

# **Year 10 Sport Science**



#### **AUTUMN TERM**

- Relevance of Components of Fitness to Different Sports
- Assessing Components of Fitness through Fitness Testing
- Principles of Training and Goal Setting in a Sporting Context Methods of Training and their Benefits
- Aerobic and Anaerobic Respiration

### **SPRING TERM**

- Planning and Designing a Fitness Based Training Programme
- Conducting and Monitoring a Fitness Training Programme
- Recording and Analysing Results

#### **SUMMER TERM**

- Evaluate Effectiveness of Fitness Training Programme
- Components, Functions & Role of the Cardio-Respiratory System During Exercise
- Knowledge of Heart/Pulse Rate, Blood Pressure and Gaseous Exchange

# Curriculum Overview - Applying the Principles of Training / The Body's Response to Physical Activity

In this academic year students will learn how to conduct a range of fitness tests, what they measure and their advantages and disadvantages. They will also learn how to design, plan and evaluate a fitness training programme using knowledge of training methods, principles of training and components of fitness. Students will interpret the data collected from fitness tests and evaluate this to make informed decisions about their fitness training programme. They will also begin to learn how the cardio-respiratory system provides them with the energy needed to keep them exercising and in turn how exercise helps develop this system.



# **Year 11 Sport Science**



#### **AUTUMN TERM**

- Components and Role of the Musculo-Skeletal System in Producing Movement
- Focus on Major Bones, Muscles and Joints
- Knowledge of Types of Movement
- Short / Long Term Effects of Exercise on Cardio-Respiratory & Musculo-Skeletal Systems

#### **SPRING TERM**

- Extrinsic and Intrinsic Factors which Influence the Risk and Severity of Injury
- Key Components & Benefits of both a Warm Up & Cool Down
- Different Types of Injury including both Chronic and Acute Injuries
- Measures taken Before/During Participation to Reduce Injury

#### **SUMMER TERM**

- Responses and Treatment of Common Injuries & Medical Conditions
- Particular Focus on Asthma, Diabetes, Epilepsy, Sudden Cardiac Arrest, Hypothermia, Heat Exhaustion and Dehydration
- External Exam Assessment

# Curriculum Overview - The Body's Response to Physical Activity / Reducing the Risk of Sports Injuries

In this academic year students will learn how both the cardio-respiratory and musculo-skeletal systems provide them with the energy and movement needed to keep them exercising and in turn how exercise helps develop both of these body systems and how technology informs this.

Students will also learn how to prepare participants to take part in sport and physical activity in a way which minimises the risk of injuries occurring; preparing them to be able to respond to common injuries that occur during sport and physical activity and to recognise the symptoms of some common medical conditions.

# **Physical Education - Post 16 Curriculum**



## **Cambridge Technical in Sport:**

This qualification is not just about being able to play sport; it will provide learners
with the skills, knowledge and understanding to progress into Higher Education on a
sport-related programme such as Sport and Physical Education, Sport Science, Sport
Coaching and Development or Sport and Leisure Management.

### **Curriculum Overview: Learners will take 2 mandatory units in year 1:**

<u>Body systems and the effects of physical activity:</u> In this unit you will gain an understanding of the structures and functions of the key body systems, how these support and impact performance in sport and physical activity and the effects that physical activity, training and lifestyle can have on them.

Sports coaching and activity leadership: This unit will give you an understanding behind the theory of what makes good sports coaches and activity leaders and methods that can be employed to improve the performance of participants. You will explore the roles and responsibilities of coaches and leaders and how these differ from each other and others involved in delivering and teaching sport and physical activity. The main part of the unit is related to developing the skills and understanding necessary to effectively plan and deliver a series of sports or activity sessions reflecting on your own practice and using this feedback to improve your performance as a sports coach or activity leader.

These units will give learners an understanding of sport within the wider contexts of coaching and leadership, anatomy and physiology and the body's short and long term responses to physical activity. Learners will also develop transferable skills such as planning, communication, adaptability and leadership.

# Physical Education - Post 16 Curriculum Cambridge Technical in Sport year 2:

Learners will take 3 additional units:

Sports Organisation and Development - In this unit you will gain an understanding of the organisations involved in sport in the UK, their roles and responsibilities and how they work together. You will also gain an understanding of sports development, including the organisations involved, who sports development is targeted at and why, how sports development is carried out and how the success of sports development initiatives can be measured.

Performance Analysis in Sport - For elite sports performers, even the smallest margins can mean the difference between winning and losing, success and failure. Even for performers who are not competing at the top level, the desire to improve and 'be the best that I can be' means that analysing performance and getting constructive feedback is an important part of participating in sport and exercise. This unit will give you the skills and knowledge required to carry out performance profiling and analysis and deliver feedback to the performers in a manner that is suitable for them.

Sports Injuries and Rehabilitation - If considering a future as a sports coach or leader, a fitness instructor or a leisure recreation assistant, you will need to know the different causes, types, signs and symptoms of sports injuries. You will also need to know the possible effects of these injuries on the injured participant, both physical and psychological. This will allow you to support the injured participant appropriately. However, prevention is better than cure, so an understanding of risk factors and how to minimise risks will help maintain a safe environment. This unit will teach you how to recognise and treat sports injuries both immediately and through long-term rehabilitation programmes, the possible psychological impacts of sports injuries and how to minimise the risk of sports injuries occurring in the first instance.

# **Physical Education - Post 16 Curriculum**



### **Academy of Sport: BTEC Extended Diploma in Sport**

- Students will undertake a number of mandatory units throughout this programme including:
- Anatomy and Physiology
- Fitness Training and Programming for Health, Sport and Well-being
- Professional Development in the Sports Injury
- Sports Leadership
- Practical Sports Performance
- Coaching for Performance
- Research methods

### **Curriculum Overview**

BTEC Nationals are designed in collaboration with employers and representatives from higher education. This ensures that content is up to date and that it includes the knowledge, understanding, skills and attributes required in the sector. The mandatory and optional content provides a balance of breadth and depth, while retaining a degree of choice for individual learners to study content relevant to their own interests and progression choices. The proportion of mandatory content ensures that all learners are following a coherent programme of study and acquiring the knowledge, understanding and skills that will be recognised and valued. BTEC Nationals require applied learning that brings together knowledge and understanding with practical and technical skills. This is achieved through learners performing tasks that encourage the development of appropriate behaviours and transferable skills. Transferable skills are those such as communication, teamwork, research and analysis, which are valued in both higher education and the workplace.

# **Extra Curricular Sport**

#### The Department is committed to the following extra-curricular pledges:

- Open Door Policy: **All** students are given the opportunity to access a wide range of extra curricular clubs for team sports and individual activities, regardless of ability levels.
- Talented students will be encouraged to pursue excellence in their sport through all available pathways, including but not limited to
  - District/County Nominations as appropriate
  - Established pathways and progression towards local clubs
- Competitions and Leagues will be entered across a wide range of activities at local and regional level to maximise the
  opportunities for students to experience inter-school competition.
- Effective relationships will be established and maintained with local clubs and providers so that students can be offered opportunities outside of school to pursue and develop their sporting interests.
- To utilise competitive extra-curricular sport as a vehicle to promote and develop positive personal qualities for our students.