



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 and the needs of each pupil. 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 students to read a greater range of high quality, challenging literature and non-fiction texts from a range of genres. For this reason, Year 9 pupils sample 19th-century fiction and nonfiction texts, building on their Year 8 knowledge of literature from this period.

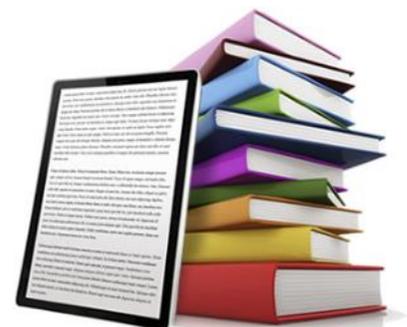
The groundwork for studying Shakespeare was laid in Year 7; this is developed in Year 9 with the study of a Shakespeare play, creating an effective bridge to Shakespeare at GCSE.

Now that the students are more emotionally mature, we introduce them to war poetry, which forms an important part in our literary heritage and helps them to appreciate a cross-curricular battlefields tour to Belgium. 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 poetry
- A Shakespeare play
- 19th-century fiction and nonfiction
- A modern prose text
- Examination preparation and practice
- GCSE English literature poetry

As wider reading helps to develop vocabulary and comprehension skills, we continue to encourage reading for pleasure at home; a Year 9 reading list can be found in: <https://www.dunottarschool.com/For-Parents>. Pupils might also want to experiment with reading 19th-century classics.



Mathematics

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

The GCSE mathematics curriculum broadly falls into the following six strands. Aspects of each stand 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

Students are taught in ability sets and all sets follow the same flow of topics, meaning that students can easily move from one set to another to maximise their learning. Students 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 students have the opportunity to compete in the Intermediate Maths Challenge, a national competition.

Science

In Year 9 pupils have the opportunity to start the GCSE course which is subject to their performance over the year. Some will work towards the three GCSEs in the separate Sciences, while others will go on to take combined science which is worth two Science GCSEs, combining essential components of all three subjects.

Biology Topics

Keeping healthy; Co-ordination and control; Medicine and drugs; Adaptation for survival; Energy in biomass; Variation, reproduction and new technology; Evolution.

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 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.

In French the focus for the Autumn term is on family and relationships, jobs and pocket money, home town and the surrounding area. Pupils will also look at present and past tenses. After Christmas, pupils will learn to describe events in the past and consolidate their use of perfect and imperfect tenses. Role-play and conversation are used to develop speaking and listening skills. Pupils will review all of the grammar and vocabulary knowledge acquired to date.

In Spanish pupils consolidate their knowledge of using present/infinitives/immediate future tenses whilst exploring the holidays topic and improving their speaking skills with role-play involving booking a hotel room and ordering food. Pupils will extend their vocabulary through topics including healthy living, food and exercise, jobs and future plans, making learning a language relevant and interesting.

Geography

The year starts with the study of development as a process and the inequalities that exist globally. Pupils are introduced to styles of writing preparing them for GCSE through a variety of tasks such as 'Assessing the extent to which the Brandt line is still relevant when analysing global inequalities'.

The course 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 begin the GCSE course in the summer term starting with the exciting Hazards Unit.

History

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

- How and why did the slave trade develop?
- How much better was life after emancipation?
- Why was World War 1 'the war to end all wars'?
- Which was the better system - democracy or dictatorship?
- Have we learnt the lessons from the holocaust?

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

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

Design & Technology is on a rotation with Food & Nutrition. In Year 9, the first project is 'Brand It!', a CAD/CAM and metals project where the outcome is a pewter cast keyring or piece of jewellery. Pupils will use their CAD knowledge from Year 7 and 8 to create a mould on the laser cutter. The theme will be based on self-branding. Pupils will develop their workshop skills through hot metal work (casting) and use of tools to create a high quality finish. They will also complete a series of sketching exercises to develop their design communication skills. The second project is "Crack It!", a bottle opener, which develops the pupils' engineering accuracy with marking, cutting and shaping mild steel. In addition, they also cover the theory of metals in this module.

Food & Nutrition

Food & Nutrition is on a carousel with Design & Technology and, by the end of KS3, students will have had experience of cooking a range of different dishes. During the final year of cooking before GCSE courses begin, pupils learn to make popular dishes with an emphasis on cultural cuisine. Practical cooking lessons will take place most weeks and pupils will learn about the different ages and stages of life and nutritional requirements, about special diets and dietary choices. Safe shopping, storage and cooking of food will also be discussed. Dishes will include stir fry, spaghetti bolognese, vegetarian spring rolls, lemon curd, swiss rolls, moroccan tagine, pizza, vegetarian sweet potato curry, lasagne, choux pastry and quiche. Skills learnt will include: use of a hob, choux pastry making, roux sauce, layering, preservation, whisked sponge, reduction sauce, portioning, shortcrust pastry and pizza dough making. There will be an investigation into Cultures and Cuisines and students will complete an independent cooking task based on a meal for a street food festival.

Computing

In Year 9 pupils learn about app development and creating an app suitable for a particular need. They learn how to program their own app using an online programming tool and then test it using their iPads. 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. Our last unit in Year 9 gives pupils skills in Python programming which prepares them for embarking on a GCSE if they wish to study Computing further.

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 'DNA' 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

Students follow a programme which includes rugby, football and cricket for the boys, netball, lacrosse and cricket for the girls and swimming for all. Athletics, rounders and tennis also take place in the summer term. There are also opportunities to experience a host of other activities for example, badminton, handball, fitness and hockey to name a few. Pupils are encouraged to experience a number of roles, including coaching and officiating and gain greater independence within their sporting development as they start to consider their GCSE choices. Co-curricular clubs run during both lunchtimes and after school for both competitive and recreational activities. Fixtures for our main competitive sports take place every Saturday with occasional mid-week fixtures for other activities.

PSHE

The pupils follow a progressive course which builds on topics over the years. Topics include: Drugs, Alcohol and Staying Safe, Bullying and Cyber-bullying, Staying Safe Online, Keeping Healthy, and Healthy Relationships. In the Spring term, the pupils are given time to look at their careers options to help prepare for their option choices. They investigate the various subject choices in depth.

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		