ORIGIN

The Third Form Curriculum

Overview (2018-19)

Introduction

The first year of any new school is always a critical one, but the Third Form is a particularly vital moment in a pupil's academic development. As they embark on their own adolescence and a voyage of personal discovery which will ultimately define their character as an adult, we take seriously our responsibility to bring them into contact with the complexities of the wider world and induct them into a vibrant and dynamic academic landscape that is calculated to inspire and enthuse.

This phase of our curriculum has, therefore, been designed not simply to provide a taster for GCSE (in advance of the options choices in January) nor as an homogenising experience to bring the diverse new joiners to a common level of understanding of each discipline. These are, of course, important elements – but the key motivator has been a desire to ignite a passion for learning that will transcend the mechanics of examinations and remain with the pupil long after they have left the school.

In the document that follows, Heads of Faculty set out the nature of the syllabus for each discipline and the individual challenges and experiences to which prospective pupils can look forward. The diversity and scope of opportunity is vast and yet, at the same time, every faculty is united by three common goals:

- To ensure that all pupils reach a high level of proficiency in key areas of competency: Literacy, Numeracy, Physicality, Creativity, Critical Skills, Cultural Appreciation and Communication.

- To ensure that all pupils engage actively in their learning and participate wholeheartedly in activities designed to build confidence, self-awareness and reflection in conjunction with the co-curricular aspects of their education.

- To ensure all pupils perceive (through means of cross-curricular projects) that academic study is neither restricted by traditional subject boundaries, nor determined entirely by routes to qualification.

It is our hope (and, in fact, our experience) that by making sure that all pupils are enjoying and contributing wholeheartedly to a broad and holistic educational experience, they accrue the necessary knowledge, understanding and skills to produce the sort of exceptional exam performances reported year on year at Shrewsbury.

Maurice Walters
Deputy Head (Academic)

April 2018

The Curriculum Structure
To encourage breadth and to increase the scope of opportunity (while ensuring there is clear intellectual focus and progress at an appropriate rate for all), every pupil will study the following subjects:

English
Mathematics
Biology
Chemistry
Physics
History
Geography
Philosophy & Theology
French
Spanish & German (or Greek)
Latin (including elements of Classical Civilisation)
Computer Science
Music
Drama
PE
Art
Design & Technology

To encourage a real experience of all three modern languages on offer at Shrewsbury, pupils study French all year round and spend half a year in Spanish and German respectively. We also find that to give pupils a potent experience of Drama in the curricular context, the most effective manner is to group these lessons together during the year in a three week, intensive period of study.

Alongside these core disciplines (from which, of course, they will make their GCSE selections), the pupils will also experience special 'Reading the World' sessions during the course of the year which will offer them the opportunity to consider problem solving, current affairs, social change and the world of economics in an unusual and exciting fashion. Furthermore, in order to promote independence in learning, the pupils undertake a key project, the Third Form Portfolio, which requires them to make a presentation and also produce a written report on two self-selected areas about which they feel interested or passionate. This unique component of their first year in the school also helps us better understand the pupils' values and interests.

We no longer teach ICT as a discrete lesson within the Timetable. In an age where technology touches on so many different and varied areas, we feel that the critical skills required for the efficient use of technology are best delivered throughout the curriculum – with different Faculties taking responsibilities for different aspects. This approach allows pupils to see the benefits and pitfalls of the use and abuse of technology in an applied context. We do however, recognise the importance of higher level Computer Science skills and all pupils will spend one period per week under the expert guidance of our teachers in this department.

Pupils also follow a fortnightly programme of PSD (Personal and Social Development Lessons), carefully put together and managed by our Director of Welfare – which promotes Self-Esteem, Respect and Tolerance. Our pupils are encouraged to make good choices which promote a healthy lifestyle while being fully aware of the pressures and stresses facing their age group, particularly within the context of their generation and with a very clear emphasis on mental health. In conjunction with other disciplines, the specialist PSD team deliver a curriculum which also encourages pupils to critically examine their social and environmental surroundings, to effect positive change where possible and to minimise the risk of harm to themselves and others.

Setting and Support
The year group is divided into sets (with parallel bands operating in some subjects). Our initial setting must, of course, be an estimate based on performance in a single entrance examination and corrective setting throughout the course of the year to maintain that healthy balance of comfort and stretch is common in many subjects. A change of set should never be viewed as a cause for concern, but a positive step to ensure the best possible progress.

For those who need it, we have an excellent and well-equipped Learning Support team who work with teachers and pupils to assist them in accessing the learning experience and realising their potential. We also offer English Language support to those for whom English is an additional language.

Sport and PE
Shrewsbury has a well-justified reputation for sporting excellence and all pupils are encouraged to play and compete at a standard relative to their abilities – helping them to understand the importance of physical exercise, teamwork, common endeavour and recreation. School and house teams at every level train and play on most afternoons in any given week. Within the curriculum, PE covers a variety of skills and techniques across a range of individual activities (including swimming, gymnastics, athletics and fitness) and the department ensures that every pupil gains a firm grounding in the major Salopian sports.

Tutoring & Parental Contact
Every pupil has a personal tutor and forms part of a small tutorial group within the House context. This tutor will work hard to get to know their tutees well – encouraging them in their endeavours, commending them on their successes and, of course, supporting them through inevitable moments of disappointment. They meet with their tutor group once a week in a dedicated slot, but there is likely to be a much higher level of informal contact as they encounter each other around the school site. The tutor will also monitor academic standards and comment in reports, offering advice and guidance on time management, methods of learning, revision planning and all other relevant matters.

Pupils will receive one short and one longer report per term (except during the Lent term, where one set of reports is replaced by a parent meeting). Individual subject teachers will offer comments alongside descriptors for effort and attainment. The overall content of the report will be summarised by either the Housemaster or the Tutor depending on the point in the cycle.

The Third Form Parent Consultation takes place in the Lent Term (usually alongside a parent lecture on e-safety provided by an external expert) and is very much focused on selection of GCSE Options. The Deputy Head (Academic) and Head of Third Form will outline the choices process for pupils and will also publish a booklet detailing the available courses and possible combinations. Pupils are encouraged to consult as widely as possible in this matter – making use of the guidance provided by their Housemaster, Tutor and the Deputy Head (Academic).

If parents do have concerns or would like clarification on particular issues as the year moves on, they are more than welcome to email, telephone or meet with key personnel at any time. The key point of contact here will, of course, be the Housemaster.

Assemblies and Extension
Beyond the traditional curriculum lessons, pupils can also look forward to surveying the global picture, both through their weekly tutorial sessions (following a curriculum developed by the Head of Third Form) and through regular year group assemblies. Those who wish to go further in any subject will find serious enthusiasm from their teachers. They can make use of

Faculty extension resources and are also warmly encouraged to take part in the wide range of high-level academic extension lectures which run throughout the year.

Art

This course aims to ensure that pupils learn to understand both their cultural heritage and the images generated by the modern world around them. It focuses on ensuring that students are visually literate, and are set up for life in an increasingly image-centred world.

The course centres on encouraging pupils to look and to understand their environment. It asks them to consider how subjects and ideas can be communicated in visual form. It introduces them to topics which are certainly not part of an ordinary curriculum – such as Architecture - and it offers an opportunity for teachers and students to integrate visual literacy across various curriculum areas, including Design, Art History, Philosophy, Literature, Science and Maths. Discovering what lies around us, taking the time to really notice and absorb our environment, is a challenge to all who live and work here. As the poet Tagore said: *A teacher can never truly teach unless he is still learning himself. A lamp can never light another lamp unless it continues to burn its own flame*.

Biology

Most children grow up with innate fascination for science: particularly for wildlife, and for the human body. Children are also growing up in a society in which Biological Sciences are ever more relevant: hardly a day goes by without headlines being made in fields like health, genetics and environment that can affect our future wellbeing or shed new light on our origins. It is the aim of this Faculty to nurture our pupils' existing interest in Biology through varied, fun, interactive and practical teaching and to inspire them to see the continued importance of Biology in their own lives and the wider world. Investigative skills and an appreciation for the scientific method are developed from day one: we need to train a new generation of scientists able to ask, and answer their own, new questions. Studying Biology also helps to develop both numeracy and literacy, and can provide the analytical skills and technical understanding that can open doors to many fulfilling and meaningful careers, and we try wherever possible to refer to real world applications of biological theory – for example in biotechnology.

Classics

The *Origin* Classics course for Third Formers endeavours to embrace the most engaging aspects of the Roman world; the language, the literature, as well as the lives of people and their day-to-day experiences in ancient Rome, Pompeii and Britain. The over-riding focus throughout is connecting the past (linguistic, cultural, philosophical, practical) with the present; the joining of the ancient world as it was, and as it is seen today, with its origins in the Roman Republic & Empire.

Through the background and cultural studies element of the course, pupils will learn how Classical Civilisation has shaped the 21st century, with a focus on Rome on our doorstep; what elements of *Urbs Romae* can be seen in Britain – and indeed Shropshire - today? Via the '*Latin Legacy'* module of the course, pupils will have the chance to study in detail the relationship between Latin and its modern linguistic descendants; Spanish, French, or Italian.

This cultural heritage course will be delivered across all sets; the language element will be differentiated, depending on experience, for pupils who will be taught the Latin language from scratch, to those who will build on their three, or in some cases four or more years of Latin at their previous schools. Those who opt for Greek can either start the language from scratch, or move on to a more advanced level. Parents of pupils considering this route are advised to liaise closely with Admissions.

The aim of the exploration of the language and culture taken together is to provide an educational experience that is stimulating, thought-provoking, and enjoyable.

Chemistry

Chemistry is a vertical subject and so we start with the basics in the Third Form. Atoms are the building blocks of the universe and we study their structure; how they bind to other atoms; how they are arranged in different materials and then finally how we come to classify them in the Periodic Table of Elements. We go on to look at the reactivity of metals, how acids behave, what alkalis are and how, when the two are combined, they form salts. Later material covered in the 4th form and 5th form continues to build on these early foundations.

There is a great deal of practical work in the third form with students carrying out experiments weekly. The early practicals cover separation of mixtures and investigating solubility of different salts in water. There is a certain amount of deliberate crossover with Maths and English as students learn to process data and write up their investigations. They also learn how to produce hydrogen (authenticated by a small explosion), carbon dioxide and oxygen before investigating the relative reactivities of metals with acids and water. All this helps to improve their dexterity with equipment and understanding of scientific methodology.

Computer Science

Although it may seem that Computer Science is a relatively new subject area, compared with subjects such as English Literature, Chemistry and History, it has roots in the most fundamental instincts of human kind – the desire to understand the world, to solve problems, to invent tools and methods to thrive and advance our well-being. In its pure form, Computer Science is automated mathematics – harnessing technology to calculate solutions for a great variety of applications.

We might look back to the early pioneers such as Leonardo da Vinci with his automata, or Joseph Marie Jacquard and his programmable weaving looms. Indeed, Britain's own Charles Babbage and Ada Lovelace pushed forward the boundaries of Computer Science in the Nineteenth century. It may have taken many years to establish this new field, but it is the ever accelerating pace of change that has thrust Computer Science into the cutting edge of human achievement.

Computer Science in the Third Form aims to build upon the experience pupils bring from prep schools far and wide to establish a common foundation that can be developed further into GCSE and A Level courses. Pupils will be shown how to use our network facilities, with both school owned machines as well as those brought to school by pupils to support their studies. We will learn problem solving techniques, turn these into code, test and run programs on computer screens as well as robots. We hope to inspire pupils and spark an interest that could carry then on to exciting future possibilities.

Design & Technology

All Design & Technological activity is embodied in the design of practical 3D solutions to real-world problems. Understanding form, creating combinations of components and a thorough understanding of materials and their properties, is at the heart of a creative 3D design idea. The 'Origin' programme in Design & Technology offers exciting and engaging design and practical activities, conducted in both studios and workshop in the Shrewsbury School Design Centre.

Design activity helps develop creative capability and communicative capacity; by learning to articulate ideas through a variety of techniques including: sketching, computer modelling, and practical workshop modelling. Understanding how design is embedded in everyday life and across wider society is crucial; pupils will research the work of contemporary designers, architects and engineers, to help inspire and develop their own design ideas. Pupils will also be given plentiful opportunities to develop their practical experience and explore a broad range of materials and engage with their properties. The aim of this foundation period is to help pupils make decisions on the appropriateness of a material to deploy in a given situation. Initially, they will work on creating artefacts in papers and boards, timbers

and manufactured boards, polymers, metals and textile materials in order to physically experience material properties and working characteristics.

As pupils progress through the Third Form, projects will increase in complexity and structural demand; introducing pupils to graphic design and communication, and mechanical structure and motion. It is expected that pupils will work towards expressing their ideas more clearly, and to take increasing responsibility for their design decision making as the year goes on.

Drama & Music

All students take part in a three week Drama module during the Third Form. If, as the Ancient Greeks believed, theatre is the place we go to see ourselves, then Drama gives students the opportunity to reflect on themselves and their place in the world. Students take part in a series of workshops designed to boost their confidence and creativity, culminating in the performance of a short piece of devised work inspired by current events.

In Music, taught in the brilliantly equipped Maidment Building, the pupils have the opportunity to explore their own talents and skills, develop and nurture existing strengths and also encounter musical ideas and aspects of recital not previously experienced. Alongside the traditional skills of composing and performance, the pupils will also gain a key insight into the fascinating world of Music Technology and the science of sound recording.

English

English plays a pivotal role in the Third Form curriculum; our aim is to support and develop the learning of other subjects through the consolidation and development of the technical skills of reading and writing, as well as encouraging students to begin to study literature more independently.

Pupils follow a comprehensive language syllabus, focusing on spelling, punctuation and grammar, with cross-curricular input from other Faculties. Each term is devoted to the study of a different form of literature, beginning with a prose text in the Michaelmas Term. Novels taught range from classic texts, such as Charles Dickens' *Hard Times*, to more contemporary works, such as Philip Pullman's *Northern Lights*. The Lent Term is devoted to the study of Shakespeare; our aim is to encourage pupils to develop confidence in exploring Shakespeare's language, as well as an appreciation for his skill and power as a dramatist. Pupils are also invited to explore the context in which the plays were written. This leads neatly into the study of an anthology of poetry in the Summer Term, often focusing on a particular theme, for example: War or Relationships. A range of oral and written assignments are produced on all literary texts, during the course of the year – with at least one substantive piece of writing on each.

Unsurprisingly, we believe that reading is central to pupils' progress in all areas of the curriculum. All Third Form pupils have a weekly slot devoted to individual reading, during their English lessons. The Faculty works closely with the Moser Library to establish and promote the value and enjoyment of reading amongst Third Form students. There are also opportunities for Creative Writing, Public Speaking and Debating.

The Third Form English programme endeavours to produce pupils who are ready to tackle the demands of the IGCSE Language and Literature courses with confidence and enthusiasm.

French

The French Scheme of Work has the same *core* IGCSE work for each set. The difference is the pace at which the course is covered, the level of expectation, the materials selected by the teacher and, especially as we introduce the new Origin curriculum, the cross-curricular and cultural topics added

to stretch and stimulate the pupils. These will include extra literary, cultural and linguistic challenge alongside cross-curricular approaches – specifically, for example, how the culture of the French speaking world has contributed to the way the world is today.

Cultural and cross-curricular topics are seen as taking pupils deeper than the level required by A* at IGCSE, and covering a wider cultural range than that simply expected by the specification. Motivation are independent learning are thereby enhanced and weaker pupils are encouraged and supported to work towards the same level as higher sets, rather than doing over-simplified work.

Geography

The Geography Origin Course – "From Pangea to Present" provides an intensive introduction to many fundamental aspects of the discipline. Starting with an in-depth investigation of Plate Tectonic and Geological History, students become immersed in the beginnings of the planet. From here, they examine the 'Origin of the Food' and explore Global Agricultural Phenomena. After this, the 'Origin of Energy' itself is dealt with as we ask pupils to look at the world in a contemporary manner, consider where our energy may come from in the future and what we can do to ensure a constant supply that meets the growing demand.

In the Summer Term, we examine a fundamental question: "Why are some places richer than others?" and, indeed, whether such a problem could ever be solved. Through further analysis of the developing and developed world, students consider questions of difference and diversity, constantly building on skills taught to them through a series of cross-curricular projects. Finally, a research project into geopolitics, globalisation and the city allows students room to breathe, and stretch themselves further at the end of the course as they consider how far the development of the Earth has come from its Origin, and indeed what its future may hold.

German

The great majority of our pupils arrive with no prior knowledge of German, so the Third Form German course is an *ab initio* course aimed at complete beginners where the emphasis is on fun, communication and the cultural origins of the language.

The Shrewsbury German course is based on our course book *Klartext*, an audio-visual course with recorded material and photo-copiable worksheets. The most important aspect of the course for us teachers is that our classes enjoy their short introduction as much as possible, while picking up a good amount of vocabulary, grammar and an understanding of the origins of the language. We regularly use language games (e.g., Bingo, Blockbusters, Platsch! and Kikereki), as well as children's songs and music videos, which are available on Firefly (Shrewsbury's Virtual Learning Environment).

History

The Shrewsbury 'Origin' History course aims to instil in all pupils a genuine enthusiasm and curiosity for the study of the past. Accepting that our pupils arrive having studied varied historical topics, themes and periods the 'Origin' course seeks to develop key skills alongside in-depth study of Britain's turbulent 20th Century. The 'Origin' focus is appropriately structured around the key question – 'What makes us who we are?' – as pupils investigate the British role in two devastating world wars and the modern era of decolonisation to more accurately determine how the recent past has affected contemporary society.

The course provides a clear focus on the core skills of extended writing, discussion, debate and independent research and seeks to explore cross-curricular ideas at key moments across the academic year. Pupils are engaged by challenging 'new to all' material in each term and have the opportunity to take part in a study visit to the World War I battlefields in the Ypres and Somme regions each June.

The History Faculty 'Origin' course seeks to ignite in our pupils a real and lasting intellectual passion for historical investigation, enquiry and debate, preparing them for rigorous and enriching academic study at GCSE level and beyond.

Mathematics

The Third Form syllabus in Mathematics focuses on the mastery of techniques studied in earlier years while unveiling the mystery of additional areas of the subject. Along with core topics in numerical work, algebra, trigonometry and geometry, pupils will study an evolutionary model of simple life-forms in "Conway's Game of Life" with the aid of a computational algorithm. They will be educated in the use of percentages in real world scenarios such as comparing interest on bank accounts and loans. There will be many opportunities to develop problem-solving skills – an essential part of the IGCSE course – with the top two sets being invited to enter national competitions such as the Intermediate Mathematics Challenge in February. The very best pupils can also volunteer to take part in the senior competition which takes place in November and is targeted at Sixth Formers.

Pupils will get the chance to research an area of Mathematics of their choosing, presenting their findings to the class and, in exceptional cases, a much larger audience. This forum to explore the subject and hone presentational skills forms one of three internal competitions offered by the faculty. The other two competitions are focused on traditional problem-solving, with one of these comprising a weekly series of progressively demanding and unusual puzzles.

Pupils will be continually assessed throughout the year in Mathematics, with resetting taking place at the end of the Michaelmas term, to ensure they are being taught at the correct pace and to the necessary depth in all topics.

Philosophy & Theology

The Third Form course focuses on key questions, examining how believers from a Judaeo-Christian base respond to both fundamental philosophical and social matters, and to several of life's ethical issues. The resources and topics are presented in a way that should engage, inform and challenge pupils across a range of abilities, helping them to understand the role of PT as a relevant, worthwhile and challenging discipline. The Faculty is also committed to helping pupils understand the crossover with other subjects. Looking at the Holocaust, for example, in the context of the philosophical *Problem of Evil*, pupils will make natural links through to History, but also through to English via novels, films and poetry. Every fortnight, a selection of pupils will have the opportunity to teach the class themselves, based on research conducted into a controversial topic of their choosing.

Physical Education

Sport is part of the Salopian species and very much part of daily life at Shrewsbury. The grounding for the Salopian sporting journey starts with our Third Form 'Origin' curriculum in the shape of Third Form Physical Education, encouraging and establishing enduring participation, 'creating a sporting habit for life'.

Our Third Form Physical Education programme aims to embed core knowledge and guiding principles regarding sports role in leading a healthy (active) lifestyle. Units such as Swimming, Gymnastics and Health-related exercise (HRE), provide the vehicle to build physical literacy and movement patterns that will stick with our pupils on their chosen sporting route. Cross-curricular links filtered into these lessons include: nutrition, teamwork, leadership and growth-mindset. Positive ethics will be encourage along with the students being inspired to reflect and examine others, and their own performance. Third Form Physical Education is a timetabled lesson – a double per fortnight.

Our sporting 'Origin' programme provides a launch-pad from which pupils evolve into well-informed, resilient and robust sportsmen and women prepared for their Salopian sporting journey.

Physics

In the Third Form we start teaching the Edexcel IGCSE Physics curriculum right from day one and our expectations of the students are high! In the Michaelmas Term, they will learn about the importance of units in Physics and are introduced to significant figures in calculations. They also study the effects of forces on movement and position and develop their practical investigative skills by measuring the average speed of toy cars down a ramp using light-gates and the latest data-logging software. More able students will then look at velocity-time graphs and how we can calculate acceleration. Later in the Term, the students cover Astrophysics which looks at the effects of gravity on planetary motion and motion of comets around our Sun. They will also learn about the fascinating process of how stars evolve from dust and gas and then in billions of years run out of fuel and 'die'!

In the Lent Term, they move on to Energy and learn how it can exist in many different forms by looking at a range of common household appliances. They will also learn how we can calculate efficiency and that 'energy can neither be created nor destroyed'. The section on Renewable/Non-Renewable resources provides an excellent opportunity to develop Cross-Curricular links with the Geography Faculty, who also teach this topic in the Lent Term. In Physics, the students will investigate the characteristics of photo-voltaic cells and construct wind turbines.
In the Summer Term, the students look at the properties of light and sound in the Waves Unit. They will carry out practical exercises using ray boxes, mirrors and glass prisms and learn how to construct ray diagrams. They will learn about the properties of sound and how we use ultrasound in hospitals and sonar devices. This Unit also introduces electromagnetic waves and provides opportunities for the students to find out where we use them in our homes and industry.

Finally, the students will return to the Astrophysics unit and be introduced to the Big Bang Theory, where they will learn about the evolution of the Universe – part of the 'Origin' whole school theme!

Spanish

Spanish influence, both linguistic and cultural, is broad and rich in so many areas of the globe and for so many people. With approximately 450 million Spanish speakers worldwide in over twenty countries, it is a language that is growing in importance. While Spanish is therefore the language of present and future generations, it also has fascinating roots and origins.

Our Origins course is split into themes based on key figures and places in Spanish and Latin American history that have had a global impact. By considering their contribution to the world as we know it today, we intend for pupils to enjoy learning about the geography, history, economy and opportunities for tourism of Spanish speaking countries. In turn we hope the course will whet the appetite of pupils to investigate further, travel more and broaden their cultural horizons before they consider choosing Spanish at IGCSE.