



Year 9 Curriculum

At Dunottar we want to add value to every pupil so that, no matter what a child's individual abilities are, they are challenged and supported to develop a love of learning and to be prepared for the opportunities, responsibilities and experiences of adult life. Our Warrior Learner concept encourages our pupils to embrace the behaviours of aspiration, tenacity, curiosity, creativity, collaboration, inclusivity and independence. Lessons are designed to allow pupils to display these behaviours and reporting at KS3 refers directly to these.

Lessons are well-paced, challenging and fun. Within the curriculum each pupil is encouraged to achieve his/her full potential. The curriculum aims to educate the whole person through creative thinking and creative learning and the curriculum at Dunottar School extends far beyond the classroom and is enriched by a wide range of co-curricular activities.

On the following pages you will find an overview of the topics covered in each subject during Year 9.

English

The aim of the final year of Key Stage 3 is to consolidate, develop and extend pupils' knowledge and skills in preparation for their GCSEs in English language and English literature.

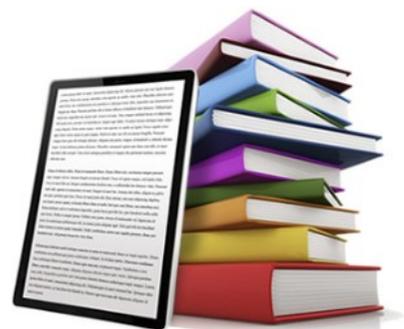
The GCSEs encourage pupils to read high quality, challenging literature and non-fiction texts from different genres. For this reason, Year 9 pupils sample a wide range of 19th-century fiction and nonfiction texts, building on their Year 8 knowledge of literature from this period. Pupils practise GCSE English language and literature skills, which we explicitly link to these texts.

Now that the pupils are more emotionally mature, we also introduce them to war literature, which forms an important part of our literary heritage. This also helps the pupils to appreciate a cross-curricular battlefields tour to Belgium and a cross-curricular WW1 day, organised by the history department.

In the final term of Year 9, pupils begin their GCSE in English literature by studying poems that are on the GCSE syllabus. Year 9 students study the following:

- War literature
- A Shakespeare play
- 19th-century fiction and nonfiction extracts
- A GCSE standard modern prose text
- Examination preparation and practice
- Oracy

As wider reading helps to develop vocabulary and comprehension skills, we continue to encourage reading for pleasure at home; a Year 9 reading list is available on the parent portal. We recommend that pupils also experiment with 19th-century classics.



Mathematics

In Year 9 pupils begin to study the Edexcel IGCSE Mathematics course, which can be sat at one of two levels, Foundation or Higher. As well as developing procedural fluency in mathematical techniques, pupils develop their problem solving skills, and learn to reason and communicate mathematically. All pupils study the content necessary to access both the Foundation and Higher level qualifications; most pupils sit the Higher level in Year 11. The decision as to whether a pupil is best suited to Foundation or Higher level is not made until Year 11.

The IGCSE mathematics curriculum broadly falls into the following six strands. Aspects of each strand are taught in Year 9:

Number: Fractions, decimals, percentages, indices and surds

Algebra: Simplifying and solving expressions and equations

Ratio, proportion & rates of change

Geometry & measure: Angles, polygons, area, volume, Pythagoras and trigonometry

Probability

Statistics

Pupils are taught in ability sets and all sets follow the same flow of topics, meaning that pupils can easily move from one set to another to maximise their learning. Pupils use Hegarty Maths both in class and for homework, they can access both video lessons and quizzes on www.hegartymaths.com. In the spring term, a large number of pupils have the opportunity to compete in the Intermediate Maths Challenge, a national competition. Each student has access to Sparx, an online homework and independent learning platform. All homework will be set using this intuitive program with follow up support, or stretch and challenge tasks created from their homework responses.

Science

In Year 9, pupils have the opportunity to start the GCSE course. We offer Separate Sciences, which is worth three GCSEs and is designed to stretch and challenge the most able pupils and the Combined Sciences, which is worth two GCSE and combines the essential components of all three subjects.

Biology Topics

Cell Biology (Cell Structure and transport; Cell division), Organisation (Digestive system, circulatory system, Breathing system and Organisation of plant tissues and organs), Photosynthesis.

Chemistry Topics

Fundamental ideas; Rocks and building materials; Metals and their uses; Crude oil and fuels; Products from oil; Plant oil; Our changing planet.

Physics Topics

Energy transfer by heating; Using energy; Electrical energy; Generating electricity; Waves; Electromagnet waves.

Foreign Languages

In Year 9 pupils have a choice of taking either French or Spanish. Pupils consolidate and extend all prior learning and focus on developing the communication skills required for a strong start in GCSE. The topics in Year 9 are a lot more "grown up" and in line not only with GCSE specifications, but also with the interests of growing teenagers.

French and Spanish

Pupils will improve their knowledge of three time frames and extend their grasps of the language while focusing on topics such as family and relationships, home and region, studies and free time. Role-plays and conversations are also used to develop speaking and listening skills.

Geography

The course opens with a spotlight on development, stereotypes and misconceptions where we try to answer the question 'How should we be measuring countries in the 21st century?'. This then leads to an in-depth study of China and its geography, population, environmental concerns and China's increasing global dominance economically. The One Child Policy is studied with its implications for China both now and in the future and pupils are increasingly exposed to a wide range of data presentation techniques and supported to interpret a range of data on which to form opinions. Environmental concerns in China and potential world-wide impact are covered, which leads into our climate change unit further on in the course. After Christmas, pupils will investigate the benefits and disadvantages that globalisation can bring and how global trading systems have been organised. The highlight of this unit is the 'Trading Game' which demonstrates to pupils how the system is rigged in favour of richer more dominant countries and how difficult it is for the benefits of globalisation to reach the very poorest members of society. By Easter, pupils will be introduced to more enquiry questions through the study of climate change and challenged with deciding what course of action the Maldives should take against ever increasing sea level rises. Throughout all these units we continue to use and develop map skills, photo interpretation, data presentation and interpretation. We take a

glimpse at the new GCSE course and 'Challenge of Natural Hazards' at the very end of Year 9 when the British Cartographic Society come into school for a fun- packed session exploring maps of the Japanese areas affected by the Japanese earthquake in 2011.

An optional trip to Iceland is offered on rotation with other department's overseas trips.

History

The History curriculum is based on a series of enquiry questions. In Year 9, these questions are:

- Why did the transatlantic slave trade begin and end?
- Why did Britain go to war in 1914?
- Democracy vs. Dictatorship
- Have black lives mattered in the C20th in Britain?
- Identity and discrimination
- What was the impact of World War Two on lives in Britain.

Religious Studies

In Year 9 we explore the following important questions:

Is there a right way to live? This is a multi-faith unit that seeks to answer the question posed. Pupils look at current affairs and draw ideas from religious and personal points of view, considering moral systems and where morality comes from.

Truth and Reality This philosophical unit examines the concepts of truth and reality. Pupils look at several philosophers and their views of truth and reality; Plato's analogy of the cave features heavily.

Is death the end? Pupils unpack and analyse the question of what happens when we die from both religious and secular points of view.

What does the idea of suffering mean to Buddhists? The question of suffering is often seen as an issue for those with faith. David Hume called it the "cornerstone of Atheism". This unit looks at the Buddha's quest to answer the question of why we suffer and analyse the answers that he found.

Art & Design

In Year 9 pupils initially explore the uses of art as a form of narrative and the ways in which the visual guides today's modern world with an emphasis on Portraiture and Mechanical Forms. They investigate a range of materials and processes and will develop their control of media and techniques through refinement of their work. They will continue to look at codes and conventions and how these are used to represent ideas, beliefs and values in works of art, craft and design.

Design & Technology

In Year 9, pupils develop their design communication skills through a series of technical drawing exercises and modelling tasks, including the use of CAD/CAM. Afterwards, the pupils design and make a clock, using a variety of 20th century design movements as their inspiration. Following on from this, pupils will use engineering skills to design and make a bottle opener from mild steel.

Food & Nutrition

In Year 9 students will have studied a range of commodities including:

- Fruit and Vegetables
- Grains and cereals
- Meat, fish and poultry
- Pluses, legumes and meat free alternatives
- Dairy products
- Fats, oils and sugars

They will be learning about the functional and nutritional properties of each commodity through a range of practical tasks which include making a variety of dishes, such as, fruit salad with sugar syrup, mini apple and blackberry tarts, pizza, risotto, macaroni cheese, Swiss roll, and chocolate Danish pastries.

Computing

In Year 9 pupils learn some app development and get a chance to create their own apps. They study cyber security and learn about threats to IT systems and what can be done to prevent them. They develop their programming skills in Python which prepares them for embarking on a GCSE if they wish to study Computing further. Artificial Intelligence is a growing and complex area of technology which has applications in a vast range of areas of modern life. We give an introduction into how neural networks work and how they are used in machine learning. Pupils gain an insight into current applications of AI and the ethical issues involved.

Drama

During Year 9, the curriculum closely mirrors the structure of the GCSE Drama course. Pupils study a range of styles and practitioners; looking at the work of Stanislavski, Brecht, and Berkoff. Pupils consider the stylistic differences, learning how to perform in the style of these practitioners, analysing and evaluating the impact on the audience. During the year, pupils will practically study the play 'Noughts and Crosses' concentrating on the skills and knowledge needed for success during the practical assessment of the GCSE Drama course. They will study a range of rehearsal techniques to develop their performance, evaluating the impact these rehearsal techniques have on their performance.

Music

Pupils in Year 9 continue to study music until the end of the academic year. Over the course of the year, pupils opt to take GCSE music into Year 10 and much of the content covered in Year 9 builds contextual understanding and musical awareness for the GCSE Edexcel specification.

In Year 9, pupils learn about:

The Blues: the origins of Blues and Jazz. Pupils learn to perform the 12 bar blues with extended chords and walking bass line. An emphasis is placed on improvisation using notes of the blues scale.

Film Music: the evolution of leitmotif and its use in film; the art of 'mickey-mousing' and creating mood in film music. Pupils compose an underscore using Garageband software to a given film scene.

Music for the Stage: the study of musical theatre and the role it plays in the music industry today. Pupils learn to sing and play solo, chorus and duet numbers from a range of musical productions.

Baroque Music: placing Baroque music into the context of music history, its musical features and instruments. Pupils focus on the music by Vivaldi and J.S. Bach, namely concerto form and how it developed during the Baroque period.

Physical Education

During Key Stage 3 the pupils follow a programme which includes rugby and football for the boys, netball and lacrosse for the girls and cricket, athletics and swimming for all. Within weekly 'PE' lessons students will rotate between swimming and PE. Through Year 9, students will explore a range of different components of fitness (e.g. power and muscular endurance) identifying how to test for them, improve them, and understanding their benefit to living a healthy and active lifestyle. These lessons built around a specific component of fitness will sometimes be taught as sport specific, i.e. through badminton, gymnastics, basketball, etc. Additionally, as we move through the term, Year 9 students will be taught the Sports Leaders programme, with the option to achieve a qualification at the end of the activity block should they wish. Within the bi-weekly swimming lessons, students will spend time looking at personal survival and water polo. Throughout the PE and Games lessons, students will experience different roles, such as coaching and officiating too, to develop their communication and leadership skills. Co-curricular clubs run during both lunchtimes and after school for both competitive and recreational activities with fixtures taking place during the week and on Saturday mornings.

PSHE

PSHE is taught as a timetabled lesson by allocated members of staff with a number of the themes being followed up in Assemblies, with outside speakers and in form times. The pupils follow a progressive course which builds on topics over the years. Topics covered in Year 9 include: Healthy Lifestyles, Respectful Relationships, Setting Goals, Employability and Options Choices. In the Autumn Term the pupils are given time to look at their GCSE options choices and to investigate the various subjects in depth whilst considering possible future careers. Staff specialise in an area of delivery with the result being an expertise amongst the staff in approaching sometimes challenging topics. We ensure full coverage of RSE and the statutory expectations of the government guidance. As part of the PSHE programme, pupils investigate changing trends in the world of work, discuss the role of various jobs in society and practise negotiating skills to solve a problem.

Subject	Lessons/week	Subject	Lessons/week
Maths	5	PE	2
English	5	Games	3
History	2	Biology	2
Geography	2	Chemistry	2
RE	2	Physics	2
French	2	PSHE	1
Spanish	2	Computing/Drama (Carousel)	2
Art	2	Music	2
Food/DT (Carousel)	2		