

Novi Curriculum



TONBRIDGE
SCHOOL

FROM CURIOSITY TO DISCOVERY

TONBRIDGE ONLY CONNECT



FROM FINE MINDS TO GOOD HEARTS

At Tonbridge we believe passionately in developing 'Fine Minds and Good Hearts' and are inspired by the opportunity to connect both of these in delivering a genuinely rounded education.

The design of our curriculum is integral to the boys' experience, our aim being to maximise learning, equipping them with the knowledge, skills and aptitudes they need while sustaining their personal development and enjoyment.

Our boys aspire to study at world-class universities in the UK, US, Europe and around the globe. We know how important it is for them to be intellectually ready and emotionally resilient to thrive at university and in their future lives and careers, given their potential to play leading roles and to influence positive change within the communities to which they belong.



Sixth Form Curriculum

In 2020 we launched a new Sixth Form Curriculum which offers multiple A-level pathways and a more personalised menu of core and elective courses. New subjects the boys can choose include A-level Computer Science, the Extended Project Qualification, European language qualifications and even cookery as a life skill. A-level Plus lessons enable the boys to explore their chosen subjects beyond the curriculum, making new and exciting connections in their learning.

We have been thrilled to see the boys performing even more strongly academically and progressing to an even wider range of highly competitive degree courses and careers, thanks to high-quality teaching and learning and the opportunities provided in our new curriculum. In The Sunday Times Parent Power 2023 league table Tonbridge was recognised as being among the top ten independent schools in the UK for the first time.

International and domestic GCSE

Our GCSE programme in the Second and Third Years (otherwise known as Years 10 and 11) offers a bespoke combination of domestic and international GCSEs, each course individually chosen by academic departments to provide the most stimulating learning experience for the boys and best preparation for further specialism in the Sixth Form. Our results at GCSE and IGCSE regularly place Tonbridge among the very best schools in the country.

At the same time, our boys continue to participate fully every day in our co-curricular programme, enjoying outstanding opportunities in sport, music, drama, community service and a whole host of clubs and societies. They are also supported in their personal development by a specially devised programme of Pastoral Education, including an introduction to Mindfulness which has been pioneered at Tonbridge.

Novi Curriculum: Foundation

More recently, we have been thinking creatively about the Novi Curriculum in Year 9 and its significance as a foundational year in the Senior School. We are eager for the boys who join us from a wide range of schools to experience subjects delivered Tonbridge-style before making their GCSE and other future choices.

We know from experience how important it is for the boys to be open-minded as they discover new approaches and new interests, often surprising themselves by the passion they develop for a new-found subject. It is the reason we encourage the boys to ask themselves not only 'Why?' but 'Why not?'

All boys complete a 'Learn to Learn' module delivered by our Learning Strategies team. Digital Creativity is delivered as a core subject, given its importance for the boys' future learning. Pastoral Education enables the boys to explore pastoral issues together and develop their understanding of themselves, their relationships with others and the world around them, while Sport, Health and Fitness promotes a lifelong appreciation of the value of health and wellbeing.

The boys study a breadth of academic subjects in addition to those already mentioned: Art, Biology, Chemistry, Classics, Drama, Design Technology and Engineering, English, Geography, History, Mathematics, Music, Modern Languages, Physics and Religious Studies.

Boys are given a choice, before they join us, of two Modern Languages: typically one continuation language from French, Mandarin and Spanish, and one *ab initio* language from German, Mandarin or Spanish.

Classics has a rich heritage at Tonbridge. All boys will study either Latin or Classical Civilisation, with the majority choosing to study Latin. Some boys may choose to study Ancient Greek as well.

Distinctively, a new Carousel for Creative subjects has been introduced in the Novi Michaelmas Term. This enables all boys to experience Art, Drama, DTE and Music at Tonbridge before selecting two of the four Creatives for the remaining two terms of the year, so that they can develop their interest and enthusiasm further.

Only Connect

Later in the year, usually around February, the boys begin finalising their GCSE choices for the following year. It is our aim to ensure that the choices they make are as informed and inspired as possible from the learning experience they have enjoyed throughout the year. In this way we encourage the boys to make their own connections as they continue their journey through Tonbridge and beyond.

James Priory
Headmaster

SUBJECTS

FROM CREATIVE CAROUSEL TO GCSE & A-LEVEL CHOICES

During the Michaelmas Term, the boys do a Carousel for the Creative subjects. One half of the year group will study Art and Drama for the first half term, while the other half will study Design, Technology and Engineering (DTE) and Music.

Boys will then switch for the second half of the Michaelmas Term. In the ultimate week of term they will decide which two they would like to study for the Lent and Summer Term.

MICHAELMAS TERM: **4 periods a fortnight for each**

Side A of Year group: Art and Drama

Side B of Year Group: DTE and Music

LENT AND SUMMER TERM: **4 periods a fortnight for the two subjects you choose**

Choose two from Art, Drama, Music and DTE

For those wanting to study Greek, we will ask you to replace two of the Creative subjects from the start of the academic year. You will then study only one Creative subject post-January, but this does not stop you studying more than one Creative subject at GCSE if you wish.

The boys make GCSE choices in February after Parents' Evening.

GCSE

The boys typically study ten subjects at GCSE, with some boys studying nine or eleven subjects depending on permutations. All boys study Maths, English Language and Literature plus Dual or Separate Science and a Modern Language. They then have a free choice from all other subjects offered. The GCSE course is supported by a vibrant super-curricular offering, ensuring boys can follow their academic passions.

A-level

Our Sixth Form Curriculum has been inspired by the skills identified by The World Economic Forum as having the greatest value in the future, such as complex problem-solving, critical thinking, creativity, leadership, resilience and flexibility.

We offer 26 subjects taught by outstanding subject specialists, often with an impressive reputation in their field. All are passionate advocates for their subjects and their students, encouraging our boys to go beyond the curriculum in order to gain a mastery of the topic.

Boys have the choice of four pathways through the Sixth Form, so they can personalise their journey to best suit their needs and interests.

GCSE 2023 & 2024:

91%

of all grades were 9–7
(equivalent to A*/A)

A-LEVEL 2023 & 2024:

96%

of grades were at
A*–B

Sixth Form Curriculum: Pathways

PATHWAY A

3 Principal Subjects plus Extended Project Qualification and Life Skills

18 periods per cycle in each of the 3 subjects, plus 7 lessons for the EPQ.

Life Skills are available after October Half Term in the Upper Sixth when the EPQ is completed.

PATHWAY B

3 Principal Subjects plus AS Mathematics

18 periods per cycle in each of the 3 subjects, plus 7 lessons for AS Mathematics over the full two years.

PATHWAY C

3 Principal Subjects plus Additional Language Qualification and Life Skills

18 periods per cycle in each of the 3 subjects, plus 7 lessons for Additional Language Qualification.

Life Skills are available after October Half Term in the Upper Sixth when the Additional Language Qualification is completed.

PATHWAY D

4 Principal Subjects plus an optional Extended Project Qualification

14 periods per cycle for each subject in the Lower Sixth, increasing to 16 periods per cycle in the Upper Sixth.

The EPQ is available for students studying this pathway in the Lower Sixth on 7 periods per cycle.

UNIVERSITIES:

95%

of leavers go on to attend top, high-tariff universities worldwide including Oxbridge, Russell Group and Ivy League institutions

OXBRIDGE:

23

places to Oxbridge were secured by our students in 2024



FROM ACADEMIC TO CREATIVE

ART

Art and design are an intrinsic part of the modern world, shaping how we see and interact with everything from physical spaces to business services, ideas and communications, while constantly providing fresh sources of artistic invention for all kinds of commercial and creative projects.

In the Art Department, we understand that boys come to us having had a range of different experiences in this subject at their previous schools, so the initial focus is to help them gain confidence. We aim to give boys the opportunity to recognise their own creative abilities with a course that gives them the opportunity to try out new techniques and introduces them to a broad cross-section of visual creative practice.

We aim to develop and nurture the creative potential in each boy and believe that the critical, analytical and problem-solving skills, which are unique to subjects like ours, are a vitally important part of a well-rounded education. Art also provides relief from subjects traditionally seen as more 'academic',

promoting resourcefulness, inventiveness, and ingenuity, as well as giving boys the opportunity to explore ideas and express themselves creatively.

The Art Department is exceptionally well resourced, with facilities for intaglio, relief, and screen printing, as well as a dedicated Ceramics Studio, Photography Lighting Studio, Dark Room, and Art Library with computer suite. There are also three large, well-lit teaching spaces for drawing, painting and sculpture.

In the first term boys will be introduced to techniques and skills that provide a means for expression and give them some idea of the wealth of creative possibilities inherent in the subject. After the initial Carousel, the Novi Curriculum familiarises boys with all the techniques and equipment in the Department, providing them with a taster of what to expect at GCSE, Fine Art or Photography, so they can make informed decisions about whether to continue and which endorsement to take.

CLASSICS

The achievements of classical Greek and Roman civilisation are the bedrock of western culture and history. The languages, literature, politics, religion and art of the ancient world are profoundly interesting both in their own right and for the influence they continue to have.

Study of the Classics has a long and distinguished history at Tonbridge. All Novi boys study either Latin or Classical Civilisation; they pre-select which of these two they would like to study, with the great majority choosing Latin. Some boys choose to study Greek alongside Latin.

Latin

Many boys will have studied Latin before arriving at Tonbridge. In the Novi year, these boys will consolidate what they have learned and will build their linguistic knowledge in preparation for the GCSE course (which normally attracts 50-60 takers per year group). By the end of the Novi year, boys will already be two-thirds of the way through the GCSE language syllabus; they will also acquire some knowledge of the formative period of Roman history, when Rome grew from being a small town in central Italy to the dominant city in the Mediterranean.

Those boys who have not studied Latin before Tonbridge are able to join separate beginners' sets. These sets focus on developing linguistic knowledge, so that boys will be in a position to choose GCSE Latin at the end of the Novi year.

Classical Greek

Classical Greek is the language of ancient Greek civilisation, and of the earliest (and some of the greatest) European literature. Boys who have enjoyed and shown proficiency in Latin

are encouraged to consider studying Greek. Greek is demanding but extremely rewarding: in the Novi boys will build a linguistic foundation ahead of the GCSE course, and also learn about the development of such central features of western culture as writing, story-telling, drama, cities and democracy.

Boys who study Greek in the Novi do so in place of two of the four creative subjects (that is, Music, Art, DTE and Drama). At present, about 15-20 boys take Greek at GCSE, per year. Greek at GCSE can be taken only alongside Latin; boys who opt for both Latin and Greek take the GCSE exams in Latin at the end of Year 10, and those in Greek at the end of Year 11.

Classical Civilisation

Those Novi boys who would prefer to study Classics without a linguistic element take Classical Civilisation. This course introduces students to some of the central achievements and the history of the ancient Greek and Roman worlds, and to their significance for later cultures.

In the Michaelmas Term, boys study ancient Greece (looking at for example writing, myth, religion, democracy, drama, art and architecture); and in the Lent Term the Roman Republic and Empire (learning about the growth of the empire, the army, the city of Rome, culture, spectator sport, the emperors and the adoption of Christianity as the state religion). In the Summer Term, boys turn to Roman Britain (its exploration by Julius Caesar, conquest by Claudius, the development of a Romanised culture and the eventual fall of Roman power).

DIGITAL CREATIVITY

Technology underpins our lives. It's ingrained in every industry and drives innovation. It allows us to form networks right around the planet and far into space. Our course equips pupils to use computational thinking and creativity to understand and change the world.

The course is designed to give boys a broad introduction into a range of digital technologies. Following a brief introduction into the use of Office 365 cloud services to work collaboratively, we look at computational thinking strategies to solve problems. This is delivered through a range of computer-based activities and provides a lead-in to the BEBRAS Computational Thinking Challenge, in which all boys take part. This gives them an opportunity to test themselves in a national competition, and success in this leads to qualification for the prestigious Oxford University Computing Challenge.

Before the end of the first term, boys will learn to program in Python. This is the dominant high-level programming language globally, and is the language used for both GCSE and A-level courses in Computer Science. As well as using Python on screen, we will be programming micro:bit devices and using the code to control robotic vehicles. Later in the year we use Python as the code in a game design module.

In the Lent Term we look at HTML, the language of the worldwide web, and investigate how it forms the backbone of every web page. All boys will be uploading their code to a webserver, creating a website using HTML. This module is followed by an app design course, using a platform that allows boys to code and test their apps on their mobile phones.

The Department runs a weekly Junior Coding Club, so that boys who have a particular interest can pursue it during co-curricular time. There is no GCSE course in Digital Creativity, but many boys who have enjoyed the course, and wish to develop their interest beyond the Novi, pursue Computer Science at GCSE level.



DRAMA

An education in Drama encourages boys to become confident communicators and performers, while providing them with an outlet to explore their own cultural values and those of others, past and present. Drama is an excellent creative outlet that has relevance for a wide range of careers, from acting, to directing, visual and audio effects, animation, set design and much more.

Lessons provide a break from desk-based subjects and require students to work creatively and collaboratively towards the realisation of mini performance-based projects, encouraging communication, people management and problem-solving skills.

The Novi Drama curriculum introduces boys to a range of dramatic techniques and conventions, regardless of prior experience.

We begin the course exploring non-verbal communication through a series of physical warm-ups and improvisation exercises, before taking a play text from 'page to stage'. Students will be introduced to a range of skills used by actors, directors and designers to interpret and communicate a play script to an audience. This will be enhanced by watching excerpts of a range of pre-recorded 'live performances' from the National Theatre Archive.

The short, six-week course will end with students performing a fully costumed scene from the play, using appropriate props and lighting, before filming a cinema-style trailer that employs music and sound effects to create atmosphere. These transferable skills are a taste of what Drama can offer students who continue to GCSE.

If boys choose to continue with Drama after the Carousel, they will be introduced to the range of devising, performance and technical skills required for the GCSE course, using the professional-quality equipment available in the EM Forster and Studio theatres. Boys will get the chance to use the lighting and sound equipment and to design staging for different theatre styles, as well as learning how actors use vocal and physical technique to create characters and how directors influence performances using a range of theatrical genres.

Boys who continue with Drama will also have the opportunity to visit a London theatre and experience a live West End matinee production as part of the course.



ENGLISH

The Novi English curriculum encourages the boys to develop critical thinking skills, improves reading and writing skills, enhances cultural literacy, provides exposure to different genres and fosters creativity.

In the Michaelmas Term, the Novi study either a collection of short stories, a novel or a modern play. Boys learn to evaluate and analyse themes, characters and literary devices, which helps them to develop a more sophisticated understanding about the world around them.

In the Lent Term, boys study a Shakespeare play. Shakespeare is one of the most important figures in English Literature and his work can help boys to understand and appreciate the cultural and historical context of different periods and societies.

By analysing Shakespeare's writing, boys can learn to evaluate and interpret texts, and to form their own opinions about literature. Finally, in the Summer Term, the Novi choose a scene from the play they have studied to perform to parents and peers by candlelight. The study of Shakespeare inspires creativity and encourages boys to think imaginatively about their own story-telling.

Also in the Summer Term, the Novi begin their study of the IGCSE Literature Anthology. The boys study 'Childhood' poems and also look at essential skills for answering an 'Unseen' poetry question.

The study of poetry is an important module for the IGCSE and provides the boys with further opportunities to develop their empathy and understanding of the human experience.



GEOGRAPHY

As a society we have never been more aware of the importance of understanding the interactions between earth systems (physical geography) and human activity (human geography). From real-world problems such as climate crisis, energy security, social inequality or challenges around migration and national identity, geographers are trying to understand the issues and seek practical solutions.

The aim of the Novi Geography course is to give boys an insight into what the subject has to offer at IGCSE, A-level and beyond through studying a wide range of topics of relevance to current affairs and their lives.

All boys study 'Protest' and 'Mass Movements' in the Michaelmas Term. The protest work focuses on the geographically important idea of 'sense of place' and why place matters to people who wish to influence political or social change through protests. Avalanches form the main focus of the work on mass movements, which introduces boys to more rigorously scientific analysis of natural hazards, focusing on the processes that create them, the statistical methods for predicting them and the strategies that can potentially be used to limit their impact.

These topics are then tested in the end of term exam, which is based on the IGCSE exam and requires boys to respond as geographers to stimulus material provided in the paper. After this, each set is introduced to topics of their teacher's own choosing for the rest of the course. Subjects covered include epidemiology, bush fires, Hans Rosling's 'Factfulness, and how the world is better than we think', the concept of geological time, social inequality, tornadoes, sport-washing and map work.



HISTORY

By studying History, we learn to analyse societies from a critical distance. It allows us to make sense of the key trends that explain much about modern life, whilst gaining the skills we need to help shape our future. Historical study exposes boys to a diversity of cultures and perspectives, while developing research and analytical skills that will equip them for a range of careers.

In the Michaelmas Term, the Novi study the First World War, from the causes to the outcomes. Boys will focus on aspects of the war which have sometimes been ignored, such as the importance of the years 1914-1918 for the campaign for female suffrage, or the experience of troops from the British Empire. This course is linked with a trip to a trench site, either in the UK or on the continent and, for those boys who go on to take the IGCSE, provides an introduction to topics they will encounter later on.

In the Lent Term, boys study either the USA from slavery to George Floyd, or China from the Macartney Embassy to Mao. Both courses look at a long time period and allow students to consider how, and why, these countries have radically changed in the last 150 to 200 years.

In the Summer Term, boys study a course entitled 'Why do we live in the country we do today?'. This focuses on three broad areas – Oliver Cromwell and Anglo-Irish relations, Empire and Migration, and LGBTQ+ rights in the 20th century. Questions such as 'Why does Cromwell have such a controversial legacy in modern Ireland?', 'How has post-war migration shaped the UK?' and 'Why did rights expand for LGBTQ+ Britons in the 20th century?' allow boys to gain a richer appreciation for the shape and key features of contemporary British society.

MATHS

Mathematics is a core subject in the National Curriculum. Maths is a creative and highly inter-connected discipline: it is critical to science, technology and engineering, and is necessary for financial literacy and most forms of employment. A high-quality Maths education therefore provides a foundation for understanding the world, the ability to reason mathematically, and an appreciation of the beauty and power of Mathematics.

The Novi are initially taught in mixed-ability classes for two weeks before sitting three Maths tests, which determine their initial sets. The structure of each year will vary slightly depending on the cohort, but there is generally a top set, parallel second sets, parallel middle sets and a lower set.

The top sets contain no more than 24 boys, with the lower ones being smaller. There are several other year-wide tests throughout the next two terms which provide further opportunities for promotion, and the classes are reset for the start of the Second Year.

The first half term is focused mainly on getting to grips with the algebraic skills needed for IGCSE Mathematics. The boys then move on to study numbers (including ratio and percentages), shape (2D and 3D) and trigonometry, before completing their first statistics topic, which includes an introduction to probability. In the Summer Term the boys return to algebra, looking at quadratics and straight-line graphs.

As well as the core syllabus, the higher sets complete a wide range of extension material aimed at developing a deeper understanding of the subject, as well as the ability to construct mathematical arguments and proofs. The top sets enter the UKMT Intermediate Mathematics Challenge, with many boys qualifying for the follow-on rounds each year. Further extension is provided at Junior Mathematics Club, which meets weekly to work through a range of stimulating problems and puzzles.



MODERN LANGUAGES

Multilingualism is good for you. It not only improves general intelligence and memory; it also develops skills highly sought after by employers in today's global market. Whatever languages a boy chooses to study in the Novi, great emphasis is placed on communicative capability, confidence, cultural awareness and understanding.

All boys in the Novi study two modern foreign languages. We offer four languages within the main timetable: French, German, Spanish and Mandarin Chinese. One of these should be that which a boy has been studying already (his 'continuation language'), and the other can be started from scratch or continued if he has previously studied two languages. Boys are expected to take at least one of these languages through to IGCSE.

French

French is likely to be the most popular language, as many boys will have been studying it for a number of years, although it is not compulsory at Tonbridge. We do not offer French from scratch, but boys will be set by ability and experience if they opt for this language. French is spoken on five continents and has official-language status in 29 countries: it is a growing language too (French-speaking African populations are some of the fastest-growing in the world). Speaking French will give boys direct access to some of the world's most important and fascinating societies and cultures.

German

German is spoken by over 130 million people in the world as a first language and it is a common second language in many parts of Eastern Europe. Germany is the economic

superpower in Europe and learning German will also give boys access to the fascinating history and culture of the countries where German is an official language (Austria, Belgium, Germany, Liechtenstein, Luxembourg and Switzerland). The German language differs from Romance languages as it has a supremely logical structure which will appeal greatly to those who love patterns.

Spanish

Spanish is available either as a continuation language, if a boy has been learning it for two or more years by the time he arrives at Tonbridge, or from scratch. Its Latin roots



and similarities to French enable rapid initial progress. The importance of the Spanish language is undeniable: Spanish is the official language of 21 countries and one of the most used languages in business and at international political summits. Co-curricular opportunities abound within the Spanish Department at Tonbridge.

Mandarin Chinese

Mandarin Chinese offers boys the perfect opportunity to leave their comfort zone and truly stand out: they will also start to understand the cultural richness and heritage of the language. The Chinese do not think as

westerners do: there is no tense in sentences; 'he', 'she' and 'it' are all pronounced the same; and the characters are like pieces of artwork. After finishing the IGCSE course, Sixth Formers enjoy studying their lessons entirely in the target language, in a 'Mandarin only' environment. As a result, our learners become confident and fluent speakers.

The School may be able to arrange private tuition for those who have an interest in a language not catered for in the main curriculum. We currently have Italian, Japanese and Russian tutors who regularly come to Tonbridge to give private lessons at all levels.





MUSIC

Music is a universal language that gives us a means to express ourselves and unleash our creativity. It is all around us – in films, TV, radio, streaming services, concerts, adverts, computer games, even Chapel – and so it's important we know how and why it affects us.

People who engage in Music study are sharpening their cognitive skills and developing social connections. Over the past 20 years, several large-scale studies of school achievement have found a strong correlation between learning to play an instrument and academic success.

Lessons in the initial Carousel of Creative subjects (Term 1) will give a brief introduction to Music at Tonbridge, and is designed to be open to all regardless of how much music may have been studied at boys' previous schools. These lessons will include playing African drums and an introduction to rhythm; composing music (using software) to understand how and why music is written down; and lots of listening along the way.

In the following two terms, these three key skills – Performing, Composing and Listening – will be developed further with a range of small projects, such as composing music for a short film clip, more performance in



small groups, and an introduction to studying works in greater depth (the foundation of studying set works). All of these are skills which will be of benefit to boys' creative education and will help develop a broad engagement in what they hear throughout their lives.

Boys who are having individual music lessons on an instrument are strongly encouraged to choose Music as one of their Novi options as it will considerably support their learning. This is not a pre-requisite, however, and all boys are encouraged to explore their creative side in this way, enjoying all the musical experiences that the School has to offer.

PASTORAL EDUCATION

The Pastoral Education and Citizenship programme aims to prepare boys for the challenges of their teenage years and beyond into adulthood, so that they are equipped to lead confident, healthy and responsible lives as individuals and members of society.

All students at Tonbridge study a robust and varied Pastoral Education curriculum throughout their time in the School, covering Personal, Social, Health and Economic Education (PSHE), Relationships and Sex Education (RSE), Citizenship, and more. Full details of what the students are studying in lessons are shared with parents, who are regularly consulted on the curriculum and invited to offer their thoughts on what should be included.

The School also provides a rich programme of education for parents, through the popular Parents' Pastoral Conference at the end of the first half term and the Parents' Pastoral Webinar Series running throughout the year.

In the Novi year, students study three courses in their weekly Pastoral Education lessons.

'How to be Healthy' in the Michaelmas Term covers the basics of physical and mental/emotional wellbeing. 'Healthy Relationships' in the Lent Term starts by looking at healthy friendships and relationships with parents and family, then moves on to thinking about tolerance and respect for all, through the lens of LGBTQ+ identities and neurodiversity.

'Digital Wellbeing' in the Summer Term covers all things to do with online safety, and also encourages the boys to develop critical thinking skills and self-control around their use of devices.

RELIGIOUS STUDIES

A modern society needs modern thinkers: people to study and critique the nature of humanity, pursue knowledge for knowledge's sake, and provide guidance for individuals, organisations and society to better evaluate and resolve problems.

The Novi Religious Studies course aims to make boys think and to teach them how to argue well. We do this by providing lively, engaging seminar-style lessons in which boys are challenged to explore some of the biggest issues in Theology, Philosophy and Ethics. The onus is always on the boys to debate, argue and refine their critical skills and arguments.

In the Michaelmas Term we look at issues in Philosophy of Religion; these will include proofs for the existence of God, arguments for atheism, the validity of religious experiences, free will (including the Leopold and Loeb murder case) and identity, robots and AI.

In the Lent and Summer terms, we move on to Ethics and explore both ethical theory – Utilitarianism and Aristotle's Virtue Ethics – and topics in practical ethics that will include war, terrorism, prisons, punishment, surveillance society, cannibalism and a return to look at issues raised by AI.

There are plenty of opportunities for extension and enrichment. The Junior Philosophy Society meets fortnightly, there is an annual Novi essay prize and boys are encouraged to delve into new areas with the help of the departmental reader.

There is a huge appetite for discussion and thinking about theological and philosophical issues. A great number of boys find that the Novi course lights an intellectual fire that leads them to opt for Religious Studies and Philosophy at GCSE, A-level and beyond.



SCIENCE

Science is a core subject in the National Curriculum. Science education plays an important role in developing a population that will make good choices, both for themselves and for the global community. It can offer a rich context for developing many 21st century skills, such as critical thinking, problem-solving and information literacy. All pupils study the separate subjects of Biology, Chemistry and Physics through to the Third Year, where a significant portion opt to continue at least one science subject at A-level.

With a focus on scientific thinking, analysis and experiment, the foundations are laid in the Novi to encourage boys to be curious about the world around them. We equip them with the knowledge and skills to understand current advancements in science and prepare them for those yet to come.

Taking advantage of the wonderful facilities available in the Barton Science Centre, boys are encouraged to attend the weekly Science Society, where a series of fun and engaging experiments or competitions are organised in rotation between the three sciences.

Biology

The Biology course for the Novi seeks to excite and engage all boys, irrespective of their experience of the subject at their previous school. The course is heavily practical in the Michaelmas and Lent terms, establishing confidence and proficiency in the laboratory through a variety of exciting activities including use of our superb microscopes, growing bacteria, investigations of enzyme activity, osmosis, diffusion and dissection.

Data analysis and ICT skills are developed, along with pupils' understanding of the



fundamental biochemical concepts that explain their own observations. Their new knowledge is consolidated, applied and contextualised during the spring, in the study of the digestive system.

As we move into the summer, we explore how plants take up water and adapt to arid conditions, and we study the process of natural selection. This leads into work on biodiversity and ecological sampling. Throughout the year, lessons are followed up with carefully considered preps that aid consolidation and give opportunities for independent research and extension.

Our ambition is that boys complete their first year with a clear understanding of important core concepts that will lay strong foundations for the remainder of the IGCSE Biology course, and that they will have fun.

Alongside timetabled lessons, the Biology Department promotes a strong culture of super-curricular engagement and enrichment. The Department has its own cosy library area, and the collection is constantly updated with periodicals and recommendations from the staff's own reading. Biology Club meets

during Monday pursuits, with specific, optional activities for the Novi, in rotation with the other sciences that are led by older boys. In addition, the most enthusiastic undertake their own independent research projects with support and guidance from staff.

Chemistry

As the 'central' Science, Chemistry sits between Physics and Biology, with ideas from Chemistry overlapping with the other two sciences. The lines where one science finishes and the others start can become blurred at times.

There is an exciting mix of theory and practical work as students move through the course. The basics of practical work are covered in the Novi, where students typically work in pairs, although occasionally individually, to complete as many practicals as time allows, building confidence with equipment and techniques.

Concepts include the structure of atoms, ionic and covalent bonding, types of reactions and reaction kinetics alongside consolidation of ideas that will typically have been encountered previously, such as diffusion and states of matter.

Students' understanding is assessed regularly through end-of-topic tests, alongside the larger Whole School assessments: the Novi Michaelmas exam and the end-of-year exam. Students are able to meet with teachers outside lessons to go over areas of weakness. There is an extensive virtual learning environment, with videoed explanations of topics and 'test yourself' questions in the Department's Firefly pages.

Physics

During the First Year, the course covers a range of topics and there is a balance between learning through discussing concepts and ideas, hands-on practical and experimental work, and mathematical skills.

It is recognised boys coming from different schools will have differing levels of knowledge in the subject, and therefore all boys follow the same course, taught at the same rate, during their First Year.

During the Michaelmas Term the boys will learn about density and pressure, why objects float and sink, and how atmospheric and hydraulic pressure influence our everyday lives.

The Lent Term includes forces and motion, covering why and how objects move and Newton's laws of motion. The Summer Term sees the focus move on to static electricity and magnetism, before preparation for the summer exams.

All of this learning occurs in the School's world-class Barton Science Centre. The labs are large, giving space for experimentation, and are extensively equipped, providing a range of apparatus for demonstrations and experiments. Much of our demonstration apparatus is made bespoke by our in-house team, and includes a number of pieces not found in any other school in the UK. This helps bring the subject to life and, using the Van De Graaff generator, will literally make hairs stand on end!



TONBRIDGE
ONLY CONNECT

Tonbridge School
High Street
Tonbridge
Kent TN9 1JP
+44 (0)1732 304297
admissions@tonbridge-school.org

TONBRIDGE-SCHOOL.CO.UK




THE SUNDAY TIMES

**SCHOOLS GUIDE
2024**

TOP BOARDING SCHOOL
TOP BOYS' SCHOOL FOR A-LEVELS
TOP BOYS' SCHOOL IN THE
SOUTH-EAST

Tonbridge School is a registered charity No. 1097977

The information contained in the brochure is accurate at the time of going to press