

Practitioners Guide

# **Welcome to BTEC Sport+ (2019)**

Pearson has created this digital learning solution to respond to a growing demand from learners to help them build knowledge through accessible and engaging online content, particularly in the form of bite-sized topics and activities.

The digital learning solution is aligned to the career-focused 2019 BTEC Nationals in Sport. Providing depth and breadth of detail to support learners and practitioners with these industry standards mapped qualifications. The learning topics and activities are also well positioned to support additional learning and qualifications that resonate with the sport-specific knowledge and application that are covered. Each of our topics looks at the knowledge, behaviours, and skills to support the learning during study, practice and beyond. Learners will engage with a range of presentation formats and stimuli to introduce, develop, and reinforce understanding. This document contains a contents guide, so you know which units and or topics we have covered to empower your study programme.

This solution has the flexibility for practitioners, departments, and centres to be used in a magnitude of ways to support teaching, learning and assessment, whilst also being perfect to support blended learning delivery; in the classroom, before or during a lesson, or via the Learning Hub app for the learners to access in their own time to facilitate independent study.

Find out more about how **Learning Hub** can support your digital learnings solutions.



# Download the app

Click the icons below, or search Pearson LearningHub where you find apps.





# The solution

BTEC Sport+ (2019) is designed for students undertaking our newest suite of BTEC Nationals in Sport:

- BTEC National in Sport and Outdoor Activities
- BTEC National in Sport, Fitness and Personal Training
- BTEC National in Sporting Excellence and Performance
- BTEC National in Sports Coaching and Development

The digital learning solution includes exciting approaches to learning and assessment. It includes practitioner lead introductory videos to present the learning within an industry and applied context. A range of contemporary, rich materials provide engaging knowledge content and self-marking quizzes and formative assessments provide learners with instant feedback to ready them for their next steps to empower progress and achievement.

# **Web for BTEC**

Included in your access to BTEC Sport+(2019) is Web for BTEC, a new digital support tool designed to give your vocational learners the research tools they need to focus and achieve success.



# What units are available?

BTEC Sport 2019+ Unit A Careers in the Sport and Active Leisure Industry

BTEC Sport 2019+ Unit B Health, Wellbeing and Sport

BTEC Sport 2019+ Unit E Research Project in Sport

BTEC Sport 2019+ Unit 1 Sport Development

BTEC Sport 2019+ Unit 2 Self-employment in Sport and Physical Activity

BTEC Sport 2019+ Unit 4 Nutrition for Physical Performance

BTEC Sport 2019+ Unit C1 Developing Coaching Skills

BTEC Sport 2019+ Unit D1 Applied Coaching Skills

BTEC Sport 2019+ Unit C2 Fitness Skills Development

BTEC Sport 2019+ Unit D2 Personal Trainer Skills Development

# Unit A: Careers in the Sport and Active Leisure Industry

#### **Module 1**

Health, Safety and Employment Law in Sport

Health and Safety at Work Legislation

Health and Safety at Work in Context

Employment Legislation: Worker Status

Employment Legislation: Legislation



Employment Law: The Contract of Employment

Money at Work

**Working Time Regulations** 

Dismissals and Appeals

Dismissals and Appeals

Representation and Trade Unions

# CHECK YOUR LEARNING 2

End of Module Summary • End of Module Assessment

#### **Module 2**

Safeguarding and Child Protection

Safeguarding Children and Young Adults: Key Principles

Key Principles of Safeguarding in Context

Types and Indicators of Abuse

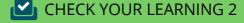
## CHECK YOUR LEARNING 1

Appropriate and Inappropriate Behaviour Around Children

Disclosure and Barring Service

Safeguarding Standards in the Sports Industry

Safeguarding Procedures



Applying for a Job in Sport and Active Leisure

Job Descriptions and Person Specifications

Educational and Role-specific Requirements

Personal Qualities

Basic Skills and Experience

**Employability Skills** 

CHECK YOUR LEARNING 1

Specific Technical Skills

Exploring Job Roles

Personal Skills Audit

Developing a Timescale For Career Development

Planning Personal Development



CHECK YOUR LEARNING 2

End of Module Summary • End of Module Assessment

#### **Module 4**

Resources Needed to Get a Job in the Sports Industry

Analyzing a Job Advertisement

Finding a Suitable Job Role

**Exploring the Application Process** 

The Purpose of a CV

Writing a CV

Letters of Application

Writing a Letter of Application

Completing a Job Application Form



CHECK YOUR LEARNING

End of Module Summary • End of Module Assessment

#### **Module 5**

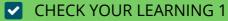
Interview Skills for a Career in Sport and Active Leisure

**Interview Approaches** 

The Interview Process

Research for a Job Interview

Using Social Media to Stand out at your Interview



Other Forms of Preparation for a Job Interview

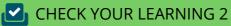
Creating the Right Impression at a Job Interview

Questions to Ask at an Interview

Questions Not to Ask at a Job Interview

Questions That You Should Not Be Asked at a Job Interview

How to Calm Your Nerves Before a Job Interview





# **Unit B: Health, Wellbeing and Sport**

#### **Module 1**

Types of Physical Activity and Participants

Sport and Physical Education (PE)

Types of Outdoor Activities

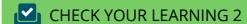
Physical Recreation and Physical Fitness

CHECK YOUR LEARNING 1

Age and Physical Activity

The Effects of Physical Activity on Different Participants

Cultural and Ethnic Groups and their Participation in Physical Activity



End of Module Summary • End of Module Assessment

#### **Module 2**

Physical, Mental and Social Health

Physical Health

Factors Affecting Physical Health

Mental Health

CHECK YOUR LEARNING 1

Social Wellbeing

Factors Affecting Mental Health and Social Wellbeing

Signs and Symptoms of Poor Mental Health and Social Wellbeing

CHECK YOUR LEARNING 2

End of Module Summary • End of Module Assessment

#### **Module 3**

Benefits and Reasons for Participation in Sport and Physical Activity

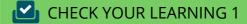
Physical Health Benefits of Sport and Physical Activity: A Healthy Heart

Physical Health Benefits of Sport and Physical Activity: Appropriate Body Fat Ratio

Physical Health Benefits of Sport and Physical Activity: Muscle

Physical Health Benefits of Sport and Physical Activity: Metabolic Rate

Mental Health Benefits of Sport and Physical Activity



Social Reasons for Providing Sport and Physical Activity: Health Agendas and Community Cohesion

Physical activity and Sport Reducing Antisocial Behaviour, Crime and Stress and Increased Employment

Financial Reason for Providing Sport and Physical Activity in the UK

**Natural Spaces for Recreation** 

Historical Benefits of Providing Sport and Physical Activity in the UK

# CHECK YOUR LEARNING 2

**Evaluating Health and Wellbeing** 

**Blood Pressure** 

Monitoring Heart Rate

Waist-to-hip Ratio

Body Mass Index (BMI)

**Bioelectrical Impedance** 

# CHECK YOUR LEARNING 1

**Health Screening Questionaries** 

Recommended Alcohol Intake

Sleep Requirements

Diet and Hydration Levels

Measuring Wellbeing

## CHECK YOUR LEARNING 2

End of Module Summary • End of Module Assessment

#### **Module 5**

Undertaking Health and Wellbeing Screening with Clients and Strategies to Improve their Health

Communication Skills and Customer Service

Interpreting Health Monitoring Tests: A Case Study

# CHECK YOUR LEARNING 1

Strategies to Improve Physicall Health

Strategies to Improve Mental Health and Wellbeing

Strategies to Improve Diet

Providing Feedback to a Client

# CHECK YOUR LEARNING 2

End of Module Summary • End of Module Assessment

# **Unit 1: Sport Development**

# **Module 1**

Concepts of the Sports Development Continuum

The Sports Development Continuum

The Foundation Stage of the Sports Development Continuum

The Participation Stage of the Sports Development Continuum

The Performance Stage of the Sports Development Continuum

The Excellence Stage of the Sports Development Continuum

Factors That Affect Each Stage of Performance on the Sport Development Continuum

# CHECK YOUR LEARNING 1

The Purpose of Sports Development

**Cross-cutting Agendas** 

Social and Cultural Barriers to Participation

Economic, Historical and Educational Barriers to Participation

Target Groups in Sports Development

## CHECK YOUR LEARNING 2



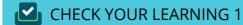
**Key Providers of Sports Development** 

The Public Sector

The Private Sector

The Voluntary Sector

Public, Private and Voluntary Provision



**Sport England** 

Department for Digital, Cultural, Media and Sport

**Youth Sport Trust** 

Local Providers of Sports Development

**National Governing Bodies of Sport** 

The Structure of Sports Development Organisations

Case Study

# CHECK YOUR LEARNING 2

End of Module Summary • End of Module Assessment

#### **Module 3**

Jobs in Sports Development and Their Roles and Responsibilities

Job Roles in Sports Development

Sports Development Officer Job Role

Coaching, Leading and Managing Sport Job Roles

Community Volunteering Roles

Youth Work Job Roles

Health Improvement Job Roles

## CHECK YOUR LEARNING 1

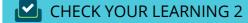
Roles in Sports Development

Responsibilities in Sports Development

Qualifications and Training Required

Employers in Sports Development

Wider Skills and Knowledge in Sports Development



End of Module Summary • End of Module Assessment

#### **Module 4**

Sports Development in Practice

Local Initiatives

Activities Aimed at Target Groups

Case Study 1: Target Groups

Partnership Activities

Case Study 2: Partnership Activities

**National Initiatives** 

Case Study 3: National Initiatives



Project Planning

One-off Events

Series of Activities

Measures of Success

Exit Routes and Lifelong Participation





# **Unit 2: Self-employment in Sport** and Physical Activity

#### **Module 1**

Starting Your Own Business

Types of Self-Employment

Starting a Self-Employment Journey

**Trading Practices** 



Personal Skills and Professional Behaviours

**Developing Your Adaptability** 

Personal Skills and Behaviour Checkpoint



**CHECK YOUR LEARNING 2** 

End of Module Summary • End of Module Assessment

#### **Module 2**

The Customer, Client, and Self-employment Opportunities in Sport, Fitness and Outdoor Activity

Types of Customer

**Customer and Client Needs** 

Market Segmentation

#### CHECK YOUR LEARNING 1

Growth Opportunities and Emerging Technologies in the Sport, Fitness and Outdoor Activity Sectors

The Customer Journey

Customer Retention and Methods of Feedback

Different Self-employment Roles in Sport

**Evaluating Self-employment Opportunities** 



#### **CHECK YOUR LEARNING 2**

End of Module Summary • End of Module Assessment

#### Module 3

Creating a Business Plan and Strategy for Your Business

Creating a Business Plan

Types of Business Ownership

**Customer Target Group and Customer Profiles** 

**Business Objectives** 

**Financial Plans and Projections** 

The Role of Stakeholders

Measuring Customer and Client Satisfaction

Identifying and Sourcing Finances

Meeting Legal Requirements

Managing Finances for Self-employment



#### CHECK YOUR LEARNING 1

Market Research

Sales Planning

Developing a Marketing Plan



#### CHECK YOUR LEARNING 2

End of Module Summary • End of Module Assessment

#### **Module 4**

Pitching and Presenting your Business Plan

Presenting a Business Plan

Collecting Feedback

**PESTLE Analysis** 

Reviewing the Feasibility of the Business Plan

Reviewing Own Skills Development

**Networking Opportunities** 

Developing a Brand



# CHECK YOUR LEARNING

End of Module Summary • End of Module Assessment

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# **Unit 4: Nutrition for Physical Performance**

#### **Module 1**

Diet, Nutrition and Hydration

**Nutrition Terminology** 

Carbohydrates

Protein

Fats

Vitamins and Minerals

Fibre

Guidelines for a Balanced Diet

**Food Labelling** 

# CHECK YOUR LEARNING 1

Hydration and Dehydration

Fluid Intake and Types of Fluids

Influence of Nutrition on Health

## CHECK YOUR LEARNING 2

End of Module Summary • End of Module Assessment

#### **Module 2**

**Nutrition for Performance** 

Structure of the Digestive System

Functions of the Digestive System

**Energy Intake and Expenditure** 

**Sports Activity Case Studies** 

# CHECK YOUR LEARNING 1

Measuring Body Composition – BMI

Measuring Body Composition - BIA

Measuring Body Composition – Skinfold and Hydrodensitometry

Measuring Energy Expenditure – Direct and Indirect Calorimetry

**Energy Balance** 

# CHECK YOUR LEARNING 2

#### End of Module Summary • End of Module Assessment

#### **Module 3**

Performance Enhancing Substances and Drug Testing

Supplements to Enhance Performance

Substances Prohibited in Sport

Prohibited Methods of Performance Enhancement

**Substances Prohibited in Competition** 

## CHECK YOUR LEARNING 1

World Anti-doping Agency (WADA)

**UK Anti-doping** 

Athletes' Responsibilities and Sanctions of Doping

Consequences of Doping

**Testing Process and Athlete Whereabouts** 

# CHECK YOUR LEARNING 2

End of Module Summary • End of Module Assessment

#### **Module 4**

Producing a Diet Plan for an Athlete

Needs Analysis for Selected Sports and Physical Activities

Estimating Daily Calorie Needs for Individuals

Adapting Macronutrient Intake to Needs of Different Sports and Activities

Calculating Percentage of Macronutrient Intake

# CHECK YOUR LEARNING 1

**Nutritional Assessment Tools** 

Good Nutritional Choices for Sport and Physical Activity

Hydration Needs of Different Activities

Pre, Inter and Post Event Nutrition

Nutrition Case Study: Weight Loss

**Nutrition Case Study: Muscle Mass** 

Nutrition Case Study: Endurance Athlete

## CHECK YOUR LEARNING 2

# **Unit C1: Developing Coaching Skills**

#### **Module 1**

Roles and Responsibilities of an Assistant Coach

Vision, Mission Statement and Values

Impact of Coaching on Participants and Community

Organisational Aims and Objectives



Coaching Code of Conduct

Knowledge of Participants

**Professional Conduct** 

Policies and Procedures

Law and Legislation



CHECK YOUR LEARNING 2

End of Module Summary • End of Module Assessment

#### **Module 2**

Leadership and Learning

Leadership Styles

**Classical Conditioning** 

**Operant Conditioning** 



CHECK YOUR LEARNING 1

Observational Learning

Thorndike's Laws

Coach, Self and Peer Assessment

Methods of Assessment

Skills Classification: Open and Closed Skills

Skills Classification: Gross and Fine Skills

Skills Classification: Simple and Complex Skills

Skills Classification: Discrete, Serial and Continuous Skills

Skills Classification: One Skill on All Continuums



CHECK YOUR LEARNING 2

End of Module Summary • End of Module Assessment

#### Module 3

Planning for Participation

**Gathering Information About Participants** 

**Establishing Coaching Goals** 

Planning Activities for a Sport and Activity Session

Planning Activities for Participants, the Timing of the Session and Equipment Available

**Differentiated Coaching** 

Risk Assessment and Contingency Planning



CHECK YOUR LEARNING 1

**Facility Safety Check** 

Maintenance and Storage of Equipment

Effective Use of Space for a Sports Activity Session

Preparing Participants for a Sports Activity Session

Assistant Coach Related Legal Obligations



CHECK YOUR LEARNING 2

End of Module Summary • End of Module Assessment

#### **Module 4**

Coaching Skills to Deliver Effective Coaching Sessions

Building Rapport and Good Relationships With Participants

**Verbal Communication** 

Non-verbal Communication

Good Organisation in Coaching



CHECK YOUR LEARNING 1

Ways to Ensure Participants Enjoy Taking Part in Sports Sessions and Continue to Participate

Behaviour Management

Getting Feedback on your Coaching



CHECK YOUR LEARNING 2

**Delivering a Sport and Activity Session** 

Components of a Warmup: Pulse Raiser

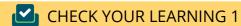
Components of a Warmup: Mobiliser

Components of a Warmup: Stretch

Games-based Warmups

Main Components of a Sports Coaching Session

Cool Downs



Session Planning

Coaching Styles and Coaching Methods

Demonstrations and Explanations in a Sports Session

Communicating with Participants in a Sports Session

Using Questioning When Coaching

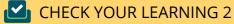
Adapting and Revising Sports Session Plans

Health and Safety for a Sports Session

Dismantling, Taking Down and Storing Sports Equipment

Legal and Organisational Responsibilities of an Assistant Coach

Customer Service Skills in Sports Coaching



End of Module Summary • End of Module Assessment

#### **Module 6**

Reviewing and Developing as a Coach

Gathering Feedback From Participants

Getting Feedback From Your Head Coach

Gathering Feedback From Peers

Reviewing Your Coaching

How to Carry Out Valid Reviews



CHECK YOUR LEARNING 1

Producing a Professional Development Plan

Developing a Coaching Philosophy



CHECK YOUR LEARNING 2

End of Module Summary • End of Module Assessment

# **Unit D1: Applied coaching Skills**

#### **Module 1**

Assessing Participant Needs for a Coaching Programme

Participant Needs

**Managing Expectations** 

Special Equipment and Adaptations

Barriers to Participation



CHECK YOUR LEARNING 1

Participant Data

**Technical and Tactical Profiling** 

**Physical Profiling** 

**Psychological Profiling** 

**Nutrition and Lifestyle Profiling** 

Recording and Storing Personal Data

Coaching Referral



CHECK YOUR LEARNING 2

End of Module Summary • End of Module Assessment

#### **Module 2**

Planning a Coaching Programme

Preparing the Coaching Team

Individual VS Squad Needs

Periodisation

Season Planning



CHECK YOUR LEARNING 1

Programme Goals

Coaching Methods and Styles

Promotion of the Coaching Programme

Lifestyle Support Coaching

**Performance Support Coaching** 

**Monitoring Coaching Progress** 



CHECK YOUR LEARNING 2

Planning Individual Coaching Sessions

Aims and Objectives of a Coaching Session

Maximising the Use of Facilities

**Equipment and Technology** 

Strategies for Differentiation

Complying with Policy and Legislation

Risk Management



CHECK YOUR LEARNING 1

**Pre-Session Preparation** 

Warm-up

Main Activities

Cool Down



CHECK YOUR LEARNING 2

End of Module Summary • End of Module Assessment

#### **Module 4**

Leading a Coaching Programme

Personal Coaching Philosophy

Personal Attributes of a Coach

Communication

**Learning Theories** 

Leadership Styles



CHECK YOUR LEARNING 1

Delegating Roles and Responsibilities

Professional Development of Support Staff

Managing Conflict

**Duty of Care** 



CHECK YOUR LEARNING 2

End of Module Summary • End of Module Assessment

#### **Module 5**

Feedback Techniques and Cycle

Purposes of Feedback

Using Feedback

Further Uses of Feedback

Characteristics of Effective Feedback

Feedback Skills



CHECK YOUR LEARNING 1

The Feedback Process

The Feedback Loop

Methods of Delivering Feedback



CHECK YOUR LEARNING 2

End of Module Summary • End of Module Assessment

## **Module 6**

Monitoring the Coaching Programme

Importance of Session and Programme Aims and Objectives

**Monitoring Individual Progress** 

Coaching Team Feedback

Using Feedback to Adapt a Coaching Programme



CHECK YOUR LEARNING 1

Using Technology to Monitor Progress

Using Performance Data to Adapt the Coaching Programme

Wider Progress Development

Dealing with Ongoing Issues

Continuing Professional Development Opportunities



CHECK YOUR LEARNING 2

End of Module Summary • End of Module Assessment

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# **Unit C2: Fitness Skills Development**

#### **Module 1**

The Cardiorespiratory System

Location of Heart and Lungs

Structure of the Heart

Blood Vessels Around the Heart

Structure and Function of Blood Vessels

**Blood Circulation** 



#### CHECK YOUR LEARNING 1

Function of the Cardiovascular System

**Blood Pressure** 

Structure of the Respiratory System

Function of the Respiratory System

Cardiorespiratory Responses to Acute Exercise

Cardiorespiratory Adaptations to Exercise

Cardiorespiratory Systems of Specific Population Groups



#### CHECK YOUR LEARNING 2

End of Module Summary • End of Module Assessment

#### **Module 2**

The Skeletal System

Structure of the Skeletal System

Anatomical Terms

Bones of the Skeleton

Functions of the Skeleton

Classification of Bones

Structure of Bone

Bone Growth and Remodelling



**CHECK YOUR LEARNING 1** 

# **Module 2 (continued)**

Synovial Joints

Types of Synovial Joints and Their Ranges of Motion

Types of Joint Movement

Posture

Planes of Movement



#### CHECK YOUR LEARNING 2

End of Module Summary • End of Module Assessment

#### **Module 3**

The Musculoskeletal System and Principles of Biomechanics in Exercise

Muscle Tissue Types Within the Body

Skeletal Muscle

Structure and Function of the Pelvic Floor Muscles

Muscle Attachments and Levers

The Effect of Exercise Variables



#### CHECK YOUR LEARNING 1

Types of Muscle Action

Joint Actions by Specific Muscle Group Contractions

Joint Stability

Skeletal Muscle Fibre Types

Musculoskeletal Response to Acute Exercise

Musculoskeletal Response to Resistance-Based Chronic Exercise

Musculoskeletal Adaptations to Aerobic-Based Exercise

Musculoskeletal System in Specific Populations



#### CHECK YOUR LEARNING 2

Energy, Digestive and Nervous Systems

Adenosine Tri Phosphate (ATP)

Overview of the Energy Systems

**Energy Sources** 

Energy Systems' Response to Acute Exercise

Excess Post-exercise Oxygen Consumption (EPOC)

Energy Systems' Response to Chronic Exercise

Structure and Function of the Digestive System

Digestion



#### CHECK YOUR LEARNING 1

Dietary Fibre and Fluid in Digestion

Function of the Liver and Pancreas in Digestion

Role and Functions of the Central Nervous System

Principles of Muscular Contraction

The All or None Law and Motor Unit Recruitment

Nervous System Response to Chronic Exercise

The Nervous System in Specific Populations



#### CHECK YOUR LEARNING 2

End of Module Summary • End of Module Assessment

#### **Module 5**

Client Assessment and Lifestyle Management

**Understanding Gym Customers** 

The Exercise and Fitness Code of Ethics

Client Screening and PAR-Qs

**Risk Stratification** 

Health Assessments: Body Mass Index (BMI)

Health Assessments: Body Fat Tests

Cardiovascular Health

Health Assessments: Submaximal Cardiorespiratory Fitness Tests

Health Assessments: Muscular Strength Tests



#### **CHECK YOUR LEARNING 1**

# **Module 5 (continued)**

Data Protection and Client Confidentiality

Prevention and Management of Common Health Conditions

Theories to Support Client Behaviour Change

Technology and Digital Media to Support Client Participation

Methods to Improve Client Exercise Adherence



#### CHECK YOUR LEARNING 2

End of Module Summary • End of Module Assessment

#### **Module 6**

Health and Safety in an Exercise Environment

Health and Safety in a Fitness Centre

Keeping the Gym Clean

Hazards in the Gym Environment

**Emergency Action Plans and Reporting Incidents and Accidents** 

Manual Handling Techniques



#### CHECK YOUR LEARNING 1

Safe Use and Storage of Gym Equipment

**UK Music License Regulations** 

**Gym Inductions** 



# CHECK YOUR LEARNING 2

Types of Exercise and Exercise Equipment

Types of Gym-based Equipment

Cardiovascular Exercises

Exercises on Fixed Resistance Machines - Upper Body

Exercises on Fixed Resistance Machines - Lower Body



CHECK YOUR LEARNING 1

Free Weight Exercises with Dumbbells

Free Weight Exercises with Barbells

**Bodyweight Exercises** 

**Functional Exercise** 



CHECK YOUR LEARNING 2

End of Module Summary • End of Module Assessment



# **Unit D2: Personal Trainer Skills Development**

# **Module 1**

The Cardiorespiratory System

Location of Heart and Lungs

Structure of the Heart

Cardiac Output and the Cardiac Cycle

Blood Vessels Around the Heart

Structure and Function of Blood Vessels

**Blood Circulation** 



CHECK YOUR LEARNING 1

Function of the Cardiovascular System

**Blood Pressure** 

Structure of the Respiratory System

Function of the Resipratory System

Cardiorespiratory Responses to Acute Exercise

Cardiorespiratory Adaptations to Exercise

Cardiorespiratory Systems of Specific Population Groups



CHECK YOUR LEARNING 2

The Skeletal System

Structure of the Skeletal System

**Anatomical Terms** 

Bones of the Skeleton

Functions of the Skeleton

Classification of Bones

Structure of Bone

Bone Growth and Remodeling



CHECK YOUR LEARNING 1

Synovial Joints

Types of Synovial Joints and Their Ranges of Motion

Types of Joint Movement

Posture

Planes of Movement



CHECK YOUR LEARNING 2

End of Module Summary • End of Module Assessment

## Module 3

The Musculoskeletal System and Principles of Biomechanics in Exercise

Muscle Tissue Types Within the Body

Skeletal Muscle: Terminology and Definitions

Skeletal Muscle: Muscles of the Shoulder and Arms

Skeletal Muscle: Muscles of the Chest, Core, and Back

Skeletal Muscle: Muscles of the Hips and Legs

Structure and Function of the Pelvic Floor Muscles

Sliding filament theory

Muscle Attachments and Levers

The Effect of Exercise Variables



CHECK YOUR LEARNING 1

Types of Muscle Action

Joint Actions by Specific Muscle Group Contractions

Joint Stability

Skeletal Muscle Fibre Types

Musculoskeletal Response to Acute Exercise

Musculoskeletal Response to Resistance-Based Chronic Exercise

Musculoskeletal Adaptations to Aerobic-Based Exercise

Musculoskeletal System in Specific Populations



CHECK YOUR LEARNING 2

End of Module Summary • End of Module Assessment

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Energy, Digestive and Nervous Systems

Adenosine Tri Phosphate (ATP)

Overview of the Energy Systems

**Energy Sources** 

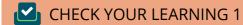
Energy Systems' Response to Acute Exercise

Excess Post-exercise Oxygen Consumption (EPOC)

Energy Systems' Response to Chronic Exercise

Structure and Function of the Digestive System

Digestion



Dietary Fibre and Fluid in Digestion

Function of the Liver and Pancreas in Digestion

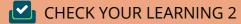
Role and Functions of the Central Nervous System

**Principles of Muscular Contraction** 

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Nervous System Response to Chronic Exercise

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End of Module Summary • End of Module Assessment

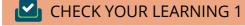
#### **Module 5**

Endocrine System and Biomechanics in Personal Training

Glands and Hormones of the Body

**Endocrine Control of Blood Glucose Levels** 

Signs and Symptoms of Overtraining



# **Module 5 (continued)**

Introduction to Forces

Centre of Gravity

Levers

Kinetic Chain Exercises: Open Versus Closed

Core Exercise and Posture

**Common Spinal Disorders** 



End of Module Summary • End of Module Assessment

#### **Module 6**

Health Conditions and Client Screening

Smoking and Health Conditions Related to Smoking

Alcohol Intake and the Short- and Long-term Effects on the Body

Nutrition

Physical Activity Levels and Preferred Types of Physical Activity

Weight Management and Obesity

# CHECK YOUR LEARNING 1

Stress and Learning to Rest and Relax

Posture

Diabetes

Cardiovascular Chronic Health Conditions.

Skeletal Health Conditions

Cancer and Chronic Fatigue

Client Screening and PAR-Qs

Health Assessments: Body Mass Index (BMI)

Cardiovascular Health Assessments

Health Assessments: Submaximal Cardiorespiratory Fitness Tests

Health Assessments: Muscular Strength Tests

**Risk Factors** 

# CHECK YOUR LEARNING 2

Personal Training Methods

Components of Fitness

Cardiovascular Training Methods and Equipment

**Principles of Cardiovascular Training** 

Muscular Strength and Endurance – Equipment and Intensity

Muscular Strength Training Methods

Training Methods for Muscular Strength and Endurance



CHECK YOUR LEARNING 1

Training Methods for Flexibility

Training Methods for Functional Exercise – Bodyweight

Training Methods for Functional Exercise - Core Stability, **Balance and Coordination** 

**Training Environments** 



**CHECK YOUR LEARNING 2** 

End of Module Summary • End of Module Assessment

#### **Module 8**

**Designing Personal Training Programs** 

Types of Clients

Principles of Training

Periodisation and Progressive Programming

Adapting Fitt: Case Study 1

Adapting Fitt: Case Study 2

Adapting Fitt: Case Study 3



CHECK YOUR LEARNING 1

Instructing a Personal Training Session: Free Weights

Instructing a Personal Training Session: Cardiovascular Exercise

Instructing a Personal Training Session: Functional and Flexibility



**CHECK YOUR LEARNING 2** 

End of Module Summary • End of Module Assessment

# **Unit E: Research Project in Sport**

#### Module 1

Creating a Project Proposal

Benefits of Research

Types of Variables in a Research Project

Types of Hypothesis in a Research Project



CHECK YOUR LEARNING 1

Designing a Rationale for a Research Project

Review of Current Literature

Types of Sources of Information for a Literature Review

Using Quotes and Summarising Information in a Literature Review

Referencing Sources of Information

Ethics, Consent, Confidentiality and Impartiality

Types of Project Design



CHECK YOUR LEARNING 2

End of Module Summary • End of Module Assessment

#### **Module 2**

Data Collection for Research

Primary and Secondary Research

Types of Qualitative Research

Types of Quantitative Research

**Data Classification** 

Validity

Reliability



CHECK YOUR LEARNING 1

# Module 2 (continued)

Managing Participants and Communication

Planning Research and Keeping Records

**Professional Behaviour** 

Operation and Use of Research Materials and Equipment

Risk Assessment and Management

**Recording Data** 



## CHECK YOUR LEARNING 2

End of Module Summary • End of Module Assessment

#### **Module 3**

Interpreting Data and Information

Organising Quantitative Data

Calculation of Quantitative Data – Averages

Standard Deviation

Visualising Information

Inferential Statistics: Correlations

Inferential Statistics: Statistical Significance and Differences Between Means

Meaning and Relevance of Statistics



#### CHECK YOUR LEARNING 1

**Deductive and Inductive Process** 

Types of Qualitative Research Analysis

Coding Qualitative Research

Points of Focus

Validating Qualitative Research



## CHECK YOUR LEARNING 2

End of Module Summary • End of Module Assessment

#### Module 3

Interpreting Data and Information

**Organising Quantitative Data** 

Calculation of Quantitative Data – Averages

Standard Deviation

Visualising Information

Inferential Statistics: Correlations

Inferential Statistics: Statistical Significance and Differences Between Means

Meaning and Relevance of Statistics



#### CHECK YOUR LEARNING 1

**Deductive and Inductive Process** 

Types of Qualitative Research Analysis

Coding Qualitative Research

Points of Focus

Validating Qualitative Research



#### CHECK YOUR LEARNING 2

End of Module Summary • End of Module Assessment

#### **Module 4**

Drawing Conclusions and Presenting a Research Project

**Presenting Data** 

**Bar Charts** 

Line Graphs

Pie Charts

Finding Patterns and Relationships



#### CHECK YOUR LEARNING 1

**Identifying Anomalous Data** 

Relating Results to Original Hypothesis

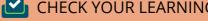
Evaluating and Improving a Research Project

Writing a Conclusion

Writing Up a Research Project



CHECK YOUR LEARNING 2



End of Module Summary • End of Module Assessment

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# Unit and packs available

Unit A	Careers in the Sport and Active Leisure Industry
Unit B	Health, Wellbeing and Sport
Unit E	Research Project in Sport  * BTEC Level 3 National in Sport – Unit 9 & 11  * BTEC Level 3 National in Sport and Exercise Science – units 5 & 9
Unit 1	Sport Development
Unit 2	Self-employment in Sport and Physical Activity  * BTEC Level 3 National in Sport – Unit 12
Unit 4	Nutrition for Physical Performance  * BTEC Level 3 National in Sport and Exercise Science – Unit 11
Unit C1	Developing Coaching Skills  * BTEC Level 2 Sports Industry Skills (Leading Children's Sports Activities) – across the mandatory units
Unit D1	Applied Coaching Skills
Unit C2	Fitness Skills Development  * BTEC Level 2 Sports Industry Skills (Instructing Exercise in a Gym Environment, Instructing Circuit Training) – across the mandatory units
Unit D2	Personal Trainer Skills Development

<sup>\*</sup> There is a significant direct alignment of Sport + (2019) topics with the stated qualifications.

Pack 1	Units A and B
Pack 2	Units A, B and C1
Pack 3	Units A, B, C1, 1 and 2
Pack 4	Units D1 and E
Pack 5	Units A, B and C2
Pack 6	Units A, B, C2 and 2
Pack 7	Units D2 and 4
Pack 8	Units D2, 4 and E
Pack 9	Units A, B and 4
Pack 10	Units A, B, 1 and 4
Pack 11	Units A, B and E

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# **Buisness and Team Management**



# Marketing



# **Sport**



# **Protective Services**



# **CPD and Training for Tutors**

Introduction to Blended Learning
Introduction to Online Learning

Teaching with Technology

<u>Vocational Teaching with Technology</u>



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