



The Dixie Grammar

Senior School

**Sixth Form Prospectus
For entry in September 2018**

THE DIXIE GRAMMAR SCHOOL

MARKET BOSWORTH

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SUBJECT ENTRIES

Art & Design
Biology
Business
Chemistry
Computing
Design & Technology
English Language
English Literature
Geography
History
Mathematics, Further Mathematics
Modern Languages
 French
 German
 Mandarin
Music
Physical Education
Physics
Religious Studies

An Introduction to The Dixie Grammar School Sixth Form

Welcome to the Sixth Form. This handbook is intended to give you useful information about what we can offer you, so that you can make informed choices about your two years in the Sixth Form.

A level success will be your, and our, priority. These two years ought also to be an *enjoyable* time academically. With GCSEs out of the way, you are free to pursue the subjects to which you are particularly attracted and, with hard work, you will have every chance of achieving the grades required to give yourself a wide choice of universities, courses, higher level apprenticeships and other post -18 opportunities.

Through our tutorial system, we are able to ensure each individual student has the opportunity to develop his or her academic, social and personal skills.

All students are encouraged to take responsibility for their own and others' actions. Whilst the individual is catered for, teamwork is a vital skill, which is developed during your two years in the Sixth Form, and through various activities both within and outside school, you have the opportunity to improve this skill. You will be given the chance to develop a whole range of new skills (sporting, dramatic, musical, debating, organisational etc.), which will certainly stand you in good stead throughout the rest of your life. This type of experience undoubtedly helps your university application: there is increasing evidence that the best universities and employers are looking for more than just 'narrow' academic skills.

Here at The Dixie Grammar School we are looking for students to join us who have not only ability in their chosen subjects, but who can also make a positive contribution to the ethos of the Sixth Form and School as a whole through their enthusiasm and commitment. It would not, however, be sensible or advisable to attempt an AS / A level course without having first achieved a reasonable standard at GCSE. You will normally be expected to have at least a grade 6 (B) in the subjects you wish to study at A level, but this is open to discussion with the relevant Head of Department if you do not do as well as you expected, particularly if you are intending only to take the AS Level Examination. It is always worth talking to your teachers or to Mrs Banton, Head of Sixth Form, as we always consider every student as an individual. A sound overall academic standard is also essential as we expect our students to pursue four subjects to an acceptable level in the Lower Sixth and to continue three subjects on to A Level. Students who have not secured GCSE Grade 4 (C) in Mathematics and/or English Language will be expected to retake these subjects, although no formal lessons will be provided.

In order to make decisions about subject choices it is important you find out as much as possible about the courses available which you might wish to take in the Sixth Form. During Year Eleven you are encouraged to talk to subject teachers, as well as to Sixth Form students who can give you valuable insight into each subject. This prospectus, one – one review meetings after mock examinations, and Sixth Form induction are also vital elements of this “choice” process.

If you are considering certain university or career options then it is also vital that you consult Mrs Banton, Head of Sixth Form and Careers, as well as university prospectuses and relevant websites such as UCAS (www.ucas.ac.uk) and Inspiring Futures (www.myfuturewise.org.uk).

A typical week in the Sixth Form will consist of eight 35-minute lessons in each of your four chosen subjects. In the Upper Sixth you will continue with three of these subjects to gain an A level and you will again have eight periods of each subject. In addition, there will be two periods dedicated to the Sixth Form Enrichment programme. Finally, three periods each week are set aside for Senior Games and /or recreational sport; commitment to competitive sport and teams is both welcomed and supported. The remaining lesson time is set aside for private study in the Library or other appropriate study areas and individual tutorial time.

Work in the Sixth Form is certainly testing, but also very enjoyable and rewarding. You will need to be far more independent, learning to organise your own time and study, rather than relying on others to tell you what to do and when to do it. Thinking for yourself and developing your ideas are important skills that you will soon find essential if you are to do well at this level.

You are not on your own so don't worry. Specialised and experienced Sixth Form tutors, in addition to your subject teachers, will help you to adjust and develop the skills needed for success, if you are prepared to match their efforts. Your tutor will keep a close eye on your progress and ensure that everything remains on track.

The tutor groups contain students from both Upper and Lower Sixth. Generally, you remain with the same tutor for the full two years; he or she registers you, deals with everyday administrative matters, offers help and advice in group and personal tutorials and, of course, writes your references! The tutorial system is designed to help you achieve your full potential in every area, while also encouraging you to become independent – essential if you are to make a success of life at The Dixie Grammar School and in your career after you leave us.

Advice is given on an ongoing basis about university applications and careers and there are various opportunities to attend careers courses, day and overnight, at numerous venues both locally and nationwide. We help you to present yourself in the best light possible in interviews and on application forms. For our part, we write positive and individual references for you to encourage successful applications. After your AS/A Level results come out, we will be here to advise you if you need help at that stage and our students have a proven track record in successful university entrance.

What are we trying to do at Dixie? We want to help everyone make the very best of themselves, to develop hidden talents as well as bringing on the skills you are already aware of. We believe that our clear framework of conventions and arrangements, which still gives you freedom to make your own decisions about how you spend your time, is necessary if you are to achieve high grades in difficult examinations. Our philosophy is tried and tested, and our success with students of varying abilities proves its value. By the end of your time in the Sixth Form you will be equipped and ready for the next stage in your career.

What courses are offered? These are shown in the 'subjects' pages. We believe that the subjects we offer are those best suited to the Sixth Form students which we attract, as well as being those which universities see as a good basis for high-quality courses. Teaching groups in the Sixth Form are always small which ensures that it is easy to obtain help from teaching staff and that any problems are spotted and dealt with promptly.

If you are already at Dixie and would like to apply to join the Sixth Form, you will need to complete an application form including personal statement. You will also be invited to an interview with Mrs Banton, Head of Sixth Form and Mrs Ibbetson, Head of Upper School. Please notice that it is possible to take most subjects only up to AS level (for just your Lower Sixth year); indeed, the expectation for most students is that one of the four chosen subjects will only be studied up to this level. It is expected that students will study three subjects at A level and therefore it is important to stress the two-year commitment necessary when choosing your Advanced Level studies.

At the end of the Summer Term all those students who are considering joining the Sixth Form in September are invited to attend Sixth Form Induction. During this you will also be able to meet and discuss with the present Lower Sixth their views on being a Sixth Former at The Dixie Grammar School.

If you are at another school and wish to apply to the Dixie Sixth Form, you will also need to discuss with your teachers how strong an AS or A level candidate you are. You will need to choose four subjects which you will begin to study in the Lower Sixth year. The expectation is that you will continue to study three of those subjects in the Upper Sixth in order to gain A levels.

You must obtain an application form from the school. When you have completed this form, please return it to us as soon as possible. External candidates will then be invited to school for an interview with the Headmaster or Academic Deputy and Head of Sixth Form. Offers of places will be based on the interview and a reference from your present school, subject to your achieving the appropriate grades at GCSE.

All applicants

You can apply to join the Sixth Form at any time but we will only be able to use the subject choices of applicants whose forms are received by **Friday 9 February 2018** to devise the scheme of options which is constructed to enable the maximum number of students to follow their preferred courses. We aim to publish the details of the final option scheme by the last day of the spring term, **Wednesday 28 March 2018**

Finally.... if you have any questions arising from information in this handbook or about items that we haven't included, please ask! We are here to help you and we want you to have an enjoyable and profitable time studying at the Dixie. The Sixth Form experience is a challenging one, but it is one that will fully prepare you for life after the Sixth Form.

The Sixth Form Curriculum

GCE AS and A Level qualifications are linear qualifications: this means that all assessment is at the end of the course i.e. at the end of the Lower Sixth for AS Level and at the end of the Upper Sixth for A Level. AS Level is a free-standing qualification assessed at a standard appropriate for students who have completed a single year of study and results do not count towards the A Level award. You therefore need to be aware that the A Level examinations will test work from the whole course, including the Lower Sixth year.

In most subjects there is the opportunity for students to choose whether to study that subject just to AS level in the Lower Sixth, or to continue for the full two years to gain an A Level at the end of the Upper Sixth. Where this is not advisable it is clearly stated on the appropriate subject page.

How many subjects can I study?

The curriculum is designed to encourage breadth and flexibility in Sixth Form study. At The Dixie we expect Sixth Formers to follow a programme starting with four subjects in the Lower Sixth, continuing with three of these in the Upper Sixth. In addition the Extended Project Qualification (EPQ) will be offered to students.

Careers

In preparation for moving on after A levels, it is vital for students to carefully consider their options for University; degrees, diplomas and apprenticeships. Help and guidance is provided through the tutorial and enrichment programmes in partnership with Inspiring Futures. Sixth Form Students and the Careers Prefect support younger students in the school, help run a 'drop' in clinic and update students through the Inspiring Futures newsletter. The Futurewise package from Inspiring Futures supports member students during their time in the Sixth Form and up to the age of 23.

EXTRA-CURRICULAR ACTIVITIES

Charities

Sixth Form students, led by the Charity Prefect, help to organise events in school which support both local and national charities. For example, non-uniform days, cake sales and other fundraising initiatives.

Community Service

During the year all Sixth Form students are encouraged to volunteer, in their own time, in their local community. Where this is not possible community service can be sometimes be undertaken as an alternative to Senior Games on a Wednesday afternoon. This must be arranged in prior consultation with the Head of Sixth Form.

Community Service is recognised by universities and future employers as valuable experience and as such relevant information regarding this can be entered onto your UCAS Application Form. Such activities are invaluable for all concerned in developing a sense of responsibility and commitment to others.

Curriculum Support

In Year 13 (and occasionally in Year 12) students undertake at least one period per week of curriculum support. They are asked to nominate a curriculum area of their choice, which might be in a subject they are studying, or one they have left behind at GCSE. This gives them an opportunity to interact with younger members of the School and to assist the teaching staff in a variety of ways. The experience allows students to develop their communication and interpersonal skills in areas they find particularly interesting and helps to raise the profile of the Sixth Form in the school.

Debating

A successful Debating Society is run as part of the Enrichment Programme. A controversial topic is tackled once every half term.

The experience gained from taking part in such events is invaluable for developing self-confidence and the ability to respond quickly and fluently to questions is a skill particularly useful for interviews.

Enrichment

The Sixth Form Enrichment programme, which takes place on Thursday afternoons, is designed to challenge our students and develop them into independent and confident young people.

The programme covers a diverse range of topics and is delivered through practical sessions, debating and guest speakers. The aim is for the programme to be informative and thought provoking, engendering both discussion and an awareness of events and issues. It also builds on life skills, career choices and citizenship.

Sixth Form Committee

The Sixth Form Committee meets regularly to make decisions about Sixth Form Life, what it can do to improve the Sixth Form House and many other related topics. The Committee also organises fundraising events. The Committee organises itself and is a way of getting all of the Sixth Form students' opinions heard and making opportunities and improvements for the current and future Sixth Formers. The Committee also organises and directs the annual "Internal Concert" and the annual Sixth Form Ball. The committee also ensures that both the Lower Sixth and the Upper Sixth students enjoy their final two years of school life. It is their job to make sure that, during the months of work and studying, there is always a party or an event to look forward to.

Sport, Recreation and Wednesday Afternoon Activities.

Senior Games continues on a Wednesday afternoon for both Lower and Upper Sixth. Sixth Formers can take part in activities at the Leisure Centre, at school, or, by agreement, other activities outside school. A number of our Sixth Form students continue to play competitive sport, representing the school in a variety of areas both as individuals and/or as members of a team.

York and Lancaster House Competitions

The House Captains for York and Lancaster primarily organise teams for our inter-house competitions. These can be sporting events, such as rugby and netball, or alternative activities such as chess, debating or inter-forms quizzes. Events take place throughout the year in a friendly yet competitive manner. Highlights are the Swimming Gala and Whole School Sports Day.

The House Captains of York and Lancaster assist their Head of House in the organisation of these whole Senior School inter- house competitions.

PREFECT TEAM

2017- 2018

POSITION	STUDENT
Head Boy	Angus Nickols
Head Girl	Ella Grainger
Deputy Head Boy	George Bacon
Deputy Head Girl	Anisha Mackay
Student Council	Joshua Melen
Sport Captain	Joey Thirlby
Lancaster House Captains	Henry Mackley Kate Sinnott
York House Captains	Lizzie Harvey Mark McCall
Sixth Form Committee	Angel Brooks Kitty Handford
Sixth Form House	Millie Hemus Dominic Skeat
Art/ Displays	Anna Greasley
Careers	Emily Lawrie
Charities	Zara Cummings
International	Hannah Mihsein
Junior School	Daisy Lynn

DESTINATION OF UPPER SIXTH 2017

D'arcey Arrowsmith	Sport Development & Physical Education	University of Northampton
James Booth	Business Management (Marketing)	University of Derby
Lewie Brooks	Product Design & Technology	Loughborough University
Harry Broughton	History	University of Edinburgh
Harry Champion	Acting	
Daisy Caulfield	Gap Year	
Malaka El-Gammal	European Studies	University of Amsterdam
Millie Feeney	Sociology	Sheffield Hallam University
Ryan Gordon	English	University of Birmingham
Matthew Haywood	Electronic Engineering	University of York
Alex Judge	Business Studies	Sheffield Hallam University
James McCall	Chemistry	University of York
Josh Oram	Animal Behaviour	Aberystwyth University
Alex Pickering	Biochemistry	Aberystwyth University
Sophie Shukla	English Literature	University of Sheffield
Christian Smaditch	Natural Sciences	Lancaster University
Kate Smart	Graphic Communication	University of Reading
Tom Stone	Physics with Theoretical Physics	University of Manchester
Freddie Sykes	English Literature	University of Reading
Karen Tang	Microbiology	University of Leeds
Caroline Tharakan	Dental Surgery	University of Leeds
Eve Webley	Medicine	University of Leeds
Yasmin Wong	Fashion Marketing	Falmouth University

SIXTH FORM SCHOLARSHIPS

Academic Scholarships

Sixth Form academic scholarships are worth up to £1000 and are awarded on the basis of the mock (I)GCSE results, teacher recommendations and a scholarship interview with the Headmaster and the Head of Sixth Form.

Art Scholarships

Art Scholarships are awarded to students of outstanding ability who have shown a constant commitment to the subject throughout their school career but especially in their GCSE studies.

Music Scholarships

Music Scholarships may be offered to Sixth Form students who demonstrate the highest level of musical performance in one or more instruments or voice.

The Director of Music and Headmaster will audition candidates for such awards. Please note that recipients of awards will be expected to play a full part in all school musical activities.

Sports Scholarships

Sports Scholarships are offered to candidates of exceptional sporting standard (they will normally have county representative honours) and of high academic standard who wish to study Sport and Physical Education at A level.

Further details are available from the Senior School Office and on the School website www.dixie.org.uk

A-LEVEL RESULTS OF SUMMER 2017

	A*	A	B	C	D	E	Total	%A*/C
Art			2				2	100%
Biology	1	3	1		1	1	7	62.5%
Business			1	2			3	100%
Chemistry	1	4	0	1	1	1	8	75%
D & T		1		1			2	100%
English Lang.			1	2	2		5	60%
English Lit.	1	1	1	1			4	100%
French		1					1	100%
Geography					2		2	0%
German		1					1	100%
History		2		4			6	100%
Maths	1	2	4	1		2	10	80%
Music				1			1	100%
Physical Education			1	1			2	100%
Physics	1		1	1	1		4	75%
Religious Studies		2		1	2		5	60%

Total	5	17	12	16	9	4	63	78%
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GRADES	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
A* - A	32%	33%	51%	19%	26%	21%	26.7%	30%	33%	34%
A* - C	90%	85%	89%	83%	72%	78%	74.3%	80%	85%	78%
A* - E	99%	100%	98%	100%	97%	99%	98%	99%	96%	98%

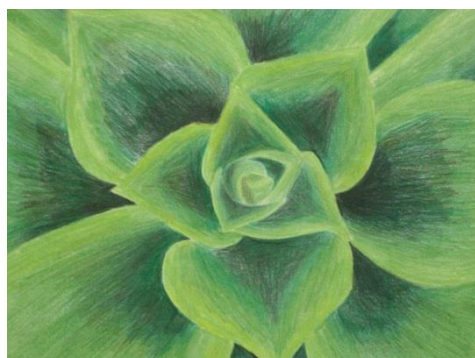
Art and Design

Head of Department: Mr G Bailey

What do I need to study Art at A level?

Usually the Art Department is looking for students who have embraced the GCSE course and risen to the challenges they have encountered there; worked hard throughout the two years of that course and achieved either an A or B grade in that qualification. The department is looking for students who have an obvious interest in the subject but are not necessarily thinking of taking their studies to degree level.

Why choose to study Art at A level?



There are real benefits to considering studying Art at A level. The obvious benefit being that it is a natural progression from Art A level to gaining a place on a Foundation course and a Degree place on an arts course of your choice. The Art Department has been very successful over the years in preparing students for the Foundation course and has an impressive success rate for students accepted onto both Loughborough and De Montfort University Foundations.



If however you are not considering Art College there are still good reasons for choosing to study Art at A level. Art is a natural foil to the more academic disciplines of other A level subjects and can offer a creative outlet that might not otherwise be realised by activities within school. Also the student who is willing to work hard in this subject, under the guidance of department staff will usually achieve a creditable grade that can then generate much needed points in the UCAS system.

What does A level Art involve?

Well hopefully lots of hard work on the part of the student; but also lots of engaging, challenging work and new experiences that are channelled into two years of study. Also you will encounter a programme of study that encourages interaction with galleries, museums and practising artists and craftspeople.

The student will be expected to carry out in depth investigations into various working methods and media. You will experience methods and materials you perhaps have not previously encountered at GCSE and have the opportunity to speak to practitioners about their approaches to creating Art and craft objects.

What does the course entail?

The course consists of two components.

1. Personal Investigation.

Students will submit one major project which will have a theme of personal significance. The investigation includes a related personal study that must be between 1,000 – 3,000 words.

2. Controlled Assignment.

Students select one starting point from an early release question paper and are given a minimum of three weeks in which to plan and prepare their assignment. This is followed by a maximum of fifteen hours of controlled time in which to complete a final outcome.

The coursework and controlled assignments are internally marked and externally moderated.



Biology

"I don't really know what it is about Biology that I like but I really enjoy it and have decided to study it at A level...."

L6 student about to start their Biology Year 1 course.

Question:

"Why should I study Biology?"

Answer 1:

The most important reason should be because you are interested in it!

Answer 2:

It will help my future career:

A career in Biology can be fascinating and rewarding and Biologists can play a pivotal role in dealing with the various challenges that face the modern society. If you have decided on a career in Biology, a study of Biology at Advanced level will enable you to progress to a degree course in a wide variety of fields:

- Serving the medical and physiological needs of people
- Working with animals and wildlife
- Conserving and restoring habitats
- Research into disease, genetics, biotechnology or molecular biology
- Education; both teaching and publishing
- Forestry, ecology, marine biology and zoology.

Biology A level is also an excellent foundation for students planning to undertake medical, dental, veterinary, chiropractic, physical therapy or optometry courses.

Question:

"What will I study in Biology?"

Answer:

Biology A level will give you an in-depth understanding of the topics you covered in Year 11. Think of it as if IGCSE was the headlines then A level is the in depth analysis.

Some topics however, like the liver, plant diseases, and the brain will be completely new.

You will be studying everything from individual biological molecules, through cells, tissues, organs and systems right up to ecosystems and conservation so you should find something that interests you.

Question:

"How will I study Biology?"

Answer:

The course will be a mixture of theory and practical work

Activities will range from individual, group and demonstration laboratory practicals, paper based exercises, computer simulations and individual research as well as field work studying ecology and a trip to Twycross Zoo to look at biodiversity and classification. You may even have to make your own "news" report video.

You will be expected to follow up work in class with extra reading and making your own notes.

Assessments will be written examinations at the end of the year and a record of your practical skills that will take the form of a lab book for the practical endorsement.

"...I have always just enjoyed it and looked forward to the lessons. It explains the biochemistry behind how our cells work, the physiology of humans, and I particularly like the detail we go into about genetics and how it influences evolution."

U6 student during their Biology Year 2 course.

Business

Head of Department: Mrs S Hudson



Why may Business be of interest to me?

The Business A Level content is designed to engage students through topics and issues that are relevant in today's society, such as digital technology, business ethics and globalisation. Students will develop the knowledge and skills needed to analyse data, think critically about issues and make informed decisions; all skills that are needed for further study and employment.

The AS qualification is fully co-teachable with the first year of A-level. Therefore, students have had the opportunity to sit the AS exams at the end of year 1.

What will I learn?

The following are the 10 key areas of study in the Business A Level. Points 7 to 10 are studied in year 2.

- 1 What is business?
- 2 Managers, leadership and decision making
- 3 Decision making to improve marketing performance
- 4 Decision making to improve operational performance
- 5 Decision making to improve financial performance
- 6 Decision making to improve human resource performance
- 7 Analysing the strategic position of a business (A-level only)
- 8 Choosing strategic direction (A-level only)
- 9 Strategic methods: how to pursue strategies (A-level only)
- 10 Managing strategic change (A-level only)



The topics lend themselves to studying and engaging with the business world. The specification and assessment should encourage students to follow business developments and think critically about contemporary business issues. Most of the assessment material is based on real business situations. By examining and thinking critically about real business situations as they study the subject, students will gain an insight into different contexts which will help them to understand the key issues in any situation and compare and contrast this with other situations and apply their understanding.





Our Business students progressed through to the national finals of the ICAEW Business Accounting and Skills Education Competition (BASE) after they won the Leicester round of the competition.

What else will I learn?

Over the course of study, students acquire generic skills in many areas including data analysis, formal written and presentation skills and construction of cash flow. Students also develop a clear and concise style of writing, the type used in business, enabling effective communication about business-related issues. Students are required to generate well written and balanced arguments and then come to a reasoned conclusion based on the weight of evidence.

In addition, we have had a number of highly successful business ventures over the last few years. Sweet Treats sold home produced chocolate truffles and fudge and made a £400 profit which they donated to Hope against Cancer. More recently the Business Bakers made a £320 profit from selling cake pops and the Gingerbread Company sold gingerbread teachers making a profit of over £300. All profits are donated to a charity of the students choosing. We have just launched the Young Enterprise Company Programme in (October 2017) during which A Level students will be able to put their learned knowledge into practice.

To help students to understand the complexity of manufacturing and topics such as lean manufacturing and kaizen, the Business students have visited local firms JJ Precision Engineering and Suncream Dairies to see first-hand how daily operations are carried out and enhancing knowledge gained in the classroom.

Is this the right subject for me?

This course is suitable for you if you:

- prefer examinations to coursework
- are prepared to take an interest in current national news and international business news
- want to learn how to analyse information effectively and suggest solutions to real business problems
- enjoy putting 'theory concepts' into practice
- are able to meet deadlines
- have a good mathematical understanding
- have a genuine interest in the business world

Chemistry

Head of Department: Mrs G Harland



- ✓ Do you want to understand how chemicals react?
- ✓ Are you looking for a course that allows you to challenge the way you think of the world around you?
- ✓ Do you enjoy practical work?

If the answer to these questions is yes, then Chemistry A level is for you!

Chemistry is an exciting subject where theory is brought alive with a variety of practical work. It allows us to understand the world from the molecular level while developing many of the transferable skills that universities and employers are looking for.

What do Chemists do?

Some work on cures for cancer, while others on new materials for catalytic converters to reduce pollution. Chemists make the ingredients needed to build the smallest electronic devices, and they also develop new medical materials. In fact, the list is huge and diverse.



Chemistry is central to any science-based course at university. It is important for most scientific disciplines ranging from molecular biology to astrophysics, and essential for medicine and veterinary science.

"AS Chemistry seems like a big step from GCSE but there are obvious links between the two, which I found made understanding the work much easier."

Parisha Kyada

The Future

Studying Chemistry helps students to develop their analytical and problem solving abilities. These skills can then be applied to the further study of science or to a wide variety of other careers. Here are just a few examples of courses that former chemistry students at Dixie have studied at university:

- Chemistry
- Medicine
- Veterinary Science
- Dentistry
- Forensic Science
- Pharmacy
- Business and Management
- Law
- Engineering
- Art

“Over the last 2 years Chemistry has been thoroughly enjoyable with many practical experiments and interesting topics such as Organic Mechanisms”
Carly Pinnock

“The teachers are always willing to give extra help or to answer questions, whether it is at lunchtime or during free periods.”
Rachel Lea

The Chemistry Department has a long-standing tradition of helping students achieve excellent results. We offer an outstanding level of support to help you do your best.



Outside the Classroom

This year students have used some of the latest analytical equipment at the University of Leicester.

They have also attended study days and practical workshops in a university laboratory setting.

At Dixie we teach the AQA specification A Level Chemistry. We are able to co-teach the AS and A Level course.

Practical skills will be assessed as part of everyday laboratory work and a lab book will be used to show development over the two years of the A Level course. This will result in an endorsement on the A Level certificate if certain standards are met.

Mrs G Harland

Computer Science

Teacher in Charge: Mr N J Mason

"Graduates who can code, solve complex problems and work smoothly in teams with non-technical colleagues are desperately needed."

Dr Louis Nanatson, Abertay University

When Charles Babbage invented the Analytical Engine, I am sure he could not have imagined how significant computers would become. You probably use several computers before you get to work every morning: alarm clock, television, radio, traffic light systems, pelican crossings, cash machines, mobile phones, to name but a few.

Computers are threaded through our everyday life. Computer Science A Level helps you to understand their role, how they work and how you can control them. The course gives students a broad experience of the world of computing including finite state machines, logic gates, binary logic, database design, binary number systems, high level programming and the fundamentals of computer systems. More important than all of this is the problem solving approach it instils in the students who do this course. It teaches them to examine a problem and break it down into manageable stages and organise a plan to solve it. These are skills students can apply across all of their learning.

Computing is a growth area at University and The United Kingdom is a world leader in the software industry so employment prospects are also good. Currently, there is a world shortage of suitably qualified computer scientists.

We will be delivering the AQA A level Computer Science course 7517 (AS 7516). This course is designed to:

- Allow students to demonstrate knowledge of the fundamental principles of the subject
- Develop problem-solving abilities in a computing context using an algorithmic approach
- Demonstrate knowledge of programming through a problem solving scenario
- Develop an understanding of the hardware and software aspects of computing.

The qualification has recently been updated to reflect modern developments in Computer Science and to concentrate on problem solving and the core technical aspects.

It is delivered in three units, only two of which are required for the AS:

AS Level

Paper 1: Problem Solving, Programming, and Theory of Computation

This is examined by a 1.5 hour, on-screen exam of short answer questions and programming exercises. All questions are compulsory. There is preliminary material including a skeleton program issued prior to the exam and many questions in the exam will relate to this material. The preliminary material gives students plenty of time to prepare for the exam. This is 50% of the AS.

Paper 2: Fundamentals of Data Representation, Computer Systems and Networks; The Consequences of the use of Computing

This is examined by a 1.5 hour written paper of short and extended answer questions. It covers the fundamentals of computer architecture and how different parts of a computer communicate with each other. This is 50% of the AS.

A Level

Paper 1: Problem Solving, Programming, Theory of Computation, Fundamentals of Algorithms and Systematic Approach to Problem Solving

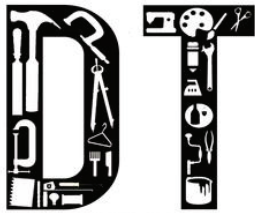
This unit is examined by a 2 hour, on-screen exam of short answer questions and programming exercises. It examines some of the content of the AS but in greater depth and adds a consideration of some important algorithms. This is 40% of the A level.

Paper 2: Fundamentals of Data Representation, Computer Systems, Networks, Databases and Big Data; The Consequences of the use of Computing

This is examined by a 2.5 hour written paper of short and extended answer questions. It examines some of the content of the AS but in greater depth and adds a consideration of databases, big data and the fundamentals of functional programming. This is 40% of the A level.

Non-examined Assessment

Students complete a practical project in computing over the course of the year. They will normally complete this project by working through the systems development life cycle in one of the allowed computer languages. The teaching language will be Python, but students are free to use other languages for their project if they are more appropriate. Students will be required to document the stages of a programmed solution to a real problem for a real end user or a problem in Computer Science as a personal research project. This is 20% of the A level.



Design and Technology: Product Design

Course Title: AQA Design and Technology Product Design (7552)

What is on Offer?

Product Design is a creative and thought-provoking qualification. At The Dixie Grammar School we give students the chance to investigate historical, social, cultural, environmental and economic influences on design and technology, whilst enjoying opportunities to put their learning in to practice by producing products of their choice, often for real world clients. They will develop various practical skills, for example sketching and CAD, whilst also improving transferable skills such as the ability to research, analysis and problem solve.

The new Design and Technology course requires students to be able to apply maths and science to solve design based problems, and would therefore fit nicely alongside either of these A levels.



What will be studied?

You will spend approximately half of your time on planning, designing and creating a product to meet your individual brief. For the other half of the course you will study how technology has advanced in the last century and take an in depth look at iconic designs around us. You will learn how products are made in industry and look at manufacturing processes and the properties of materials.

Where could Design and Technology: Product Design lead?

Here are just some of the areas:

Aerospace Engineering, Animation, Architecture, Art Therapy, Costume Design, Engineering, Fashion Design (Shoe designer), Fine art, Graphic Design , Interior Design, Model Making/ Special Effects, Printmaking, Product Design, Set and Theatre Design, Textile Design , Prosthetics



Which subjects does Design and Technology go well with?

Design and Technology goes well with other STEM subjects such as:

- Science (especially Chemistry and Physics)
- Maths (this course is most suited to A/B grade GCSE candidates)

It also goes nicely with:

- Art and Design
- Business Studies

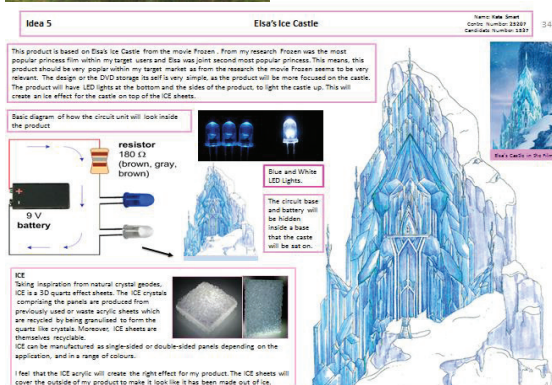
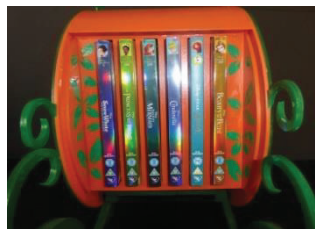
How is the course assessed?

This qualification is linear. Linear means that students will sit all their exams and submit all their non-exam assessment at the end of the course.

The course will be assessed in the following way:

1. NEA- Non Exam Assessment (formerly referred to as a coursework portfolio) – this counts for 50% of the marks. Students can select their own brief and complete a substantial design and make project based on it.
2. Technical principles Exam – 2.5 hour written exam worth 30%. The exam looks at the student's ability to apply mathematic principles to design situations.
3. Designing and making principles Written exam – 1.5 hour exam that makes up the remaining 20% of the A level. The exam consists of questions relating to product analysis and commercial manufacture.

Here are some examples of NEA work:



Please note that this subject is not suitable for those wishing to study for an AS Level. You should be committed to the full 2-year course.

English Language

Head of Department: Mr J Dixon

Why do children say 'I falled over' when they've never heard this word before?

Why is our spelling system so irregular?

Why do we have swear words?

Why can the words 'miss' and 'mrs' be viewed as sexist?

Why do parents say 'Can you tidy your room?' when you have no choice in the matter?

Why has text language developed the way it has?

If these questions interest you then you should consider studying English Language. You need to have an interest in language and enjoy both looking closely and also creating language.

What it isn't!

- A Level English Language is not English Literature. They are very different.
- A Level English Language is not GCSE English. It will be a new subject and you will have very little prior knowledge.
- A Level English Language is not for people who 'like English but don't like reading or writing'. You will have to read around the topics, the exams are written and the two pieces of coursework require extended writing.

The best way of understanding English Language is to look at the course:

AS- Paper 1- Section A- Analysis of a short text using the different linguistic methods.

Section B- Comparing two texts, one of which will be spoken.

Paper 2- Section A- Writing a media text on a topical linguistic issue.

Section B- Analysis of a text with emphasis on either language and gender or language and power.

A Level- Paper 1- Section A- Analysis of a short text using the different linguistic methods.

Section B- Writing on a topical language issue.

Section C- Comparing two texts, one of which will be spoken.

Paper 2- Section A- Child Language Acquisition.

Section B- Language and the Media.

Section C- Historical Language Change.

Coursework- Investigation into a language area of the student's choosing and then the creation of an academic poster to display the findings.

Where can English Language take me?

You will acquire analytical skills, reading skills and a deep understanding of language. This will help in any walk of life from a newspaper reporter to a salesperson. Any profession that requires the reading of complex writing, such as medicine or law, will benefit. Also any job that involves writing, such as journalism, academia or public relations, will suit English Language.

Basically, English Language helps any subject and the skills learnt will be useful for life!

You need to think carefully about studying English Language and do your research because it is a new subject. In particular, if you are deciding between English Literature or Language, you should speak to the relevant teachers because each subject is so very different!

English Literature

Head of Department: Mr J Dixon

Why study English Literature?

For starters, it is a highly respected subject - both employers and universities will know what it involves and no-one is going to question its academic merit. The rigour of the English Literature course means that, whilst it is not a soft option, it is very rewarding if you are willing to put in the work. You will develop essay writing skills, begin to interpret and evaluate material, discuss and criticise points of view - all skills that are transferable into many other areas of life.

On a less narrowly academic level, English Literature taps into the broader cultural heritage of the country - a familiarity with Literature broadens your understanding of the society that you live in, its history and people. As such, English Literature can enhance your understanding of subjects as diverse as History, Philosophy, Psychology, Law and even the social application of the Sciences.

Literature is also enjoyable! If you have any interest in story or narrative, in drama or theatre or poetry, this course allows you to explore those interests more deeply. We can't promise you will enjoy every text you study - but you will certainly have many opportunities to develop your interest in those that you do.



What does the course involve?

Almost all lessons are discussion based - we want you to become confident in sharing your ideas and in constructively responding to the ideas of others. Some lessons will be teacher-led - at other times students might be asked to lead the discussion.

When it comes to coursework (where you can choose your own texts for study) a lot of teaching takes place via one to one discussion. We follow the Edexcel A Level specification and whilst text choices for study may vary from year to year, current selections are shown below. *

Year One

- *A Streetcar Named Desire*
- Post-2000 Poetry
- *Dracula*
- *The Picture of Dorian Gray*

Year Two

- *Hamlet*
- The Poetry of T.S. Eliot
- Coursework (20% of total marks)

*These are the texts required for A Level. Students who wish to take the AS Level qualification will be in a position to do so at the end of Year One.

What can I study afterwards?

Almost anything you like!

You may decide that English Literature is the degree for you - and we have had many students over the years who have found that the A Level course gave them both the desire to study the subject at a higher level and the skills to enable them to do so.

However, English Literature is an excellent springboard to a wide variety of courses. An A Level in the subject will demonstrate that you can construct essays, develop a line of thought, argue, synthesise and criticise. Indeed, **universities, including Oxford and Cambridge, list English Literature as one of the most useful A Levels.** Even if your ultimate aim is, for example, Medicine, English Literature will show that you have a wide range of academic interests beyond those essential for your subject.

Past English Literature students from Dixie have gone on to study Medicine, Law, History, Accounting – and, of course, English Literature.

Visits/Speakers

English Literature provides a number of opportunities for trips and visits – particularly theatre performances. Students can usually expect to see a performance of at least one play during each year of their course.

Please note that this subject is not suitable for those intending only to study for an AS Level. You should be committed to the full 2-year course.

Geography

Head of Department: Miss V Entwisle

Why study Geography?

Geography is, of course, a very important component of everybody's life, being as it is the study of human interaction with our environment. It is also an important link between the arts and the sciences providing a great width of experience, skills and knowledge.

In the Geography Department at The Dixie Grammar School we believe an interest in, and an understanding of, geography is crucial to a well-informed, balanced individual. It is important to realise that geography is much more than the basic knowledge of where places are; it is a much more complex and interesting subject vital to a lively person with an enquiring mind. It is true to say that geographers are not generally people who might sit idly on a beach. We want to know what is on the other side of the headland and why? Geographers have 'get up and go' and as a result are in demand by employers who want people who 'have something about them'.

At The Dixie Grammar School you will be encouraged to develop your knowledge and interests through independent learning. We are proud of our results which have, over the last 20 years, consistently led to students reaching their maximum potential.

What will be studied?

In Geography we will cover both human and physical topics at both AS and A level study. Pupils will be given opportunities to experience fieldwork allowing them to make links between theories learnt in class and the real world. The AS/A Level courses not only allow pupils to further develop their knowledge and understanding of geographical concepts but also teach essential research skills which can be applied to a wide variety of occupations or further academic study.

Outlined below are current OCR specifications for the AS and A Level courses

AS (H081)	A Level (H481)
Exam 1 Landscape systems Changing Spaces; Making Places	Exam 1 Physical systems
Exam 2 Geographical debates	Exam 2 Human interactions
Fieldwork Skills are examined through the two exams outlined above	Exam 3 Geographical debates
	Independent investigation

Further details can be found on the OCR exam board website www.ocr.org.uk

Where will it lead?

A level Geography proves to prospective employers, colleges and universities that you are capable of working at a high academic standard. Geography provides a sound basis for degree level studies in almost any subject. More specifically it is vital in courses such as Earth Sciences, Business Studies, Sociology, Urban Planning, Cartography, Meteorology and Resource Management as well as Geography itself (in which the emphasis can be either on the physical or the human).

Extra Curricular Activities

As Geography is the study of the earth we like to try to get out and about as much as possible. Our main field trip is to North Wales. If there is sufficient interest there is also a possibility of a Geography visit to Iceland combined with IGCSE students.



History

Head of Department: Mrs J Prasher-Maldé

"The time for extracting a lesson from history is ever at hand for those who are wise." Desmosthenes

Why study History?

Many people pose the following questions: of what use is learning about the past to our future development and on our values? What role does studying History play in an individual's intellectual journey? And what skills does History equip the student with?

If we know about the past then we can understand the present, and prepare for the future. History spans all subject areas from Science and Technology to Philosophy and Economics. Indeed, the study of History provides the foundation of where we are and how we got here. As we begin to understand the past of a variety of cultures and debate the moral issues, we begin to form more considered opinions and judgments. As a result we broaden our perspectives.

The study of History involves discussion and critical thinking. Gradually the student becomes accustomed to thinking logically and laterally. This leads to developing an analytical and evaluative approach when examining issues, which the student can then employ across all the subject areas.

With History, the student will acquire many skills including reading for meaning; writing purposefully; interpreting and evaluating documents; discussion skills and synthesizing arguments.

However, why should **YOU** do History? There is only one answer in the end - because you enjoy it.

What does the History course involve?

Lessons in A level History are similar to lower school and GCSE in that a variety of teaching and learning strategies are used. The aim is to enable each student to gain their maximum potential through interesting and challenging lessons as well as empowering them to think independently and to be able to exercise their judgement in a variety of situations.

In order to widen your historical and cultural knowledge, we also offer a range of extra-curricular activities such as:

- Opportunities to participate in Sixth Form Conferences led by eminent Historians
- Visits to places of historical significance relevant to our studies in the Sixth Form, such as:
 - Amsterdam, Poland and Berlin.
 - Bosworth Battlefield
- Leadership of our highly motivational and popular History Society

AS level

Each year an initial survey is carried out with prospective A level History students about what they would like to study. Based on this information a shortlist of topic areas are created by the department and this choice is offered to students, for example:

- The Age of the Crusades
- The Wars of the Roses
- The Tudors
- Tsarist and Communist Russia
- France in Revolution
- The British Empire
- The Making of a Superpower USA
- International Relations and Global Conflict
- Transformation of China
- Modern Britain

There are in fact 30 choices.

A Level

Students study the examination courses as for AS and also conduct a historical investigation

For their independent investigation, students conduct their own research on a topic of their choice and produce an academic essay of 3000-3500 words.

Over the years we have found that all students relish this aspect of their studies and the sense of accomplishment is extremely high.

Just a few of the topics studied in the past few years have been: the Rwandan genocide; the Middle East; Changing Nature of warfare; Apartheid; Scottish medieval History; Irish nationalism; Tudor rebellions; Universal suffrage; African-American Civil rights; and the Opium wars.

What can you do with your History A level?

Despite popular opinion there are other alternatives to using your History education rather than just for becoming a librarian or a museum curator and the ubiquitous History teacher with the tweed jacket with leather patches and brown sandals. In fact a History education is useful and desirable in many fields.

What do the following people have in common?

Prince Charles, Gordon Brown, the BBC correspondent Jeremy Bowen, the barrister Michael Mansfield, the art critic Sir Roy Strong, the novelist Salman Rushdie, the comedian Sacha Baron Cohen (Ali G), the ex- England footballer Steve Coppell, the BBC motor racing correspondent Jonathan Legend and the DJ Simon Mayo.

They all studied History!

Studying History is a passport to success in the world of work.

Indeed a History education will stand you in good stead in any position, which requires you to have the ability to develop cogent arguments and formulate considered judgements. The study of History at Dixie is challenging, but rewarding yet takes place in a relaxed and jovial atmosphere.

Mathematics

Head of Department: Miss L Russell

Why should you choose Mathematics?

Mathematics is desirable to both universities and employers. Whatever your degree or career choice it is a valuable and impressive addition as it develops your problem solving skills which are applicable to so many different fields. Depending on your degree choice some universities specify A level Mathematics as an entry requirement, so it is worthwhile doing your research early.

What skills/qualities will I need?

First and foremost is that you enjoy the subject. The course involves spending a significant amount of time practising the concepts you are taught and so it is important that you have a love of the subject. Your IGCSE or GCSE will have developed the foundations of the mathematical skills that you will require and if you have a logical mind and find solving a problem satisfying then Mathematics could be the subject for you.

Course content and assessment

The new linear A levels in Mathematics and Further Mathematics allow for the AS level to be taught alongside those pupils studying the two year A level course. Both the AS and the full A level will include Pure and Applied Mathematics (Mechanics and Statistics). These are examined on separate papers. In Year 13, in addition to the new content taught, the concepts covered in Year 12 will be examined, but at a higher level.

Assessment will be through examination only. The AS level is a stand alone qualification and therefore marks gained at AS do not contribute to the A level.

Can I take Further Mathematics?

Further Mathematics is offered (subject to demand) at both AS and A level.

If you are interested in taking Further Mathematics or for further details please speak to Miss Russell

NB To take Further Mathematics you must also be taking mathematics.

Other opportunities

All our Sixth Form Mathematicians are given the opportunity to achieve their Dixie Maths Leaders Award.

Pupils are required to plan and run motivational mathematical activities for our younger students, provide curriculum support and be a Maths Buddy. They will also help run our annual Maths Activity Day, Year 5 Maths morning and plan Junior School activities.

The award aims to develop leadership, communication and organisational skills and is an excellent addition to their University application.



Modern Languages

Head of Department: Mr R Thirlwell

Here at the Dixie Grammar School we are passionate about languages, believing them to be the key to 21st century citizenship, providing the crucial link in an increasingly global economy and multi-cultural society.

Which languages can I study?

In a world where roughly 60% of British trade is with non-English speaking countries and 90% of the population live in countries where English is not the native language, any second or third language is a huge advantage.

At Dixie, we are proud to offer French and German at A Level as well as Cambridge Pre-U Mandarin and here are some of the reasons why:



- French, alongside English, is the only language that can claim to be truly global, spoken, as it is, on all five continents.
- Germany is the world's fourth largest economy and produces more than one quarter of the EU's GDP. It is also the UK's largest European export market.
- China is the world's second largest economy and has the world's largest population.
- Alongside English, French is the official working language of the United Nations, UNESCO, NATO, the Council of Europe and the EU, and it is the dominant working language of the European Court of Justice.
- German is the most commonly spoken language in the EU.
- China has a rapidly growing middle class and stands to become the engine of the world's economy in the coming years.

Why study at Dixie?

Staff

I believe that the Languages staff at Dixie is second to none. Inspection reports over the last ten years refer to languages lessons as 'inspirational', 'taught with flair' and 'promoting cultural development', where assessment is 'thorough' and 'encouraging', and the languages lessons observed in the most recent inspection in 2016 contributed to the school's 'excellent' rating for teaching and learning. You will be in safe hands, working with teachers who know how to get the best out of students and who believe in what they are doing.

Facilities

Languages are taught in five dedicated rooms, each with an interactive whiteboard and internet access. All rooms are integrated into the school ICT network, allowing easy sharing of digital and online resources as well as MP3 audio files.

Results

A combination of enthusiasm, talent and hard work means that our students consistently achieve excellent results, which at least match and usually exceed their expectations (see www.dixie.org.uk for full details). Although the Sixth Form at Dixie is relatively small, a number of students each year continue language studies at University and beyond.

Teaching Aims

Whatever languages you study in our Sixth Form, our aim will be to help you to raise your level of proficiency in all skill areas (listening, speaking, reading and writing).

What will I be doing?

In Class

In class, students will be taught how to express themselves in a more sophisticated manner, both orally and in writing, and will be helped to understand more advanced language, both aurally and in written form. Any topic can serve as the vehicle to improve your language skills, from abortion to drugs, from film to literature and from the future of the planet to your relationship with your family. All we ask is that you enjoy expressing your feelings about these things and responding to those of others. All Sixth Form language students benefit from a one-to-one speaking session with a native speaker each week, to help increase confidence and fluency.

At Home

Speaking a language is a skill, like playing a musical instrument, and so practice on an individual level is essential. To encourage this, each week, students are asked to read at least one article in the target language, carry out an independent listening task and revise one area of grammar they have met at GCSE. This system ensures students are getting the essential practice they need in these vital exam skills.

Beyond the Classroom

Languages live and breathe and need to be experienced outside of a classroom. Dixie is recognised for its strong international links and trips abroad form part of Sixth Form language study. These range from summer trips to China, to the well established German Exchange and from work experience in France and Germany to cross-curricular trips combining languages and business, for example. In addition, an ever-increasing range of foreign DVDs can be watched in the Sixth Form Centre, linguists meet weekly to watch foreign news on-demand and a foreign film club meets once each half term after school.

Higher Education and beyond

Those with languages skills are much sought after: language graduates still have one of the highest employment rates in the UK. Whichever language you decide to study, it will be worthy of further study in its own right, or can complement a wide range of other subjects at degree level, from Science to Business Studies and from Law to Engineering. Equally diverse are the types of career your qualifications could lead to. Recent adverts for jobs requiring a second or third language include software designer, management trainer, international counsel and engineering specialist. Our own languages students are pursuing careers in fashion, law and the diplomatic service, amongst others. What is certain, however, is that learning a language can only broaden your horizons and give you access to a wider range of opportunities than you would otherwise have.

We look forward to seeing you soon.

Music

Mrs M Dye, Director of Music

***Music can be magic. It enriches and inspires.
It calls for and calls forth all the human virtues,
imagination, discipline, teamwork, determination.***

***Music plays a prominent part in the life of The Dixie Grammar School.
We believe that music is important for itself and for its ability to change how
we think, feel and act. In the Sixth Form we provide opportunities not only for
Advanced Level study but for music-making of all types.***

All Sixth Form students are encouraged to play a leading role in the wide range of extra-curricular music-making on offer. We aim to provide opportunities for them to deepen and broaden their musical interest and skills as well as to assist staff and younger students by undertaking curriculum support and by helping with and running school ensembles.

Course

Why Study Music at Dixie?

Although the Sixth Form at Dixie is relatively small the number studying A level music is usually higher than in many comparative schools and we regularly attract students from other schools. This provides a happy balance – groups are large enough to provide stimulating interaction but small enough for individual support.

The separate Music School is housed in the Old Bank building adjacent to the main school buildings, overlooking the Square. The department comprises three well-equipped teaching rooms. These include a keyboard room, an ICT suite equipped with 14 computers and 6 MacBooks (integrated into the school network and supporting Sibelius 7, Cubase 8.5 and Guitar Pro 7 for use with coursework) and practice rooms, all of which may be used during study periods. A Music technician is available to assist with recording of performances and compositions.

A team of specialist peripatetic staff provide high-quality individual instrumental and vocal tuition. The school acts as a Centre for ABRSM Practical and Theory examinations and Rock School examinations. Students are also entered LCM Music Theatre Examinations.

There are numerous performance opportunities throughout the year including Soloists Concerts, Carol Service, Christmas Rocks, Summer Concert, Prize Giving and assemblies.

Sixth Form Music Scholarships are available to students who demonstrate advanced music skills, an enthusiasm for music and the potential for development.

Regular concert visits and workshops with professional performers give students the opportunity to broaden their horizons.

The Course

A level students follow the Edexcel A Level course which integrates the study of harmony and composition with listening & understanding, performance and the in-depth analysis of instrumental and vocal set works.

They are expected to complete a variety of study tasks at school and at home and to strive to reach the highest level of performance. There are numerous opportunities for ensemble work as well as for solo performance.

The Global Dimension

The Music Department has links with our sister school, The Chongqing Experimental School in China and with the Moricz School in Dunaujvaros, Hungary. Sixth Form musicians are regularly involved in joint music projects with students from both schools.

Beyond School

Many transferable skills are needed to succeed in music. The confidence gained in performing and in working with and assisting others equips students for careers as disparate as professional performing, teaching, PR, arts management and the Services and can provide invaluable leisure opportunities and assist in developing social skills. The self-discipline of regular practice makes for good study habits and musicians easily make new friends wherever they go!

PHYSICAL EDUCATION

Head of Department: Mr C Fielding

Why should you study 'AS' or 'A' level Physical Education?

Sport & fitness is a huge industry and you can be part of it. If you're keen on sport you can make a healthy living from your passion. Whether that is working within a sports business, as a personal trainer or training to be a physiotherapist, there are lots of opportunities.

From professional sport through to amateur teams and individuals who just want to get into shape, sport and fitness is a fast-growing business. Best of all, you could be in a career doing something that you love. The UK has gone sports mad since London hosted the 2012 Olympic games. Every year more and more people take up sport. Physical Education has never played such an important part in society.



AS level Physical Education

What will be studied?

In the 'AS' PE qualification there are three main content areas:

Applied physiology, Skill acquisition and Sport psychology, Sport and society and technology in sports. All these topics will be assessed by a written exam worth 70%.

Plus:

A practical role as a performer or a coach in the full-sided version of one activity and this will be internally assessed and externally moderated. This area is worth 30%.

How will it be assessed?

Written exam: 2 hours on the content above (84 marks) worth 70% of the 'AS'.

Practical assessment: As a performer or coach (90 marks) worth 30% of the 'AS' plus a written/verbal analysis of performance.

A-Level Physical Education

What will be studied?

In the 'A' level PE qualification there are six main content areas. Applied anatomy and physiology, Skill acquisition, Sport and society, Exercise physiology, Biomechanical movement, Sport Psychology, Sport and society and the role of technology in physical activity and sport. All these topics will be assessed by two written exams worth a total of 70%.

Plus:

A practical role as a performer or a coach in the full-sided version of one activity and this will be internally assessed and externally moderated and this is worth 30%.

How will it be assessed?

Written exam:

Paper 1 = 2 hours on the content above (105 marks) worth 35% of the 'A level'.

Paper 2 = 2 hours on the content above (105 marks) worth 35% of the 'A level'.

Practical assessment: As a performer or coach plus a written/verbal analysis of performance (90 marks) worth 30% of the 'A level'.

The main difference between the 'AS' and the 'A' level qualifications is that the 'A' level questioning will be set at a higher level than the 'AS' around the content areas of the course.

Where could this subject lead me?

The areas of study you learn about will be invaluable on a personal level and will help you to be an improved sportsman/woman no matter what your standard. This 'A' level also opens up a whole number of career opportunities such as: sports science, physiotherapy or working for a national governing body to name but a few.

Is PE 'A' Level a suitable subject for me?

Are you passionate about sport? Do you take part in sport regularly for your school/club? Would you enjoy learning about the Physiological/Psychological and Socio-cultural aspects of sport? Then PE 'A' level could be a good option for you! Speak to your PE teacher for further information on this subject.

Please note that this subject is not suitable for those intending only to study for an AS Level. You should be committed to the full 2-year course.

PHYSICS

Head of Department: Dr S Ketchion

Why study Physics? Physics is for all those who are interested in understanding how things work from the smallest sub-atomic particle to the largest conceivable distances in the universe. Physics is the basis for much of the present and future technology and hence qualifications in this subject are well sought after in the world of work. Physics has the reputation of not being an easy subject to study but you will develop valuable skills in thinking logically, solving problems, handling very large and very small numbers and finding things out during experimental work. Due to the broad range of topics we study at AS and A level, our students have gone on to a wide range of careers including engineering (aeronautical, automotive civil, chemical and mechanical), natural sciences, medicine, music technology, sports science, the armed forces and finance.



Fig.1 Problem solving activities



Fig.2 Practical work in the lab.

At AS level, students will study the relatively new topics of particle physics (that includes hadrons, leptons, quarks and other strange particles) and quantum theory. We also study topics such as electricity, waves, mechanics and materials that students should be aware of from IGCSE level but we obviously investigate in greater depth. Students will have two physics teachers who concentrate on different aspects of the course. Class sizes are generally quite small which allows us to look at problems in

detail and discuss the solutions that each student has produced. This helps develop the necessary thinking and calculation skills that are needed.

One double session every week is normally reserved for experimental work where students learn the skills of making observations, taking measurements and analysing results. The skills developed during demonstrations and practical sessions will be assessed in a written paper.

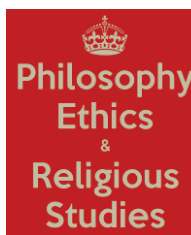
If students wish to study to the full A level we cover the major topic of fields (gravitational, magnetic and electric) that involve anything from the motion of the planets to the physics of amusement rides. We also cover nuclear physics, thermal physics and an option topic that is normally engineering physics.

The department organises a number of visits and guest speakers to enrich the curriculum. Previous visits have included the aeronautical and space museums in Washington D.C., NASA's Kennedy Space Centre and the physics of amusement rides at Universal Studios in Florida. Closer to home we have visited to the Diamond Light Source Synchrotron near Oxford and the Physics department at the University of Birmingham to do a masterclass in particle physics. This year we are taken a group to Switzerland to visit CERN, the largest scientific facility in the world and travel to Bern to visit where Albert Einstein did much of his famous work.



Fig.3. Dixie students visit magnet assembly plant for the Large Hadron Collider

Students are encouraged to broaden their experience and attend Institute of Physics evening lectures and take part in the British Physics Olympiad challenges.



Religious Studies

“The only true wisdom is in knowing you know nothing” Socrates

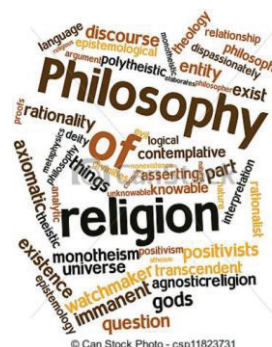
Departmental staff: Ms H Miller (Head of Department), Ms C. Young, Mr J. Dixon

What is Religious Studies A level?

- Dynamic
- Challenging
- Rigorous

What skills will I develop?

- Thinking
- Debating
- Questioning
- Logical arguing
- Evaluating
- Researching
- Arguing
- Analyzing
- Self confidence
- Literacy and essay writing.



What can I do at University with it?



- The **Russell Group** of top universities has made it clear that RS A level provides ‘suitable preparation for university generally’
- Both **Oxford and Cambridge** University include Religious Studies in the top-level list of ‘generally suitable Arts A levels’
- Applicants with Religious Studies A level were more likely to gain admission to study History at Oxford University in 2012 than those with A levels in many ‘facilitating’ subjects
- 20% of students admitted to Oxford University to study Mathematics in 2011 had an RS A level

(*RE Today services 2014* <http://www.retoday.org.uk/news/a-level-rs-university>)

What can I do with it if I don’t want to be a vicar?

“RS A level provides an excellent foundation for a range of careers – from **medicine** to **public service** to **business**. Imagine how better prepared a doctor or business professional is if they understand the **culture and customs of the individuals they are treating** or dealing with. As...we interact with more diverse groups day to day, **RE is becoming ever more relevant.**”

John Keast, Chair, Religious Education Council of England and Wales (REC):

‘And career-wise, at least, theology has stood us in great stead ... Between us, there is a television researcher, a theatrical agent, a Walt Disney producer, an artist, a court reporter, a primary school teacher, a financial journalist, a literary agent, a night club singer and a spy.’

Clare Garner, journalist with The Independent on her University theology classmates.

Career prospects for those that take Religious Studies/Theology at degree level are also very bright, with 25% of 2015 graduates going on to work in the fields of **legal, social and welfare**, **11% choosing to become educational professionals** and almost **5% managers**.

Religious Education council, August 2017

What will I study?

WJEC/eduqas A/AS Level Religious Studies specification.

The specification consists of **THREE** components/papers:

- 1 A Study of Religion (Christianity)
- 2 Philosophy of Religion
- 3 Religion and Ethics



What will my lessons and private study be like?

Mini lectures and seminars, with lots of discussion and argument. Occasionally you will present and lead a lesson yourself. Outside of the classroom you will undertake personal research. This includes reading, listening to podcasts, watching videos and commenting on contemporary newspaper articles. Essay writing is a key element of assessment.

What does the assessment look like?

- AS Three 1 hour and 30 minute exams.
- A level Three 2 hour exams.
- We can co-teach the AS and the A level specification.
- The AS qualification is 'stand-alone' and results from this cannot be counted towards the final A level grades for those who then decide to continue into the second year of the course.

You don't have to have studied RS GCSE to study RS A level