
- developing the capacity for critical thinking through accessing, analysing and using information from a wide variety of sources
- discussion and informed debate
- developing reasoned and justified points of view
- developing and using maps in a variety of contexts
- developing and applying skills in interpreting and displaying graphical representation of information
- developing an awareness of sequence and chronology
- presentation skills – oral, written, multimedia

Experiences and Outcomes

Pupils will:

- develop their understanding of the history, heritage and culture of Scotland, and an appreciation of their local and national heritage within the world
- broaden their understanding of the world by learning about human activities and achievements in the past and present
- develop their understanding of their own values, beliefs and cultures and those of others
- develop an understanding of the principles of democracy and citizenship through experience of critical and independent thinking
- explore and evaluate different types of sources and evidence
- learn how to locate, explore and link periods, people and events in time and place
- learn how to locate, explore and link features and places locally and further afield
- engage in activities which encourage enterprising attitudes
- develop an understanding of concepts that encourage enterprise and influence business
- establish firm foundations for lifelong learning and for further specialised study and careers

Themes

- people, past events and societies
- people, place and environment
- people in society, economy and business

Teaching Strategies

There will be a variety of approaches including:

- active learning which provides opportunities to observe, explore, experiment and play
- use of relevant contexts and experiences familiar to children and young people
- appropriate and effective use of technology
- building on the principles of Assessment is for Learning
- both collaborative and independent learning
- discussion and informed debate
- interdisciplinary learning experiences
- learning outdoors, field trips, visits and input by external contributors

Subjects

Administration and IT

This course will articulate with the syllabus areas at National 4/5 and Higher. Pupils will build on the ICT skills and knowledge developed in S1 and S2. The key purpose of the Course is to develop learners' administrative and ICT skills and, ultimately, to enable them to contribute to the effective functioning of organisations.

The Course contains a significant practical component, which involves experiential learning, encouraging the integration of skills, knowledge and understanding through practical activities. Its use of real-life contexts makes it relevant to the world of work, and its uniqueness lies in developing IT skills in an administration-related context.

Event Management	**Information Technology in the Workplace**
This unit will provide an overview of administration in the workplace, allowing candidates to carry out administrative tasks in the context of organizing and supporting small-scale events, according to a simple brief.	This unit will develop candidates' skills in the use of modern office packages in line with a given task.

Business Management

This course will articulate with the syllabus areas at National 4/5 and Higher. Pupils will build on the skills and knowledge developed in S2 as well as furthering their knowledge that underpins the subject. Continual assessment will be used in conjunction with project-based work, where pupils will be carrying out investigations as well as completing a structured business plan for a new start-up business.

Business in Action	Marketing and Operations
Pupils who complete this unit will be able to prepare an innovative business proposal for a new small business. Pupils will understand the roles and qualities of successful entrepreneurs and carry out research into real life organisations. There will be a specific focus on business aims/objectives; meeting customer needs in order to create socially responsible and profitable businesses. Factors affecting the success of business start-ups will be analysed, including: government influence, competition and the economy.	Pupils who complete this unit will understand the importance of the marketing and operations function and how these contribute to organisational success. Pupils will understand the importance of branding and design; effective pricing strategies; appropriate distribution outlets; and various methods of promotion available. Focus will also be given to Quality Production Processes and their importance to organisations. This unit will be studied in the context of how technology contributes to successful marketing and operational activity, with specific reference to companies such as Apple, Facebook, Google, and Hollister.

<u>Geography</u>

Throughout this course pupils will get the chance to look at a number of different geographical issues. This Course opens up for pupils the physical environment around them and the ways in which people interact with this environment. It will help to develop the learner's knowledge and understanding of our changing world and its human and physical processes. Pupils will get the opportunity to carry out a number of projects and group tasks which will teach them skills which can be transferred to life outside of school. The course will also encourage learners to develop important attitudes, including: an open mind and respect for the values, beliefs and cultures of others; openness to new thinking and ideas and a sense of responsibility and global citizenship.

The course will be the teaching different aspects of Human & Physical Environments which will help pupils towards a National 4 or 5 qualifications. This will give pupils the opportunity to discuss and investigate a range of topical Global and Environmental Issues. Topics will include:

- Weather and climate
  - Synoptic charts, weather in the UK and how it affects people
- Fragile Environments
  - Tundra (Alaska, the way people and animals use the land, Inuits, oil extraction, wildlife, the climate in this area)
  - Equatorial Rainforest (the way people and animals use the land, the Amazon, the Yanomami Tribe, deforestation and illegal mining, the climate in this area)
- Population
  - Population pyramids
  - Ageing population

  Strategies to control population – China's One Child policy

History

The S3 History Course fulfils the outcomes and experiences of Curriculum for Excellence; People in the Past through a study of the Great War and the rise to power of Adolf Hitler and the Nazi Party in Germany. Those that choose to continue with History at National 4/5 and beyond will gain a depth of knowledge and skills. Learning is through a combination of evidence-based activities and personal investigation and reflection as well as the use of various other media.

Unit I - ***Blood, Mud and Rats; the Story of the Great War***
Pupils will be able to: Evaluate conflicting sources of evidence to sustain a line of argument and present a supported conclusion. **This will be studied through contemporary sources on such topics as the causes of the Great War, the experience of life in the trenches, the experience of life on the British and German home fronts, etc.** Describe features of conflicting world belief systems and present informed views on the consequences of such conflicts on societies. **This will be presented by studying the causes of the Great War.** Express an informed view and demonstrate empathy about the changing nature of conflict over time. **This will be presented through the study of life in the Trenches.** Describe the factors and effectiveness of attempts to maintain peace. **This will be presented through studying the League of Nations.**
Unit II – ***Rise of Evil; Hitler and the Nazis in Germany***
Pupils will be able to: Critically evaluate and assess the importance of factors contributing to a major historical event and assess the impact of a specific incidence of expansion of power. **This will be presented through studying how Hitler became the leader of Germany.** Examine inequality in the past and how it was addressed. Encourage a sense of heritage and appreciate the importance of respecting the heritage and identity of others. **This will look at the Nazi persecution of minority communities within Germany.** Compare societies on their level of democracy. **This is presented through a comparison of the Weimar Republic and the Nazi Dictatorship.**
Unit III – ***Pupil's Choice***
This Unit builds on the skills already developed by requiring pupils to choose their own subject matter for an Investigation. This allows pupils to develop further skills of; • Planning – Pupils will select their own topic to study and create a line of argument that they wish to investigate. E.g. 'What was the main cause of the French revolution?', 'What was the main impact of the First World War?' • Research – Pupils are expected to seek out relevant source material for their chosen subject. Possible methods might be to use the school and local library, departmental library, internet and/or personal contact with relevant people. • Selection of evidence – Once the research stage is completed the pupil must then select the information that they wish to use to inform and support their argument for their Investigation. • Presentation – Each pupil will decide on a suitable method of presentation. This might include the use of PowerPoint or be in the form of a podcast or recording or simply word processed.

Modern Studies

A thematic approach with a political, international and a social element. This replicates the syllabus areas at National 4/5 and Higher. Pupils will be building upon the skills developed in S1 and S2 Modern Studies as well as furthering their knowledge that underpins the subject. Continual assessment will be used in tandem with project-based end of unit assessments. The end of unit assessments will be project based and each unit will be assessed using a different skill.

Political Issues: Democracy in Scotland	**International Issues: Need and Aid**	**Social Issues: State v the Individual**
Pupils study how individuals can participate in the decision making process, how the Scottish Parliament works and the role of our political representatives.	Pupils study the needs of some developing countries and factors that may hamper development. Through case studies of developing countries, pupils can consider the appropriate type of aid that could be given and how organisations such as the United Nations can provide this aid.	Through a case study (a tax on junk food) pupils consider the role of the state in influencing behaviour. Pupils consider the relative merits of state or individual responsibility.

RMPS

Pupils will have the opportunity to experience a broad introduction to the 3 sections of the National 4 and 5 courses. Pupils will build on skills they have developed throughout S1 and S2 and will deepen their knowledge and understanding in the subject area. Assessment will be varied and continuous, including home learning assignments, project work, and group presentations.

World Religion – Hinduism	**Morality And Belief – Relationships**	**Religious And Philosophical Questions – The Existence of God**
Find out about what Hindus believe about the world we live in. Study the main teachings of the religion and find out about the different gods and goddesses. Discuss and debate the Hindu caste system and find out what Hindus believe happens to us when we die.	Discuss the nature of human relationships, including sexuality, love and intimacy. Find out about different viewpoints on the roles of men and women, including those in the home and at work. Develop a deep knowledge and understanding of the moral and legal aspects of marriage and civil partnerships.	Look in depth at the main arguments for and against the existence of God. Critically assess all points of view and then reach your own personal inclusion. This unit includes studying atheism and scientific theories such as the Big Bang and Evolution.

S4

It is planned to offer the following subjects for further study in S4:

Administration and IT
Business Management
Geography
History
Modern Studies
RMPS

Contact: R Flood

PARENTAL FEEDBACK SLIP

It is hoped that you have found the information provided in this booklet of assistance. As part of our on-going process of improving communication with parents, if you would like to make any suggestions as to how the booklet can be made more user-friendly to pupils and parents, please use the space below for comments and return the slip to Mr S Illingworth, Depute Head Teacher. Alternatively, please communicate your feedback through the school office.

Thank you.

_____ (Signature)