

## St David's College

— Est. 1965 —

Sixth Form Options 2023-2024

## Subject Choices

The following pages give a brief overview of the courses on offer at St David's College and include details on how the subjects will be assessed for pupils beginning the course in 2020/21. More information is also available directly from the individual departments listed below.

Biology	3
Chemistry	4
Physics	5
Computer Aided Draughting & Design (City & Guilds)	6
Design Technology: Product Design	7
Advanced Certificate in Computer Aided Draughting and Design	8
Art & Design	9
Mathematics	10
Enterprise & Entrepreneurship (BTEC)	11
Geography	12
History	13
English Language & Literature	14
Performing Arts (BTEC)	15
Music Performance (BTEC)	16
Applied Psychology (BTEC)	17
Sport (BTEC)	18
Sport and Outdoor Activities (BTEC)	19
Duke of Edinburgh Award	20



### **Exam Body**

Eduqas

### **Head of Department**

Stephanie Stephenson sstephenson@stdavidscollege.co.uk

What's inside a cell?

How do enzymes work?

Crack the genetic code and find out about plumbing in plants and animals.

Love living things?

To take the Advanced Level in Biology pupils should have a good pass mark at GCSE in Science. There is also a significant amount of practical work in this subject.

This specification is a linear course divided into a total of 3 units.

#### **Course Content**

AS Unit 1 - Basic Biochemistry and Cell Organisation

Written examination: 1 hr 30 minutes (80 marks)

A range of short and longer structured

AS Unit 2 - Biodiversity and Physiology of Body Systems

Written examination: 1 hour 30 minutes (80 marks)

A range of short and longer structured questions and one extended response

A Level (the above plus a further 3 units)

Component 1 – Energy and the Environment

Written examination: 2 hours (100 marks)

range of short and longer structured luestions and one extended response.

Component 2 - Variation, Inheritance and Options

Written examination: 2 hours (100 marks)



## Chemistry

## Exam Body WIFC

### **Head of Department**

Andrew Goodwin agoodwin@stdavidscollege.co.uk

To take Advanced Level Chemistry pupils should have a good pass mark at GCSE in Science and Mathematics. There is a significant amount of practical work in this subject. Pupils will sit the AS exam at the end of Year 12 and can exit the course at this point or can continue to A2 provided they have achieved a pass in Units 1 & 2.

#### **Course Content AS**

AS (2 units)

AS Unit 1 - The Language of Chemistry, Structure of Matter and Simple Reactions

Written examination: 1 hour 30 minutes (80 marks)

A range of short answer, structured and extended response questions.

AS Unit 2 - Energy, Rate and Chemistry of Carbon Compounds

Written examination: 1 hour 30 minutes (80 marks)

A range of short answer, structured and extended response questions.

#### **Course Content A Level**

A Level, AS plus a further 3 units
A2 Unit 3 - Physical and Inorganic Chemistry
Written examination: 1 hour 45 minutes (80 marks)

A range of short answer, structured and extended response questions.

#### A2 Unit 4 - Organic Chemistry and Analysis

Written examination: 1 hour 45 minutes (80 marks)

A range of short answer, structured and extended response auestions.

#### A2 Unit 5 - Practical (60 marks)

Experimental Task (30 marks)
Practical Methods and Analysis Task (30 marks)

## **Physics**

### **Exam Body**

WJEC

#### **Head of Department**

Andrew Goodwin agoodwin@stdavidscollege.co.uk

How does it work?

Why does it do that?

Where has that come from?

What do you mean, light is not a wave?

To take Advanced Level Physics, pupils should have a good pass mark at GCSE in Science and Mathematics.

#### Course Structure AS/A2 A Level

The concept-led approach to AS and A level Physics begins with a study of the laws, theories and models of physics, and finishes with an exploration of their practical applications.

#### **Course Content**

AS Unit 1: Motion, Energy and Matter

Written examination: 1 hour 30 minute (80 marks) 20% of qualification

AS Unit 2: Electricity and Light

Written examination: 1 hour 30 minutes (80 marks) 20% of aualification

A2 Unit 3: Oscillations and Nuclei

Written examination: 2 hours 15 minute (100 marks) 25% of auglification

A2 Unit 4: Fields and Options

Written examination: 2 hours

100 marks) 25% of qualification

A2 Unit 5: Practical Exam

10% of aualification



# Computer Aided Draughting and Design

#### **Exam Body**

City and Guilds

#### **Head of Department**

Martin O'Leary moleary@stdavidscollege.co.uk

City & Guilds CAD courses provide comprehensive training on Computer Aided Design software.
Our range of CAD training qualifications will help students to develop a career in manufacturing or engineering design

Level 1 Award in Parametric Modelling is ideal for anyone looking to start working with CAD software, or who already has some limited experience.

Level 2 CAD courses are for those who already have some experience in computing and want to increase their knowledge and skills.

Level 3 CAD courses are for those who want to develop specialist 2D/3D design skills, who already have a background in computing and design, and may have worked in manufacturing or engineering design for some time.

#### Who are the qualifications for?

These provide learners with the essential skills in how to use Computer Aided Design software. Students will learn how an object is designed in either 2D or 3D and how objects can be manufactured.

#### What do the qualifications cover?

They provide learners with the skills and knowledge to design objects in either 2D or 3D.

#### **Course Content**

City and Guilds CAD aualifications on offer

Level 2 Award in Parametric Modelling

Level 3 Award in Parametric Modelling

Level 2 Award in 2D Computer Aided Design

Level 3 Award in 2D Computer Aided Design

evel 2 Certificate in Computer Aided Design

evel 3 Certificate in Computer Aided Design

These qualifications allow candidates to learn, develop and practise the skills required for employment and / or career progression in the broad Engineering and Manufacturing sectors

What opportunities for progression are there? They allow candidates to progress into employment or further / higher education.

# Design and Technology: Product Design

### **Exam Body**

**WJEC** 

### **Head of Department**

Martin O'Leary moleary@stdavidscollege.co.uk

Design and Technology: Product Design offers a unique opportunity for learners to identify and solve real problems.

Design and technology is an inspiring, rigorous and practical subject. This course encourages learners to use creativity and imagination when applying iterative design processes to develop and modify designs, and to design and make prototypes that solve real world problems, considering their own and others' needs, wants, aspirations and values.

The specification enables learners to identify market needs and opportunities for new products, initiate and develop design solutions, and make and test prototypes. Learners should acquire subject knowledge in design and technology, including how a product can be developed through the stages of prototyping, realisation and commercial manufacture. Learners should consider small and large commercial / manufacturing contexts and gain an insight into design and technology activity in the creative industries.

#### **Course Content A Level**

#### AS Unit 1: Written Paper

Written examination: 2 hours 20% of qualification 80 marks

#### AS unit 2: Design and make task

Non-exam assessment: approx 40 hours 20% of qualification 80 marks

#### A2 unit 3: Written paper 2

Written examination: 2 hours 30 mins 30% of auglification 100 marks

#### A2 unit 4: Design and make project

Non-exam assessment: approx 60 hour 30% of aualification 100 marks





# Advanced Certificate in Computer Aided Draughting and Design

### **Exam Body**

SQA (Advanced Level CADD)

#### **Head of Department**

Martin O'Leary moleary@stdavidscollege.co.uk

The Advanced Certificate in Computer Aided Draughting and Design will develop a comprehensive level of knowledge and practical skills in traditional CADD topics, as well as the more advanced features of modern software.

Pupils will also develop knowledge and understanding of the design process, and of how CADD can help in achieving a desirable design solution.

This SQA Advanced Level CADD course allows students to specialise in disciplines such as Visualisation and Animation, Feature Based Modelling, Product and Industrial Design, Graphical Design, CAD Systems Management, Prototyping, Manufacturing, and Materials. Students will also develop analysis and synthesis skills

Employment and Progression Opportunities - Having achieved the Advanced Level CADD, students could go on to employment as a CADD Technician/Operator or Junior Designer in a variety of industries including: Architecture and Construction; Engineering (Mechanical, Electrical, Fabrication, and Manufacturing); Furniture and Interior Design and Product Design.

#### **Course Content**

Within this qualification pupils cover a range o topics including:

- 3D Surface and Solid Modelling
- CAD User System.
- CAD Principles
- Design Methodology

## Art & Design

## **Exam Body** WJEC

### **Head of Department**

Simon Scarff sscarff@stdavidscollege.co.uk

All Advanced courses within the Art department offer a rich and diverse range of learning experiences. Pupils are encouraged to express themselves freely.

Projects are devised to imagination and promote experimentation through inventive use of materials and techniques.

Skills are taught that allow all pupils to explore a range of practical and theoretical approaches from which they can develop personal work.

Individual special abilities and interests are discovered, encouraged and developed.

Our aim is to inspire confidence, enthusiasm and a sense of achievement at each stage of the course studied.

#### **Course content**

AS Unit 1 - Personal Creative Enquiry
Non-exam Assessment: 40% of qualification

A2 Unit 2 - Personal Investigation
Non-exam Assessment: 36% of qualification
A2 Unit 3 - Externally Set Assignment



### *Mathematics*

#### **Exam Body**

Pearson

#### **Head of Department**

Jillian Dolder jdolder@stdavidscollege.co.uk

Entry for this course requires the ability and the desire to take the subject well beyond GCSE Level, even for AS Level Mathematics. Past experience has shown that, for a student to do well at A Level, a grade 7 for Mathematics GCSE/IGCSE is the minimum grade required and to be thoroughly confident with algebraic techniques.

Mathematics at A Level is harder but more stimulating than at GCSE. Students will be challenged and will need to be interested and determined to succeed. In Mathematics the main emphasis is on learning techniques and skills, understanding concepts and applying these to solving problems.

Mathematics at A Level is highly regarded by University admissions tutors of all disciplines and, as such, is a useful subject to study, and compliments a wide range of subjects when studied as a block. Students will acquire skills and knowledge that can be applied in many fields. Students will develop their powers of reason and logic, as well as their communication skills. Mathematics is key if you want to pursue a career Physics, Engineering or if you intend to go on to other science courses, banking, business studies or economics. Universities and employers' value the academic training that Mathematics provides and areas such as Law or Computing consider the logical training provided by Mathematics as extremely helpful.

#### **Course Content**

The Mathematics A Level course is a linear course, consisting of three 2-hour papers for the A Level award.

Pure Mathematics is the study of abstract topics such as geometry, algebra, trigonometry, functions and calculus. It includes: Indices and surds; Polynomials; Coordinate geometry and graphs; Trigonometry; Sequences and series; Algebra and functions; Numerical methods; Differentiation and integration; Differential equations; Vectors.

Applied Mathematics relates the knowledge and skills learned in Pure Mathematics to real life situations and is broken down into two areas. Statistics and Mechanics

- Mechanics is the study of forces and moving objects; Mechanics Forces as a vector; Equilibrium of a particle; Kinematics of motion in a straight line; Newton's Laws of Motion: Linear momentum
- Statistics is the study of probability and the analysis of data. Statistics Representation of data; Probability; Discrete random variables; Normal and Binomial Distribution along with hypothesis testing.

## Enterprise & Entrepreneurship

#### **Exam Body**

Pearson (BTEC Level 3)

### **Head of Department**

Mark Turner

mturner@stdavidscollege.co.uk

The assessment approach of the qualifications allows learners to receive feedback on their progress throughout the course as they provide evidence towards the assessment and grading criteria. Some units are also assessed through external examinations.

Business employers value employees who can communicate effectively both verbally and using electronic communication methods.

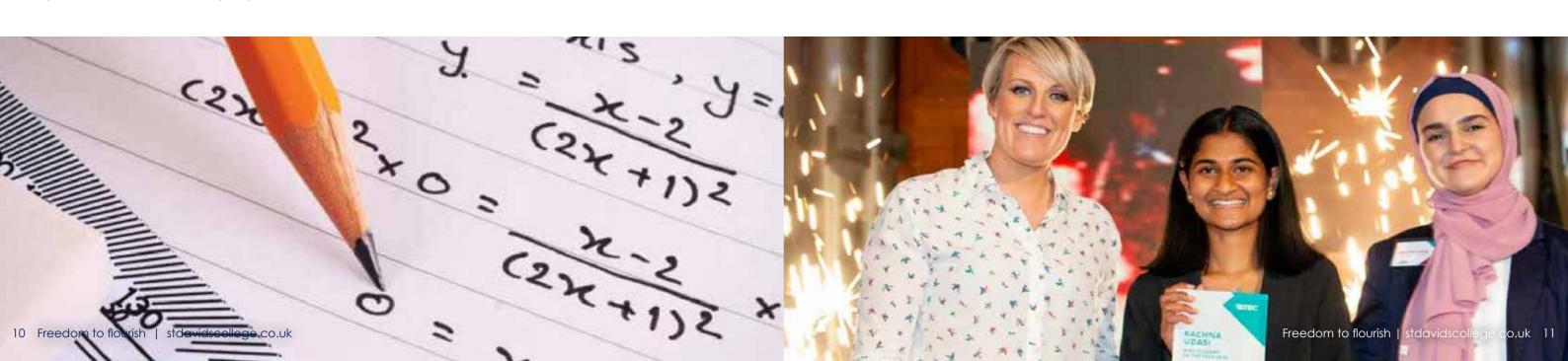
The qualification provides opportunities for learners to develop their communication skills as they progress through the course.

This can be through presentations and discussions in which pupils have the opportunity to express their opinions. Pupils are encouraged to take responsibility for their own learning and achievement, taking into account industry standards for behaviour and performance.

#### **Course Content**

Within this qualification, pupils cover a range of topics including:

- Enterprise and Entrepreneurs
- Developing a Marketing Campaign
- Personal and Business Finance
- Social Enterprise
- Enterprise and Entrepreneurship in Practice



## Geography

### **Exam Body WJEC**

### **Head of Faculty**

Matthew Roberts mroberts@stdavidscollege.co.uk

The course allows pupils to strengthen knowledge, skills and develop research methods to leave school life as a highly adaptable, employable and desirable individual. The courses add detail to that learnt during, GCSE whilst also introducing a vast array of new topics.

During the two years there will be ample opportunities for field visits, including an opportunity to take part and represent a country of their choice in a model United Nations conference.

The Department prides itself on being well resourced with textbooks and field equipment as well as digitally and online. Department members are specialist and enthusiastic and integrate their own experiences of global travel and Geography into lesson content. This caters for a wide-ranging form of teaching and learning styles, meeting the needs of every pupil.

#### **Course Content AS**

AS Unit 1: Changing Landscape Written Exam 2 hours

AS unit 2: changing Places Written Exam 1 hour 30 minutes

#### **Course Content A Level**

A2 Unit 3: Global Systems and Global Governance

Written Exam 2 hours

A2 Unit 4: Contemporary Themed in Geography

Written Exam 2 hours



### **Exam Body**

AQA

#### **Head of Faculty**

Matthew Roberts mroberts@stdavidscollege.co.uk

History isn't a subject that is stuck in the past. Far from it! Historical events have shaped who we are today, and this is true across the world. Did you know that Magna Carta, a document signed in 1215, is the basis of the US constitution?

The A level History course is designed to help pupils understand the value and significance of world events in the past. In the process, they will gain deeper understanding of social, cultural, religious and ethnic diversity. Knowing how people lived in the past helps us to understand why people act like they do today.

Skills that history pupils develop:

- The ability to analyse.
- The ability to make informed criticisms.
- Independent research skills.
- Oraanisation.
- The ability to listen and work with others.
- To develop your own opinion.

This is a two-year A level course with all examinations being taken in year 13.

#### **Course Content**

• Unit 1: The Tudors: England, 1485–1603

Part one: Consolidation of the Tudor Dynasty: England, 1485–1547

• Henry VII, 1485–1509

• Henry VIII, 1509–1547

Part two: England: turmoil and triumph. 1547-1603 (A-level only)

- Instability and consolidation: 'the Mid-Tudor Crisis', 1547–1563
  The triumph of Elizabeth, 1563–1603
- Unit 2: The American Dream: reality and illusion, 1945–1980

- Truman and Post-war America, 1945–1952
- Eisenhower: tranquility and crisis,
- John F Kennedy and the 'New Frontier',

Part two: challenges to the American Dream, 1963–1980 (A-level only)

- The Johnson Presidency, 1963–1968
- Republican reaction: the Nixon
- The USA after Nixon, 1974–1980
- Unit 3: Topic based essay.



## English Language and Literature

### **Exam Body**

AQA

#### **Head of Department**

Jennifer Turner jturner@stdavidscollege.co.uk

This qualification offers opportunities for pupils to develop their subject expertise by engaging creatively and critically with a wide range of texts. Using literary and linguistic concepts and methods, pupils analyse literary and non-literary texts in a range of modes and genres, in the process gaining insights into the nature of different discourses and ideas about creativity. Pupils develop skills as producers and interpreters of language by creating texts themselves and critically reflecting on their own processes of production.

The topics and titles of the subject content clearly signpost the key areas of study and separate the content both logically and distinctively. 'Views and Voices' focuses on how and why views and perspectives of different kinds are shaped and used in narratives, and how language choices help to shape the representations of different worlds and perspectives. 'People and Places' retains this focus on language choices (which pervades the specification) but looks at how these choices help to shape the representations of a place, along with different perspectives.

Literary texts are defined as those that are drawn from the three main literary genres of prose fiction, poetry and drama. 'Non-literary' is an overarching term which describes more than simply non-fiction.

#### **Course Content**

AS Paper 1: Views and Voices Written examination: 1.5 hours AS Paper 2: People and Places

Written examination: 1.5 hours

A2 Paper 1: Telling Stories

A2 Paper 2: Exploring Conflict

Written examination: 2.5 hours

A2 Coursework: Making Connections

Personal investigation: 2500-3000 word

It includes non-fiction but also texts and data that are not formally published and marketed – for example, personal letters, spontaneous speech, multimedia texts. Non-literary texts do not have to occur in continuous prose: they can be charts and diagrams, transcripts, lists.

## Performing Arts

#### **Exam Body**

Pearson (BTEC Level 3)

### **Head of Department**

Jennifer Appleton jappleton@stdavidscollege.co.uk

Performing Arts is the window to a whole new world of career opportunities. Choosing to study for a BTEC Level 3 Performing Arts Qualification is a great decision to make for lots of reasons.

Pupils will investigate different areas of the performing arts, leading them into a whole range of professions and sectors, allowing them to explore their creativity in many ways.

The BTEC Level Performing Arts course is a vocational or work-related qualification. As part of the assessment approach pupils will receive feedback on their progress after the completion of units throughout the course as they provide evidence towards the grading criteria.

The BTEC qualifications in these specifications have been developed in the performing arts sector to:

- Provide education and training for Performing Arts employees.
- Give Performing Arts employees opportunities to achieve a nationally recognised Level 3 vocationally specific qualification which will give the same UCAS points as an A2 level qualification.
- Give pupils the opportunity to enter employment in the Performing Arts sector.
- Give pupils the opportunity to develop a range of skills and techniques, personal skills and attributes essential for successful performance in working life.

#### **Course Content**

Unit 7: Performing to an Audience i

Unit 19: Principles of Acting

Unit 17: Developing Voice for the Actor

Unit 18: Auditions for Actors.

Candidates who enjoy and want to pursue a potential career in Musical Theatre have the opportunity to study

Unit 30: Singing Skills for Actors & Dancers
Unit 14: Musical Theatre Performance.

Alternatively, if a pupil would prefer the acting route, they would complete:

Unit 9: Devising Plays and
Unit 10:Theatre in Education



## Music Performance

#### **Exam Body**

Pearson (BTEC Level 3)

#### **Head of Department**

Jennifer Appleton jappleton@stdavidscollege.co.uk

This is a modular, practically based course which focuses on performing and composing music in any style. Pupils need to be able to play or sing or DJ for this course.

The course teaches the knowledge and skills pupils will need to work in the music industry, and how different organisations collaborate to make it work.

Pupils will work as part of a band to plan and market performances and concerts, and they will learn about musical equipment and the recording

To complete the Subsidiary Diploma there are 6 modules over the 2-year course. The Certificate option includes the first 3 modules over one year.

BTEC music opens doors to careers in Performing, Producing, Composing, and Sound Engineering, and really develops pupils as a musician. Pupils are also expected to take a full part in the musical life of the school and be an excellent role model for the younger years.

#### **Course Content**

# Applied Psychology

#### **Exam Body**

Pearson (BTEC Level 3)

### **Head of Department**

Sue Davies

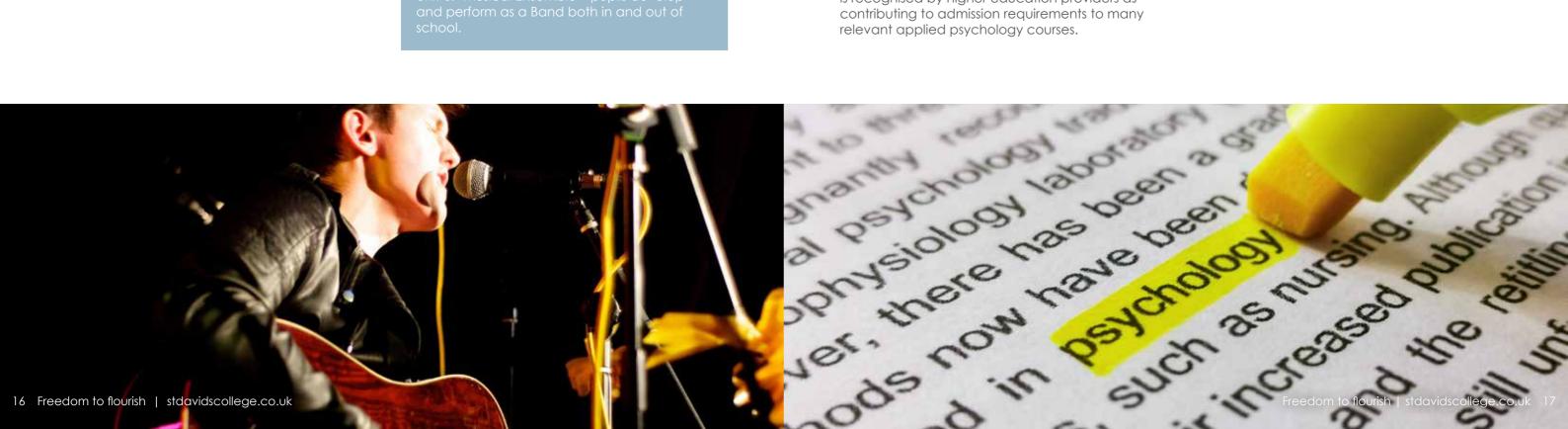
sdavies@stdavidscollege.co.uk

The Pearson BTEC Level 3 National Extended Certificate in Applied Psychology, is an applied qualification for learners who wish to continue their education through applied learning, and who aim to progress to higher education and ultimately to employment, possibly in the applied psychology sector. The qualification is the equivalent of one A Level and can be combined with other Level 3 BTEC or A-level qualifications. No prior experience in the field is necessary however a level 4 in GCSE Maths and 5 in English are recommended.

The qualification provides the knowledge, understanding and skills that will prepare students for further study or training. To complete the Extended Certificate learners will study four units, covering the following content areas:

Assessment is specifically designed to fit the purpose and objective of the qualification. It includes a range of assessment types and styles suited to vocational qualifications in the sector. There are three main forms of assessment that you need to be aware of: external, internal and synoptic. The qualification carries a maximum of 56 UCAS points, equivalent to an A Level, and is recognised by higher education providers as contributing to admission requirements to many

#### **Course Content**



## BTEC Sport

#### **Exam Body**

Pearson (BTEC Level 3)

#### **Head of Department**

Dan Lycett

dlycett@stdavidscollege.co.uk

As part of the BTEC Sport Level 3 we offer the National Diploma which is equivalent to two A-Levels and the Extended Certificate which is equivalent a single A-Level

This course at St David's College focuses on coaching aspects of the discipline and is wholly internally assessed

It delivers transferable knowledge and abilities, including the capacity to learn independently, engage in active research, and deliver presentations, while covering a variety of diverse units.

In the teaching and learning phases of the BTEC Sport Level 3, course there will be opportunities for pupils to practice in improving employability skills:

- cognitive and problem-solving skills using critical thinking, approaching non-routine problems, applying expert and creative solutions, using systems and technology
- interpersonal skills communicating, working collaboratively, negotiating and influencing, self-presentation
- intrapersonal skills self-management, adaptability and resilience, self-monitoring and development.

Assessment is specifically designed to fit the purpose and objective of the qualification. It includes a range of assessment types and styles suited to vocational qualifications in the sector.

There are three main forms of assessment that you need to be aware of: external, internal and synoptic.

#### **Course Content**

#### **Mandatory Units**

- Anatomy and Physiology
- Fitness Training and Programming for Health Sport and Well-being
- Professional Development in the Sports Industry

#### Optional Units

- Sports Leadership
- Application of Fitness Testing
- Sports Psychology
- Practical Sports Performance

## Sport and Outdoor Activities

#### **Exam Body**

Pearson (BTEC Level 3 1.5 A Levels)

### **Head of Department**

Ian Martin

imartin@stdavidscollege.co.uk

For our Year 12 and 13 pupils, we offer a BTEC Level 3 Foundation Diploma in Sport and Outdoor Activities. This course has been designed for post-16 learners who wish to gain employment in any sector of the Outdoor Activity industry. It might also be an attractive option to pupils who might not be considering employment in the Outdoor Activities sector, but have a strong personal interest in Outdoor Activities and have a desire to explore the subject further.

Combined with other Level 3 subjects, this qualification supports progression to a range of higher education courses, as well as various training and apprenticeship schemes in the sector. Pupils will gain the underpinning knowledge, skills and behaviours needed to work in the Sport and Outdoor Activities sector. Pupils will also focus on exploring factors affecting the outdoor sector and how to maintain health and safety, including in respect of the equipment and facilities required for participation in outdoor activities and their responsibilities to the environment in which they are operating.

The course is largely practical in nature, and we are lucky to be able to make use of some world-class venues right here on our doorstep. Activities through which the course is delivered might include paddlesports, sailing, climbing, mountaineering and caving to name a few.

#### **Course Content**

The units taught on the course are:

- Personal Skills Development in Outdoor Activities
- Outdoor Activity Provision
- Expedition Experience
- Careers in the Sport and Active Leisure Industry
- Health, Well-being and Sport
- Health and Safety Factors in Outdoo Learning



# Duke of Edinburgh Award

#### **Head of Department**

Ian Martin

imartin@stdavidscollege.co.uk

St David's College uses the Duke of Edinburgh's Award scheme to provide an additional, challenging, fun and rewarding programme of high-quality personal development as part of it's Outdoor Education provision. The scheme encourages pupils to undertake exciting, constructive, adventurous and enjoyable activities in their free time.

The Award adds an extra dimension to the extra-curricular program and supports pupils in developing personal and social relationships which enable them to learn for life, lead healthy lifestyles and help to manage risk. The recognition from achieving the Award has international renown and prestige.

There are many benefits to St David's pupils taking part in the Bronze, Silver or Gold Duke of Edinburgh's Award. Some of these are listed below:

- Self-belief.
- Self-confidence.
- A sense of identity.
- Independence of thought and action.
- A sense of responsibility.
- An awareness of their potential.
- Understanding strengths and weaknesses.
- Public recognition for achievements.

## Duke of Edinburgh's Award Sections:

There are four individual 'Sections' that have to be complete to obtain the awards. Each of these need to be committed to over a set period of time, with evidence logged onto the DofE App or Website.

- Volunteering
- Physica
- Skill:
- Expedition
- The ability to plan and use time effectively.
- The ability to learn from and give back to others in the community.
- New relationships.
- Skills including problem-solving, presentation and communication.
- The ability to lead and work as part of a team.
- Sense of satisfaction in meeting and succeeding a series of different challenges.





St David's College • Gloddaeth Hall • Llandudno • LL30 1RD



www.stdavidscollege.co.uk