
Edexcel BTEC Levels 4 and 5 Higher Nationals specification in Sport and Sport and Exercise Sciences

Contents

Unit 1:	Anatomy and Physiology for Sport and Exercise	1
Unit 2:	Sport and Exercise Psychology	7
Unit 3:	Research Methods for Sport and Exercise Sciences	13
Unit 4:	Biomechanics for Sport	17
Unit 5:	Research Project	21
Unit 6:	Nutrition for Sport and Exercise	25
Unit 7:	Training and Fitness for Sport and Exercise	31
Unit 8:	Field-based Fitness Testing for Sport and Exercise	37
Unit 9:	Principles of Sports Coaching	41
Unit 10:	Applied Sports Coaching	47
Unit 11:	The Evolution of Sports Development	53
Unit 12:	Managing Sports Development	57
Unit 13:	The Sport and Leisure Industry	63
Unit 14:	Marketing Principles	69
Unit 15:	Operating and Managing a Sport and Leisure Facility	75
Unit 16:	Managing in the Health and Fitness Industry	79
Unit 17:	Customer Service	85
Unit 18:	Sport and Society	91
Unit 19:	Laboratory and Experimental Methods in Sport and Exercise Sciences	95
Unit 20:	Biochemistry of Exercise	101
Unit 21:	Physical Activity, Lifestyle and Wellbeing	105

Unit 22:	Instructing Physical Activity and Exercise	111
Unit 23:	Personal and Professional Development	121
Unit 24:	Employability Skills	127
Unit 25:	Work-based Experience	133
Unit 26:	Injury Prevention and Treatment in Sport and Exercise	139
Unit 27:	Skill Acquisition in Sport	145
Unit 28:	Sports Coaching	151
Unit 29:	Analysis of Sports Performance	155
Unit 30:	Sport and Exercise Massage	159
Unit 31:	Physical Education	165
Unit 32:	Technology in Sport and Exercise	171
Unit 33:	Functional Exercise Physiology	175
Unit 34:	Exercise Prescription	181
Unit 35:	Sport and Exercise for Specific Groups	185
Unit 36:	Applied Sport and Exercise Psychology	191
Unit 37:	Sport and Exercise Rehabilitation	197
Unit 38:	Law and Sport and Leisure Operations	201
Unit 39:	The Entertainment Industry and Venue Management	205
Unit 40:	Event Management in Sport and Leisure	211
Unit 41:	Health Promotion	217
Unit 42:	Managing Human Resources	223
Unit 43:	Small Business Enterprise	229
Unit 44:	Managing Resources in Sport and Leisure Management	235
Unit 45:	The Organisation and Control of Sport, Exercise and Fitness	241
Unit 46:	The Developing Manager	247
Unit 47:	Employment Law	253

Unit 1: Anatomy and Physiology for Sport and Exercise

Unit code: T/601/1865

Level: 5

Credit value: 15

● Aim

This unit examines the physiological systems relevant to sport and exercise sciences. The inter-relationships between systems are stressed with learners considering homeostatic control mechanisms at rest and during exercise.

● Unit abstract

An understanding of anatomy and physiology forms the basis for a number of other areas relating to training, fitness, fitness testing, physical activity and various therapeutic techniques. In this unit learners will study the structure and function of the human body systems (cardiovascular, respiratory and musculo-skeletal), intracellular processes and the endocrine and nervous systems. Learners will also be required to understand the homeostatic control mechanisms for each perspective at rest and during exercise.

Fitness professionals require an understanding of intra-cellular processes including sources of energy, the rate and capacity of aerobic and anaerobic energy release as a basis of training programmes and fitness assessment. Furthermore, knowledge of the cardiovascular and respiratory systems, the musculo-skeletal system, intracellular processes and the endocrine and nervous systems provides the basis for understanding training methods and training adaptations.

There is an increasing emphasis on raising levels of physical activity and the role exercise can play in preventing or combating various diseases. Knowledge of energy balance and the endocrine system will help learners understand obesity. An understanding of the cardiovascular and respiratory systems will aid future learning on various diseased states such as asthma, chronic obstructive pulmonary disease or coronary heart disease.

● Learning outcomes

On successful completion of this unit a learner will:

- 1 Understand the structure, function and control of the cardiovascular and respiratory systems
- 2 Understand the musculo-skeletal system in relation to its functions of support and movement
- 3 Understand the intracellular processes that lead to the phosphorylation of adenine nucleotides
- 4 Understand the characteristics of the nervous and endocrine systems with respect to the operation of homeostatic control.

Unit content

1 Understand the structure, function and control of the cardiovascular and respiratory systems

Heart and circulation: anatomy and histology (structure related to function) of the heart and blood vessels

Characteristics of heart function: the cardiac cycle; initiation of contraction; cardiac output, stroke volume; control of rate at rest and during exercise

Characteristics of circulation: peripheral resistance; pressure; volume flow; distribution during exercise

Blood: blood composition; carriage of respiratory gases; the haemoglobin molecule; oxygen dissociation; factors affecting oxygen affinity

Respiratory system: anatomy of respiratory apparatus; histology of lungs and responses to exercise; muscular activity leading to inspiration and expiration; demonstration of lung volumes and capacities

The respiratory surface: structural characteristics; exchange of gases

Pulmonary ventilation and perfusion: variations in the composition of alveolar air in different regions of the lungs

Respiratory control: factors influencing variation in the rate and depth of breathing at rest and under a range of exercise conditions

2 Understand the musculo-skeletal system in relation to its functions of support and movement

Musculo-skeletal system: features (anatomical, histological)

The articulated skeleton: details of the axial and appendicular components; types of bones; classification of joints

Skeletal tissues: histology of bone; cartilage; ligament; tendon; areolar (sub-cutaneous) connective tissue; development and growth of bone

Muscle tissue: histology of muscle types; sub-cellular organisation of skeletal muscle fibres

Movement: sliding filament hypothesis of muscle contraction; stimulation and measurement of tension in isolated muscles; length tension and force velocity relationships; motor unit recruitment; types of muscle action, stretch-shortening cycle, eccentric, concentric and isometric

Central control of muscle contraction: role of motor cortex; pyramidal tracts; cerebellum; sensory input via proprioceptors in muscles and tendons; the stretch reflex and the tendon reflex

3 Understand the intracellular processes that lead to the phosphorylation of adenine nucleotides

Energy for cellular respiration: metabolism; energy input and output; energy balance; energy transfer and conversion in cells; concept of the energy-rich phosphate bond; sources of fuel for energy release; the rate and capacity of the different energy systems

Adenosine triphosphate (ATP): nucleotide structure; the importance of ATP in cellular respiration; metabolic requirements for ATP

Anaerobic respiration: ATP resynthesis; substrate level phosphorylation; the rate of usage of phosphocreatine at rest and during exercise; anaerobic glycolysis, enzymatic control of the pathway; control of the rate of utilisation of carbohydrate fuel; inhibition by acidosis during exercise; the lactate shuttle

Aerobic respiration: ATP resynthesis; oxidative phosphorylation; mitochondrial function; link reaction-pyruvate oxidation; tricarboxylic acid (TCA); Electron Transfer System (ETS); incorporation of fatty acids and amino acid derivatives into the oxidative pathway

4 Understand the characteristics of the nervous and endocrine systems with respect to the operation of homeostatic control

Nervous system: nerve tissue; characteristics of sensory, intermediate and motor neurones; organisation into central and peripheral components

Functioning of neurones: the nature of the nerve impulse; membrane potentials; synapses; transmitter substances; excitatory post-synaptic potential (EPSP); inhibitory post-synaptic potential (IPSP); link between structure of neurones and function ie impulse propagation

Autonomic nervous system: structural organisation into sympathetic and parasympathetic components; transmitter substances; examples of processes under autonomic control (heart rate, bronchodilation, vasoconstriction, sweat secretion)

Endocrine system: distribution of major endocrine glands; histology of glandular tissue; link between structure and function of glands ie endocrine and exocrine glands

Hormones: means of release of hormones associated with exercise eg thyroxine, adrenaline, insulin/glucagon; summary of actions; interactions eg receptor/transmitter interactions, hormone/receptor interactions

Mode of action of hormones: water-soluble and fat-soluble; similarities and differences between hormones and transmitter substances; link between structure (type of hormone) and function ie receptor location and response to receptor-ligand binding

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand the structure, function and control of the cardiovascular and respiratory systems	1.1 explain how the cardiovascular system ensures appropriate supply of blood to working tissues at rest and during exercise 1.2 discuss how variations in blood gas tensions affect the movement of those gases in and out of the blood 1.3 discuss how the respiratory centre controls the rate and depth of breathing 1.4 assess how the cardiovascular and respiratory systems deliver oxygen and nutrients to cells, and remove waste products, at rest and during exercise
LO2 Understand the musculo-skeletal system in relation to its functions of support and movement	2.1 assess how features of the musculo-skeletal system affect its role in movement, support, and load bearing 2.2 discuss the sequence of events in motor neurones and muscle fibres that lead to developing tension in muscles 2.3 discuss factors which affect the tension developed in a muscle 2.4 compare different types of muscle action and their role in movement 2.5 discuss the role of proprioception in controlling movement
LO3 Understand the intracellular processes that lead to the phosphorylation of adenine nucleotides	3.1 discuss energy balance, transfer and conversion leading to ATP resynthesis, achievement of metabolic work, and heat generation 3.2 discuss the hydrolysis of phosphate bonds as an exothermic process yielding free energy for metabolic work 3.3 discuss how anaerobic ATP resynthesis is controlled by enzymes and limited by substrate depletion and feedback inhibition 3.4 review how all three major food type molecules contribute to the aerobic respiratory pathway 3.5 discuss the varying oxygen demands of carbohydrate and fat oxidation

<p>Learning outcomes</p> <p>On successful completion of this unit a learner will:</p>	<p>Assessment criteria for pass</p> <p>The learner can:</p>
<p>LO4 Understand the characteristics of the nervous and endocrine systems with respect to the operation of homeostatic control</p>	<p>4.1 discuss how the structure of the nervous and endocrine systems affect their function</p> <p>4.2 analyse the modification of the stimulus/response arc by events at synapses</p> <p>4.3 discuss how named membrane receptors are affected by the binding of autonomic transmitters</p> <p>4.4 discuss how cell behaviour is modified by the physiological changes initiated by receptor interactions</p> <p>4.5 discuss the significance of feedback control</p>

Guidance

Links

This unit has links to the following units in the BTEC Higher Nationals in Sport and in Sport and Exercise Sciences:

- *Unit 4: Biomechanics for Sport*
- *Unit 6: Nutrition for Sport and Exercise*
- *Unit 7: Training and Fitness for Sport and Exercise*
- *Unit 8: Field-based Fitness Testing for Sport and Exercise*
- *Unit 19: Laboratory and Experimental Methods in Sport and Exercise Sciences*
- *Unit 21: Physical Activity, Lifestyle and Wellbeing*
- *Unit 22: Instructing Physical Activity and Exercise*
- *Unit 30: Sport and Exercise Massage*
- *Unit 33: Functional Exercise Physiology*
- *Unit 34: Exercise Prescription.*

Essential requirements

A well-equipped sport and exercise sciences laboratory is essential.

Employer engagement and vocational contexts

The delivery of this unit could be enhanced by bringing in appropriate professionals, for example those involved in strength and conditioning, personal training, fitness testing or the delivery of physical activity programmes.

Unit 2: Sport and Exercise Psychology

Unit code: D/601/1861

Level: 4

Credit value: 15

● Aim

The aim of this unit is to develop an understanding of the key psychological factors that influence participation and performance in sport and exercise.

● Unit abstract

Successful sport performance is dependent upon many scientific disciplines. However, increasingly there is an awareness of the link between what a sport and exercise participant is thinking and the outcomes they achieve. Understanding the experiences of sport and exercise participants and the psychological skills they are employing is the focus of sport psychology.

This unit addresses key concepts in sport psychology that are relevant to sports performance. Whilst the focus of sport psychology is on performance in competitive sport, the focus of exercise psychology is on exercise/physical activity and the role exercise plays in establishing optimal mental health.

The unit looks at motivation and the range of factors that will influence motivation in different situations. The unit also looks at the related concepts of arousal, anxiety and stress. Anxiety and stress are linked to arousal as they are generally experienced at high levels of arousal and they can have a positive or negative effect on an individual and their performance.

The unit also examines group dynamics and the range of processes involved in developing a group that functions effectively, such as cohesion and leadership.

The issue of exercise adherence through successful behaviour change is a key concept and models of behaviour change are examined as well as the relationship between exercise and mental health.

● Learning outcomes

On successful completion of this unit a learner will:

- 1 Understand motivation and its effect on successful sport and exercise performance
- 2 Understand the effects of arousal, anxiety and stress on sport and exercise performance
- 3 Understand the processes leading to the effective functioning of groups
- 4 Understand the psychological factors that impact on participants in exercise environments.

Unit content

1 Understand motivation and its effect on successful sport and exercise performance

Personality: definitions; theories eg psychodynamic, trait, social learning theory/situational, phenomenological, humanistic; measurement; personality and sports performance; relationship of personality to motivation

Motivation: definitions; views eg trait-centred, situation-centred, interactional; causal attribution theory; need achievement theory; goal perspective theory; practical application of theories; developing a motivational climate

Self-confidence: definitions; state and trait; related terms eg self-efficacy, self-concept, self-esteem, identity; self-efficacy theory, relationship between confidence and motivation; how self-confidence enhances performance; developing confidence

2 Understand the effects of arousal, anxiety and stress on sport and exercise performance

Arousal: definition; physiology of arousal; arousal-performance relationship eg drive theory, inverted-U hypothesis, catastrophe theory, individualised zones of optimal functioning, multidimensional anxiety theory, reversal theory; why arousal influences performance

Anxiety: definition; state and trait; cognitive, somatic and behavioural signs and symptoms; measuring anxiety eg Sport Competition Anxiety Test (SCAT), Competitive State Anxiety Inventory (CSAI-2, CSAI-2R); anxiety as being facilitative or debilitating

Stress: definition; Selye's concept of eustress and distress; the stress process; sources of stress eg event importance, perceptions of self (self-esteem, self-induced pressure), trait anxiety, external influences, uncertainty

Burnout: definition; models of burnout eg cognitive-affective stress model, negative-training stress response model, entrapment model; factors leading to burnout; symptoms of burnout.

3 Understand the processes leading to the effective functioning of groups

Group processes: definition of groups and teams; theories of group development eg linear, cyclical, pendular, group roles, informal and formal, role clarity and conflict; Steiner's model of actual productivity, the Ringelmann effect and social loafing, ways to reduce social loafing

Group cohesion: definition; dimensions of cohesion (task, social); factors influencing cohesion eg environmental, personal, leadership, team; cohesion-performance relationship; measuring cohesion eg Group Environment Questionnaire (GEQ), sociograms; developing group cohesion

Group leadership: definition; qualities of effective leaders; leadership approaches, trait, behavioural; theories of leadership, cognitive-mediational model, multidimensional model

4 Understand the psychological factors that impact on participants in exercise environments

Exercise participation and adherence: reasons for exercising; reasons for not exercising; barriers to physical activity

Models of exercise behaviour: types; health belief model, theory of planned behaviour, transtheoretical model; strategies to enhance exercise adherence eg prompts, contracting, decision balance sheet, offering rewards, social support

Exercise and mental health: role of exercise in reducing anxiety and depression; exercise and mood enhancement; understanding the link between exercise and mental health; exercise and cognitive functioning

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand motivation and its effect on successful sport and exercise performance	1.1 discuss the importance of personality in influencing motivation 1.2 analyse the factors that influence motivation 1.3 assess the relationship between motivation and success in sport and exercise 1.4 evaluate the role of self-confidence in influencing motivation
LO2 Understand the effects of arousal, anxiety and stress on sport and exercise performance	2.1 discuss the relationship between arousal levels and performance 2.2 discuss the relationship between anxiety and performance 2.3 discuss stress and its relationship with performance c
LO3 Understand the processes leading to the effective functioning of groups	3.1 discuss the development of effective groups 3.2 analyse theories of leadership for group effectiveness
LO4 Understand the psychological factors that impact on participants in exercise environments	4.1 analyse factors influencing participation in exercise activities 4.2 compare the value of models of exercise behaviour 4.3 evaluate the role of exercise to promote mental health

Guidance

Links

This unit has links to the following units in the BTEC Higher Nationals in Sport and in Sport and Exercise Sciences:

- *Unit 9: Principles of Sports Coaching*
- *Unit 10: Applied Sports Coaching*
- *Unit 21: Physical Activity, Lifestyle and Wellbeing*
- *Unit 22: Instructing Physical Activity and Exercise*
- *Unit 28: Sports Coaching*
- *Unit 36: Applied Sport and Exercise Psychology.*

Due to the scope of study within this unit it will be of value to learners who wish to pursue careers in sports coaching and exercise instruction. In both these disciplines, knowledge of psychology and the application of that knowledge is essential to ensure that they are able to help their athletes achieve maximal results in their activities.

Essential requirements

Effective delivery of this unit requires access to appropriate texts, websites and journals as well as visual resources. There are many visual and audio resources available online through sport psychology websites. It would also be beneficial to develop and use case studies to help learners to apply their knowledge in real situations.

Employer engagement and vocational contexts

This unit focuses on the background knowledge and skills of sport psychology needed to work in coaching or fitness instruction. Centres are encouraged to develop links with sports clubs who use sport psychologists or have coaches who implement psychological techniques, for example by inviting guest speakers.

Unit 3: Research Methods for Sport and Exercise Sciences

Unit code: H/601/1862

Level: 4

Credit value: 15

● Aim

The aim of this unit is to develop learners' understanding of and skills and techniques for sport and exercise science related research.

● Unit abstract

Have you ever thought about what the different government guidelines relating to diet and exercise are based on? Or where the advice that we give to athletes within sport to help them improve their performance comes from? These are just some of the benefits of using research methods within sport and exercise sciences.

Research methods is the branch of sport and exercise sciences that aims to enhance human knowledge on a given topic. It is essential for all elements of sport and exercise sciences and without it there would be very little credibility to any of the applied work that is conducted within each of the different disciplines within sport and exercise science.

This unit will introduce learners to each of the different areas of understanding within research methods, starting with being able to find and read journal articles to develop subject knowledge in a given area and culminating with having an applied knowledge of the different quantitative and qualitative techniques that are commonly used within sport and exercise science research.

The knowledge and skills gained from this unit will be ideal for learners wanting to progress to further study and/or sports related careers such as sports science, sports therapy, physical activity, personal training, strength and conditioning or research.

● Learning outcomes

On successful completion of this unit a learner will:

- 1 Be able to search for and summarise research articles in sport and exercise sciences
- 2 Understand key issues in research methods in sport and exercise sciences
- 3 Understand quantitative research within sport and exercise sciences
- 4 Understand qualitative research within sport and exercise sciences.

Unit content

1 Be able to search for and summarise research articles in sport and exercise sciences

Searches: manual searching, search engines, journal databases

Reading articles: how to read a research article eg read it at least twice – once to get a general understanding and once to get a more detailed understanding; how to summarise a research article eg identifying the aims of the study, identifying the research methods used, identifying the key findings, identifying the strengths and limitations

2 Understand key issues in research methods in sport and exercise sciences

Research: definitions and characteristics (research, quantitative, qualitative, mixed modal / method approaches)

Key issues: validity (internal, external, face, construct, ecological), reliability (test / re-test reliability, inter-observer reliability), objectivity, trustworthiness, accuracy, precision,

Ethical and legal issues: British Association of Sport and Exercise Sciences (BASES) Code of Conduct; issues eg informed consent, confidentiality and data protection, competence

3 Understand quantitative research within sport and exercise sciences

Research Designs: experimental designs, non-experimental designs

Quantitative data collection: techniques eg laboratory versus field-based, surveys, observations, methods of recording data

Quantitative data analysis: organising and displaying data effectively; measures of central tendency; measures of variability; selecting appropriate statistical tests eg type of data, number and type of variables, number of groups; parametric tests eg t-tests, Pearsons Product Moment Correlation Coefficient; non-parametric tests eg Chi Square, Mann-Whitney U, Spearman's Rank Order Correlation, Wilcoxon Matched Pairs Signed Ranks; interpreting levels of significance; one-tailed vs two-tailed, type 1 errors, type 2 errors

Use of ICT-based analysis techniques: eg Microsoft Excel, SPSS (Statistical Package for Social Sciences)

4 Understand qualitative research within sport and exercise sciences

Research designs: eg case study, longitudinal

Qualitative data collection techniques: interviews (structured, semi-structured, unstructured), focus groups, questionnaires, use of probe questions within interviews, focus groups and questionnaires, observations (participant and non-participant), methods of recording data

Qualitative data analysis: transcription techniques; stages of data analysis, (data reduction - types of coding and purposes, displaying data - types of diagrams and purposes, drawing conclusions and verifying data – triangulation and member checking).

ICT-based techniques: eg ATLAS.ti

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Be able to search for and summarise research articles in sport and exercise sciences	1.1 use literature searching techniques to find research articles in sport and exercise sciences 1.2 summarise a research article in sport and exercise sciences
LO2 Understand key issues in research methods in sport and exercise sciences	2.1 discuss the different approaches to research used in sport and exercise sciences 2.2 discuss the key issues in research in sport and exercise sciences 2.3 discuss the ethical and legal issues associated with research in sport and exercise sciences
LO3 Understand quantitative research within sport and exercise sciences	3.1 discuss quantitative research designs in sport and exercise sciences 3.2 discuss quantitative data collection techniques in sport and exercise sciences 3.3 discuss quantitative data analysis techniques in sport and exercise sciences 3.4 justify appropriate quantitative research methods for a sport and exercise sciences research example
LO4 Understand qualitative research within sport and exercise sciences	4.1 discuss qualitative research designs in sport and exercise sciences 4.2 discuss qualitative data collection techniques in sport and exercise sciences 4.3 discuss qualitative data analysis techniques in sport and exercise sciences 4.4 justify appropriate qualitative research methods for a sport and exercise sciences research example

Guidance

Links

This unit has links the following units in the BTEC Higher Nationals in Sport and in Sport and Exercise Sciences:

- *Unit 5: Research Project*
- *Unit 8: Field-based Fitness Testing for Sport and Exercise*
- *Unit 19: Laboratory and Experimental Methods in Sport and Exercise Sciences.*

This unit gives learners who have not previously studied research methods the chance to develop their understanding and skills. Although direct links should be made to the research project unit, there is scope for integration with all other units for both delivery and assessment. This will provide learners with a contextualised approach to research methods.

Essential requirements

Centres must make sure there is access to appropriate testing equipment and consider the ethical implications as well as health and safety issues that may need to be in place when undertaking experimental methods. The availability of sufficient computers and the specialised computer software (spreadsheet, SPSS, ATLAS.ti) is necessary for learners to successfully complete this unit.

Employer engagement and vocational contexts

Learners would benefit from the input of guest speakers who work as researchers for organisations such as the NHS, Youth Sport Trust and National Governing Bodies so that learners can grasp the role and position of research within different types of organisation.

Unit 4: Biomechanics for Sport

Unit code: M/601/1864

Level: 5

Credit value: 15

● Aim

The aim of this unit is to develop learners' understanding of biomechanical principles and techniques used to improve an individual's or a team's sport performance.

● Unit abstract

Think about how many times you have seen David Beckham curl a football around a wall and wondered just how he manages to do it, or when Usain Bolt broke the world record in 100m and you wondered just how he managed to run that fast. These phenomena of truly expert performance in sport can be partially explained through the use of sports biomechanics.

Sports biomechanics is the branch of sport and exercise sciences that examines the causes and consequences of human movement and the interaction of the body with apparatus or equipment through the application of mechanical principles in sporting settings. It is one of the key areas to understand when analysing the performance of both individuals and teams.

This unit combines theoretical and applied learning contexts allowing learners to examine traditional principles of biomechanics through a practical learning environment. Learners will also discover how to use essential practical techniques in sports biomechanics through investigating different sporting activities first hand, which will give learners a greater understanding of the key mechanical principles in sport performance. Learners will start to adopt an evidence-based practice approach to their work which will help them to prepare for possible careers within sport and exercise sciences, sports therapy and other related areas.

The knowledge and skills gained through this unit will be useful for learners wishing to progress into careers based around performance analysis, sports injury, sports therapy, sports coaching and fitness instructing or training.

● Learning outcomes

On successful completion of this unit a learner will:

- 1 Understand biomechanical principles in sporting contexts
- 2 Be able to record sport performances using biomechanical techniques
- 3 Be able to conduct notational analyses of performance
- 4 Be able to compare sport performances to biomechanical models.

Unit content

1 Understand biomechanical principles in sporting contexts

Biomechanical principles: planes and axes of motion; kinematics (definition, linear kinematics, rotational kinematics, projectile motion); kinetics (definition, linear kinetics, rotational kinetics, friction, impact); fluid mechanics (viscosity, fluid kinematics, types of flow, drag forces, lift forces, Bernoulli principle and Magnus effect)

2 Be able to record sport performances using biomechanical techniques

Recording sport and exercise performance: planning skills eg participant preparation, equipment preparation; recording techniques eg digital photography, video recording, two dimensional and three dimensional recording; recording principles eg frame rate, horizontal scaling, vertical referencing, perspective error, validity, reliability, accuracy, precision; following guidelines for recording techniques and recording principles

3 Be able to conduct notational analyses of performance

Notational analysis: background to manual notation systems; background to electronic notation programmes eg Gamebreaker; sport specific performance criteria; data collection; data analysis; displaying data

Providing feedback: use of appropriate language for athletes and coaches; providing recommendations for future performance; using literature to support recommendations for future performance; target setting

4 Be able to compare sport performances to biomechanical models

Biomechanical models: literature-based and elite athlete-based numerical models; literature-based and elite athlete-based technical models; combination of literature-based and elite athlete-based models

Comparing performance to models: identifying strengths and areas for improvement of performance, using literature to support identified strengths and areas for improvement

Providing feedback: use of appropriate language for participants and coaches; providing recommendations for future performance; using literature to support recommendations for future performance; target setting

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand biomechanical principles in sporting contexts	1.1 discuss the planes and axes of motion 1.2 discuss kinetic principles in sporting contexts 1.3 discuss kinematic principles in sporting contexts 1.4 explain fluid mechanics in sporting contexts
LO2 Be able to record sport performances using biomechanical techniques	2.1 plan a data collection session to record performance 2.2 justify techniques used within the recording session 2.3 record a performance using biomechanical recording techniques
LO3 Be able to conduct notational analyses of performance	3.1 explain manual notation systems and electronic notation systems 3.2 justify performance criteria to be used as part of the notational analysis 3.3 carry out a notational analysis of a sport performance of a selected individual or team 3.4 produce feedback for an individual or team based on the notational analysis, providing recommendations on how to improve future performance
LO4 Be able to compare sport performances to biomechanical models	4.1 select and justify the selection of a biomechanical model for a chosen sport performance 4.2 compare an observed sport performance to the selected biomechanical model 4.3 provide feedback for the participant in the observed performance to improve performance 4.4 justify the performance recommendations given in feedback

Guidance

Links

This unit has links to the following units in the BTEC Higher Nationals in Sport and in Sport and Exercise Sciences:

- *Unit 3: Research Methods for Sport and Exercise Sciences*
- *Unit 5: Research Project*
- *Unit 8: Field-based Fitness Testing for Sport and Exercise Science*
- *Unit 9: Principles of Sports Coaching*
- *Unit 10: Applied Sports Coaching*
- *Unit 19: Laboratory and Experimental Methods in Sport and Exercise Sciences*
- *Unit 28: Sports Coaching.*

Essential requirements

Learners will need access to video and digital photography equipment to be able to complete the practical elements of the unit. Centres would benefit from having access to specific performance and movement analysis software (such as *Gamebreaker* or *Dartfish*) and equipment such as, a force plate, an electromyogram and 2D/3D video recording and analysis equipment (such as *Qualisys*).

Employer engagement and vocational contexts

Learners would benefit from visits and guest speaking from sports biomechanists, performance analysts and sports therapists.

Unit 5: Research Project

Unit code: K/601/0941

Level: 5

Credit value: 20

- **Aim**

To develop learners' skills of independent enquiry and critical analysis by undertaking a sustained research investigation of direct relevance to their Higher Education programme and professional development.

- **Unit abstract**

This unit is designed to allow learners become confident in the use of research techniques and methods. It addresses the elements that make up formal research including the proposal, a variety of methodologies, action planning, carrying out the research itself and presenting the findings. To complete the module satisfactorily, the learners must also understand the theory that underpins formal research.

The research itself is dependent on the learner, the context of their area of learning, their focus of interest and the anticipated outcomes. The unit draws together a range of other areas of content within the programme of study to form a holistic piece of work that makes a positive contribution to the learner's area of interest. Learners should seek approval from their tutors before starting the study.

- **Learning outcomes**

On successful completion of this unit a learner will:

- 1 Understand how to formulate a research specification
- 2 Be able to implement the research project within agreed procedures and to specification
- 3 Be able to evaluate the research outcomes
- 4 Be able to present the research outcomes.

Unit content

1 Understand how to formulate a research specification

Research formulation: aims and objectives; rationale for selection; methodology for data collection and analysis; literature review; critique of references from primary sources eg questionnaires, interviews; secondary sources eg books, journals, internet; scope and limitations; implications eg resources

Hypothesis: definition; suitability; skills and knowledge to be gained; aims and objectives; terms of reference; duration; ethical issues

Action plan: rationale for research question or hypothesis; milestones; task dates; review dates; monitoring/reviewing process; strategy

Research design: type of research eg qualitative, quantitative, systematic, original; methodology; resources; statistical analyses; validity; reliability; control of variables

2 Be able to implement the research project within agreed procedures and to specification

Implement: according to research design and method; test research hypotheses; considering test validity; reliability

Data collection: selection of appropriate tools for data collection; types eg qualitative, quantitative; systematic recording; methodological problems eg bias, variables and control of variables, validity and reliability

Data analysis and interpretation: qualitative and quantitative data analysis – interpreting transcripts; coding techniques; specialist software; statistical tables; comparison of variable; trends; forecasting

3 Be able to evaluate the research outcomes

Evaluation of outcomes: overview of the success or failure of the research project (planning, aims and objectives, evidence and findings, validity, reliability, benefits, difficulties, conclusions)

Future consideration: significance of research investigation; application of research results; implications; limitations of the investigation; improvements; recommendations for the future, areas for future research

4 Be able to present the research outcomes

Format: professional delivery format appropriate to the audience; appropriate media

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand how to formulate a research specification	1.1 formulate and record possible research project outline specifications 1.2 identify the factors that contribute to the process of research project selection 1.3 undertake a critical review of key references 1.4 produce a research project specification 1.5 provide an appropriate plan and procedures for the agreed research specification
LO2 Be able to implement the research project within agreed procedures and to specification	2.1 match resources efficiently to the research question or hypothesis 2.2 undertake the proposed research investigation in accordance with the agreed specification and procedures 2.3 record and collate relevant data where appropriate
LO3 Be able to evaluate the research outcomes	3.1 use appropriate research evaluation techniques 3.2 interpret and analyse the results in terms of the original research specification 3.3 make recommendations and justify areas for further consideration
LO4 Be able to present the research outcomes	4.1 use an agreed format and appropriate media to present the outcomes of the research to an audience

Guidance

Links

This unit may be linked to single or several units in the programme, depending on the research topic and the context of their area of learning. It can be linked to *Unit 25: Work-based Experience* and gives the learner the opportunity to undertake research in the same organisation in which they undertook their placement.

Essential requirements

Tutor will need to establish the availability of resources to support the independent study before allowing the learner to proceed with the proposal.

Employer engagement and vocational contexts

Centres should try to establish relationships with appropriate organisations in order to bring realism and relevance to the research project.

Unit 6: Nutrition for Sport and Exercise

Unit code: F/601/1867

Level: 4

Credit value: 15

● Aim

The aim of this unit is to develop learners' understanding of the principles of nutrition and how these principles can be applied to enhance sport and exercise performance.

● Unit abstract

Success in sport and achieving goals is dependent upon a range of physiological and psychological factors and thus sports performers are seeking out every advantage available to them. As a result of these developments, sports performers are increasingly engaging the services of sports nutritionists to provide advice on nutritional strategies to enable them to optimise their performance and safeguard their health.

The unit develops learners' knowledge of nutrition in relation to improving performance in sport and exercise and helping them to achieve their sporting or exercise goals. On completion of this unit, learners should feel confident in offering well-informed, accurate nutrition advice to other people. The ability to provide information to people participating in exercise sessions and those interested in general health is a skill in increasing demand from coaching and instructional professionals.

The unit examines macronutrients by looking at their sources, calorific values and structure. Learners examine the metabolism of carbohydrate and fat to provide energy for aerobic and anaerobic energy production, and how this can be measured. This is linked to the production of energy through the aerobic and anaerobic energy systems. The unit explores specific issues, such as the practice of vitamins and mineral supplementation, free radicals and the role of vitamins and minerals as antioxidants and how they act as coenzymes and cofactors. Learners will apply their knowledge of nutrition by looking at nutritional strategies employed to improve performance.

● Learning outcomes

On successful completion of this unit a learner will:

- 1 Understand macronutrients and the macronutrient requirements of different sport and exercise participants
- 2 Understand the micronutrient requirements of different sport and exercise participants and related issues
- 3 Be able to advise sport and exercise participants on nutritional strategies to improve performance.

Unit content

1 Understand macronutrients and the macronutrient requirements of different sport and exercise participants

Macronutrients: carbohydrates; monosaccharides; disaccharides; polysaccharides; fats (fatty acids – saturated, monounsaturated, polyunsaturated); proteins (amino acids, complete proteins, incomplete proteins); functions of macronutrients; sources of macronutrients; calorific value(s); recommended daily allowance (RDA) of macronutrients (assessment of RDA – according to gender, age and level of physical activity)

Energy: endogenous (internal) energy reserves (location and extent – liver and muscle glycogen, blood glucose and fat deposits in peripheral adipose tissue); energy balance (tools used in the assessment of energy intake and expenditure); aerobic and anaerobic metabolic pathway (energy production through metabolism of carbohydrate and fat)

Substrate use: at rest and during exercise; direct or indirect calorimetry

2 Understand the micronutrient requirements of different sport and exercise participants and related issues

Micronutrients: vitamins (water-soluble, fat-soluble, functions, dietary sources, phytochemicals, RDA); minerals (macro minerals, micro minerals, functions and dietary sources, RDA); functions (supplementation, free radicals, antioxidants, enzymes, coenzymes, cofactors)

Micronutrient deficiency: implications, symptoms and consequences (deficiencies in certain athletic groups, occurrence of injuries and medical conditions with particular reference to specific groups eg stress fractures, osteoporosis in female distance runners, ballerinas, gymnasts)

3 Be able to advise sport and exercise participants on nutritional strategies to improve performance

Carbohydrates: carbohydrate (CHO) feeding (amount and rate of CHO supplementation, influence of exogenous CHO ingestion on muscle glycogen use, free fatty acid liberation and mobilisation, effect of elevated blood glucose and plasma insulin levels); optimising muscle and hepatic CHO stores (glycogen loading, super-compensation); type of carbohydrates ingested (simple vs complex, solid vs liquid, environmental conditions, exercise mode, importance of glycaemic index – low, moderate, high)

Nutritional strategies: causes of fatigue during prolonged exercise (location of CHO sources used during exercise, depletion of CHO stores and dehydration, trade-off between CHO supplementation and fluid replacement during exercise); timing of CHO supplementation (single feeding vs continuous smaller feeding); solution formulation (solution concentration, influence on exogenous CHO provision and rate of fluid absorption); pre-exercise meal (several hours before exercise, during the hour leading to exercise, hypoglycaemic rebound and impact on central nervous system function, importance of adequate hydration before exercise, pre-exercise hyperhydration) post-exercise meal (timing and rate of CHO ingestion immediately following exercise and 24 hours post exercise);

Rehydration: beverage volume and formulation; electrolyte replacement

Learning outcomes and assessment criteria

<p>Learning outcomes</p> <p>On successful completion of this unit a learner will:</p>	<p>Assessment criteria for pass</p> <p>The learner can:</p>
<p>LO1 Understand macronutrients and the macronutrient requirements of different sport and exercise participants</p>	<p>1.1 discuss the structure, function and sources of macronutrients</p> <p>1.2 analyse the RDA of macronutrients for different sport and exercise participants</p> <p>1.3 discuss internal energy reserves</p> <p>1.4 assess the relative proportion of substrates used at rest and during different intensities of exercise</p>
<p>LO2 Understand the micronutrient requirements of different sport and exercise participants and related issues</p>	<p>2.1 discuss the functions and sources of micronutrients</p> <p>2.2 analyse the RDA of micronutrients for different sport and exercise participants</p> <p>2.3 discuss the symptoms and consequences of micronutrient deficiency</p>
<p>LO3 Be able to advise sport and exercise participants on nutritional strategies to improve performance</p>	<p>3.1 discuss carbohydrate ingestion and fluid replacement</p> <p>3.2 discuss the optimisation of muscle and hepatic glycogen stores</p> <p>3.3 discuss considerations for designing nutritional strategies to improve performance</p> <p>3.4 plan a nutritional strategy for a selected sport and exercise participant to improve performance</p> <p>3.5 create guidelines for optimal rehydration for sport and exercise participants</p>

Guidance

Links

This unit has links the following units in the BTEC Higher Nationals in Sport and in Sport and Exercise Sciences:

- *Unit 1: Anatomy and Physiology for Sport and Exercise*
- *Unit 7: Training and Fitness for Sport and Exercise*
- *Unit 21: Physical Activity, Lifestyle and Wellbeing*
- *Unit 22: Instructing Physical Activity and Exercise.*

Essential requirements

Effective delivery of this unit requires access to appropriate texts, websites and journals as well as visual resources to present case studies/resources.

Employer engagement and vocational contexts

This unit focuses on nutrition in sport and exercise and its application that is required to work in sports coaching or fitness instruction. Centres are encouraged to develop links with sports clubs who use sports nutritionists or have coaches who offer advice on nutritional strategies, for example inviting them in as guest speakers.

Unit 7: Training and Fitness for Sport and Exercise

Unit code: A/601/1866

Level: 4

Credit value: 15

- **Aim**

This unit will develop learners' understanding of training principles and methods and their use in improving sport and exercise performance.

- **Unit abstract**

Think about how many times you have seen Wayne Rooney make a sprint the full length of the pitch in the 90th minute of a game, or about when a boxer is able to defeat much bigger opponent and wondered just how they manage to do it. This type of expert performance in sport can be partially explained through the understanding of training principles.

Training and fitness has inherent applications within all areas of sport and exercise sciences and sports therapy as it examines the different fitness requirements of different sports and athletes, the training methods that can benefit these areas and the changes that can occur with an individual or team as a result of the adopted methods. The principles of training and fitness can be particularly important for sport and exercise scientists working with sport and exercise performers who are trying to peak for competition and sports therapists that are working with performers in the later stages of functional rehabilitation.

In this unit there is a combination of both theoretical and applied learning contexts which will allow learners to examine traditional principles of training in a practical learning environment. Learners will also discover how to use essential practical techniques in training environments through investigating different training techniques. This will allow for a greater understanding of the key physiological, biomechanical and psychological changes that can benefit performance. Learners will also adopt an evidence-based practice approach to their work on training programmes which will help them to prepare for the continuing rigours of Higher Education and careers within sport and exercise sciences, sports therapy and other related areas.

- **Learning outcomes**

On successful completion of this unit a learner will:

- 1 Understand the principles of training for sport and exercise
- 2 Understand the use of ergogenic aids in sport and exercise
- 3 Be able to assess levels of fitness of different sport and exercise participants
- 4 Be able to complete safe and effective training programmes for sport and exercise participants.

Unit content

1 Understand the principles of training for sport and exercise

Fitness requirements: health-related components of fitness; skill-related components of fitness

Principles and theories of training: General Adaptation Syndrome theory; supercompensation cycle; specificity; progression; overload; reversibility; tedium; individual differences; recovery; periodisation (phases and cycles); tapering

Conditions associated with over training: conditions eg injury, acute and chronic unexplained underperformance syndrome, staleness, chronic fatigue syndrome, post-viral fatigue, burnout; warning signs of different conditions; management of different conditions

2 Understand the use of ergogenic aids in sport and exercise

Ergogenic aids: nutritional aids eg creatine, l-carnitine; physiological aids eg blood doping, erythropoietin, oxygen; mechanical/technological aids eg heart rate monitors, power breathe; psychological aids eg imagery, relaxation; pharmacological aids eg amphetamines, beta-blockers, alcohol; benefits; applications to training; ergolytic potential of different aids

3 Be able to assess levels of fitness of different sport and exercise participants

Field-based assessment of fitness: field-based testing eg Harvard step test, multistage fitness test, Rockport walking test (cardiovascular endurance), sit-ups and press-ups (local muscular endurance), one repetition maximum and grip dynamometer (strength), sit and reach (flexibility), Illinois agility run (agility), beam balance (balance), Margaria-Kalamen staircase test and vertical jump (power) test, learning to juggle (coordination), Body Mass Index, waist-to-hip ratio; validity and reliability of testing

Laboratory-based assessment of fitness: laboratory-based testing eg Wingate test (power, anaerobic endurance, fatigue index), cycle-based and treadmill-based assessment of maximal oxygen uptake, ventilatory break point testing, onset of blood lactate accumulation testing, skinfold assessment and bio-electrical impedance (body composition); validity and reliability of testing

Feedback: methods of feedback (verbal and non verbal); at fitness testing session; after fitness testing session; comparison of results to appropriate norms; setting training targets based on test results and requirements of the sport/activity

4 Be able to complete safe and effective training programmes for sport and exercise participants

Training methods: endurance training methods eg resistance training, interval training, fartlek training, continuous training; strength training methods eg resistance machines, free weight training; flexibility training eg static stretching, dynamic stretching, proprioceptive neuromuscular facilitation; speed, agility and quickness training; power training eg plyometrics; core stability training; proprioception training; benefits and limitations of each type of training

Design an appropriate training programme: use of fitness test results; use of training goals; application of principles of training (individual needs / differences, specificity, progressive overload, rest and recovery); FITT (Frequency, Intensity, Time and Type); health and safety eg risk assessment of training area, strategies to avoid over training; Physical Activity Readiness Questionnaire (PAR-Q); session planning; use of appropriate training methods; evidence-based practice; following guidelines

Carrying out a training programme: following guidelines eg process of completing different training methods, training at recommended levels

Evaluation of training: strengths; areas for improvement; repeated fitness tests; reviewing of training goals; physical/physiological adaptations to training eg cardiovascular, respiratory, flexibility, body composition; psychological adaptations to training eg enhanced self-confidence, enhanced self-esteem

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand the principles of training for sport and exercise	1.1 assess the key fitness requirements of selected sport and exercise activities 1.2 discuss the principles of training 1.3 discuss the effects of over training 1.4 discuss how the principles of training can be used to minimise the effects of over training
LO2 Understand the use of ergogenic aids in sport and exercise	2.1 discuss categories of ergogenic aids 2.2 analyse the ergogenic effects of different ergogenic aids used in sport and exercise 2.3 analyse the ergolytic effects of different ergogenic aids used in sport and exercise 2.4 justify the use of ergogenic aids in sport and exercise
LO3 Be able to assess levels of fitness of different sport and exercise participants	3.1 plan fitness testing sessions for selected participants 3.2 conduct safe and effective fitness testing sessions 3.3 provide feedback on the results of the fitness testing session to participants
LO4 Be able to complete safe and effective training programmes for sport and exercise participants	4.1 plan, and justify a training programme for a selected participant 4.2 carry out a training programme for a selected participant 4.3 evaluate the effectiveness of the training programme 4.4 suggest improvements to the training programme based on evaluation

Guidance

Links

This unit has links to the following units in the BTEC Higher Nationals in Sport and in Sport and Exercise Sciences:

- *Unit 1: Anatomy and Physiology for Sport and Exercise*
- *Unit 2: Sport and Exercise Psychology*
- *Unit 3: Research Methods for Sport and Exercise Sciences*
- *Unit 8: Field-based Fitness Testing for Sport and Exercise*
- *Unit 19: Laboratory and Experimental Methods in Sport and Exercise Sciences*
- *Unit 21: Physical Activity, Lifestyle and Wellbeing*
- *Unit 33: Functional Exercise Physiology*
- *Unit 36: Applied Sport and Exercise Psychology.*

Essential requirements

Learners will need access to a range of facilities and gym equipment to be able to complete the practical elements of the unit. Centres would benefit from having access to specific fitness facilities such as a fitness suite, a range of field-based and laboratory-based fitness testing equipment and a range of specific training equipment such as SAQ (speed, agility, quickness) training equipment, free weights and Swiss balls.

The training programme in learning outcome 4 must cover a period of time long enough to give the participant a chance to respond to the programme so that the learner will be able to evaluate its effectiveness.

Employer engagement and vocational contexts

Learners would benefit from visits or guest speaking from personal trainers, fitness instructors and sport specific strength and conditioning coaches.

Unit 8: Field-based Fitness Testing for Sport and Exercise

Unit code: K/601/1877

Level: 5

Credit value: 15

● Aim

Fitness testing in different sport and exercise environments is well-established. This unit gives learners the skills, knowledge and understanding to conduct field-based fitness tests and interpret the results.

● Unit abstract

For many people it is impractical to have their fitness assessed within a laboratory setting. Reasons for this include access to facilities and cost of the assessment.

Generally, it is more time and cost effective for most people to undertake field-based testing. While many field-based tests lack some of the validity and reliability of laboratory tests, they have the advantage of being more specific to a given activity.

In this unit, learners will start by analysing the concepts of reliability and validity of fitness assessment. These concepts are then applied to a range of fitness assessments.

In addition to understanding the physiological basis of these tests, learners will consider the practicalities of the test protocols while gaining the practical skills and competencies required to perform these tests.

At the end of the unit learners will be able to select and perform field-based fitness tests and interpret the outcomes as part of a fitness profile.

● Learning outcomes

On successful completion of this unit a learner will:

- 1 Understand the reliability, validity and practicality of field-based fitness tests
- 2 Be able to conduct field-based fitness tests
- 3 Be able to produce fitness profiles using field-based fitness tests.

Unit content

1 Understand the reliability, validity and practicality of field-based fitness assessments

Validity: explanation of the concept; types of validity (internal, external, face, concurrent, predictive)

Reliability: explanation of the concept; types of reliability (absolute, relative)

Practicality: health and safety, pre-exercise client screening (including measures of stature, mass, blood pressure and lung function), selecting suitable tests based on client needs related to specific conditions eg high blood pressure, diabetes, obesity, calibration of equipment, test sequencing, practicality (test duration and client number)

2 Be able to conduct field-based fitness tests

Field-based fitness tests: maximal tests eg muscular strength, muscular endurance agility; sub-maximal tests eg body composition, blood pressure; suitability of tests; test protocol; validity; reliability; practicality

Maximal tests: muscular strength (1 rep-max, hand grip); muscular endurance (number of exercises performed in one minute, 10 rep-max); maximum oxygen uptake (multistage fitness test, yo-yo test, Cooper test, 1.5 mile run); maximum power (vertical jump – static and counter movement, drop jump, standing long jump, hopping and bounding tests); maximum speed (sprints over distances up to 100m); anaerobic/speed endurance (Baker's repeat sprint test, RAST test, 60s run); agility (Illinois agility run, 5-0-5 test, T-test)

Sub-maximal tests: maximum oxygen uptake (Step tests eg Chester, Harvard, Forester, Queen's College, cycle tests eg Astrand, PWC 170); flexibility (sit and reach test, use of goniometers and flexometers to measure range of movement); body composition (stature, mass, skinfolds, girths, somatotype); blood pressure (manual determination of blood pressure); physical activity (use of pedometers, accelerometers, heart rate monitors and GPS-based devices)

3 Be able to produce fitness profiles using field-based fitness tests

Fitness profiles: comparing tests scores (with norms, for elite athletes, for sedentary individuals, for specific and different groups, eg medical conditions); strengths and areas for improvement; weaknesses; producing reports

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand the reliability, validity and practicality of field-based fitness tests	1.1 analyse the reliability, validity and practicality of field-based fitness assessments using relevant data and research 1.2 discuss how field-based fitness tests can be managed cost effectively and safely
LO2 Be able to conduct field-based fitness tests	2.1 select and justify suitable field-based fitness tests for different sport and exercise participants 2.2 carry out field-based fitness tests for different sport and exercise participants 2.3 record the results of field-based fitness tests carried out 2.4 review own performance in carrying out field-based fitness tests, identifying strengths and areas for improvement
LO3 Be able to produce fitness profiles using field-based fitness tests	3.1 analyse the results of field-based fitness tests for sport and exercise participants 3.2 compare the results of field-based fitness tests for sport and exercise participants to appropriate normative values 3.3 produce fitness profiles for sport and exercise participants who have completed field-based fitness tests 3.4 give feedback to participants based on the results of field-based fitness tests and fitness profiles

Guidance

Links

This unit has links to the following units in the BTEC Higher Nationals in Sport and in Sport and Exercise Sciences:

- *Unit 1: Anatomy and Physiology for Sport and Exercise*
- *Unit 4: Biomechanics for Sport*
- *Unit 7: Training and Fitness for Sport and Exercise*
- *Unit 19: Laboratory and Experimental Methods in Sport and Exercise Sciences*
- *Unit 21: Physical Activity, Lifestyle and Wellbeing*
- *Unit 22: Instructing Physical Activity and Exercise*
- *Unit 33: Functional Exercise Physiology*
- *Unit 34: Exercise Prescription.*

Essential requirements

Learners need to carry out practical fitness assessments that are safe, effective and follow standard protocols. Learners should be given demonstrations of these tests and then given the chance to practise. Issues involved in field-based fitness testing need to be covered theoretically.

A basic level of equipment is required, for example skinfold callipers, cycle ergometer, heart rate monitor, pedometer, tape player, sphygmomanometer. Learners must have access to various media such as books, journals, publications, computer-based resources and videos to provide current information and research findings.

Employer engagement and vocational contexts

The delivery of this unit could be enhanced by bringing in related professionals, for example from health clubs or GP referral schemes.

Unit 9: Principles of Sports Coaching

Unit code: R/601/1887

Level: 5

Credit value: 15

- **Aim**

The unit provides learners with theories of sports coaching and the methods used to support the development of performances.

- **Unit abstract**

This unit will provide learners with the core principles behind coaching support for athletes. The unit will develop learners' knowledge of mentoring and developing sports performers from a wide range of sports.

In this unit learners will investigate different teaching, learning and coaching styles, the impact of each style on current coaching practice and ways they can be used to monitor and enhance athletic performance and success for a range of participants.

Learners will also examine the methods used by sports coaches to assess and manage the needs of sports performers.

Learners will have the opportunity to look at the organisational processes and procedures that are used to monitor and manage coaching performance to ensure safe and effective sports activities that contribute to the success and achievement of the sports coach.

This unit will help learners appreciate standards related to practice and performance guidelines, as well as full consideration of needs, opportunities, barriers, and social and economic factors that can affect different sectors of the population.

- **Learning outcomes**

On successful completion of this unit a learner will:

- 1 Understand coaching, teaching and learning styles that can be used to develop athletes
- 2 Understand methods used by sports coaches to assess and manage the needs of athletes
- 3 Understand the formal guidelines, codes, protocols and practices used in sports coaching
- 4 Understand the organisational processes and procedures used to monitor and manage coaching performance.

Unit content

1 Understand coaching, teaching and learning styles that can be used to develop athletes

Teaching and coaching styles: teaching styles (autocratic, democratic, laissez faire); coaching styles eg group and one-to-one sessions, practical and theoretical sessions, technical and tactical sessions, demonstrations, whole-part-whole, performance analysis

Learning styles: styles eg visual, auditory, kinaesthetic; relationship with different teaching and coaching styles eg which teaching and coaching styles are more successful with which learning styles

2 Understand methods used by sports coaches to assess and manage the needs of athletes

Assessing needs: needs of the activity (physiological, biomechanical); needs of athletes (assessment of strengths and areas for improvement); personal needs eg social, physical, health-related; performance measures; talent identification eg world class performance plans, TABS (technique, attitude, balance, speed), SUPS (speed, understanding, personality, skill), TIPS (technique, intelligence, personality, speed), PAS (pace, attitude, skill)

Managing needs: managing needs eg fair play, deviant behaviour, codes, protocols and guidelines (effects, current practice, use), accessibility, gender, race, health and safety; agreeing targets and development plans; feedback eg formative, summative, constructive, criticism, praise

Management documentation: to ensure guidelines, codes, protocols and practices are adhered to eg worksheets, minutes of meetings, witness testimony, performance reviews

3 Understand the formal guidelines, codes, protocols and practices used in sports coaching

Assessment methods: formative and summative testing eg questioning, portfolio, observation, continuous and end of programme; validity and reliability; fairness of assessment; coherent assessment process; whole and balanced; alternatives for those with special assessment; peer and self-assessment requirements

Management guidance: management guidance regarding implementation of assessment methods eg procedures, resources, feedback

4 Understand the organisational processes and procedures used to monitor and manage coaching performance

Organisational processes and procedures: processes and procedures used to monitor sports coaching performance eg recording documentation, level of technical skills and knowledge, data protection, observation checklists, experiences and qualifications, feedback (athletes, mentors, peers)

Management information: management information used to monitor sports coaching and performance eg progression of athletes, retention, achievement of athletes, skills, CPD (courses, qualifications, updating of skills and practices)

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand coaching, teaching and learning styles that can be used to develop athletes	1.1 analyse different teaching and coaching styles that can be used to meet the needs of sports performers 1.2 analyse different learning styles and their relationship with different teaching and coaching styles
LO2 Understand methods used by sports coaches to assess and manage the needs of athletes	2.1 evaluate different codes, guidelines, protocols and practices used by sports coaches to assess and manage the needs of performers 2.2 prepare management documentation to ensure that guidelines, codes, protocols and practices are followed by those involved in sports coaching
LO3 Understand the formal guidelines, codes, protocols and practices used in sports coaching	3.1 evaluate assessment methods used to identify the needs of sports coaches and performers 3.2 design, trial and evaluate assessment methods that can be used with sports performers 3.3 prepare management guidance for the implementation of selected assessment methods
LO4 Understand the organisational processes and procedures used to monitor and manage coaching performance	4.1 analyse organisational processes and procedures used to monitor sports coaching performance 4.2 discuss management information used to monitor and appraise coaching performance

Guidance

Links

This unit has links to the following units in the BTEC Higher Nationals in Sport and in Sport and Exercise Sciences:

- *Unit 9: Principles of Sports Coaching*
- *Unit 27: Skill Acquisition*
- *Unit 28: Sports Coaching*
- *Unit 29: Analysis of Sports Performance*
- *Unit 31: Physical Education.*

This unit has links to aspects of the LLUK standards for Teaching and Supporting Learning.

Learners may also be encouraged to complete National Governing Body accredited coaching awards to support the required technical and tactical knowledge required for specific sport performer development.

Essential requirements

To complete this unit it is important that a centre has access to a variety of experienced sports coaches with a wide variety of knowledge and experience of coaching a variety of sports and participants across a range of abilities.

Learners must have access to adequate sports facilities in order to undertake and manage coaching sessions.

Learners must have suitable ICT programmes to support them with the analysis of sports performance. For example, technical analysis programmes like *Dartfish* and *Kandle* will help learners assess an athlete's performance and within team sports programmes these programmes will help learners to analyse statistical data to support their analyses of athletes' effectiveness.

Employer engagement and vocational contexts

When completing this unit links could be made with qualified sports coaches. Experienced sport coaches could act as mentors to learners on the programme and develop learners' knowledge and understanding of the methods of supporting and developing (mentoring) sports performers.

If possible, learners should observe the teaching and coaching methods used to develop sports performers with different learning styles by visiting elite sports coaches at local professional sports clubs. It may also be beneficial for learners to visit schools to observe how Physical Education teachers manage learners with different learning styles.

If learners are given the opportunity to shadow sports coaches for a period of time, the coaches should be made aware of learners' required learning outcomes and provide support to learners, especially with regards to the mentoring process coaches have to support and develop sports performers, and how this is carried out effectively and sensitively when appropriate.

Unit 10: Applied Sports Coaching

Unit code: J/601/1885

Level: 4

Credit value: 15

● Aim

This unit provides learners with an opportunity to put coaching theory into practice. The unit enables learners to assess performers and after initial assessment, to develop methods to improve performance.

● Unit abstract

This unit will give learners the chance to go through the full coaching process starting with the initial assessment of an athlete's ability and ending with a player consultation at the end of the training programme.

This unit will enable learners to apply coaching theory and develop learners' ability to assess sports performers in relation to the physical, psychological, technical and tactical demands of a selected sport. Through practical application learners will develop an understanding of the initial assessment procedures used to assess current performance in a particular sport.

Learners will then be required to develop a training programme and deliver a series of coaching sessions of their design to athletes upon whom they have carried out the initial assessment. Learners will design each session with the aim of developing the athlete's ability through specific performance development coaching techniques and activities.

This unit also gives learners the chance to apply and use effective mentoring skills during feedback sessions that encompass issues related to confidentiality, negotiation and consultation. Learners will be provided with an opportunity to review their own performance and consider methods for their personal development to improve their performance as a sports coach in a particular sport.

● Learning outcomes

On successful completion of this unit a learner will:

- 1 Be able to plan and undertake initial assessment and analysis of performance of sports performers
- 2 Be able to produce training programmes to support the development of selected sports performers
- 3 Be able to plan and manage coaching sessions that meet the needs of selected sports performers
- 4 Be able to review coaching performance and plan for future practice.

Unit content

1 Be able to plan and undertake an initial assessment and analysis of performance of sports performers

Initial assessment: assessment interviews eg knowledge of rules and regulations of specific sport, age, health, diet, previous training, motivation; fitness assessment eg sit and reach for flexibility, one-rep max for strength, eg multi-stage fitness test or step test for aerobic endurance, skinfold calipers for body composition; psychological assessment eg psychological strengths and weaknesses, identifying psychological demands of activity

Analysis of Performance: technical analysis eg skills analysis; tactical analysis eg attack, defence, positioning; notational analysis; strengths (technical, tactical); areas for development (technical, tactical)

2 Be able to produce training programmes to support the development of selected sports performers

Development plan: based on initial assessment and analysis of performance; targets; goals (short-term, medium-term, long-term); aims and objectives eg technical and tactical development; activities for each component of sessions eg warm up, skill development, main activity, warm down; resources eg human, fiscal, physical; health and safety considerations eg risk assessment, emergency procedures, contingencies

Training programme: aims and objectives; periodisation; cycles (macrocycle, mesocycle, microcycle); individual training sessions

Coaching diary: monitoring development of performers; reflection on each session eg coaching cycle, plan, coach, review; strengths and areas for development of each session; amendments to training programme as appropriate

3 Be able to plan and manage coaching sessions that meet the needs of selected sports performers

Deliver training programme: instructions eg clear and concise communication, verbal, non-verbal, listening; effective organisation of session; effective time management skills; health and safety; development of performers

Assess development: development (technical, tactical, fitness, psychological); analysis eg against targets previously set, comparison with starting position

Present feedback: methods (verbal, non-verbal); format eg written report, one-to-one discussion; use of appropriate language; resources; providing recommendations for future

4 Be able to review coaching performance and plan for future practice

Evaluate own performance: formative and summative evaluation; strengths and areas for improvement against aims and objectives; development of performance of performers; feedback eg participants, observers, peers, assessors, mentor

Coaching skills audit: technical skills and knowledge; teaching and learning styles; demands of the role; current and potential level of performance; negotiation and consultation; confidentiality

Development plan: aims and objectives; goals (short-term, medium-term, long-term); targets (SMART – specific, measurable, achievable, realistic, time-bound); opportunities eg advice, contacts, training, development, courses, qualifications; barriers

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Be able to plan and undertake initial assessment and analysis of performance of sports performers	1.1 plan for an initial assessment of selected sports performers 1.2 carry out an initial assessment of selected sports performers 1.3 discuss the physiological and psychological strengths and areas for the development of selected sports performers 1.4 carry out analysis of the performance of selected sports performers 1.5 discuss the technical and tactical strengths and areas for development of selected sports performers
LO2 Be able to produce training programmes to support the development of selected sports performers	2.1 produce a development plan for a selected sports performer 2.2 plan a training programme for a selected sports performer 2.3 design a coaching diary to log the progress and development of coaches and sports performers
LO3 Be able to plan and manage coaching sessions that meet the needs of selected sports performers	3.1 deliver a training programme for a selected sports performer 3.2 assess the development of selected sports performers following completion of training programme 3.3 present feedback to sports performers following assessment of their development
LO4 Be able to review coaching performance and plan for future practices.	4.1 evaluate own performance in the delivery of a training programme for a selected sports performer 4.2 prepare a personal development plan relating to the planning and delivery of sports coaching

Guidance

Links

This unit has links to the following units in the BTEC Higher Nationals in Sport and in Sport and Exercise Sciences:

- *Unit 9: Principles of Sports Coaching*
- *Unit 27: Skill Acquisition*
- *Unit 28: Sports Coaching*
- *Unit 29: Analysis of Sports Performance*
- *Unit 31: Physical Education.*

This unit has links to aspects of the LLUK standards for Teaching and Supporting Learning.

Learners may also be encouraged to complete National Governing Body accredited coaching awards to support the required technical and tactical knowledge required for specific sport performer development.

Essential requirements

Learners must also have access to adequate sports facilities in order to undertake and manage coaching sessions. Learners must also have access to suitable ICT programmes to support them with the analysis of sports performance. For example, technical analysis programmes like *Dartfish* and *Kandle* will support learners' assessment of athletes' performance and within team sports programmes to analyse statistical data will support learners' analyses of performers' effectiveness.

For learning outcome 1, learners must plan, justify and use appropriate physical and psychological assessment methods for an initial assessment for at least two sports performers. They must also use at least two different methods of assessment to carry out an analysis of the performance of these selected performers.

In order to meet the requirements of learning outcome 3 learners should produce a variety of session plans that demonstrate their involvement with the delivery of sessions. Learners should be observed delivering at least two sessions and should be observed developing the athletes within the sessions in accordance with the development targets agreed with the athlete prior to the start of the session.

Employer engagement and vocational contexts

Links could be made with local voluntary sports clubs and experienced (and qualified) sports coaches within these clubs. Experienced sport coaches could act as mentors to learners on the programme and develop learners' knowledge and understanding of sports coaching in practice.

If possible, learners should observe the methods used by coaches to analyse player performance and how initial assessments are completed and used to develop training programmes at a local professional sports club.

Unit 11: The Evolution of Sports Development

Unit code: L/601/1886

Level: 4

Credit value: 15

● Aim

This unit looks at the evolution of sports development and includes the origins of sports development policy, rationales that have come to prominence and resulting issues.

● Unit abstract

The unit starts with a historical view of sports development and gives an insight into the principles and concepts which have influenced its growth. It also highlights the growing influence of government in sports development. Although developments have spanned several decades, each development has brought a step change in some way or another to the strategies.

The unit explores some of the models and philosophies that have strengthened and modernised sports development work. Since the origins of sports development, many rationales have been developed by many organisations, which has created dichotomies for sports development practitioners.

Today it is possible to identify a spectrum of provision that ranges from mass provision, reflecting social dimensions, through to elite performer provision, seeking medals and global recognition. This joint agenda can be identified for the London Olympics, perhaps the UK's biggest ever investment in sport.

Some would also argue that sports development has been 'hijacked' or re-interpreted for purposes other than sport, making it harder to judge effectiveness and true impacts. Current health and social inclusion drives reflect this trend. The unit will raise learners' awareness of a range of these issues.

● Learning outcomes

On successful completion of this unit a learner will:

- 1 Know about key policy stages and campaign development
- 2 Understand concepts and dichotomies influencing sports development strategies
- 3 Understand mass and elite strategies in sports development
- 4 Understand issues of effectiveness and impacts of strategies.

Unit content

1 Know about key policy stages and campaign development

Stages of development: Wolfenden report (1960s); Central Council of Physical Recreation (CCPR) activities (1970s); sports councils work (1980s); ‘Into the Nineties’ strategy document (1990s); Modernisation (2000s); Department for Culture Media and Sport (DCMS) and International influence (2010), European Union (EU), global federations

Policies and Campaigns: policies and campaigns eg Sport For All, All to Play For, New Horizons, A Sporting Future, Raising the Game, Game Plan, PESSCL (Physical Education, School Sport & Club Links) plans, Step into Sport, TOP schemes, action zones; EU influence; international bodies eg World Health Organisation (WHO), FIFA (Fédération Internationale de Football Association)

2 Understand concepts and dichotomies influencing sports development strategies

Influencing concepts: utilitarianism; people focused eg Sport for All; sports development models; product focus; business style management eg Compulsory Competitive Tendering (CCT), best value, accountability; social reform and partnership management; quality awards

Dichotomies: dichotomies eg social inclusion, equality, anti crime, personal and wellbeing, redevelopment, regeneration, renewal, sustainability, community cohesion, development of sport, strategies (performance, elite, excellence), facility development, sport in development, key driver, multiplier potential, event strategies

3 Understand mass and elite strategies in sports development

Mass (inclusion): social oriented strategies; economic-based strategies; behavioural types; relevant strategies of different organisations eg DCMS, Youth Sports Trust, Sport England/Scotland/Wales/Northern Ireland

Elite (success): British Olympic Association (BOA); English Institute of Sport (EIS); Sport England; UK Sport; sports coach UK; centres of excellence; academies

4 Understand issues of effectiveness and impacts of strategies in sports development

Effectiveness of: measurement methods; local interpretation and provision; vulnerability to limited resources; problems with partnerships and gathering data; reward systems; sustainability; Active People survey results; lack of uptake, community involvement, funding, availability, success

Impacts on: health agendas; social inclusion; educational aims; target groups; participation; performance and success; political agendas; desired objectives and benefits

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Know about key policy stages and campaign development	1.1 describe policy shifts that have occurred during different stages of the evolution of sports development 1.2 discuss different sports development policies and campaigns
LO2 Understand concepts and dichotomies influencing sports development strategies	2.1 analyse concepts which influence the management of sports development 2.2 discuss dichotomies that exist in sports development strategies
LO3 Understand mass and elite strategies in sports development	3.1 assess strategies relating to mass participation and inclusion employed by organisations involved in sports development 3.2 evaluate strategies employed by organisations involved in sports development that focus on elite success
LO4 Understand issues of effectiveness and impacts of strategies in sports development	4.1 review the effectiveness of provision in a selected community, in the context of sports development 4.2 discuss impacts on ongoing sports development strategic agendas

Guidance

Links

This unit has links to the following units in the BTEC Higher Nationals in Sport and in Sport and Exercise Sciences:

- *Unit 12: Managing Sports Development*
- *Unit 13: The Sport and Leisure Industry*
- *Unit 16 Marketing Principles*
- *Unit 21 Physical Activity, Lifestyle and Wellbeing*
- *Unit 27 Skill Acquisition in Sport*
- *Unit 28 Sports Coaching*
- *Unit 31 Physical Education*
- *Unit 35 Sport & Exercise for Specific Groups*
- *Unit 40 Event Management in Sport and Leisure*
- *Unit 41 Health Promotion*
- *Unit 44 Managing Resources in Sport and Leisure*
- *Unit 45 The Organisation and Control of Sport, Exercise and Fitness.*

The diversity of sports development means that it often encompasses cross cutting agendas, multi-agency work and incorporates diverse management skills hence the extensive link to other units.

Essential requirements

There are no essential requirements for this unit.

Employer engagement and vocational contexts

Most local authorities have sports development units which are normally co-operative when it comes to case studies or speakers. Their websites are often rich sources of case studies

Regional offices of sport bodies may provide useful updates or speakers.

Unit 12: Managing Sports Development

Unit code: Y/601/1888

Level: 5

Credit value: 15

● Aim

The aim of this unit is to give learners an understanding of how sports development schemes are planned and run, and the skills required to do this.

● Unit abstract

Current directions of sports development are very diverse, so in the first learning outcome the vision and content of selection of key organisations will be studied. This will show learners similarities and differences in their approaches to sports development. Learners should be aware of the global scale of sports development operations and the type of management it requires.

The second outcome considers initiatives and short, medium and long-term schemes ie partnerships, events and programmes common in the delivery of sports development today and the issues involved with them.

The final two outcomes have a slightly more practical inclination and enable learners to evaluate what planning, resources and issues affect the management of sports development schemes, including synergies, barriers and funding issues.

As most sports development schemes are projects, coverage of how to apply project management techniques, along with the ability to lead schemes to a successful conclusion is an important part of this unit.

● Learning outcomes

On successful completion of this unit a learner will:

- 1 Know about the vision and emphasis of sports development agencies
- 2 Understand sports development partnerships, events and programming issues
- 3 Understand the planning and funding of sports development schemes and related barriers
- 4 Be able to manage and evaluate sports development schemes.

Unit content

1 Know about the vision and emphasis of sports development agencies

Vision of: international federations eg FIFA (Fédération Internationale de Football Association), IAAF (International Association of Athletics Federation), IOC (International Olympic Committee); UK National Governing Bodies (NGB) eg Football Association (FA), Lawn Tennis Association (LTA), Rugby Football Union (RFU), Amateur Swimming Association (ASA); disability groups; local authorities; regional bodies eg County Sports partnerships; Local and district schemes eg clubs, voluntary groups, schools sports partnerships and colleges, independent school networks; corporate programmes, private sector providers

Emphasis: use of the sports development continuum; Long Term Athletic Development (LTAD) model; target groups eg gender specific, elite, mass, youth; talent identification; equality

Objectives: objectives eg pro-health, pro-education, athlete development, anti-exclusion, anti-crime, talent identification

2 Understand sports development partnerships, events and programming issues

Partnerships: multi-agency eg police, welfare and social services, National Health Service (NHS), Further Education, Higher Education; stakeholder theory; relationship building; roles eg of clubs, sponsors, governing bodies

Events: aims; nature eg taster, intervention; resourcing eg finance, physical, staff; marketing; targeting; role of hallmark events eg legacy, motivation

Programming issues: capacity building; sustainable frameworks; empowerment; enablement; synergies; systems approach eg implementing nationally

3 Understand the planning and funding of sports development schemes and related barriers

Planning: planning eg parameters, research, data, consultation, objectives, feasibility of idea, budget, resources, logistics, time scale

Funding: cost/benefit analysis; possible income streams eg subsidy, sponsorship, fees; expenditure forecasts; funding sources eg lottery, NOPES (New Opportunities for PE and Sport), Awards for All, Sportmatch, Sport England, foundations, charitable organisations

Barriers: barriers eg understanding youth (culture, motivation identity), shared purpose, cultural, historical, educational, technological, financial, personal, social, political, geographical

4 Be able to manage and evaluate sports development schemes

Management techniques: project management approaches eg Management by Objectives (MBO), SMART targets (specific, measurable, achievable, realistic, time-bound), Critical Path Analysis (CPA), networks, Gantt charts, decision making models, software programmes; costing and projections; writing funding bids and applications; contingency plans; staff training

Skills and considerations: skills and considerations eg leadership, organisation, reporting, problem solving, facilitation, deal with media and marketing, control and gather data, roles and responsibilities, health, safety and security, ensure ethics and legality, insurance cover, establish quality standards

Evaluation: complete cost/benefit cycle; assess value, Return on Investment (ROI); Key Performance Indicators (KPI) eg financial, social, physical; provide feedback eg from surveys, data collected; press coverage; negative impacts; follow up; take up; outcomes and objectives

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Know about the vision and emphasis of sports development agencies	1.1 discuss the visions of different sports development agencies 1.2 discuss the different emphases that sports development agencies have 1.3 discuss different objectives found in sports development schemes
LO2 Understand sports development partnerships, events and programming issues	2.1 assess partnerships in different sports development schemes 2.2 compare key elements of sports development events 2.3 analyse programming issues in delivering sports development schemes
LO3 Understand the planning and funding of sports development schemes and related barriers	3.1 explain basic planning requirements of a sports development scheme 3.2 analyse funding issues that affect sports development 3.3 assess barriers that exist to running sports development schemes
LO4 Be able to manage and evaluate sports development schemes	4.1 plan a sports development scheme 4.2 implement and manage a sports development scheme 4.3 evaluate the planning, implementation and management of a sports development scheme, identifying strengths and areas for improvement 4.4 make recommendations relating to future planning, implementation and management of sports development schemes

Guidance

Links

This unit has links to the following units in the BTEC Higher Nationals in Sport and in Sport and Exercise Sciences:

- *Unit 11: The Evolution of Sports Development*
- *Unit 13: The Sport and Leisure Industry*
- *Unit 21: Physical Activity, Lifestyle and Wellbeing*
- *Unit 35: Sport and Exercise for Specific Groups*
- *Unit 38: Law and Legal Responsibilities in Sport and Leisure*
- *Unit 40: Event Management in Sport and Leisure*
- *Unit 41: Health Promotion*
- *Unit 44: Managing Resources in Sport and Leisure*
- *Unit 45: The Organisation and Control of Sport, Exercise and Fitness.*

The diversity of sports development means that it often encompasses cross cutting agendas, multi-agency work and incorporates diverse management skills hence the extensive link to other units. The assessment also allows for some personal development amongst learners.

Essential requirements

An explanatory talk from sports development professional would clearly help with understanding of current practice.

Employer engagement and vocational contexts

Large professional or semi-professional clubs may also have a youth development coach who can be contacted. Knowledge in this area might well be facilitated by a visit.

Some private sector organisations have useful websites to gain a view of their inputs, for example, Brazilian Soccer.

Unit 13: The Sport and Leisure Industry

Unit code: M/601/1878

Level: 4

Credit value: 15

- **Aim**

This unit gives learners an understanding of the sport and leisure industry, the environment in which it operates and its range, growth and development.

- **Unit abstract**

In this unit learners will examine the expansion and influence of the sport and leisure industry over the last ten years, as well as the relationships between the different partners within the industry.

Learners will gain an understanding of the meaning of sport and leisure, participation trends and explanations for differences in participation. They will consider the structure of the leisure industry including the private, public and voluntary sectors. Learners will also consider the impact of time distribution on sports participation, the economics of professional team sports and measurement of performance.

Learners will be expected to look at how the political environment influences the sport and leisure industry, as well as the role of both government and government agencies. Learners will also evaluate the implementation of government policy at a local level. Learners will explore the significance of key impacts and current issues that affect the sport and leisure industry using relevant economic, social, cultural and environmental theories. Learners will be expected to prepare management strategies to meet these impacts and issues at a local level.

- **Learning outcomes**

On successful completion of this unit a learner will:

- 1 Understand the growth and influence of the sport and leisure industry
- 2 Understand how sport and leisure is provided
- 3 Understand the role of government and the political environment in the sport and leisure industry
- 4 Understand key impacts and current issues that affect sport and leisure.

Unit content

1 Understand the growth and influence of the sport and leisure industry

Sport and leisure industry: facilities and activities; outdoor and indoor; minority sports; professional clubs; entertainment; hospitality and exhibitions; fashionable sport and leisure and trends in sport and leisure; commercial and private providers; professional sport; cinemas and theatres; exhibitions; health clubs and spas; sports merchandise; voluntary eg local sports clubs, drama groups; public eg local authority leisure, national stadia, venue, parks and events, schools and specialist sports colleges, further education centres of excellence, government organisations, other agencies and providers

Growth, expansion and influences: age; gender; socio-economic group; lifestyle; geographical location; disability; health status; governmental imperatives; improved choice; health clubs; specialist activities; purpose built facilities; educational eg new sports colleges and centres of excellence; events management; recreation, arts and entertainment; outdoor activities; adventure tourism; sports development policy and planning; consumer consumption; lifestyle; national governing bodies; sector skills councils; sports councils to reflect national government policy on sport and associated areas eg fitness, elite training, facilities, services (growth of youth academies for different sports, lottery funding, professional bodies); use of appropriate data sources

2 Understand how sport and leisure is provided

Organisation: funding; objectives; structure; significance of commercial, voluntary and public provision; relationships between the providers; funding similarities; commercial activities (by public providers, voluntary providers); community activities (by commercial providers)

Management: lines of communication within and external to the organization; structure eg hierarchical; management by objectives; scientific management; autocratic; democratic

Mission, values and objectives: concept of corporate vision; mission statements; equality of access and opportunity eg women and disabled participants; profits and market share; sales; level of service; customer friendly; key legal responsibilities to the consumer and employee (health and safety, data protection); ethical and environmental practices; other stakeholders; setting industry standards; management training for different aspects of the sector eg National Occupational Standards

3 Understand the role of government and the political environment in the sport and leisure industry

Role: governmental departments and their relationships eg education, health; social inclusion; health; obesity in school children; crime prevention; widening participation; central government policy in sport and leisure; local authority strategies; implementation and success; government targets; quasi-governmental institutions; government sponsored bodies; major event planning

Policy: policies eg support and priority for sport and leisure, economic growth, full employment, inflation, health, social inclusion, inner cities, crime rates, new sports colleges, centres of excellence

Local authority: discretionary power to provide sport and leisure activities to improve health; accessible facilities for different community groups eg age, culture; sports development policy and implementation

4 Understand key impacts and current issues that affect sport and leisure

Impacts: economic eg influence on the growth of other sectors within the economy, seasonality, generation of revenue; social and cultural eg income and employment, quality of life, health and wellbeing, anti-drug, anti-crime, education and lifelong learning, regeneration of communities, achievement in school, work-life balance, transport, use of non-work time, increased leisure time, higher leisure spend, greater provision by local authorities, improved choice, value for money, unemployment trends, barriers to participation (age, gender, disability); environmental eg pollution, land use, energy conservation, planning and land use, brown field sites versus green field sites, loss of school playing fields, sustainable transport links, waste management, recycling,

Issues: economic; health of the nation eg obesity; media coverage and influence on participation; development of national stadia; hosting of major games; work-life balance/leisure time

Strategies: strategies eg for economic, environmental, social, cultural impacts; increased participation eg Active Participation survey; improve revenue and facilities; policy planning and management structures; marketing events and activities; open days; access for specialist sports, activities and events

Learning outcomes and assessment criteria

<p>Learning outcomes</p> <p>On successful completion of this unit a learner will:</p>	<p>Assessment criteria for pass</p> <p>The learner can:</p>
<p>LO1 Understand the growth and influence of the sport and leisure industry</p>	<p>1.1 discuss different types of sport and leisure providers</p> <p>1.2 analyse the growth, expansion and influence of the sport and leisure industry over the last ten years</p>
<p>LO2 Understand how sport and leisure is provided</p>	<p>2.1 discuss the mission, values and objectives of selected sport and leisure providers</p> <p>2.2 review the organisation, governance and management of selected sport and leisure providers</p> <p>2.3 analyse the organisation of selected sport and leisure providers</p> <p>2.4 discuss how selected local sport and leisure providers meet the needs of the community and predict future trends and possible changes</p>
<p>LO3 Understand the role of government and the political environment in the sport and leisure industry</p>	<p>3.1 analyse the role and inter-relationship of government departments with a remit that includes sport and leisure</p> <p>3.2 analyse current government policy and its effect on the sport and leisure industry</p> <p>3.3 evaluate the implementation and success of government policy and local authority strategy in a selected locality</p>
<p>LO4 Understand key impacts and current issues that affect sport and leisure</p>	<p>4.1 discuss current issues that affect sport and leisure</p> <p>4.2 produce strategies to manage sport and leisure issues and impacts</p>

Guidance

Links

This unit has links to the following units in the BTEC Higher Nationals in Sport and in Sport and Exercise Sciences:

- *Unit 9: Principles of Sports Coaching*
- *Unit 10: Applied Sports Coaching*
- *Unit 11: The Evolution of Sports Development*
- *Unit 12: Managing Sports Development*
- *Unit 18: Sport and Society.*

This unit also has links to the Level 4 National Occupational Standards (NOS) for Sports Development.

Essential requirements

There are no essential requirements for this unit.

Employer engagement and vocational contexts

In order for learners to fully explore the organisation of the sports industry in the UK, it is important that they understand the role of key organisations. The internet is the most useful resource here, as this tends to be an ever-changing area. Sports development officers (SDOs) and further education and school sports coordinators would be a good point of contact for information on both local and national sports provision. Learners would benefit from also talking with Community Sports Partnerships coordinators.

Unit 14: Marketing Principles

Unit code: F/601/0556

Level: 4

Credit value: 15

- **Aim**

This unit aims to provide learners with understanding and skills relating to the fundamental concepts and principles that underpin the marketing process.

- **Unit abstract**

This is a broad based unit which provides the learners with the opportunity to learn to use the key principles of marketing.

Firstly the unit looks at the definitions of marketing, and what is meant by a marketing orientation and the marketing process.

Next the learners consider the use of environmental analysis in marketing and undertake their own analyses at both macro and micro levels. They also investigate the importance of segmentation of the market and how this leads to the identification and full specification of target groups. Then they consider buyer behaviour and positioning.

The unit then looks at the main elements of both the original and the extended marketing mix. This includes an introduction to the concept of the product life cycle, new product development, pricing strategies, distribution options and the promotion mix.

Finally the unit allows learners to develop their own marketing mixes to meet the needs of different target groups. This is extended to include consideration of the differences when marketing services as opposed to goods. A range of other contexts is examined including the marketing to businesses instead of consumers and the development of international markets.

- **Learning outcomes**

On successful completion of this unit a learner will:

- 1 Understand the concept and process of marketing
- 2 Be able to use the concepts of segmentation, targeting and positioning
- 3 Understand the individual elements of the extended marketing mix
- 4 Be able to use the marketing mix in different contexts.

Unit content

1 Understand the concept and process of marketing

Definitions: alternative definitions including those of the Chartered Institute of Marketing and the American Marketing Association; satisfying customers' needs and wants; value and satisfaction; exchange relationships; the changing emphasis of marketing

Marketing concept: evolution of marketing; marketing orientations; societal issues and emergent philosophies; customer and competitor orientation; efficiency and effectiveness; limitations of the marketing concept

Marketing process overview: marketing audit; integrated marketing; environmental analysis; SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis; marketing objectives; constraints; options; plans to include target markets and marketing mix; scope of marketing

Costs and benefits: links between marketing orientation and building competitive advantage; benefits of building customer satisfaction; desired quality; service and customer care; relationship marketing; customer retention; customer profitability; costs of too narrow a marketing focus

2 Be able to use the concepts of segmentation, targeting and positioning

Macro-environment: environmental scanning; political, legal, economic, socio-cultural, ecological and technological factors

Micro-environment: stakeholders (organisation's own employees, suppliers, customers, intermediaries, owners, financiers, local residents, pressure groups and competitors); direct and indirect competitors; Porter's competitive forces

Buyer behaviour: dimensions of buyer behaviour; environmental influences; personal variables – demographic, sociological, psychological – motivation, perception and learning; social factors; physiological stimuli; attitudes; other lifestyle and lifecycle variables; consumer and organisational buying

Segmentation: process of market selection; macro and micro segmentation; bases for segmenting markets (geographic, demographic, psychographic and behavioural); multivariable segmentation and typologies; benefits of segmentation; evaluation of segments and targeting strategies; positioning; segmenting industrial markets; size; value; standards; industrial classification

Positioning: definition and meaning; influence over marketing mix factors

3 Understand the individual elements of the extended marketing mix

Product: products and brands – features, advantages and benefits; the total product concept; product mix; product life-cycle and its effect on other elements of the marketing mix; product strategy; new product development; adoption process

Place: customer convenience and availability; definition of channels; types and functions of intermediaries; channel selection; integration and distribution systems; franchising; physical distribution management and logistics; ethical issues

Price: perceived value; pricing context and process; pricing strategies; demand elasticity; competition; costs, psychological, discriminatory; ethical issues

Promotion: awareness and image; effective communication; integrated communication process – (SOSTT + 4Ms); promotional mix elements; push and pull strategies; advertising above and below the line including packaging; public relations and sponsorship; sales promotion; direct marketing and personal selling; branding, internet and online marketing

The shift from the 4Ps to the 7Ps: product-service continuum; concept of the extended marketing mix; the significance of the soft elements of marketing – people, physical evidence and process management

4 Be able to use the marketing mix in different contexts

Consumer markets: fast-moving consumer goods; consumer durables; co-ordinated marketing mix to achieve objectives

Organisational markets: differences from consumer markets; adding value through service; industrial; non-profit making; government; re-seller

Services: nature and characteristics of service products – intangibility, ownership, inseparability, perishability, variability, heterogeneity – the 7Ps; strategies; service quality; elements of physical product marketing; tangible and intangible benefits

International markets: globalisation; cultural differences; standardisation versus adaptation; the EU; benefits and risks; market attractiveness; international marketing mix strategies

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand the concept and process of marketing	1.1 explain the various elements of the marketing process 1.2 evaluate the benefits and costs of a marketing orientation for a selected organisation
LO2 Be able to use the concepts of segmentation, targeting and positioning	2.1 show macro and micro environmental factors which influence marketing decisions 2.2 propose segmentation criteria to be used for products in different markets 2.3 choose a targeting strategy for a selected product/service 2.4 demonstrate how buyer behaviour affects marketing activities in different buying situations 2.5 propose new positioning for a selected product/service
LO3 Understand the individual elements of the extended marketing mix	3.1 explain how products are developed to sustain competitive advantage 3.2 explain how distribution is arranged to provide customer convenience 3.3 explain how prices are set to reflect an organisation's objectives and market conditions 3.4 illustrate how promotional activity is integrated to achieve marketing objectives 3.5 analyse the additional elements of the extended marketing mix
LO4 Be able to use the marketing mix in different contexts	4.1 plan marketing mixes for two different segments in consumer markets 4.2 illustrate differences in marketing products and services to businesses rather than consumers 4.3 show how and why international marketing differs from domestic marketing

Guidance

Links

This unit has links to the following units in the BTEC Higher Nationals in Sport and in Sport and Exercise Sciences:

- *Unit 15: Operating and Managing a Sport and Leisure Facility*
- *Unit 16: Managing in the Health and Fitness Industry*
- *Unit 40: Event Management in Sport and Leisure*
- *Unit 41: Health Promotion.*

Essential requirements

There are no essential requirements for this unit.

Employer engagement and vocational contexts

Centres should develop links with local businesses. Many businesses and chambers of commerce want to promote local business and are often willing to provide work placements, visit opportunities, information about businesses and the local business context and visiting speakers.

www.businessbritainuk.co.uk provides information about business in Britain and has extensive links to other business and business news sites.

www.fsb.org.uk The Federation of Small Businesses provides information, support and guidance about small businesses in the UK.

Unit 15: Operating and Managing a Sport and Leisure Facility

Unit code: Y/601/1891

Level: 4

Credit value: 15

● Aim

This unit provides an understanding of how a typical sport and leisure facility is operated to meet organisational goals, deliver services effectively and use resources efficiently to meet customer needs.

● Unit abstract

The ongoing challenge for a sport and leisure manager is to bring all the aspects of running a facility into harmony and to try to keep them there. That means being able to manage routine and non-routine tasks and ensure that the facility's resources are working as best they can for staff.

For larger and more diverse facilities this can mean a mix of retail, events, wet and dry activities, indoor and outdoor locations and surrounding parking or play areas need to have plans for use in place and to be monitored to see if they are meeting customer needs.

The unit takes learners through aspects of planning, implementing and monitoring, and the manager's central role in controlling these aspects.

The understanding and skills covered in the unit should by nature be transferable to many contexts and help to establish good knowledge of best working practices for sport and leisure, whether they are in swimming pools, outdoor centres, sports stadia or leisure centres.

The technology, staffing, resources and activities may differ from one facility to another but the principles of good operations management will still apply. Everything from design, layout, capacity and maintenance planning to quality assurance, scheduling, inventory and supplies management can come under the umbrella term of operations management.

● Learning outcomes

On successful completion of this unit a learner will:

- 1 Understand philosophies of operation in sport and leisure facilities
- 2 Understand the responsibilities of managers in sport and leisure facilities
- 3 Understand resource management processes for sport and leisure facilities
- 4 Be able to apply monitoring, controlling and reporting techniques.

Unit content

1 Understand philosophies of operation in sport and leisure facilities

Philosophies of use: overview of sport and leisure operations; Schmenner model; private sector business planning eg profit, maximising income, increasing market share and turnover; public sector service planning eg council policy, mission statements, service aims and subsidy levels; voluntary (not for profit) sector practices eg lowest costs, sustainable levels of income, ploughing back profit, fundraising

Developing an operations strategy to include: vision; objectives; implementation eg scheduling, resource and asset plans, activity range, staffing levels, safety parameters, procurement, customer targets; marketing and forecasting activities; quality levels and monitoring methods

2 Understand the responsibilities of managers in sport and leisure facilities

Planning services: space and layout use eg capacities, use of locations, programming; pricing and cost controls eg merchandising and sales, fees, catering; staff communications, security; welfare; environmental control eg utility usage, waste and recycling.

Planning procedures: quality assurance; risk assessments; covering legislation and licensing eg UK and EU safety at work, Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR), Control of Substances Hazardous to Health (COSHH), fire, food, consumer protection, working with children and the disabled, emergency procedures, alcohol, gaming, and music; staffing eg recruitment, discipline, grievances and absence, training and appraisal; financial affairs eg contracts, handling cash, credit, cards, billing

3 Understand resource management processes for sport and leisure facilities

Resource planning: supplies and materials eg restocking and replacement, use and control of consumables; contracting; documentation processes eg inventory checks and audits; change in staffing needs; events and foreseen risk control; embedding ethical and sustainable practices in operations

Resource maintenance: preventative; emergency cover; health and safety; energy reduction; assets; servicing and lifecycles and costs; leasing options; vandalism and damage; vehicle and plant needs

4 Be able to apply monitoring, controlling and reporting techniques

Applications: customer data collection eg bookings, supplier data; employee eg records, accidents and incidents, deployment; resources eg purchasing, stock control, energy use and recovery; financial reporting eg budget performance, income and expenditure

Systems and software: selection of most suitable eg purposes, cost, capabilities, user friendliness; flexibility eg logistical and environmental coverage, reporting style; quality assurance applications

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand philosophies of operation in sport and leisure facilities	1.1 discuss the fundamentals of operations management in sport and leisure facilities 1.2 analyse the value of Schmenner model 1.3 discuss key components of an operations strategy
LO2 Understand the responsibilities of managers in sport and leisure facilities	2.1 discuss the diverse services that managers in sport and leisure facilities may have to plan for 2.2 analyse procedures used in the operation and management of sport and leisure facilities
LO3 Understand resource management processes for sport and leisure facilities	3.1 discuss the operations requirements for resource provision and control 3.2 analyse the importance of resource maintenance in operations management in sport and leisure facilities
LO4 Be able to apply monitoring, controlling and reporting techniques	4.1 produce a rationale giving the benefits of having comprehensive applications and reporting systems in place 4.2 assess software systems used or that could be used in sport and leisure operations

Guidance

Links

This unit has links to the following units in the BTEC Higher Nationals in Sport and in Sport and Exercise Sciences:

- *Unit 14: Marketing Principles*
- *Unit 16: Managing in the Health and Fitness Industry*
- *Unit 17: Customer Service*
- *Unit 32: Technology in Sport*
- *Unit 38: Law and Sport and Leisure Operations*
- *Unit 39: The Entertainment Industry and Venue Management*
- *Unit 40: Event Management in Sport and Leisure*
- *Unit 42: Managing Human Resources*
- *Unit 43: Small Business Enterprise*
- *Unit 44: Managing Resources in Sport and Leisure*
- *Unit 47: Employment Law.*

The unit has links with professional body awards promoted by The Institute for Sport, Parks and Leisure (ISPAL) and The Institute of Sport and Recreation Management (ISRM) .

Some knowledge of working within the law would complement studies, ie so that an understanding of liability negligence, tort, courts, employment discrimination is given as back drop and linked to consequences of having poor or no systems in place.

NVQs in a range of operational dimensions will also complement studies or provide good previous grounding and might be considered as useful pre-requisites.

Essential requirements

Learners will need access to different types of centres and operational contexts.

Employer engagement and vocational contexts

There are opportunities for employers to engage with the delivery of this unit through:

- allowing access to facilities managers and staff to explain and demonstrate systems in action
- supplying written procedures and materials for learners to study
- guidance to tutors on current practice or changes in philosophy
- work placements to give holistic opportunities to learners.

Unit 16: Managing in the Health and Fitness Industry

Unit code: R/601/1890

Level: 5

Credit value: 15

● Aim

The aim of this unit is to provide learners with an understanding of the health and fitness industry, its management imperatives, client needs and trends in participation and provision over the last 20 years in the UK.

● Unit abstract

The unit will help learners focus on the issues of adapting to market needs, managing provision, and customers effectively, and using funding and resources efficiently in order to manage a viable health and fitness facility.

Learners will also be expected to look at the current state of competition within the public, voluntary and private sectors of the industry and prepare strategies to increase client recruitment and retention, reduce attrition rates and add value to the service.

This unit will help learners understand the motivation and expectations of users of a health and fitness facility.

● Learning outcomes

On successful completion of this unit a learner will:

- 1 Understand the development trends of the health and fitness industry in the UK
- 2 Understand the marketplace dynamics in which health and fitness providers operate in the UK
- 3 Understand the resources required to establish and operate health and fitness businesses
- 4 Understand the health and fitness experience from the perspective of customers.

Unit content

1 Understand the development trends of the health and fitness industry in the UK

Trends: growth of private (SME), commercial sector health club chains, local authority provision, voluntary sector facilities, industrial/corporate and ‘contracted out’ services; role of refurbishment, upgrades, new technology, effect on management of facilities; health culture eg health promotion, concept of wellness and lifestyle; increasingly active lifestyles of an older population, complementary spa culture and treatments

Factors: government campaigns, media pressure, local authority provision funding levels, health education and awareness, peer pressure, access and affordability, disposable income, leisure time, consolidation (saturation) of health and fitness market, recession

2 Understand the marketplace dynamics in which health and fitness providers operate in the UK

Market dynamics: major health and fitness chains, mergers and acquisitions, local authority provision and its efforts to redress the appeal of the private operators, survival for independent operators and voluntary sector, quality dimensions; competitive factors for both public and commercial sectors

Operating options: increasing and maintaining market share eg recruitment, retention and attrition strategies, increased benefits of joining, niche marketing, location and relocation near major centres of population, aggressive pricing, regular refurbishment and equipment upgrades, responsive staffing and customer care, incentives, free offers, added value, downsizing

3 Understand the resources required to establish and operate health and fitness businesses

Resources: company structure (sole trader, partnership, ltd, plc); funding eg private capital investment, share capital, loans; credit, membership fees, grants, public finance initiatives (PFI), lottery funding, sales and receipt processes; financing new provision/equipment, forecasting, budget control, annual reporting; physical eg premises, location, equipment and services, marketing materials and promotional techniques; staffing eg numbers, qualifications, gender/age balance, rates of pay, hours of work, training requirements

Membership operations: strategies eg recruitment of new clients, specialist groups, specialist/new provision, niche markets; joining procedures eg client friendly, unobtrusive, transparent, non-threatening, encourages culture of ‘buying into’ rather than ‘selling to’, administratively straightforward, not time consuming; ICT friendly eg ease of processing details; retention of clients eg target marketing special groups, assigning personal trainers, extra services, following up non-attendees/irregular attendees, special deals for new members, incentives for introducing new members, managing the membership database; evaluation through the stages of recruitment, joining and retention

4 Understand the health and fitness experience from the perspective of customers

Motivation and expectations: personal motivation eg weight loss, get fitter, in shape, self-esteem, sense of belonging, 'gym' culture, social interaction; contract between different client groups using theory to support eg Maslow, lifestyle models (psychographics)

Different client groups: client groups eg corporate clients, women only, GP referrals, over 50s, disabled groups, pregnant women, people from different cultures

Effectiveness: effectiveness eg staff, customer care, special incentives, sensitive programming, specialised equipment and interior design, access and egress, adequate provision, after sales service, appropriate marketing and promotion, dealing with complaints, feedback loops

Adding value: adding value eg sales of food and drink, sportswear and accessories, hair and beauty treatments and products, confectionery, health supplements, training aids, fitness videos, magazines, complementary products in changing rooms, personal celebrations and events

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand the development trends of the health and fitness industry in the UK	1.1 discuss trends in the health and fitness sector over the last 20 years 1.2 assess factors that have driven changes in the health and fitness sector over the last 20 years
LO2 Understand the marketplace dynamics in which health and fitness providers operate in the UK	2.1 analyse competition amongst health and fitness providers 2.2 evaluate the market profiles of different health and fitness providers 2.3 assess operating options and strategies for increasing the market share of health and fitness providers
LO3 Understand the resources required to establish and operate health and fitness businesses	3.1 analyse sources of funding available to establish and manage a health and fitness facility 3.2 discuss different human and physical resource set-ups, in the health and fitness industry 3.3 evaluate the management of a membership scheme
LO4 Understand the health and fitness experience from the perspective of customers	4.1 analyse the motivations and expectations of different types of customers 4.2 analyse the effectiveness of a selected health and fitness facility in meeting the needs of the different customer groups 4.3 provide recommendations to improve the effectiveness of a selected health and fitness facility in meeting the needs of different customer groups 4.4 analyse the scope for health and fitness facilities to add value to their customers' experience'

Guidance

Links

This unit has links to the following units in the BTEC Higher Nationals in Sport and in Sport and Exercise Sciences:

- *Unit 13: The Sport and Leisure Industry*
- *Unit 14: Marketing Principles*
- *Unit 15: Operating and Managing a Sport and Leisure Facility*
- *Unit 17: Customer Service*
- *Unit 38: Law and Sport and Leisure Operations*
- *Unit 39: The Entertainment Industry and Venue Management*
- *Unit 40: Event Management in Sport and Leisure*
- *Unit 42: Managing Human Resources*
- *Unit 43: Small Business Enterprise*
- *Unit 44: Managing Resources in Sport and Leisure Management*
- *Unit 46: The Developing Manager*
- *Unit 47: Employment Law.*

Essential requirements

Learners will need access to appropriate resources including literature websites, collation and interpretation of original documentation (sourced from individual organisations/centres), lead lectures and class discussions. Learners also need access to a range of health and fitness providers within the commercial and public sector.

It should be noted that many of the assessment criteria for this unit require comparative studies in which learners will need to have access to facilities, staff and 'live' documentation, such as forms, written procedure, staff handbooks.

Employer engagement and vocational contexts

Employers through talks, tours and visits or responding to questionnaires can input current practice to this unit. Professional bodies The Institute for Sport, Parks and Leisure (ISPAL) and Institute of Sport and Recreation Management (ISRM) may respond to contact on training

Visits to large chains would give learners the opportunity to see many diverse aspects of operations.

Unit 17: Customer Service

Unit code: J/601/1790

Level: 4

Credit value: 15

- **Aim**

This unit enables learners to gain understanding of customer service policies and the purpose of promoting a customer-focused culture and to gain skills to provide customer service.

- **Unit abstract**

The aim of this unit is to introduce learners to the principles and objectives of customer service with a focus on business and services operations, such as sports and leisure and hospitality. The unit will develop an understanding of the nature of a customer service culture and quality service in the business and services management environment. It will provide an appreciation of the importance of information gathered from customers and its relevance to improved delivery of services.

Learners must ensure that their evidence relates to the sport and active leisure industry.

- **Learning outcomes**

On successful completion of this unit a learner will:

- 1 Understand customer service policies within business and services contexts
- 2 Understand the purpose of promoting a customer-focused culture
- 3 Be able to investigate customer requirements and expectations
- 4 Be able to provide customer service within business and services contexts to meet required standards.

Unit content

1 Understand customer service policies within business and services contexts

Policies: policies (structure, use, focus, customer requirements, customer expectations, customer satisfaction, product and service knowledge, consultation, confidentiality, customer perceptions and satisfaction, monitor, influences affecting implementation, effective communication)

Quality of service: methods of assessment; customer expectations; standardised procedures; codes of practice; staff levels (staffing levels, staff competency, flexibility, reliability, responsiveness)

Evaluation: purpose; sources of feedback; accuracy; relevance; reliability; validity; methods of data collection; improvements; staff training and staff development

Sport and Leisure industry: industries within the sport and leisure industry eg leisure centres, theme parks, cinemas, contract food service providers, membership clubs, events

2 Understand the purpose of promoting a customer-focused culture

Communication: types eg verbal, non-verbal body language, written; types of response; use; effect

Customer: central role; customer service culture; identifying and analysing customer requirements and expectations; influences of service provision on customer perceptions

Benefits of improved service: customer satisfaction, repeat business, improved reputation, increased profit

3 Be able to investigate customer requirements and expectations

Requirements: sources of information eg customers, staff, management, customer records, past information

Primary research: primary research eg sampling, qualitative, quantitative; interview eg individual, group, survey, observation; contact methods eg mail, telephone, personal

Secondary research: internal eg sales records, yield data, financial information, client databases; external eg government publications, trade journals, periodicals, professional associations, national organisations, commercial data

Satisfaction levels: planning; strategy; assessment of options using researched information; role of the business and services manager; staffing levels; motivating staff; improvements

4 Be able to provide customer service within business and services contexts to meet required standards

Types of customers: different age groups eg the elderly, children; different cultural backgrounds; special needs eg physically disabled; satisfied; dissatisfied; under influence eg drugs, alcohol, medication

Customer needs: customer needs eg products and services, urgent, non-urgent, special requirements, quality of service, value for money, cultural, social; trends eg fashion, ergonomic, equipment, training, products and services, consumer protection legislation

Customer service: consultation; advice; personal selling; complaints procedure; reception skills; confidentiality

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand customer service policies within business and services contexts	1.1 discuss reasons for using customer service policies 1.2 discuss the purpose of evaluating a customer service policy, indicating how this can assist future staff training and development
LO2 Understand the purpose of promoting a customer-focused culture	2.1 evaluate different communication methods and how these are used to best effect 2.2 analyse how customer perception is influenced by customer service provision
LO3 Be able to investigate customer requirements and expectations	3.1 assess sources of information on customer requirements and satisfaction levels 3.2 carry out research on customer requirements and satisfaction levels for a selected business, suggesting potential improvements
LO4 Be able to provide customer service within business and services contexts to meet required standards	4.1 deliver customer service to required standards in a business and service environment 4.2 review own performance in the delivery of customer service and make recommendations for improvement

Guidance

Links

This unit has links to the following units in the BTEC Higher Nationals in Sport and in Sport and Exercise Sciences:

- *Unit 14: Marketing Principles*
- *Unit 15: Operating and Managing a Sport and Leisure Facility*
- *Unit 16: Managing in the Health and Fitness Industry*
- *Unit 39: The Entertainment Industry and Venue Management*
- *Unit 40: Event Management in Sport and Leisure*
- *Unit 43: Small Business Enterprise*
- *Unit 46: The Developing Manager.*

Essential requirements

The use of appropriate case studies will enhance the relevance of the unit and show how different organisations, both local and national, have developed their customer care policies.

Employer engagement and vocational contexts

Centres should try to establish relationships with appropriate organisations in order to bring realism and relevance to the unit.

Unit 18: Sport and Society

Unit code: T/601/1879

Level: 4

Credit value: 15

- **Aim**

This unit makes learners aware of the intrinsic role sport plays within society today, including the involvement of different organisations, and people's perceptions of, and participation in, sport.

- **Unit abstract**

Sport has become an important part of society. It has moved away from its playful beginnings in pre-industrial times and it is now a prominent social institution in almost every society. It has evolved from a pastime into a multi-national operation controlled by commercialism, entertainment, media and government policy.

The unit learners a focus on the issues and debates that preoccupy sports and their providers at a strategic level. Sport has become a tool to alleviate many of the social issues affecting society today, such as health, crime, and inactivity. Many of these reflect current agendas of national and local government and address the challenges of satisfying the aspirations of society.

This unit develops learners' awareness of the influence that media and marketing has in international and European relations alongside national developments such as hosting the Olympic Games which recognises the political meaning of sport to many societies not just within Britain.

Inequalities in society such as gender class and racial inequality are often mirrored within sport. In this unit, learners will have the chance to analyse these issues of inequality by applying theory.

Learners will evaluate local, regional and national initiatives that have used sport to encourage social inclusion and eliminate social barriers at all levels.

- **Learning outcomes**

On successful completion of this unit a learner will:

- 1 Understand the involvement of different organisations in sports provision
- 2 Understand the role that sports participation plays in addressing social issues
- 3 Understand the factors that affect perceptions of, and participation in, sport
- 4 Be able to develop strategies to increase participation in sport locally.

Unit content

1 Understand the involvement of different organisations in sports provision

Organisations involved in sports provision: organisations from different sectors (public sector organisations, private sector organisations, third sector organisations); local organisations eg local government, local facilities, local clubs; national organisations eg National Governing Bodies (NGB), Youth Sports Trust, SportEngland, central government departments, Girlguiding UK

Networks: local networks eg community sports networks, county sports partnerships; national networks eg National County Sports Partnerships Network; international networks

2 Understand the role that sports participation plays in addressing social issues

Social issues: issues eg physical and mental health, disaffected youth, crime

Addressing social issues: addressing social issues eg promotion of healthy lifestyles, using physical activity as a vehicle to improve communication, coordination and motor skills related to mental health issues, initiatives for young offenders, local community projects, police initiatives

Policy: related government policy eg designed to increase participation, working with specific target groups (school truants, potential or rehabilitated offenders)

3 Understand the factors that affect perceptions of, and participation in, sport

Factors that influence perceptions: factors eg marketing, media, major events, success, role-models, personal experiences

Factors that influence participation: factors eg marketing, promotion, availability, accessibility, programming, health-related factors, linguistic and cultural barriers, socio-economic factors

4 Be able to develop strategies to increase participation in sport locally

Strategies used to encourage participation: local eg local authority strategies, local network strategies; national strategies eg Game Plan, Every Child Matters, Girls First, Active Sports, Sportsmark

Prepare a strategy to encourage participation: prepare a strategy eg issue to be addressed, target audience, resources required, operational details, desired outcomes

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand the involvement of different organisations in sports provision	1.1 discuss different organisations involved in sports provision 1.2 discuss different networks involved in sports provision, and their role at local, regional and national level 1.3 analyse the relationships between different organisations and networks involved in sports provision
LO2 Understand the role that sports participation plays in addressing social issues	2.1 discuss social issues that can be addressed by sports participation 2.2 discuss how sports participation can address social issues 2.3 discuss how the use of sports participation to address social issues affects government policy 2.4 review different initiatives, and government policy, relating to the use of sports participation to address social issues
LO3 Understand the factors that affect perceptions of, and participation in, sport	3.1 discuss factors that affect perceptions of sport 3.2 discuss factors that affect participation in sport
LO4 Be able to develop strategies to increase participation in sport locally	4.1 analyse strategies used to encourage participation in sport 4.2 prepare a strategy to encourage local participation in sport

Guidance

Links

This unit has links to the following units in the BTEC Higher Nationals in Sport and in Sport and Exercise Sciences:

- *Unit 11: The Evolution of Sports Development*
- *Unit 12: Managing Sports Development*
- *Unit 13: The Sport and Leisure Industry*
- *Unit 21: Physical Activity, Lifestyle and Wellbeing*
- *Unit 41: Health Promotion.*

This unit also has links to the Level 4 National Occupational Standards (NOS) for Sports Development.

Essential requirements

This unit does not include any essential requirements or resources.

Employer engagement and vocational contexts

In order for learners to fully explore the organisation of the sports industry in the UK, it is important that they understand the role of key organisations. The internet is the most useful resource here, as this tends to be an ever-changing area. Sports development officers (SDOs) further education and school sports coordinators would be a good point of contact for information on both local and national sports provision. Learners could benefit from also talking with community sports partnerships coordinators.

Unit 19: Laboratory and Experimental Methods in Sport and Exercise Sciences

Unit code: L/600/0032

Level: 4

Credit value: 10

● Aim

The aim of this unit is to enable learners to explore standard procedures in kinanthropometry and to increase familiarity with laboratory and experimental methods.

● Unit abstract

In this unit learners will develop an understanding and appreciation of the importance of adhering to health and safety protocols when conducting experiments and tests, and develop skills to become adept at handling and interpreting scientific data.

The unit introduces laboratory and experimental methods in kinanthropometry, giving learners a valuable experience for higher level experimental work.

Learners will also be introduced to alternative anthropometric methods, develop the practical skills necessary to use anthropometric techniques and explore factors which might affect accuracy of results. Learners will apply statistical analyses to determine the degree of relationship or difference between the alternative anthropometric methods, and the implications this may have for predicting the percent body fat of an individual. Learners will progress to practical assessment and interpretation of the anthropometric somatotype.

The unit enables learners to estimate the aerobic fitness of an individual using alternative modes of assessment. Learners will explore and account for any differences in the prediction of aerobic fitness which might occur and interpret the aerobic fitness levels of the individual against normative data, and data for elite performers, highlighting strengths and providing recommendations for improvement.

● Learning outcomes

On successful completion of this unit a learner will:

- 1 Understand health, safety and ethical issues associated with laboratory and experimental methods in sport and exercise sciences
- 2 Be able to estimate percent body fat using anthropometric methods
- 3 Be able to measure and interpret the anthropometric somatotype
- 4 Be able to use experimental methods to predict maximum oxygen uptake.

Unit content

1 Understand health, safety and ethical issues associated with laboratory and experimental methods in sport and exercise sciences

Health and safety issues: gaining permission to test from the subject; use of health screening; use of informed consent, subject disclaimer; preparation of the subject; test sequence; laboratory safety procedures; first aid procedures; reasons for terminating a test

Ethical issues: eg recording results, confidentiality of data, storage of data, ethical clearance, ensuring the welfare of the subject throughout the test procedures

2 Be able to estimate percent body fat using anthropometric methods

Anthropometric methods: Durnin and Womersley skinfold method (bicep, tricep, subscapular, suprailiac); Jackson and Pollock skinfold method for males (chest, abdomen, thigh); Jackson and Pollock skinfold method for females (triceps, suprailiac, thigh); Bioelectrical Impedance Analysis; hydrodensitometry; other methods eg circumferential analyses

Test guidelines: pre-test preparation eg gaining permission to test, informed consent; practice and application of correct technique; units of measurement

Validity issues: eg calibration of equipment, test variables, other considerations eg preparation of subject

Reliability issues: eg consistency of results (trial one, trial two, average), acceptable difference existing between trials

Calculations to estimate percent body fat: equation to predict body density; equation to predict percent body fat (according to method employed, age, gender and ethnic origin); use of nomogram

Interpretation of results: use of statistical tests to determine degree of relationship or difference between alternate methods eg Pearson's product moment correlation coefficient (r), t-tests; compare to norms for age, gender and ethnic origin; strengths and areas for improvement

3 Be able to measure and interpret the anthropometric somatotype

Measurement of anthropometric somatotype: pre-test preparation eg gaining permission to test, informed consent; Heath-Carter anthropometric somatotype (use of Heath-Carter somatotype rating form); first component (skinfolds); second component (height, bone diameters, girths); third component (height weight ponderal index)

Interpretation of results: plot on somatochart; categories (endomorph, mesomorph, ectomorph, other somatotype categories); related to sports performance; strengths and areas for improvement

4 Be able to use experimental methods to predict maximum oxygen uptake

Experimental methods: pre-test preparation eg gaining permission to test, informed consent, health screening; test validity and reliability issues; aerobic run tests eg multistage fitness test, 12-minute run test, 1.5-mile run test; aerobic step tests eg Harvard step test, Forestry step test, Queens College step test; aerobic cycle tests eg Astrand cycle ergometry test

Interpretation of results: applying statistical tests to determine degree of relationship or difference between test results eg Pearson's product moment correlation coefficient (r), t-tests; validity issues; reliability issues; comparison to norms for age and gender; comparison to elite sports performers; strengths and areas for improvement

Learning outcomes and assessment criteria

<p>Learning outcomes</p> <p>On successful completion of this unit a learner will:</p>	<p>Assessment criteria for pass</p> <p>The learner can:</p>
<p>LO1 Understand health, safety and ethical issues associated with laboratory and experimental methods in sport and exercise sciences</p>	<p>1.1 explain health and safety issues associated with laboratory and experimental methods in sport and exercise sciences</p> <p>1.2 evaluate ethical issues associated with laboratory and experimental methods in sport and exercise sciences</p>
<p>LO2 Be able to estimate percent body fat using anthropometric methods</p>	<p>2.1 follow test guidelines for the prediction of percent body fat of an individual using two alternative anthropometric methods</p> <p>2.2 describe validity and reliability issues of the two selected anthropometric methods</p> <p>2.3 carry out calculations for the prediction of percent body fat of an individual using two alternative anthropometric methods, interpret results and describe the strengths and areas for improvement</p>
<p>LO3 Be able to measure and interpret the anthropometric somatotype</p>	<p>3.1 carry out an assessment of the anthropometric somatotype of an individual, describing the results</p>
<p>LO4 Be able to use experimental methods to predict maximum oxygen uptake</p>	<p>4.1 follow two different experimental methods to predict the maximum oxygen uptake of an individual, describing the results</p>

Guidance

Links

This unit has links to the following units in the BTEC Higher Nationals in Sport and in Sport and Exercise Sciences:

- *Unit 3: Research Methods for Sport and Exercise Sciences*
- *Unit 5: Research Project*
- *Unit 8: Field-based Fitness Testing for Sport and Exercise.*

This unit also has links to the National Occupational Standards (NOS) for Coaching, Teaching and Instructing level 3.

Essential requirements

It is vital that this unit is introduced with the tutor explaining health and safety issues associated with conducting laboratory and experimental methods in sport and exercise sciences.

Learners will require access to a well-equipped gym and fitness suite with access to a range of kinanthropometric equipment, such as skinfold calipers (eg, Harpenden/Slimguide), Bioelectrical Impedance Analysis (BIA) machine, bone diameter calipers, multistage fitness test package, cycle ergometer (eg, Monark 824E). Learners will need to use the Heath-Carter (1967) anthropometric somatotype rating form and somatochart to conduct the anthropometric somatotype method. Learners also need access to normative data for aerobic fitness interpretation and data for elite performers.

Learners need to be aware of the importance of gaining medical and ethical clearance, and how to ensure confidentiality of subjects. Learners will also need to ensure the welfare of subjects throughout the laboratory and experimental methods to be conducted. Pre-test procedures must be conducted and consent obtained from subjects prior to conducting any tests. Learners will also need to be fully aware of reasons for terminating a test and the procedures to follow.

Employer engagement and vocational contexts

Following correct kinanthropometric technique to ensure validity and reliability of data is of utmost importance. Developing valid and reliable technique comes with experience. Centres may have a link with a local university where learners can use their exercise physiology laboratory facilities and kinanthropometric instrumentation for collecting data.

Practising techniques to gain experience and/or watching professionals undertake tests of this type would be invaluable in preparing learners for practical assessments and activities. Visits to a local fitness centre, centre of excellence or local university sports science laboratory would be beneficial.

Unit 20: Biochemistry of Exercise

Unit code: J/601/1868

Level: 5

Credit value: 15

● Aim

This unit gives learners an understanding of the biochemistry of cells and homeostasis. It also explores energy production and how it is affected by participation in exercise.

● Unit abstract

This unit provides the learner with an overview of the biochemical process in the human body and how they respond to the stresses of exercise.

The unit starts by exploring the structure and function of human cells and the organelles within them. Learners will explore different types of cell and how their structure relates to their function. The unit then examines homeostasis in relation to maintenance of pH levels, oxygen levels, body temperature and osmotic environment and how they vary and are controlled in relation to exercise participation.

Learners will explore metabolic processes including the energy systems – both anaerobic and aerobic energy systems are covered together with the biochemistry of the different stages involved in energy production.

The final part of the unit examines metabolic processes and their changes during exercise. An appreciation for the metabolic processes is essential to any consideration of the limitations to exercise and to performance in sport. An understanding of the living cell and the cellular inclusions with it is fundamental for a study of metabolic events.

A range of careers in the sport and exercise industry, such as coaches and sports nutritionists require an understanding of the biochemistry of exercise in order to help to improve athletes' sporting performance.

● Learning outcomes

On successful completion of this unit a learner will:

- 1 Understand the structure and function of human cells
- 2 Understand the homeostatic systems that maintain the function of human cells
- 3 Understand the metabolic processes that provide energy for exercise
- 4 Understand how participation in exercise affects metabolic processes.

Unit content

1 Understand the structure and function of human cells

Human cells: types of cells eg skeletal muscle, cardiac muscle, smooth muscle, secretory, epithelial, erythrocyte, nerve; structure of cells eg cell membrane, nucleus, mitochondria, endoplasmic reticulum, ribosomes, Golgi body, lysosomes; function of cells eg metabolic functions of sub-cellular organelles

2 Understand the homeostatic systems that maintain the function of human cells

The cell and homeostasis: maintenance (pH, pO₂, osmotic environment, temperature - thermoregulation); homeostasis (effects of exercise on homeostasis)

Supply of nutrients: nutrients eg carbohydrates, proteins, fats

3 Understand the metabolic processes that provide energy for exercise

Energy production: anaerobic energy production eg phosphocreatine system, lactic acid system (anaerobic glycolysis), capacity; limitation; aerobic energy production eg aerobic glycolysis, Krebs Cycle, electron transport chain; by-products; capacity; limitation

Metabolic processes: anabolic and catabolic processes; oxidation-reduction reactions; control of metabolic activity by (co) enzymes – regulation and rate of activity; hormonal effects; effects on cells

4 Understand how participation in exercise affects metabolic processes

Metabolism changes during exercise: factors influencing substrate utilisation – exercise intensity, duration and substrate availability

Rate of metabolism during exercise: methods used to study metabolism eg determination of basal metabolic rate; respiratory exchange ratio; blood sampling; muscle biopsies

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand the structure and function of human cells	1.1 discuss the structure of different types of human cells 1.2 discuss the function of different types of human cells
LO2 Understand the homeostatic systems that maintain the function of human cells	2.1 discuss how the pH, pO ₂ and temperature of human cells are maintained 2.2 discuss how the osmotic environment of human cells is maintained 2.3 discuss the supply of nutrients to human cells
LO3 Understand the metabolic processes that provide energy for exercise	3.1 discuss anaerobic and aerobic energy production 3.2 discuss how metabolic activity is controlled 3.3 discuss hormonal effects on human cells
LO4 Understand how participation in exercise affects metabolic processes	4.1 explain metabolic changes that occur during participation in exercise 4.2 assess the rate of metabolism during participation in different types of exercise

Guidance

Links

This unit has links to the following units in the BTEC Higher Nationals in Sport and in Sport and Exercise Sciences:

- *Unit 1: Anatomy and Physiology for Sport and Exercise*
- *Unit 4: Biomechanics for Sport*
- *Unit 6: Nutrition for Sport and Exercise*
- *Unit 10: Applied Sports Coaching.*

Essential requirements

There are no essential requirements for this unit.

Unit 21: Physical Activity, Lifestyle and Wellbeing

Unit code: L/601/1869

Level: 4

Credit value: 15

● Aim

The aim of this unit is to give learners the skills, knowledge and understanding to assist individuals with positive lifestyle changes in order to improve personal health.

● Unit abstract

Lifestyle plays a very important role in the health and wellbeing of an individual. Individuals who lead a healthy lifestyle are likely to live longer and cope better with the daily demands of life. A poor lifestyle can also increase the risk of a number of diseases including coronary heart disease, cancer and obesity.

An understanding of the effects lifestyle can have upon health and how to improve the lifestyle of an individual is important to individuals working in the sport and fitness sector. This unit is particularly relevant for individuals wanting to work in health promotion and exercise and fitness instruction.

The unit covers exercise, diet, stress, smoking and alcohol consumption and the ways that these factors can affect the quality of life of an individual. In this unit, learners will examine the relationship between lifestyle and health and look at current recommended dietary guidelines as well as methods of weight management. Learners will also explore strategies to manage stress, reduce alcohol consumption and stop smoking, analysing their success and effect on the 'health of the nation'. This unit provides opportunities for learners to plan, cost and manage a lifestyle improvement programme for a selected individual.

● Learning outcomes

On successful completion of this unit a learner will:

- 1 Understand the role of physical activity in maintaining health and wellbeing
- 2 Understand dietary guidelines and the maintenance of desirable body weight
- 3 Understand the relationship between health and wellbeing and stress, smoking and alcohol consumption
- 4 Be able to plan lifestyle improvement programmes for selected individuals.

Unit content

1 Understand the role of physical activity in maintaining health and wellbeing

Benefits: prevention and management of disease eg coronary heart disease, hypertension, obesity, arthritis, osteoporosis; weight management and quality of life; psychological and social benefits eg reducing anxiety and stress; effect on self-esteem, social effects, reducing depression

Assess levels of activity: using recommendations and guidelines eg health development agency guidelines, American College of Sports Medicine (ACSM) guidelines

2 Understand dietary guidelines and the maintenance of desirable body weight

Diet: nutrients (fat, carbohydrate, protein, vitamins, minerals, water); dietary guidelines eg World Health Organisation, Health Development Agency, British Dietetics Association, percentage nutrient intake, Recommended Daily Allowance – RDA); food groups

Analysis of diet: analysis (using relevant theories and recognised guidelines); signs and symptoms of poor nutrition eg weight loss, anorexia, bulimia, obesity, inability to perform simple activities, anaemia, type II diabetes, high cholesterol, fatigue

Strategies: to change/improve diet

Energy balance: energy balance eg basic metabolic rate, metabolic rate, energy requirements of different activities, calorific value of foods, thermic effect of food

Weight management: methods eg diet, exercise, diet and exercise combined, behaviour therapy

3 Understand the relationship between health and wellbeing and stress, smoking and alcohol consumption

Analysis: analysis (using relevant theories and current data)

Excessive stress: causes eg emotional, environmental, work, life; personality; the need for stress; stress management techniques; stress hormones (fight or flight); analysis of effects of stress on health using data and relevant theories

Smoking: health risks eg lung cancer, bronchitis, emphysema, coronary heart disease; techniques and aids used to stop smoking; analysis of effects of smoking on health using data and relevant theories

Excessive alcohol consumption: health risks eg hypertension, liver damage, psychological and emotional problems; techniques and aids to reduce alcohol consumption; analysis of alcohol consumption on health using data and relevant theories

Methods and government strategies: designed to manage stress; designed to reduce alcohol consumption; designed to stop smoking; evaluation eg success, failure, effect on the health of the nation

4 Be able to plan lifestyle improvement programmes for selected individuals

Lifestyle improvement programmes: programmes eg physical activity, dietary guidelines, stress, smoking, alcohol consumption, motivational strategies for maintaining participation, aims, objectives, monitoring, evaluation; lifestyle assessment eg questionnaires, consultation, communication skills, confidentiality; behaviour change eg stages of change model, barriers to change, motivational interviewing

Plan programme: lifestyle assessment; appropriate for selected individual; resources eg facilities, time, specialist equipment

Implement programme: implementation in line with plan; following guidelines

Review programme: review eg outcomes against plan, strengths, areas for improvement

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand the role of physical activity in maintaining health and wellbeing	1.1 assess the relationship between physical activity and the prevention and management of disease 1.2 discuss the relationship between physical activity, weight management and quality of life 1.3 analyse the psychological and social benefits of exercise 1.4 assess the level of activity of selected individuals in line with recommendations and guidelines for physical activity
LO2 Understand dietary guidelines and the maintenance of desirable body weight	2.1 analyse the diets of selected individuals 2.2 suggest strategies to manage improvements or change to the diets of selected individuals 2.3 discuss the concept of energy balance and evaluate methods of weight management
LO3 Understand the relationship between health and wellbeing and stress, smoking and alcohol consumption	3.1 analyse the relationship between excessive stress levels, excessive alcohol consumption, smoking and health at local and national level 3.2 evaluate methods and government strategies to manage stress, reduce alcohol consumption and stop smoking
LO4 Be able to plan lifestyle improvement programmes for selected individuals	4.1 plan a lifestyle improvement programme for a selected individual 4.2 implement a lifestyle improvement programme for a selected individual 4.3 review a lifestyle improvement plan and recommend improvements

Guidance

Links

This unit has links to the following units in the BTEC Higher Nationals in Sport and in Sport and Exercise Sciences:

- *Unit 6: Nutrition for Sport and Exercise*
- *Unit 7: Training and Fitness for Sport and Exercise*
- *Unit 22: Instructing Physical Activity and Exercise*
- *Unit 34: Exercise Prescription.*

This unit is designed to be vocationally relevant and also has links to the level 3 National Occupational Standards (NOS) for:

- *Coaching, Teaching and Instructing*
- *Instructing Physical Activity and Exercise.*

Essential requirements

The Health Development Agency produces a range of videos, books, booklets and questionnaires which would assist delivery. These are available from local health promotion agencies and NHS walk-in centres. The following websites: Department of Health (www.doh.gov.uk), The World Health Organisation (www.who.int), the British Nutrition Foundation (www.nutrition.org.uk) and Food Standards Agency (www.eatwell.gov.uk) provide very useful information.

For learning outcome 4, the lifestyle improvement programme must be long enough to cover the required content and see improvements and learners may choose themselves as the selected individual.

Employer engagement and vocational contexts

Centres are encouraged to develop links with health and fitness centres and Primary Care Trusts. This could be via talks, demonstrations, workshops or visits.

Unit 22: Instructing Physical Activity and Exercise

Unit code: F/502/5726

QCF level 3: BTEC National

Credit value: 10

Guided learning hours: 60

- Aim and purpose

The aim of this unit is for learners to be able to design, plan, deliver and review exercise sessions which meet the needs of different client groups.

- Unit introduction

The number of people attending gyms and exercise sessions has increased significantly over the last decade as people seek to get themselves fit, lose weight, improve their health or reduce the effects of the ageing process. Each client will have different needs and it is the job of the instructor to meet their needs by providing them with safe and effective exercise programmes and sessions.

Instructors will require a good understanding of the health-related components of fitness and how the body adapts to training within different client groups. They will require knowledge of health screening methods and risk assessments to ensure the safe and effective delivery of the exercise sessions. Each exercise session will require some form of warm-up and cool down activity and this unit will provide the underpinning knowledge so learners have the opportunity to develop their own ideas in-line with the latest research.

Calculating and considering the intensity of exercise will be explored using a variety of methods in order that the goals of each client can be reached without detrimentally affecting their health. Clients will be from a number of different groups with a variety of needs. This unit will investigate those clients' needs and allow learners to adapt sessions and activities to meet them.

Planning and delivering single and sequential exercise sessions is important so that clients observe progress towards their goals. The unit requires learners to design a six-week exercise programme for two contrasting clients and then plan and deliver a safe and effective exercise session.

Experienced instructors will always review their sessions and obtain feedback from others. The unit will explore different methods for collecting feedback on performance, enabling learners to identify their strengths and areas for improvement. This may include planning for future sessions, making changes to the activities, the intensity of the activity, the goals of the client or their personal style of delivery.

The knowledge and skills provided by this unit are an exciting combination of theory and practical aspects to help learners gain an improved understanding of working as an instructor in the fitness industry.

- **Learning outcomes**

On completion of this unit a learner should:

- 1 Know the principles of safe and effective exercise sessions
- 2 Be able to design an exercise programme
- 3 Be able to plan and lead an exercise session
- 4 Be able to review the design of an exercise programme and leading of an exercise session.

Unit content

1 Know the principles of safe and effective exercise sessions

Principles of fitness training: components of fitness (strength, aerobic endurance, muscular endurance, flexibility, body composition); adaptations to training eg hypertrophy, increased muscle tone, decreased resting heart rate, increased stroke volume; FITT principles (frequency, intensity, time, type)

Health and safety: PAR-Q (physical activity readiness questionnaire); contraindications; risk assessments

Warm-up: functions; components (raising of the pulse, dynamic stretches); duration; types of warm-up eg specific (aerobic routines), general (low repetitions on resistance machines)

Cool down: functions; components (lowering of the pulse, stretches eg developmental, proprioceptive neuromuscular facilitation – PNF)

2 Be able to design an exercise programme

Structure: introduction to the session; warm-up; main component (duration, activities, exercise intensity eg max heart rate, training zones, Karvonen formula, Rating of Perceived Exertion – RPE); cool down

Factors to consider: screening eg PAR-Q, medical history and exercise history; motives; barriers; current physical activity level; goals (short and long-term)

Clients: eg varied ability, individuals, groups, specific groups (elderly, children, obese); code of ethical practice eg rights, relationships, personal responsibilities, professional standards

Activity selection: eg likes and dislikes, accessibility, culture, commitments (work and family), goals, time

3 Be able to plan and lead an exercise session

Plan an exercise session: screening; risk assessment; aim; objectives; structure of the session; venue; marketing; setting-up, checking and maintaining equipment

Deliver an exercise session: introduction to the session; instruction delivery (communication, technique correction, correct body alignment, modification of exercises, observation, motivation, rapport with clients); end of the session eg feedback, checking and setting down equipment

4 Be able to review the design of an exercise programme and leading of an exercise session

Review performance: methods eg peer evaluation, questionnaires, self-evaluation; fit for purpose eg track progression, adapt session, modify activities, improve own performance, codes of practice, continued professional development; modify eg FITT progression, changes in exercises to maintain interest and motivation, achievable goals; development needs eg continue professional development; SMART (specific, measurable, achievable, realistic, time-bound) targets

Assessment and grading criteria

In order to pass this unit, the evidence that the learner presents for assessment needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria for a pass grade describe the level of achievement required to pass this unit.

Assessment and grading criteria		
To achieve a pass grade the evidence must show that the learner is able to:	To achieve a merit grade the evidence must show that, in addition to the pass criteria, the learner is able to:	To achieve a distinction grade the evidence must show that, in addition to the pass and merit criteria, the learner is able to:
P1 describe the principles of fitness training		
P2 describe the health and safety considerations associated with exercise programmes and sessions	M1 explain the health and safety considerations associated with exercise programmes and sessions	
P3 describe the importance of warm-up and cool down in exercise programmes and sessions		
P4 design a six-week exercise programme for two selected contrasting clients	M2 explain choice of activities for exercise programmes for selected clients	D1 justify choice of activities for exercise programmes for selected clients, suggesting alternative activities
P5 plan a safe and effective exercise session	M3 explain choice of activities for the planned exercise session	D2 justify choice of activities for the planned exercise session and suggest alternative activities.
P6 deliver a safe and effective exercise session, with tutor support	M4 independently deliver a safe and effective exercise session.	
P7 review own performance in the designing of exercise programmes and the planning and delivery of the exercise session, identifying strengths and areas for improvement.		

Essential guidance for tutors

Delivery

The components of fitness can be taught in both a theoretical and practical manner with practical work providing the context into which the theory is placed. Learners should understand the theory behind the health-related components of fitness and how they can be adapted through training.

Learners could research different PAR-Qs and find the relevant information that is required to deliver safe and effective exercise sessions. From this, learners can then design their own screening document. Risk assessments can be practically-based with learners completing them during lessons in an appropriate facility.

Learners should be aware of the importance of warm-ups and cool downs in the safe delivery of exercise sessions. This could be done through practical participation as part of their planned delivery.

The design of the exercise programmes can be completed in many ways, starting with a daily, weekly and monthly programme, which will eventually lead to the chosen goal. Use of case studies and exemplar programmes would be beneficial here. The programmes should consider what the clients want to achieve, what exercises they enjoy, what component of fitness they wish to improve, adhere to FITT principles, and other factors which may affect the programme design. This information can be obtained by handing out learner-compiled questionnaires or by interviewing the clients in order to assess their individual needs.

Leading the exercise session can be a fun way for learners to express their knowledge and skills. A variety of sessions can be taught; these need to show an adherence to health and safety and codes of practice.

Learners are required to review and adapt their programmes and exercise sessions. They must show a good understanding of why they are adapting or making modifications to activities. They must also be able to give constructive feedback on their own performance. Initially this should be tutor-led, showing different kinds of strengths and areas for improvement; this will aid learners' progression in their evaluation skills.

In group experience of exercise sessions, mentoring by other learners can be encouraged. Tutor-led practical lessons can be individually reviewed; this will help learners to evaluate their performance in their own sessions.

Assessment

The assessment of this unit should be practically-based, wherever possible, with demonstration of knowledge and understanding applied to the practical activities.

A structured portfolio approach can be taken that builds upon the principles of fitness training, through the warm-up and cool down phases to the delivery of a safe and effective exercise session that is then reviewed by learners.

The description of the principles of fitness training (P1) underpins the design of the programmes and should be considered throughout the assessment. Evidence can be presented in written format but innovative ways to show evidence could also include recording of client interviews, supported by a tutor witness statement/ observation record.

Description of health and safety considerations that are associated with exercise programmes and sessions (P2) should be broad enough to cover exercise programmes and sessions as a whole, but learners should also be encouraged to show such considerations for their specific clients. Description of the importance of warm-up and cool down sessions (P3) allow bite-size design, planning, and delivery of sessions, supported by a written summary and a tutor observation record.

The design of a six-week exercise programme for two contrasting clients should show a range of exercises that are scheduled to take place daily, weekly and monthly up to a six-week period. The use of six weeks allows learners to develop programmes where adaptation will occur. Where possible learners should be encouraged to implement these with their clients to provide further evidence. The exercise programmes designed will form the assessment evidence for P4.

The exercise session learners plan (P5) should also be the same session they deliver (after appropriate tutor feedback and suggested changes). Delivery of the planned safe and effective exercise session (P6) will be practically assessed, preferably through a series of formative exercise sessions, eg circuit sessions, induction in a gym or exercise to music session, after which learners may choose to deliver a chosen summative assessment.

By using this method the tutor support should be minimal in the summative assessment and judgement on support should only be made in this session. Learners will need to deliver a session with due regard for health and safety as well as following codes of professional conduct. Tutors should complete observation sheets to confirm achievement. Learners must be able to describe the purpose of the exercise, give accurate instructions, give constructive feedback to correct technique and adapt and modify exercises to suit individual needs. Where possible, formative assessments can take place with peers, or learners from local centres, but it is often better for summative assessment of delivery to be with a new group.

After delivery of the session, an in-depth review of own performance in the design of the exercise programmes and the planning and delivery of the exercise session must be made (P7). This can be through tutor feedback, feedback from clients/participants, questionnaires, looking at SMART targets or completing other relevant documentation. Learners should be encouraged to reflect regularly on their own performance, determining their strengths and areas for improvement.

Grading criterion M1 links to P2, and requires learners to explain the health and safety considerations associated with exercise programmes and sessions. For M2, learners need to explain the choice of activities for the exercise programmes that they design (P4) for two selected contrasting clients. For M3, learners need to explain the choice of activities for the exercise session that they have planned (P5).

Grading criterion M4 links to P6, and requires learners to deliver the exercise session without the tutor support that was acceptable for P6. For D1, which builds on M2, learners need to justify their choice of activities for the two exercise programmes designed, and also give some suggestions regarding alternative activities for the programmes. For D2, which builds on M3, learners need to justify their choice of activities for the planned exercise session, and give suggestions regarding alternative activities for the session.

Programme of suggested assignments

The table below shows a programme of suggested assignments that cover the pass, merit and distinction criteria in the assessment and grading grid. This is for guidance and it is recommended that centres either write their own assignments or adapt any Edexcel assignments to meet local needs and resources.

Criteria covered	Assignment title	Scenario	Assessment method
P1	Task 1: Principles of Fitness Training	You have gained part-time employment in a sports centre, and will be responsible for assisting with and leading exercise classes. Investigate the health-related components of fitness and their adaptations to training.	Presentation. Witness statement.
P2, M1	Task 2: Health and Safety	Investigate the different screening methods used in the industry and conduct risk assessments of practical activities.	Written medical consent form. Risk assessment.
P3	Task 3: Warm-Ups and Cool Downs	Practically deliver different types of warm-up and cooldown for different client groups.	Practical observation and assessment. Observation record. Written summary.
P4, M2, D1	Design an Exercise Programme	As a personal trainer you are asked to design a six-week exercise programme for two contrasting clients.	Written programme.

Criteria covered	Assignment title	Scenario	Assessment method
P5, P6, M3, M4, D2	Plan and Lead an Exercise Session	Plan a safe and effective exercise session for a selected client.	Written plan. Practical observation and assessment. Observation record.
P7	Review the Exercise Programme and Session	Identify strengths and areas for improvement for both the exercise programme and the session.	Written reflective report.

Links to National Occupational Standards, other BTEC units, other BTEC qualifications and other relevant units and qualifications

This unit forms part of the BTEC Sport sector suite and the BTEC Sport and Exercise Sciences sector suite. This unit has particular links with the following unit titles in the BTEC Sport suite and the BTEC Sport and Exercise Sciences suite:

Level 2 Sport	Level 3 Sport	Level 3 Sport and Exercise Sciences
Anatomy and Physiology for Sport	Principles of Anatomy and Physiology in Sport	Anatomy for Sport and Exercise
Effects of Exercise on the Body Systems	Fitness Training and Programming	Fitness Training and Programming
Injury in Sport	Sports Coaching	Sports Coaching
Fitness Testing and Training	Exercise, Health and Lifestyle	Exercise, Health and Lifestyle
Planning and Leading Sports Activities	Assessing Risk in Sport	Sport and Exercise Physiology
Development of Personal Fitness	Fitness Testing for Sport and Exercise	Fitness Testing for Sport and Exercise
Lifestyle and the Sports Performer	Exercise for Specific Groups	Exercise for Specific Groups
Exercise and Fitness Instruction	Leadership in Sport	
Leading Outdoor and Adventurous Activities	The Athlete's Lifestyle	
	The Physiology of Fitness	

This unit has links to the National Occupational Standards (NOS) for:

- Instructing Physical Activity and Exercise at Level 3.

Essential resources

Learners will require access to suitable exercise facilities, for example a sports hall, as well as access to suitable groups who can act as clients.

Employer engagement and vocational contexts

This unit focuses on planning and delivering safe and effective exercise sessions which will provide learners with the knowledge, skills and experience required to work in fitness suites, leisure clubs or gyms. Visits to local leisure centres or fitness clubs would be beneficial so that learners can observe a variety of exercise sessions in progress.

Indicative reading for learners

Textbooks

American College of Sports Medicine – *ACSM Fitness Book* (Human Kinetics, 1997)
ISBN 9780880117838

American College of Sports Medicine – *ACSM's Guidelines for Exercise Testing and Prescription* (Lippincott, Williams and Wilkins, 2005) ISBN 9780781745062

Ansell M – *Personal Training* (Learning Matters, 2007) ISBN 9781844451630

Burke E – *Precision Heart Rate Training* (Human Kinetics, 1998) ISBN 9780880117708

Byl J – *101 Fun Warm-up and Cool-down Games* (Human Kinetics, 2004) ISBN 9780736048491

Champion N and Hurst G – *The Aerobics Instructor's Handbook: What to Teach, and How to Teach it Effectively!* (A&C Black publishers, 2000) ISBN 9780713653595

Fleck SJ and Kraemer W J – *Designing Resistance Training Programmes* (Human Kinetics, 1997) ISBN 9780873225083

Griffin J C – *Client-centred Exercise Prescription* (Human Kinetics, 2006) ISBN 9780736054959

Gudrin P – *Aerobic Training* (Meyer Meyer Sports Books, 2000) ISBN 9781841260211

Harris J and Ebourn J – *Warm-up and Cooling Down* (Human Kinetics, 2002) ISBN 9780736038782

Heyward V H – *Advanced Fitness Assessment and Exercise Prescription* (Human Kinetics, 2006) ISBN 9780736057325

Jackson AW et al – *Physical Activity for Health and Fitness* (Human Kinetics, 2004)
ISBN 9780736052054

Norton K and Old T – *Pre-exercise Health Screening Guide* (Human Kinetics, 1999)
ISBN 9780736002103

Powers S K and Howley E T – *Exercise Physiology: Theory and Application to Fitness and Performance* (McGraw-Hill, 2008) ISBN 9780071280785

Whyte G P, MacLaren D and Spurway N – *The Physiology of Training – Advances in Sport and Exercise Science* (Churchill Livingstone, 2006) ISBN 9780443101175

Woolf-May K and Bird S – *Exercise Prescription: The Physiological Foundations: A Guide for Health, Sport and Exercise Professionals* (Churchill Livingstone, 2006) ISBN 9780443100178

Journals

Journal of Human Sport and Exercise

Journal of Physical Activity and Health

Journal of Sports Sciences

Journal of Sports Sciences and Medicine

Medicine and Science in Sports and Exercise

The Journal of Sports Medicine and Physical Activity

Websites

Brian Mac, Sports Coach – www.brianmac.co.uk

British Association of Sport and Exercise Sciences – www.bases.org.uk

British Broadcasting Corporation – www.bbc.co.uk

Peak Performance – www.pponline.co.uk

Top End Sports – www.topendsports.com

Unit 23: Personal and Professional Development

Unit code: T/601/0943

Level: 5

Credit value: 15

● Aim

This unit aims to help the learner become an effective and confident self-directed employee. This helps the learner become confident in managing their own personal and professional skills to achieve personal and career goals.

● Unit abstract

This unit is designed to enable the learner to assess and develop a range of professional and personal skills in order to promote future personal and career development. It also aims to develop learners' ability to organise, manage and practise a range of approaches to improve their performance as self-directed learners in preparation for work or to further career development.

This unit's emphasis is on the needs of the individual, but within the context of how the development of self-management corresponds with effective team management in meeting objectives.

Learners will improve their own learning, be involved with team work and be more capable of problem solving through the use of case studies, role-play and real-life activities.

● Learning outcomes

On successful completion of this unit a learner will:

- 1 Understand how self-managed learning can enhance lifelong development
- 2 Be able to take responsibility for own personal and professional development
- 3 Be able to implement and continually review own personal and professional development plan
- 4 Be able to demonstrate acquired interpersonal and transferable skills.

Unit content

1 Understand how self-managed learning can enhance lifelong development

Self-managed learning: self-initiation of learning processes; clear goal setting eg aims and requirements, personal orientation achievement goals, dates for achievement, self-reflection

Learning styles: personal preferences; activist; pragmatist; theorist; reflector eg reflexive modernisation theory; Kolb's learning cycle

Approaches: learning through research; learning from others eg mentoring/coaching, seminars, conferences, secondments, interviews, use of the internet, social networks, use of bulletin boards, newsgroups

Effective learning: skills of personal assessment; planning, organisation and evaluation

Lifelong learning: self-directed learning; continuing professional development; linking higher education with industry, further education, Recognition of Prior Learning, apprenticeships, credit accumulation and transfer schemes

Assessment of learning: improved ability range with personal learning; evidence of improved levels of skill; feedback from others; learning achievements and disappointments

2 Be able to take responsibility for own personal and professional development

Self appraisal: skills audit (personal profile using appropriate self-assessment tools); evaluating self-management; personal and interpersonal skills; leadership skills

Development plan: current performance; future needs; opportunities and threats to career progression; aims and objectives; achievement dates; review dates; learning programme/activities; action plans; personal development plan

Portfolio building: developing and maintaining a personal portfolio

Transcripts: maintaining and presenting transcripts including Curriculum Vitae

3 Be able to implement and continually review own personal and professional development plan

Learning styles and strategies: types of styles; awareness of own personal style; impact of personal style and interactions with others

Learning from others: formal learning and training; observation; mentoring; supervision; tutorials; informal networks; team members; line managers; other professionals

Evaluation of progress: setting and recording of aims and objectives; setting targets; responding to feedback; resetting aims and targets; establishing and recognising strengths and weaknesses; directions for change; cycles of activity (monitoring, reflecting and planning)

4 Be able to demonstrate acquired interpersonal and transferable skills

Transferable skills: personal effectiveness (ability to communicate effectively at all levels, initiative, self-discipline, reliability, creativity, problem solving)

Verbal and non-verbal communication: effective listening, respect of others' opinions; negotiation; persuasion; presentation skills; assertiveness; use of ICT

Delivery formats: ability to deliver transferable skills using a variety of formats

Working with others: team player; flexibility/adaptability; social skills

Time management: prioritising workloads; setting work objectives; using time effectively; making and keeping appointments; reliable estimates of task time

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand how self-managed learning can enhance lifelong development	1.1 evaluate approaches to self-managed learning 1.2 propose ways in which lifelong learning in personal and professional contexts could be encouraged 1.3 evaluate the benefits of self-managed learning to the individual and organisation
LO2 Be able to take responsibility for own personal and professional development	2.1 evaluate own current skills and competencies against professional standards and organisational objectives 2.2 identify own development needs and the activities required to meet them 2.3 identify development opportunities to meet current and future defined needs 2.4 devise a personal and professional development plan based on identified needs
LO3 Be able to implement and continually review own personal and professional development plan	3.1 discuss the processes and activities required to implement the development plan 3.2 undertake and document development activities as planned 3.3 reflect critically on own learning against original aims and objectives set in the development plan 3.4 update the development plan based on feedback and evaluation
LO4 Be able to demonstrate acquired interpersonal and transferable skills	4.1 select solutions to work-based problems 4.2 communicate in a variety of styles and appropriate manner at various levels 4.3 evaluate and use effective time management strategies

Guidance

Links

This unit has links to the following units in the BTEC Higher Nationals in Sport and in Sport and Exercise Sciences:

- *Unit 24: Employability Skills.*

It also has links to the following units from the Management Standards Centre National Occupational Standards (NOS):

A2: Manage your own resources and professional development

A3: Develop your personal networks

D2: Develop productive working relationships with colleagues and stakeholders

D9: Build and manage teams

D12: Participate in meetings

E11: Communicate information and knowledge

Essential requirements

Activities in this unit could be part of the mainstream academic activity and could be integrated into the whole programme of study. The learner would benefit if there were established links with the learning outcomes of other units and if review meetings are held regularly.

A personal development portfolio or progress file should be put together to for all information and personal records 'owned' by the learner, including the planning and monitoring of progress towards the achievement of personal objectives. The method for this could be web based, paper based or other. Potentially this could form the basis of an extended record of a lifelong record of learning and achievement.

Tutors should be aware that textbooks are frequently updated and that they should use the latest editions where available. This is a practical module and textbook materials should be used for reference purposes.

Unit 24: Employability Skills

Unit code: A/601/0992

Level: 5

Credit value: 15

- **Aim**

This unit provides learners with the opportunity to acquire honed employability skills required for effective employment.

- **Unit abstract**

All learners at all levels of education and experience require honed employability skills as a prerequisite to entering the job market. This unit gives learners an opportunity to assess and develop an understanding of their own responsibilities and performance in or when entering the workplace.

It considers the skills required for general employment such as interpersonal and transferable skills, and the dynamics of working with others in teams or groups including leadership and communication skills.

It also deals with the everyday working requirement of problem solving which includes the identification or specification of the 'problem', strategies for its solution and then evaluation of the results of the solution through reflective practices.

- **Learning outcomes**

On successful completion of this unit a learner will:

- 1 Be able to determine own responsibilities and performance
- 2 Be able to develop interpersonal and transferable skills
- 3 Understand the dynamics of working with others
- 4 Be able to develop strategies for problem solving.

Unit content

1 Be able to determine own responsibilities and performance

Own responsibilities: personal responsibility; direct and indirect relationships and adaptability, decision-making processes and skills; ability to learn and develop within the work role; employment legislation, ethics, employment rights and responsibilities

Performance objectives: setting and monitoring performance objectives

Individual appraisal systems: uses of performance appraisals eg salary levels and bonus payments, promotion strengths and weaknesses, training needs; communication; appraisal criteria eg production data, personnel data, judgemental data; rating methods eg ranking, paired comparison, checklist, management by objectives

Motivation and performance: application and appraisal of motivational theories and techniques, rewards and incentives, manager's role, self-motivational factors

2 Be able to develop interpersonal and transferable skills

Effective communication: verbal and non-verbal – awareness and use of body language, openness and responsiveness, formal and informal feedback to and from colleagues; ICT as an effective communication medium; team meetings

Interpersonal skills: personal effectiveness; working with others; use of initiative; negotiating skills; assertiveness skills; social skills

Time management: prioritising workload; setting work objectives; making and keeping appointments; working steadily rather than erratically; time for learning; reliable estimate of task time

Problem solving: problem analysis; researching changes in the workplace; generating solutions; choosing a solution

3 Understand the dynamics of working with others

Working with others: nature and dynamics of team and group work; informal and formal settings, purpose of teams and groups eg long-term corporate objectives/strategy; problem solving and short-term development projects; flexibility/adaptability; team player

Teams and team building: selecting team members eg specialist roles, skill and style/approach mixes; identification of team/work group roles; stages in team development eg team building, identity, loyalty, commitment to shared beliefs, team health evaluation; action planning; monitoring and feedback; coaching skills; ethics; effective leadership skills eg setting direction, setting standards, motivating, innovative, responsive, effective communicator, reliability, consistency

4 Be able to develop strategies for problem solving

Specification of the problem: definition of the problem; analysis and clarification

Identification of possible outcomes: identification and assessment of various alternative outcomes

Tools and methods: problem-solving methods and tools

Plan and implement: sources of information; solution methodologies; selection and implementation of the best corrective action eg timescale, stages, resources, critical path analysis

Evaluation: evaluation of whether the problem was solved or not; measurement of solution against specification and desired outcomes; sustainability

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Be able to determine own responsibilities and performance	1.1 develop a set of own responsibilities and performance objectives 1.2 evaluate own effectiveness against defined objectives 1.3 make recommendations for improvement 1.4 review how motivational techniques can be used to improve quality of performance
LO2 Be able to develop interpersonal and transferable skills	2.1 develop solutions to work based problems 2.2 communicate in a variety of styles and appropriate manner at various levels 2.3 identify effective time management strategies
LO3 Understand the dynamics of working with others	3.1 explain the roles people play in a team and how they can work together to achieve shared goals 3.2 analyse team dynamics 3.3 suggest alternative ways to complete tasks and achieve team goals
LO4 Be able to develop strategies for problem solving	4.1 evaluate tools and methods for developing solutions to problems 4.2 develop an appropriate strategy for resolving a particular problem 4.3 evaluate the potential impact on the business of implementing the strategy

Guidance

Links

This unit has links to the following units in the BTEC Higher Nationals in Sport and in Sport and Exercise Sciences:

- *Unit 5: Research Project*
- *Unit 23: Personal and Professional Development*
- *Unit 25: Work-Based Experience.*

It also links with the following Asset Skills cross-sectoral Employability Matrix:

B2.4: Plan and manage time, money and other resources to achieve goals

B3.3: Find and suggest new ways to achieve goals and get the job done and achieve goals

B4.5: Plan for and achieve your learning goals

C1.1: Understand the roles people play in a group and how you can best work with them

C1.7: Lead or support and motivate a team to achieve high standards

C2.6: Find new and creative ways to solve a problem

Essential requirements

Access to a range of work-related exemplars (eg appraisal and development systems, team health checks, job descriptions, action plans, communication strategies, etc) would be of assistance in delivering this unit. Case studies based on relevant sectors, workshops, career talks, work-based mentors would also be useful in the teaching and learning aspect of the unit.

Learners can generate assessment evidence through a range of possible activities including individual work placements, project management, research reports, development of case studies, the process of working with others (eg employee – supervisor roles, teamwork, group work) and everyday communication within the workplace.

Employer engagement and vocational contexts

Employers could help tutors, for example, with the planning of programmes of learning, or provision of visits, guest speakers and mentors. They could also help to design assessment activities.

The delivery of this unit would be enhanced by engagement with a range of employers in the sector.

Unit 25: Work-based Experience

Unit code: D/601/0998

Level: 5

Credit value: 15

- **Aim**

This unit aims to enable learners to experience the scope and depth of learning which may take place in a work-based context by planning, monitoring and evaluating the work experience.

- **Unit abstract**

A significant amount of learning can be achieved by carrying out practical activities in a workplace. Learning may be enhanced by taking a more formal approach to work-based activities – by planning, carrying out the activities and reflecting on the benefits of the activities to the business and to the learner.

This unit is designed to allow flexibility of study for part-time and full-time learners. It is expected that learners are supervised in the workplace in addition to their academic supervisor.

Learners will have the opportunity, supported by their supervisors, to negotiate and perform activities which will allow them to fulfil the assessment criteria for this unit. They will recognise the scope of what they have achieved by recording evidence from carrying out the activities. They will also gain maximum benefit by reflection on and evaluation of the work they undertake.

- **Learning outcomes**

On successful completion of this unit a learner will:

- 1 Be able to negotiate industry experience
- 2 Understand the specific requirements of the placement
- 3 Be able to undertake work experience as identified
- 4 Be able to monitor and evaluate own performance and learning.

Unit content

1 Be able to negotiate industry experience

Suitable organisation and location: types of establishments for placement eg industry-related work for a client brief at college, existing work environment, different department within current employer's business

Negotiation: methods of contacting organisations; methods of undertaking negotiations

Nature of duties: type of undertaking eg routine duties and tasks, project work, development of new procedures/protocol

Supervisors: roles and responsibilities of academic and industrial mentors

Expectations of learning: aims eg proficiency in new tasks and procedures, time-management and problem solving skills, reflection, discuss progress with others, teamwork

Business constraints: consideration of possible limitations eg need to be fully trained, adherence to quality systems, health and safety considerations, supervision time, workload, customer satisfaction, limited staffing, cost of materials

2 Understand the specific requirements of the placement

Tasks: details of activities eg specific hourly, daily, weekly routine and non-routine tasks; breakdown of a project into stages; new procedures/protocol

Prioritise: reasons for rationalisation of the order of tasks; methods of prioritising work

Plan for the work experience: methods used to develop detailed plan with schedule of tasks, proposed dates for reviews, expected input from supervisors

Benefits to organisation and learner: advantages to business eg allowing more routine tasks to be carried out, allowing procedures/techniques to be developed, increasing responsiveness, identifying cost saving measures; advantages to learner eg understanding how a business operates, understanding importance of teamwork, learning new techniques, development of problem-solving and time-management skills

3 Be able to undertake work experience as identified

Carry out the planned activities: realisation eg carrying out tasks and project work according to relevant legislation, training and codes of practice; developing new procedures or protocol

Record activities in the appropriate manner: systematic and appropriate recording of relevant activities eg logbook, diary, portfolio, spreadsheets, data bases; list of resources

Revise the initial plan as required: methods used to review activities at the appropriate time to see if they meet requirements, make alterations as needed

4 Be able to monitor and evaluate own performance and learning

Evaluation of the quality of the work undertaken: meeting industry standards and evaluating own performance against original proposal; comments/testimony from supervisors

Account of learning during the work experience: details of experience gained eg new procedures, interpersonal skills, time-management, problem-solving, teamwork; details of evidence eg portfolio of evidence, scientific report, management report

Recommendations on how the learning experience could have been enhanced: alternative ideas eg different location, different brief, different time period, more/less support, better time-management, better preparation

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Be able to negotiate industry experience	1.1 research and evaluate suitable organisations that could provide industry experience 1.2 negotiate with work and academic supervisors a proposal for the work experience 1.3 recognise the business constraints on the work experience offered
LO2 Understand the specific requirements of the placement	2.1 agree and prioritise the tasks and responsibilities involved in the work experience 2.2 produce a plan for the work experience 2.3 analyse the benefits of the proposed activities to the business and the learner
LO3 Be able to undertake work experience as identified	3.1 fulfil specified requirements of placement conforming to all related codes of practice 3.2 produce systematic records of work undertaken 3.3 revise the initial plan as required 3.4 make suggestions for improvement and review these with appropriate supervisor
LO4 Be able to monitor and evaluate own performance and learning	4.1 monitor progress against original proposal 4.2 evaluate the quality of own performance. 4.3 analyse the learning which has taken place during the work experience using suitable reflections 4.4 make recommendations on how the experience could have been enhanced

Guidance

Links

This unit has possible links to all units in the Edexcel BTEC Higher Nationals in Sport and in Sport and Exercise Sciences, but especially the following:

- *Unit 23: Personal and Professional Development*
- *Unit 24: Employability Skills.*

This unit maps to the following Management National Occupational Standards (NOS) units:

A1: Manage your own resources

D1: Develop productive working relationships with colleagues

E8: Manage physical resources

F1: Manage a project

Essential requirements

Given the work-based nature of this unit, the majority of resources will be those available to the learner in the workplace. The work will normally be planned to be achievable within the resource constraints of the employer. Therefore knowledge of company structures and daily routines and expectations are essential. Learners should also have access to a wide range of research facilities including careers library and/or careers services.

Tutor support and guidance are essential. Learners should remain in touch with tutors during the work-experience – email is often the best way but some colleges may have access to a virtual learning environment where learners can share information and experiences with each other and the tutor.

Employer engagement and vocational contexts

Employers could help tutors, for example, with the planning of programmes of learning, or provision of visits, guest speakers and mentors. They could also help to design assessment activities.

Unit 26: Injury Prevention and Treatment in Sport and Exercise

Unit code: F/601/1870

Level: 4

Credit value: 15

● Aim

This unit examines the causes of common injuries in sport and exercise and how they can be prevented. It also gives learners an opportunity to look at the treatment and rehabilitation of injuries.

● Unit abstract

It is essential that learners understand how sports injuries can occur and the factors that are related to their incidence in order for preventative measures to be taken.

This unit provides learners with an opportunity to consider the most common sport and exercise injuries in relation to specific sports and in relation to how they may be prevented.

Learners will investigate causal issues and the physiological evidence for the specified injuries will clearly link their effect on the nervous and musculoskeletal system.

This will give learners an understanding of causal factors and therefore inform the preventative measures that need to be implemented.

The unit also provides an opportunity for learners to examine the importance of immediate and appropriate treatment where necessary. Learners will be encouraged to utilise this underpinning knowledge in order to consider effective treatment and rehabilitation where appropriate.

● Learning outcomes

On successful completion of this unit a learner will:

- 1 Understand injuries common in sport and exercise
- 2 Understand the techniques used to prevent injuries in sport and exercise
- 3 Be able to treat different injuries common in sport and exercise
- 4 Understand the role of injury treatment plans.

Unit content

1 Understand injuries common in sport and exercise

Clinical signs of strains: 1st, 2nd, 3rd degree sprains; bruises/contusions; fractures; swellings including haemarthrosis; haematomas (inter- and intra-muscular); synovial effusion; oedema Bursitis; compartment syndrome; ruptured Achilles; Achilles tendonitis; Achilles paratendinitis; plantar fasciitis; patellofemoral syndrome; Osgood Schlatters; myositis ossificans; osteitis pubis; Severs disease; hernia; osteochondritis dessicans; anterior crucial ligament (ACL) and posterior cruciate ligament (PCL) damage; medial and lateral collateral ligament strain; tennis elbow; carpal tunnel syndrome; back pain; cramp; cartilage damage; concussion and other head injuries

Nervous system: nerve tissue features; sensory; intermediate; motor neurones; the pain cycle; the pain gate theory

Causes and factors affecting injuries: overuse; traumatic; warming up; appropriate fitness levels; muscular strength and endurance; cooling down; poor technique; accidental; equipment/footwear; contact sports

2 Understand the techniques used to prevent injuries

Techniques: massage; postural imbalance; strapping of limbs; heat/spa treatments; preparation for exercise/sport; weight training; fitness testing (flexibility, strength, endurance, vital capacity, body fat, cardio-respiratory testing); psychological influences

Incidences: the frequency of sports injuries; national statistics within sporting federations eg World Boxing Association, Football Association, Amateur Athletics Association; the Sports Council

Types of protective clothing: structure of footwear for different sports; specific clothing; equipment eg racquets; gloves; body protectors; shields and their effectiveness; effect of sports federations' liaison with manufacturers of sports equipment

3 Be able to treat different sport and exercise injuries

Assessment: injuries as they occur; both on field and in designated treatment areas; apply emergency first-aid; removing athlete from field of play safely; referral to medical practitioners; coolant; taping; bandaging; passive and active movements of injured athletes; RICE (Rest, Ice, Compression, Elevation) principles

Modalities: safe application of paraffin wax; heat packs; gel packs; radiant heat lamps; coolant sprays; crushed ice; ice cube massage; contrast bathing; bandages; under-wrap; zinc oxide tape; elastic adhesive bandage (EAB); tubigrip; splints; pressure bandages; specialised limb supports; the physiological effects of all above modalities

Medication: the effects of steroids; non-steroidal anti-inflammatories; anti-inflammatories; placebos; analgesics; specialised prophylactic supports eg knee braces, ankle braces

4 Understand the role of injury treatment plans

Effectiveness: safety of the injured athlete; record-keeping of the nature and result of treatment; effectiveness in limiting discomfort; referral to medical practitioners/accident and emergency

Aftercare: what the athlete should do to minimise further injury; booking of future appointments where appropriate; explanation of contra-actions to treatment and rehabilitation

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand injuries common in sport and exercise	1.1 analyse different injuries common in sport and exercise 1.2 discuss the effects on the nervous and musculo-skeletal systems of different injuries 1.3 analyse the causes of injuries common in sport and exercise
LO2 Understand the techniques used to prevent injuries in sport and exercise	2.1 discuss the techniques available to prevent injuries in sport and exercise 2.2 explain how to minimise injuries in sport and exercise 2.3 assess the incidence of injuries in a selected sport or exercise activity 2.4 discuss the types of protective clothing and equipment available to sport and exercise participants
LO3 Be able to treat different injuries common in sport and exercise	3.1 demonstrate injury assessment procedures 3.2 demonstrate modalities of treatment for different injuries common in sport and exercise 3.3 discuss the benefits of modalities of sport and exercise injury treatment in emergency and non-emergency situations 3.4 discuss different types of medication prescribed for common injuries
LO4 Understand the role of injury treatment plans	4.1 analyse treatment plans for different injuries 4.2 review the effectiveness of different injury treatments 4.3 discuss the aftercare procedures for different injuries 4.4 discuss the importance of contra-indicated actions in relation to full rehabilitation

Guidance

Links

This unit has links to the following units in the BTEC Higher Nationals in Sport and in Sport and Exercise Sciences:

- *Unit 1: Anatomy and Physiology for Sport and Exercise*
- *Unit 4: Biomechanics for Sport*
- *Unit 30: Sports and Exercise Massage*
- *Unit 33: Functional Exercise Physiology*
- *Unit 37: Sport and Exercise Rehabilitation.*

It also has links to the National Occupational Standards in therapy.

Essential requirements

It is essential that the tutor emphasises that preventative measures are the main thrust of safe-guarding sports performers.

It should be stressed at all times that the application of treatment and treatment plans should be conducted by an appropriate individual with the necessary knowledge or expertise.

The assessment of injury and the process of referral to a professional is also essential in order to help learners who may consider working within the sports industry.

The learner must not undertake the treatment of injuries by themselves after successful completion of this unit without gaining a further qualification such as a recognised first aid qualification, the FA Rehabilitation Module, etc.

Employer engagement and vocational contexts

This unit focuses on the practical aspects of sports injury prevention, identification and rehabilitation and will provide learners with the background knowledge and some important skills needed to work in a sports environment. Centres are encouraged to develop links with sports therapists, physiotherapists, coaches etc. This could be via talks, first aid courses, practical treatment workshops, or visits to sports facilities to look at risk assessment and preventative measures.

Unit 27: Skill Acquisition in Sport

Unit code: F/601/1884

Level: 4

Credit value: 15

● Aim

The aim of this unit is to develop learners' knowledge and understanding relating to skill acquisition in sport, enabling them to plan sessions that foster an effective learning environment.

● Unit abstract

How many times have you seen Cristiano Ronaldo run at players with the ball at his feet, demonstrating grace, balance and speed throughout his performance? Or Tiger Woods hit his golf ball from the tee with the pinpoint precision that many individuals can only dream of? As sports coaches, tutors and sport and exercise scientists, we have long wondered about how people attain this level of skill and the range of different internal and external factors that can influence skill development. One of the key areas of interest that has helped sports professionals to explain this process is the area of skill acquisition.

Skill acquisition has important applications within sports coaching, sport psychology and talent development as it examines the ways in which people learn, the different ways of presenting information to athletes to foster their skill development and different ways of planning sessions to help develop different types of skill.

Within this unit, theoretical and applied learning contexts are combined to allow the learner to examine traditional areas of skill acquisition through a practical learning environment. Learners will discover how to use essential techniques for skill acquisition in practical and simulated environments through investigating different leadership behaviours and types of skill presentation first hand. This will give learners a greater understanding of the key theories of learning within sport. Alongside this practical learning environment, learners will start to adopt an evidence-based practice approach to their work on session plans to develop an effective learning environment. This will help them to prepare for the continuing rigours within higher education and careers within sports coaching and teaching, child development and elite performance analysis.

● Learning outcomes

On successful completion of this unit a learner will:

- 1 Understand the nature of skilled performance in sport
- 2 Understand information processing models in sport
- 3 Understand learning theories in sport
- 4 Be able to create an effective learning environment for leading sports activities.

Unit content

1 Understand the nature of skilled performance in sport

Characteristics of skilled performance: definitions of skill; skill as an act/task and skill as an indicator of quality performance; learned behaviour; goal-directed; consistency; accuracy; economy

Classifications of skill: rationale for classification; cognitive skills; perceptual skills; motor skills; gross-fine; discrete-serial continuous; internally-externally paced; open-closed; implications for coaching

Motor abilities: skill and ability differentiation; Fleishman's (1972) Taxonomy of perceptual motor and physical proficiency abilities; influence of environment and heredity on motor abilities; implications for practice

2 Understand information processing models in sport

Information processing models: simple information processing model (input, decision making, output, feedback); Whiting's Model (input data, perceptual mechanisms, translator mechanisms, effector mechanisms, output data, feedback data); Welford's Model (sensory input, sense receptors, perception, short-term memory, decision making, long-term memory, effector control, effectors, output, feedback); implications for coaches

Factors influencing reaction time: Hick's Law; pre-cueing; psychological refractory period; stimulus response complexity; stimulus response compatibility; age; gender; stimulus intensity; implications for practice

Memory and selective attention: short-term sensory store; short-term memory; long-term memory; retention; strategies to enhance retention; selective attention; experience and cue abbreviation; implications for practice

Feedback: intrinsic feedback; categories of sensory feedback; knowledge of results; knowledge of performance; timing of augmented feedback; volume of augmented feedback; content of augmented feedback; presentation of augmented feedback; positive reinforcement; negative reinforcement and punishment; implications for coaches

3 Understand learning theories in sport

Learning theories: definition of learning; definition of performance; drive reduction theory; classical and operant conditioning; Thorndike's laws; cognitive learning theories; social learning theory; motor programme and control (open loop theory, closed loop theory, Schmidt's Schema Theory); practical applications of learning theories

Phases of learning: Fitts and Posner's (1977) three-stage model; characteristics of each stage; learning curves; performance plateaus; changes in aspects of performance with learning; implications for practice

Transfer of learning: positive and negative transfer; zero transfer; intra-task transfer; inter-task transfer; bilateral transfer; influence of transfer on sequencing skills to be learned; transfer and instructional methods; practical applications

4 Be able to create an effective learning environment for leading sports activities

Planning sessions: factors in session planning eg goals, nature of the task, environmental factors, individual differences of the learner; learning styles (eg visual, auditory, kinaesthetic, Kolb's learning styles)

Running a session: leadership behaviours eg Chelladurai's multi-dimensional model of leadership; Mosston and Ashworth's spectrum of teaching styles; evaluating progress during sessions; giving correct feedback to participants; following guidelines

Presentation of skills: Whole and part learning methods (eg fractionisation, segmentation, simplification); practice conditions (massed, distributed, fixed, variable); types of guidance (visual, verbal, manual, mechanical); contextual interference

Evaluation of session: strengths and areas for improvement; recommendations for future sessions; use of evidence base to support future recommendations (peer reviewing, empirical evidence)

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand the nature of skilled performance in sport	1.1 discuss the classifications and characteristics of skill in sport 1.2 discuss the classifications and characteristics of abilities in sport 1.3 explain the difference between skill and ability 1.4 discuss the implications of the differences between skill and ability for sports performers
LO2 Understand information processing models in sport	2.1 evaluate different information processing models 2.2 discuss factors influencing reaction time in sporting contexts 2.3 discuss the role of memory and selective attention in information processing in sporting contexts 2.4 evaluate different methods of giving feedback to sports performers
LO3 Understand learning theories in sport	3.1 evaluate learning theories in sporting contexts 3.2 discuss the phases of learning in sporting contexts 3.3 discuss transfer of learning in sporting contexts
LO4 Be able to create an effective learning environment for leading sports activities	4.1 plan a session for the acquisition or development of a particular skill 4.2 demonstrate appropriate leadership behaviours whilst leading a sport session 4.3 review a sport session with reference to skill acquisition or development

Guidance

Links

This unit has links to the following units in the BTEC Higher Nationals in Sport and in Sport and Exercise Sciences:

- *Unit 2: Sport and Exercise Psychology*
- *Unit 4: Biomechanics for Sport*
- *Unit 9: Principles of Sports Coaching*
- *Unit 10: Applied Sports Coaching*
- *Unit 28: Sports Coaching*
- *Unit 36: Applied Sport and Exercise Psychology.*

Essential requirements

For this unit, centres need access to practical sport facilities such as a sports hall or sports field and need to have a range of sports equipment that can be used during practical sessions.

Employer engagement and vocational contexts

This unit would benefit from guest speakers in sports coaching.

Unit 28: Sports Coaching

Unit code: J/601/1871

Level: 4

Credit value: 15

● Aim

The aim of this unit is to engage learners in the planning, delivery, observation, analysis and evaluation of sports coaching, with an emphasis on current coaching methods and practices.

● Unit abstract

Every sports coach wants to maximise the potential of those they are coaching, enabling them to achieve levels of performance that might not have been possible without a coach.

The role of the sports coach is a complex one, yet exciting and rewarding. They get involved in all aspects of a sport, including physical and psychological player development. Sports coaches support and mentor their athletes. The coach's job is to transfer as much knowledge and experience to the players as possible to develop the most skilled athletes.

Sport and coaching in the UK is well-structured, exciting and innovative. The system provides high quality opportunities for children, young athletes, the community and players at all levels of performance. This is supported at school, club, regional and national level. Coaching plays a key role in the development of performance in both young people and adults. It can provide stimulating and rewarding career pathways in addition to maintaining the balance within communities.

This unit encourages the learner to develop their own skills and knowledge in the coaching process. Learners will reflect on their coaching practices and compare coaching methods of others and of current published information. The unit helps learners to develop an awareness of the influence of sciences in sport and encourages a methodical approach to tracking and quantifying success in themselves, their peers and mentors.

In a mostly practical environment, learners will study the planning, delivery and evaluation of sports coaching. They are encouraged to explore further opportunities in the area of coaching both on a voluntary basis and with formalised national governing body qualifications.

● Learning outcomes

On successful completion of this unit a learner will:

- 1 Understand sports coaching and its relationship with sport and exercise sciences
- 2 Be able to plan coaching for selected sports
- 3 Be able to deliver coaching for selected sports
- 4 Be able to evaluate own sports coaching performance.

Unit content

1 Understand sports coaching and its relationship with sport and exercise sciences

Teaching and coaching styles: teaching styles eg autocratic, democratic, laissez-faire; coaching styles eg group, one-to-one, practical, theoretical, demonstrations, whole-part-whole

Sport and exercise sciences: physiology eg training principles, components of fitness, fitness testing, conditioning programmes; skill acquisition eg movement control, feedback, types of practice; biomechanics eg data application and evaluation, observational analysis; psychology eg personality, behaviour, motivation, psychological skills training

2 Be able to plan coaching for selected sports

Short-term planning: setting goals; action planning; schemes; session planning; conducting sessions in a safe environment; evaluating and reviewing the success of the sessions

Long-term planning: periodisation; cycles; phases and seasonal training schemes; training principles applied to development of endurance; speed; power and flexibility

3 Be able to deliver coaching for selected sports

Deliver: health and safety; appropriate role; responsibilities; skills and techniques; components; communication; organisation of session; effective use of resources; time management skills; development of performers

Review: review of own performance; formative and summative evaluation; feedback eg from participants, observers, supervisors, mentors; strengths and areas for improvements

4 Be able to evaluate own sports coaching performance

Coaching performance: analysis of coaching behaviour within the coaching process (knowledge, skills, experience, philosophy); observing group management methods; communication skills and style; leadership style; teaching style and method

Self-reflection process: coaching diary/log; use of video for analysis; checklists; action planning; SMART targets (specific, measurable, achievable, realistic, time-bound)

Coaching mentor: action planning; aims and objectives; goals (short-term, medium-term, long-term); targets (SMART); resources for new knowledge; observation; feedback; new ideas; verify self-analysis; opportunities eg advice, contacts, training, development, courses, qualifications; barriers

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand sports coaching and its relationship with sport and exercise sciences	1.1 discuss different types of teaching and coaching styles that are used in sports coaching 1.2 discuss key elements of sport and exercise sciences that are applicable to sports coaching
LO2 Be able to plan coaching for selected sports	2.1 describe the importance of planning in coaching for a selected sport 2.2 discuss short-term coaching planning for a selected sport 2.3 prepare a short-term coaching plan for a selected sport 2.4 discuss long-term coaching planning for a selected sport 2.5 prepare a long-term coaching plan for a selected sport
LO3 Be able to deliver coaching for selected sports	3.1 deliver a series of coaching sessions in a selected sport 3.2 review own performance in the delivery of coaching sessions, identifying strengths and areas for improvement
LO4 Be able to evaluate own sports coaching performance	4.1 analyse own coaching performance following the delivery, and review, of coaching sessions 4.2 evaluate the effectiveness of a coaching session in meeting the objectives stated 4.3 design an action plan to effect change in the next session

Guidance

Links

This unit has links to the following units in the BTEC Higher Nationals in Sport and in Sport and Exercise Sciences:

- *Unit 1: Anatomy and Physiology for Sport and Exercise*
- *Unit 4: Biomechanics for Sport*
- *Unit 7: Training and Fitness for Sport and Exercise*
- *Unit 11: The Evolution of Sports Development*
- *Unit 12: Managing Sports Development*
- *Unit 27: Skill Acquisition in Sport*
- *Unit 31: Physical Education*
- *Unit 35: Sport and Exercise for Specific Groups.*

Essential requirements

It is anticipated that the application of knowledge and skills will be essential and applied in a practical coaching context.

The selected sport for learning outcome 2 may involve a sport for the individual (eg. tennis) or a team (eg. football). Before reviewing the programming and planning process for this particular outcome, the experience of the person or team will need to be considered as will any previous experience of the learner.

The selected sport will determine the depth and width of selected knowledge but must incorporate the breadth of the disciplines of anatomy, physiology, skill acquisition and sport biomechanics. A focus on self-reflection in the coach's analysis / evaluation phase is also required.

Employer engagement and vocational contexts

Within this unit there is an opportunity for learners to work with various activity groups. To deliver sports coaching and physical activities sessions to children, adults, novices, the disabled and experienced performers should be the main focus. Centres are encouraged to develop links with local agencies such as schools, sports clubs and professional organisations. Involvement in a sports work placement and NGB coaching awards is recommended.

Unit 29: Analysis of Sports Performance

Unit code: K/601/1880

Level: 5

Credit value: 15

- **Aim**

This unit gives learners the skills required to analyse sports performance, and to offer feedback to performers to bring about improvements.

- **Unit abstract**

Learners will select a specific sport, depending upon their own areas of interest. They will learn about the performance demands of selected sport including the skills, techniques, physical fitness requirements, skill related requirements and psychological requirements.

Learners will then assess the sports performance of an individual, they will identify appropriate tests and carry out these tests on the individual to analyse their sports performance.

Learners will then consider factors that affect performance, primarily concentrating on the physiological and psychological factors.

At the end of the unit, learners will be able to provide detailed feedback to the individual to help them to improve their sports performance.

- **Learning outcomes**

On successful completion of this unit a learner will:

- 1 Understand the requirements of selected sports
- 2 Understand how psychological and physiological factors affect sports performance
- 3 Be able to analyse the sports performance of individuals
- 4 Be able to provide feedback to individuals to help improve their sports performance.

Unit content

1 Understand the requirements of selected sports

Technical and tactical requirements: technical eg passing, shooting, dribbling; tactical eg attack, defence

Physical fitness requirements: components (cardiovascular fitness, muscular endurance, muscular strength, flexibility, body composition)

Skill-related fitness requirements: components of skill-related fitness (agility, power, speed, balance, coordination, reaction time)

Psychological requirements: required for selected sports eg arousal, confidence, aggression, relaxation

2 Understand how psychological and physiological factors affect sports performance

Psychological: factors eg arousal, stress, mental rehearsal, imagery, motivation, confidence, home and away advantage

Physiological: factors eg age, health, diet, hot climate, high altitude, training programmes

3 Be able to analyse the sports performance of individuals

Assessing the physical fitness requirements for a selected sport: required for selected sport eg multi-stage fitness test, VO₂ max, Wingate test

Assessing the skill-related fitness requirement for a selected sport: required for a selected sport eg Illinois agility run test, 60m sprint test, Standing Stork test

Assessing the psychological requirement for a selected sport: methods eg The Task and Ego Orientation in Sport Questionnaire (TEOSQ), Sport Competition Anxiety Test (SCAT), Sport Personality Questionnaire (SPQ20)

Analysis of sports performance: technical analysis eg skills; tactical analysis; notational analysis; accurate recording

4 Be able to provide feedback to individuals to help improve their sports performance

Sports performance feedback: strengths; areas for improvement; SMART (specific, measurable, achievable, realistic, time-bound) targets; goals (short/medium/long-term goals, practice and training goals, competition goals)

Psychological recommendations to improve sports performance: eg mental rehearsal, relaxation techniques

Physiological recommendations to improve sports performance: eg training programmes to improve physical components, fitness; training programmes to improve skill-related components of fitness

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand the requirements of selected sports	1.1 discuss the technical and tactical requirements of a selected sport 1.2 discuss the components of physical fitness required for a selected sport 1.3 discuss the components of skill-related fitness required for a selected sport 1.4 discuss the psychological requirements for a selected sport
LO2 Understand how psychological and physiological factors affect sports performance	2.1 discuss how psychological factors affect sports performance 2.2 discuss how physiological factors affect sports performance
LO3 Be able to analyse the sports performance of individuals	3.1 assess the physical and skill-related components of fitness of a selected sports performer 3.2 assess the psychological profile of a selected sports performer 3.3 analyse the performance of a selected sports performer
LO4 Be able to provide feedback to individuals to help improve their sports performance	4.1 provide feedback to a selected sports performer after an analysis of performance, to help improve future performance 4.2 provide psychological and physiological recommendations to a selected sports performer to improve future performance, giving justification of the recommendations made

Guidance

Links

This unit has links to the following units in the BTEC Higher Nationals in Sport and in Sport and Exercise Sciences:

- *Unit 2: Sport and Exercise Psychology*
- *Unit 7: Training and Fitness for Sport and Exercise*
- *Unit 8: Field-based Fitness Testing for Sport and Exercise*
- *Unit 9: Principles of Sports Coaching*
- *Unit 10: Applied Sports Coaching.*
- *Unit 36: Applied Sport and Exercise Psychology.*

Essential requirements

Access to equipment to perform a range of physical fitness and skill-related fitness tests is essential. Learners should also have access to a range of different sport psychology questionnaires.

Unit 30: Sport and Exercise Massage

Unit code: L/601/1872

Level: 4

Credit value: 15

● Aim

The aim of this unit is to develop learners' practical skills in sport and exercise massage techniques, and their understanding of the wider considerations relating to sport and exercise massage.

● Unit abstract

Sport and exercise massage is a very popular and growing therapeutic intervention that draws on both understanding and application of practical skills. It is a treatment modality that is used by many different types of athlete, whether it is the amateur, semi-professional or the elite athlete preparing for world-class competitions. The increased demand for pre-event, inter-event and post-event massage is becoming an essential aspect of the athlete's regime, not only during training but also in preparing for competition.

The sport and exercise masseur is now a key member of the sports multi-disciplinary team, working alongside the sports therapist, physiotherapist, nutritionist, coach and sports psychologist. For this reason, this unit encourages learners to develop their theoretical skills whilst integrating them in a practical sport and exercise massage treatment on a variety of athletes.

Within this unit there is the opportunity to develop skills and work not only as an individual but also as part of a team. Learners will develop their therapeutic skills in providing pre-event and post-event massage not only in a therapeutic environment, but also in a sporting setting. Learners will also complete the relevant supporting written documentation that must accompany practical treatments, whilst recognising the importance of working in a safe and appropriate manner.

The knowledge and skills gained from this unit will provide a good basis for those wanting to pursue further study or sport and exercise-related careers such as sports science, sports therapy, rehabilitation, physical activity, personal training and fitness testing.

● Learning outcomes

On successful completion of this unit a learner will:

- 1 Understand professional ethics in sport and exercise massage
- 2 Understand sport and exercise massage treatment
- 3 Be able to apply sport and exercise massage techniques
- 4 Understand the outcomes of sport and exercise massage treatments.

Unit content

1 Understand professional ethics in sport and exercise massage

Professional appearance: short nails; no jewellery; clean; appearance; personal hygiene; confidentiality

Health and safety: current legislation; Health and Safety at Work Act (1974); Control of substances hazardous to health (COSHH) (1988); Local Government (Miscellaneous Provisions) Act (1976); local authority byelaws; Data Protection Act (1998); professional indemnity insurance; sterilisation of equipment (cold bleach, autoclave, ultra-violet cabinets, surgical spirit)

Liaison with medical practitioners: referral to an accident and emergency ward

General practitioner; osteopath; physiotherapist; chiropractor: seeking written permission from medical practitioner for clients with contra-indications

2 Understand sport and exercise massage treatment

Planning treatments: type of treatment; duration and frequency of massage; target areas of massage; planning for individual and group treatment; planning for different venues

Purpose of treatment: improved circulation, improved lymphatic drainage, increased cellular function, removal of waste products, soothes, stimulates, increased range of movement, therapeutic effects

Medium: talcum; oil; cream; reasons for selection; benefits of each medium

3 Be able to apply sport and exercise massage techniques

Client consultation: personal details; previous and existing injuries; figure and posture analysis; height; weight; fitness test result if appropriate; contra-indications check; accurate recording eg devise a recording system, written, computer-based, importance for insurance, retrieving and updating records, correspondence from medical practitioners

Venues: treatment room; trackside; ringside; football pitch; rugby pitch; health club; leisure centre; poolside

Techniques: effleurage; petrissage; percussion/tapotement; vibrations; thumb-kneading; ulnar border; frictions; rehabilitation; scar tissue massage; neuro-muscular

Adapting massage: techniques adapted for pre-event, inter-event, post-event; rate and depth of massage; techniques selected; duration of treatment

4 Understand the outcomes of sport and exercise massage treatments

Athlete feedback: effectiveness of treatment, areas treated, speed of treatment, depth of treatment

Benefits: effects on nervous and muscular tissue; psychological benefits; effects of treatment on injuries, athlete performance

Outcomes of treatments: long-term goals, short-term goals, post massage effects, wellbeing, tiredness, relaxation, exercise/training plans; subsequent treatments, timing of treatments

Learning outcomes and assessment criteria

<p>Learning outcomes</p> <p>On successful completion of this unit a learner will:</p>	<p>Assessment criteria for pass</p> <p>The learner can:</p>
<p>LO1 Understand professional ethics in sport and exercise massage</p>	<p>1.1 discuss professional conduct in sport and exercise massage</p> <p>1.2 discuss the importance of health and safety within a sport and exercise massage treatment</p> <p>1.3 assess the importance of liaising with qualified medical practitioners for client referral</p>
<p>LO2 Understand sport and exercise massage treatment</p>	<p>2.1 discuss the purpose of specific sport and exercise massage techniques</p> <p>2.2 select sport and exercise massage techniques for different clients</p> <p>2.3 justify the selected sport and exercise massage techniques for different clients</p>
<p>LO3 Be able to apply sport and exercise massage techniques</p>	<p>3.1 carry out pre-treatment consultations with different clients</p> <p>3.2 perform sport and exercise massage treatments for different clients</p> <p>3.3 demonstrate adaptations to sport and exercise massage techniques</p>
<p>LO4 Understand the outcomes of sport and exercise massage treatments</p>	<p>4.1 analyse treatments given to clients</p> <p>4.2 discuss the benefits of different treatments for clients</p> <p>4.3 review the outcomes of client treatments, providing recommendations on how treatment can be improved</p>

Guidance

Links

This unit has links to the following units in the BTEC Higher Nationals in Sport and in Sport and Exercise Sciences:

- *Unit 1: Anatomy and Physiology for Sport and Exercise*
- *Unit 23: Personal and Professional Development*
- *Unit 24: Employability Skills*
- *Unit 26: Injury Prevention and Treatment in Sport and Exercise*
- *Unit 35: Sport and Exercise for Specific Groups.*

This unit could also link directly to personal development and skills relating to employability, particularly if supervised placements are used for sports massage.

Essential requirements

In order to deliver this unit successfully, centres must have appropriately qualified tutors to deliver the understanding and skills aspect of the unit. Access to practical resources to complete the massage skills is essential though this could be provided in an area related to sport.

On starting this unit, learners must be introduced to the health and safety aspects of providing treatments to different athletes and the importance of professional ethics especially when liaising with members of the healthcare professions or medical practitioners.

Employer engagement and vocational contexts

The inclusion of guest lectures, or workshops from different members of sports teams may be of additional benefit to learners. Alternatively, visiting sporting events to see therapists at work could provide a link to local employers. Liaison with qualified therapists who work in local sports clubs and teams may provide placement opportunities to enable learners to collect evidence whilst under supervision.

Unit 31: Physical Education

Unit code: R/601/1873

Level: 4

Credit value: 15

● Aim

This unit introduces learners to current practice in physical education, including the National Curriculum. It gives learners the opportunity to sample the vocational route to teaching physical education.

● Unit abstract

Participating in Physical Education from an early age is an effective method of enriching an individual's mental, physical, social and psychological development. It teaches the individual physical activities that can be practised in later life such as motor skills for the games and sports of volleyball, tennis, swimming and so on, as well as instilling the value of ethical behaviour in sporting situations. It is beneficial during adulthood to maintain good health and fitness.

In the first part of this unit learners will demonstrate an understanding of the term 'Physical Education' and its administration in the UK. They will explore values that physical education offers in the holistic development of the individual and investigate a contemporary issue.

Following the theoretical and knowledge-based aspects of the first part of this unit, a practical, hands-on approach, together with school visits for lesson observation is essential for the effective delivery of the second part of this unit.

The second part of the unit introduces the learner to the four key stages of the National Curriculum and through this knowledge the learner will explore the role and training of the Physical Education tutor using schemes of work and lesson plans to deliver sample lessons.

● Learning outcomes

On successful completion of this unit a learner will:

- 1 Understand physical education and its administration in the UK
- 2 Understand the role of physical education in society
- 3 Understand the National Curriculum for Physical Education
- 4 Understand the role of the physical education tutor.

Unit content

1 Understand physical education and its administration in the UK

Key terms: physical education eg an element of educational curriculum concerned with bodily development, strength, physical coordination and agility; leisure; physical recreation; play : to include a variety of essential definitions

Agencies involved in the administration of physical education: roles of agencies eg Association for Physical Education (afPE), Department for Children, Schools and Families (DCSF), Department for Work and Pensions (DWP), Office for Standards in Education, Children's Services & Skills (Ofsted), Qualifications and Curriculum Development Agency (QCDA), Training and Development Agency for Schools (TDA), HM Inspectorate of Education (HMIE)

2 Understand the role of Physical Education in society

Intrinsic values and extrinsic outcomes: instrumental; economic; humanistic; quality of life

Contemporary issues: contemporary issues eg analysis and evaluation of current issues affecting physical education, excellence versus sport for all, expense of outdoor education programmes, equal opportunities for women in sport

3 Understand the National Curriculum for Physical Education

Structure of the National Curriculum

Differentiation of activities in physical education: outwitting opponents; accurate replication of actions, phrases and sequences; exploring and communicating ideas, concepts and emotions; performing at maximum levels in relation to speed, height, distance, strength or accuracy; identifying and solving problems to overcome challenges of an adventurous nature; exercising safely and effectively to improve health and wellbeing

National Curriculum for Physical Education: key stages 1–4 skills; knowledge and understanding for each key stage is sub divided into acquiring and developing skills, selecting and applying, evaluating and improving performance, knowledge and understanding of fitness and health; breadth of study across the key stage

Learning processes and attainment levels: level descriptions; attainments at each key stage

Qualifications: qualifications taught by PE tutors eg GCSE PE, GCE PE, BTEC Firsts, BTEC Nationals, Personal Social Health and Economic education (PSHE)

4 Understand the role of the Physical Education tutor

Styles of teaching: styles eg autocratic, democratic, laissez faire

Prepare: scheme of work and lesson plans eg area of curriculum, selected qualification, content, resources, timing

Delivery: deliver a sample lesson eg management of lesson, planning, teaching styles

Training of physical education tutors: training institutions eg universities; training courses eg Bachelor of Education (Bed), Post Graduate Certificate in Education (PGCE), Post Compulsory Education and Training (PCET)

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand physical education and its administration in the UK	1.1 discuss definitions of physical education 1.2 discuss the terms: leisure, physical recreation and play 1.3 analyse the influence of different agencies on the administration of physical education
LO2 Understand the role of physical education in society	2.1 examine the contribution of physical education to the development of individuals 2.2 discuss a selected contemporary issue within the field of physical education
LO3 Understand the National Curriculum for Physical Education	3.1 discuss the different classifications of activities in physical education 3.2 analyse the key stages of the National Curriculum for Physical Education 3.3 discuss the key learning processes in physical education and the levels of attainment used in the assessment of children 3.4 discuss different qualifications taught by physical education tutors
LO4 Understand the role of the physical education tutor	4.1 discuss different styles of teaching 4.2 prepare a scheme of work, and lesson plans, for a selected area of the National Curriculum for Physical Education, or a selected physical education qualification 4.3 deliver a sample physical education lesson 4.4 examine different institutions, and courses, involved in the training of physical education tutors

Guidance

Links

This unit has links to the following units in the BTEC Higher Nationals in Sport and in Sport and Exercise Sciences:

- *Unit 9: Principles of Sports Coaching*
- *Unit 10: Applied Sports Coaching*
- *Unit 27: Skill Acquisition in Sport*
- *Unit 28: Sports Coaching*
- *Unit 35: Sport and Exercise for Specific Groups*
- *Unit 45: The Organisation and Control of Sport, Exercise and Fitness.*

Essential requirements

Learners must have access to sporting facilities for the practical delivery of lessons.

When delivering a sample physical education lesson in learning outcome 4, learners may deliver this to peers or physical education students.

Employer engagement and vocational contexts

Learners would benefit from working alongside, or observing, an experienced physical education tutor in action. It is recommended that centres build up links with PE departments within schools, who would be willing to accept learners for regular observational visits

Liaising with outside agencies in physical education for example schools, clubs and national governing bodies, would provide additional opportunities to demonstrate physical education/coaching skills and expertise in a real world setting.

Unit 32: Technology in Sport and Exercise

Unit code: Y/601/1874

Level: 4

Credit value: 15

● Aim

This unit will develop learners' understanding of the evolution of technology in sport and how developments in equipment and facility design have an impact upon performance.

● Unit abstract

Technological advancement in the delivery of performance and training, together with state of the art equipment design, is known to maximise the potential of the individual or team in sports performance.

The impact of design of footwear, playing surfaces, striking implements, human-powered machines, watercraft, fitness equipment and clothing may mean the difference between success and failure at the highest level.

Technological developments in the diagnosis and treatment of injury may return the athlete to training and competition quicker than ever before. Once fully fit, the technological advancement in training methods and equipment are known to enhance performance.

New technology impacts on all involved in sport, whether as designer, athlete, coach, manager, official, supporter, or health practitioner. Innovative rehabilitation methods are often key to the rapid and successful return of the individual to performance.

The assumption should not be that all technological advancements in sport are advantageous to the athlete. Learners will understand how to discriminate between the positive and negative impacts of new design and technology on the individual, team, or sport industry as a whole.

In this unit learners will investigate the relationship between technology and sports performance including the evolutionary development, current application, and implications of technology for the future of sporting performance.

● Learning outcomes

On successful completion of this unit a learner will:

- 1 Understand the evolutionary development of technology in sport and exercise
- 2 Understand the positive and negative effects of technological development
- 3 Understand the technological developments in equipment and facility design
- 4 Understand the implications of technological developments in sport and exercise for the future.

Unit content

1 Understand the evolutionary development of technology in sport and exercise

Materials, facilities and equipment developments: synthetic and composites (aluminium, nylon, fibreglass, reinforced concrete, maraging steel, titanium); sport-specific equipment development; video analysis; performance testing equipment; sports stadia and facilities; lighting; synthetic pitches; swimming pools; water flumes; artificial ski slopes; influences on developments

Clothing and footwear developments: indoor and outdoor; breathable; protective clothing; sport-specific shoe design; influences on developments

2 Understand the positive and negative effects technological development

Effects on performance: positive effects eg analysis, training, testing, safety, professionalism, optimum performance, sport for all; negative effects eg changing nature of the game (tennis, javelin, cricket), serious injury, negative effects on the body, performance enhancing drugs

Ethical, social and legal: positive issues eg positive effects on motivation, self-fulfilment, role models, communications (television, internet, travelling), leadership, equal opportunities in sport; negative issues eg costs, cheating, gambling, aggression, athlete as a commodity

3 Understand the technological developments in equipment and facility design

Design and designing: new equipment and products; design brief; investigation; ideas; CAD; evaluation; testing; aesthetics; business and marketing

Materials and their application: choosing materials (traditional, composites); joining methods; costs; properties; materials for the disabled sportsman

Biomechanical considerations: performance improvement; levers and cantilevers; centre of gravity; balance and weight; injury prevention

Role of ergonomics: anthropometrics; postural considerations; body measurement and calculation; the disabled sports performer; measuring performance

4 Understand the implications of technological developments in sport and exercise for the future

Development of activities: new activities (roller derby, futsal, frisbee golf, extreme sports); sport and disability; changes in equipment (javelin, airbags); monitoring and officiating (3rd umpire, video referee, electronic eye)

Equipment development: fitness equipment; clothing and footwear; activity equipment (striking, athletics, motor sport, summer and winter, indoor and outdoor)

Facility design: specialist facilities; coaching resources; multi-purpose; sport science support

Improved performances: world records; monitoring and assessment (software support, Hawkeye, notational analysis, timing and measuring); sport for all; talent identification

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand the evolutionary development of technology in sport and exercise	1.1 discuss major technological developments in sport and exercise materials, facilities and equipment 1.2 discuss major technological developments in sport and exercise clothing and footwear
LO2 Understand the positive and negative effects technological development	2.1 analyse potential positive and negative effects of technological developments on sport and exercise performance 2.2 analyse potential positive and negative ethical, social and legal issues due to technology and technological development in sport and exercise
LO3 Understand the technological developments in equipment and facility design	3.1 discuss the production of new products or facilities in sport and exercise 3.2 analyse the selection of materials for different sport and exercise products 3.3 discuss the use of biomechanics in designing new sport and exercise products 3.4 evaluate the importance of ergonomics and aesthetics in the design process for sport and exercise products
LO4 Understand the implications of technological developments in sport and exercise for the future	4.1 discuss potential trends in the future development of equipment in sport and exercise 4.2 discuss potential trends in the future development of facilities in sport and exercise 4.3 examine future trends in facility design 4.4 discuss potential future achievement in sport and exercise due to technological developments

Guidance

Links

This unit has links to the following units in the BTEC Higher Nationals in Sport and in Sport and Exercise Sciences:

- *Unit 4: Biomechanics for Sport*
- *Unit 7: Training and Fitness for Sport and Exercise*
- *Unit 8: Field-based Fitness Testing for Sport and Exercise*
- *Unit 15: Operating and Managing a Sport and Leisure Facility*
- *Unit 26: Injury Prevention and Treatment in Sport and Exercise*
- *Unit 28: Sports Coaching.*

Essential requirements

There are no essential requirements for this unit.

Employer engagement and vocational contexts

Within this unit there is an opportunity for learners to make several educational or industrial visits. The visits can be to local specialised facilities or to national specialised facilities. These visits will give the learners an opportunity to see the latest innovations in a working environment. There are a range of organisations that may be able to help centres engage and involve local employers in the delivery of this unit.

- Local, regional business links – www.businesslink.gov.uk
- Work-based learning guidance – www.aimhighersw.ac.uk
- International Sports Engineering – www.sportsengineering.co.uk
- Satra Technology Centre – www.satra.co.uk
- Work experience/links with local Universities – www.uclan.ac.uk; www.lboro.ac.uk; www.shu.ac.uk.

Unit 33: Functional Exercise Physiology

Unit code: D/601/1875

Level: 5

Credit value: 15

● Aim

This unit provides learners with an in-depth understanding of functional physiological responses to physical activity, extending knowledge of anatomy and physiology and exploring their links with performance.

● Unit abstract

In this unit learners will use their knowledge and understanding of anatomy and physiology and apply the basic principles and concepts in a practical physical activity setting.

Throughout this unit learners will look at how energy release is utilised and controlled, how cardiovascular and respiratory responses to physical activity are affected and adapted, and how neuromuscular and hormonal changes occur when undertaking both acute and chronic exercise.

In addition to these elements, learners will consider the effect of environmental influences such as heat and altitude.

The emphasis of the unit is on the application of knowledge in a practical setting, and the use of laboratorial techniques gained from previous study would be advantageous.

The sum of this information and the emphasis on practical application will aid the learner to apply each of the principles to a range of vocational settings.

● Learning outcomes

On successful completion of this unit a learner will:

- 1 Understand relationships between energy systems and performance in sport and exercise
- 2 Understand the responses of the cardiovascular and respiratory systems to exercise
- 3 Understand neuromuscular and hormonal responses to exercise
- 4 Understand influences of environment on performance in sport and exercise.

Unit content

1 Understand relationships between energy systems and performance in sport and exercise

Energy sources and systems: the ATP-PCr system – adenosine triphosphate and creatine phosphate (anaerobic); the glycolytic system; the oxidative system (aerobic)

Bioenergetic pathways: synthesis of energy by phosphocreatine, glycolytic and oxidative energy systems to include tricarboxylic acid cycle (TCA) cycle and electron transport chain; metabolic adaptation to training

Energy expenditure: demands of different types and intensities of exercise on energy synthesis (identification of different activities at different intensities resulting in different energy expenditure eg walking at low intensity, V running at high intensity); measurement of energy expenditure eg Basal Metabolic Rate (BMR) and VO_2 max; impact of bi-products of metabolism on energy release

2 Understand the responses of the cardiovascular and respiratory systems to exercise

Cardiovascular control during exercise: parameters surrounding the 'Fick' equation; cardiovascular drift; blood pressure; blood flow

Respiratory regulation during exercise: pulmonary ventilation; pH levels; concepts and measurement of ventilatory breakpoint and onset of blood lactate accumulation (OBLA)

Cardiorespiratory adaptation to training: chronic adaptation of lungs; heart; circulatory function and metabolic factors

3 Understand neuromuscular and hormonal responses to exercise

Muscle fibre recruitment and exercise type: Type 1 (Slow Twitch Fibres – ST); Type 2a (Fast Oxidative Glycolytic Fibres – FOG) and Type 2b (Fast Glycolytic Fibres – FG); determination of fibre type

Neuromuscular adaptation to resistance training: fibre hypertrophy and hyperplasia; delayed onset muscle soreness; the Wingate anaerobic power test

Hormonal effects on metabolism and energy: glucose and fat metabolism during exercise

Hormonal effects on fluid and electrolyte balance: action of Antidiuretic hormone (ADH) in conserving body water

4 Understand influences of environment on performance in sport and exercise

Thermal regulation: mechanism of body temperature regulation; physiological response to hot and cold environments; acclimatisation

Extreme environments: hypobaric environments eg at altitude, in space; hyperbaric environments eg underwater

Effects: effects of hypobaric environment eg physiological responses, acclimatisation; effects of hyperbaric environments eg depth, impacts, effects on lung volume/capacity, requires holding breath which in turn increases arterial carbon dioxide levels

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand relationships between energy systems and performance in sport and exercise	1.1 discuss the sources of fuel available to the body 1.2 assess the degree to which the energy systems are used in different sport and exercise activities 1.3 assess energy expenditure for different physically demanding activities with respect to the concept of energy and work 1.4 discuss the results of laboratory VO ₂ measures
LO2 Understand the responses of the cardiovascular and respiratory systems to exercise	2.1 discuss the responses of the cardiovascular system to physical activity 2.2 discuss the responses of the respiratory system to physical activity 2.3 discuss cardiorespiratory adaptation to training
LO3 Understand neuromuscular and hormonal responses to exercise	3.1 analyse the relationships between muscle fibre types and athletic potential 3.2 assess neuromuscular adaptation to resistance training 3.3 discuss the importance of hormonal changes during exercise
LO4 Understand influences of environment on performance in sport and exercise	4.1 examine the mechanisms used to control body temperature 4.2 discuss the risks associated with exercising in hot and cold environments and related preventative measures 4.3 explain the effects of physical activity in extreme environments and how the body acclimatises

Guidance

Links

This unit has links to the following units in the BTEC Higher Nationals in Sport and in Sport and Exercise Sciences:

- *Unit 1: Anatomy and Physiology for Sport and Exercise*
- *Unit 6: Nutrition for Sport and Exercise*
- *Unit 7: Training and Fitness for Sport and Exercise*
- *Unit 19: Laboratory and Experimental Methods in Sport and Exercise Sciences*
- *Unit 20: Biochemistry of Exercise*
- *Unit 29: Analysis of Sports Performance*
- *Unit 34: Exercise Prescription*
- *Unit 35: Sport and Exercise for Specific Groups.*

Essential requirements

Learners will need access to well-equipped laboratory facilities, technical support, library and ICT resources.

All learners should have the opportunity to explore the principles of the unit in the laboratory and through the use of ICT packages.

Employer engagement and vocational contexts

Learners would benefit from visits to industrial laboratories and fitness testing facilities such as those available in some sports coaching venues where conditioning and fitness training is a part of the training programme for an athlete/sports person.

Unit 34: Exercise Prescription

Unit code: Y/601/1860

Level: 4

Credit value: 15

● Aim

In this unit learners will develop the knowledge and skills needed by those who work in exercise prescription settings, including client consulting and the designing and evaluation of client-centred exercise programmes.

● Unit abstract

Why are we as a nation more and more likely to suffer from chronic diseases such as obesity, heart disease and type 2 diabetes? Despite these chronic diseases being largely preventable through maintaining a healthy lifestyle, inactivity levels across all ages are increasing. Could this be a result of ineffective exercise prescription, and through effective exercise prescription can the health of our clients, communities, and nation be improved?

This unit combines theoretical and practical learning contexts. Ultimately, learners will be able to take clients through the exercise prescription process. Learners will develop applied understanding of client consultation from a holistic viewpoint and be able to explain how the findings of this consultation would affect exercise prescription. This unit also focuses on the theory and application of selecting the right exercises for the right client group. Learners will be able to design safe and effective client-centred exercise programmes that incorporate the key principles of exercise prescription, leading to evaluation of exercise programmes. It is expected that alongside this applied learning environment, learners will start to adopt an evidence-based approach to their work to help them prepare for the workplace or further education within this field.

The knowledge and skills gained in this unit will be useful for learners wishing to progress into further education in sport-related and healthcare-related programmes, or careers based around health-related exercise, personal training, and clinical exercise. This unit links with the professional body standards of the Register of Exercise Professionals (REPS).

● Learning outcomes

On successful completion of this unit a learner will:

- 1 Be able to conduct lifestyle consultations with different clients
- 2 Be able to select appropriate forms of exercise for different client groups
- 3 Understand the principles of training in relation to exercise prescription
- 4 Be able to design exercise programmes for different clients.

Unit content

1 Be able to conduct lifestyle consultations with different clients

Screening questionnaire: questionnaire eg past and current medical history, family disease history, medication, use of British National Formulary (BNF), contra-indications, referral

Lifestyle consultation: consultation eg activity levels, diet, smoking, alcohol, stress, occupation; communication eg appropriate to client

Exercise prescription: health screening tests eg blood pressure, body mass, skin fold measurements, peak flow, sit and reach, strength tests, bioelectrical impedance, sub maximal test of aerobic endurance (Rockport walk test, Astrand Rhyming test); client types eg risk stratification (A, B, C), referral patients; role of psychology eg establishing commitment, improving motivation and adherence, preventing relapse, stage of change model, goal setting

2 Be able to select appropriate forms of exercise for different client groups

Different forms of exercise: gym-based eg resistance exercises, free weights, flexibility exercise, core stability, power plates, aerobic training; aqua-based eg swimming, aqua aerobics; group-based eg circuits, pilates, yoga, tai chi, spinning, aerobic classes

Different clients: different clients eg gender, age, ability level, medical history

3 Understand the principles of training in relation to exercise prescription

Warming up and cooling down: role of warm up and cool down eg warming up to gradually warm up muscles and prevent injury, cooling down to disperse lactic acid to prevent aches and soreness

Principles of training: individual needs/differences; specificity; overload; progression; rest; recovery; FITT (frequency, intensity, time, type); reversibility

Monitoring intensity: monitoring eg perceived exertion, observation, talk test, heart rates, calories, metabolic equivalents, percentages of repetition max

Training zones: determining training zones eg age predicted method, conservative method, heart rate reserve method, training zones (general health, fat burning, improving fitness)

4 Be able to design exercise programmes for different clients

Design programme: programme for selected client eg appropriate for client, based on screening and consultation and including appropriate activities

Evaluating the programme: evaluation eg client feedback, strengths and areas for improvement, physical and mental benefits, health-related benefits

Improving the programme: based on outcomes of evaluation eg strength and areas for improvement; recommended future activities

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Be able to conduct lifestyle consultations with different clients	1.1 devise a screening questionnaire for use with different clients 1.2 demonstrate an effective lifestyle consultation with a selected client 1.3 analyse factors that would affect exercise prescription for different clients 1.4 discuss the referral of clients to health professionals
LO2 Be able to select appropriate forms of exercise for different client groups	2.1 discuss the benefits of using different forms of exercise 2.2 discuss the use of different forms of exercise with different client groups 2.3 select and justify appropriate forms of exercise for different client groups
LO3 Understand the principles of training in relation to exercise prescription	3.1 discuss the role of warming up and cooling down 3.2 discuss the principles of training in the context of exercise prescription 3.3 assess the various ways intensity of exercise can be monitored with clients 3.4 determine heart rate training zones for different clients and justify them
LO4 Be able to design exercise programmes for different clients	4.1 design an appropriate exercise programme for a selected client 4.2 implement an exercise programme for a selected client 4.3 evaluate an exercise programme for a selected client 4.4 make recommendations regarding improving exercise programmes based on evaluation

Guidance

Links

This unit has links to the following units in the BTEC Higher Nationals in Sport and in Sport and Exercise Sciences:

- *Unit 7: Training and Fitness for Sport and Exercise*
- *Unit 21: Physical Activity, Lifestyle and Wellbeing*
- *Unit 35 : Sport and Exercise for Specific Groups*
- *Unit 41: Health Promotion.*

It also has links with the standards of the register of exercise professionals (REPS).

Essential requirements

Learners will need to have access to a range of exercise equipment and health testing equipment such as free weights, core balls, resistance machines, cardiovascular machines, cycle ergometers, skin fold callipers, body mass scales, blood pressure monitors, peak flow meters, and heart rate monitors.

Tutors must allow learners to experience a range of gym-based, aqua-based and group-based exercise to support their understanding of exercise prescription, therefore appropriate resources to be made available.

It is essential that learners are encouraged to complete independent work outside of tutor contact hours to fully meet the scope of this unit.

Employer engagement and vocational contexts

Engagement with a health-related fitness facility would enable learners to practically experience some of the resource-intensive topics of this unit..

The use of guest speakers from healthcare, GP referral, and personal training may also aid the delivery of the unit.

Unit 35: Sport and Exercise for Specific Groups

Unit code: M/601/1881

Level: 4

Credit value: 15

● Aim

This unit introduces learners to the considerations needed when planning and delivering sport or exercise programmes for children, individuals with disabilities, older adults, ante/postnatal women and referred clients.

● Unit abstract

There is a recognised link between physical activity and health. The Department of Health and healthcare professionals recommend that the general population carry out regular physical activity. Individuals who are responsible for prescribing exercise, writing training programmes and leading sport or exercise sessions must have the knowledge and skills required to work with any specific groups they might encounter.

The unit is particularly relevant for individuals aiming to work in the exercise and fitness industry, sports leadership, PE teaching, sports coaching or health promotion. Sport and exercise professionals may work with special groups in a teaching, coaching or instructing context.

The unit will explore the considerations needed when working with children, older adults, individuals with a disability, ante/postnatal women and referred clients. This includes anatomical and physiological changes, contra-indications to exercise, exercise guidelines and planning sport or exercise programmes and sessions.

Learners will look at working with children in mixed ability groups. They will examine common impairments and the structure of disability sport as well as the integration of disabled individuals into able-bodied sport or exercise mainstream sessions. GP referral schemes are examined and health and safety considerations when working with special groups are explored.

● Learning outcomes

On successful completion of this unit a learner will:

- 1 Understand the considerations needed when planning sport or exercise programmes for children
- 2 Understand the considerations needed when planning sport or exercise programmes for older adults
- 3 Understand the considerations needed when planning sport or exercise programmes for disabled people
- 4 Understand exercise prescription for referred clients, and ante/postnatal women.

Unit content

1 Understand the considerations needed when planning sport or exercise programmes for children

Special considerations: differences in boys and girls; children's growth and development; child protection

Exercise programming: goal setting; barriers to participation; principles of training (individual needs/differences, specificity, progressive overload, rest and recovery); FITT principles (frequency, intensity, time, type); exercise adaptation; benefits of exercise

Sport or exercise sessions: planning; delivering and evaluating sport and exercise sessions; suitable equipment; mixed ability groups; health and safety

2 Understand the considerations needed when planning sport or exercise programmes for older adults

Anatomical and physiological changes: skeleton and joints; muscular system; cardiovascular system; nervous system; implications for exercise and training; risks of specific exercises

Exercise programming: exercise screening and referral; goal setting; barriers to participation; principles of training; FITT principles; exercise adaptation; benefits of exercise

Sport or exercise sessions: group sessions; 1:1 sessions; planning, delivering and evaluating sport and exercise sessions; suitable equipment; health and safety

3 Understand the considerations needed when planning sport or exercise programmes for disabled people

Impairments: impairments eg multiple sclerosis, cerebral palsy, learning disabilities, deafness, hearing impairment, visual impairment

Anatomical and physiological changes: changes that result from impairments eg skeleton and joints, muscular system, cardiovascular system, nervous system; implications for exercise and training; risks of specific exercises

Disability sport: structure; organisations involved; roles and remits; modified sports; opportunities for participation (local, regional, national)

Legislation: legislation eg Disabled Persons Act, Disability Discrimination Act

Exercise programming: exercise screening and referral; goal setting; barriers to participation; principles of training; FITT principles; exercise adaptation; benefits of exercise

Sport or exercise sessions: group sessions; 1:1 sessions; planning, delivering and evaluating sport and exercise sessions; integrating disabled individuals; suitable equipment health and safety

4 Understand exercise prescription for referred clients and ante/postnatal women

Referral conditions: cardiovascular disease eg primary prevention of coronary heart disease, hypertension, peripheral arterial disease; metabolic/immunological conditions eg obesity, diabetes, osteoporosis; musculoskeletal conditions eg arthritis, back pain, joint replacement; respiratory conditions eg asthma, lung disease; neuromuscular conditions eg stroke, Parkinson's disease, multiple sclerosis; common mental health problems

Health and safety: emergency procedures; emergency scenarios; appropriate action

GP referral schemes: initial screening procedures; referral professionals eg sports therapists, physiotherapists, general practitioners; exercise opportunities

Exercise prescription: exercise screening and referral; goal setting; barriers to participation; principles of training; FITT principles; progression; exercise adaptation; health and safety; benefits of exercise

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand the considerations needed when planning sport or exercise programmes for children	1.1 analyse the special considerations needed when working with children 1.2 discuss suitable sport or exercise sessions for a group of mixed ability children 1.3 plan an exercise programme for a group of children
LO2 Understand the considerations needed when planning sport or exercise programmes for older adults	2.1 analyse the physiological differences that can occur with age 2.2 plan an exercise programme for an older adult 2.3 discuss suitable sport or exercise sessions for a group of older adults
LO3 Understand the considerations needed when planning sport or exercise programmes for disabled people	3.1 analyse the structure of disability sport and opportunities for participation 3.2 analyse the physiological differences that relate to different disabilities 3.3 plan an exercise programme for an individual with a disability 3.4 discuss suitable sport or exercise sessions suitable for both able-bodied and disabled participants
LO4 Understand exercise prescription for referred clients, ante/postnatal women	4.1 prescribe safe and effective exercise to different referred clients 4.2 discuss safe and effective exercise for antenatal and postnatal women 4.3 evaluate referral schemes for individuals with medical conditions

Guidance

Links

This unit has links to the following units in the BTEC Higher Nationals in Sport and in Sport and Exercise Sciences:

- *Unit 1: Anatomy and Physiology for Sport and Exercise*
- *Unit 9: Principles of Sports Coaching*
- *Unit 10: Applied Sports Coaching*
- *Unit 21: Physical Activity, Lifestyle and Wellbeing*
- *Unit 22: Instructing Physical Activity and Exercise*
- *Unit 28: Sports Coaching*
- *Unit 31: Physical Education*
- *Unit 34: Exercise Prescription*
- *Unit 41: Health Promotion.*

This unit is designed to be vocationally relevant and also has links to the level 3 National Occupational Standards (NOS) for:

- Coaching, Teaching and Instructing
- Instructing Physical Activity and Exercise.

Essential requirements

In the delivery of this unit learners need to observe a GP referral scheme operating in the community.

For learning outcomes 1-3, the planned exercise programme must be long enough to cover the required content and see improvements.

Employer engagement and vocational contexts

This unit will provide learners with the background knowledge and skills needed to work in the exercise and fitness industry, sports leadership, sports coaching, PE teaching or health promotion. Centres are encouraged to develop links with leisure clubs, gyms and Primary Care Trusts. This could be via talks, demonstrations, workshops or visits.

Unit 36: Applied Sport and Exercise Psychology

Unit code: H/601/1876

Level: 5

Credit value: 15

● Aim

The aim of this unit is to introduce learners to a range of techniques that are used by sport and exercise psychologists to develop psychological skills in performers.

● Unit abstract

In this unit, learners will investigate psychological skills training which is the teaching and delivery of skills, strategies and techniques used to influence the behaviour of individuals and teams.

The techniques and skills investigated in this unit can be equally applied to sport or exercise environments dependent upon the needs of the learners. Sports performers will use the techniques to improve their performances and their enjoyment of activities, while exercise participants may use the techniques to promote their chances of adhering to an exercise programme and to complement the health benefits of their physical training. This unit will be of interest to learners who work or intend to work in sports coaching, exercise instruction and other sport/fitness-related environments.

The unit looks at the purpose of psychological skills training (PST) and the roles psychological skills can play. Learners will examine the different phases of developing a training programme and investigate the professional boundaries a sport psychologist must work within and the ethical codes they need to follow. The unit examines methods to influence motivation in sport and exercise participants, including techniques such as goal setting, self-talk and performance profiling. Learners will explore techniques used to control arousal levels and the associated issues of anxiety and stress, including relaxation and imagery techniques used to lower arousal levels and psyching up techniques to raise arousal levels. The unit also focuses on concentration and maintaining an appropriate attentional focus. Learners will employ techniques and exercises for maintaining and improving concentration.

● Learning outcomes

On successful completion of this unit a learner will:

- 1 Be able to plan psychological skills training programmes
- 2 Be able to implement techniques to influence motivation
- 3 Be able to carry out techniques to control arousal and anxiety
- 4 Be able to employ techniques to produce attentional focus.

Unit content

1 Be able to plan psychological skills training programmes

Psychological skills training (PST): definition; aims; intended outcomes (improved performance, enjoyment, satisfaction); content (skills and techniques); importance; issues and myths in PST

Implementing a psychological skills training programme: models eg three phase model (education, acquisition, practice), Kirshenbaum's (1984) five stage model, Thomas's (1991) seven phase model; methods to assess psychological strengths and weaknesses eg use of questionnaires, performance profiling, observation, interviewing; analysis of strengths and weaknesses; designing a PST programme; evaluating the PST programme.

Professional boundaries and ethical issues: role of the sport and exercise psychologist; organisations accrediting sport psychologists (British Association of Sport and Exercise Sciences – BASES, British Psychological Society – BPS); working within codes of ethical guidance

2 Be able to implement techniques to influence motivation

Goal setting: value of goal setting in influencing motivation; types of goals (outcome, performance, process); characteristics of effective goals (short and long-term, difficulty level, group and individual, practice and competition); why goal setting is effective; principles in setting goals; stages in designing a goal setting system (preparation and planning, education and acquisition, implementation and evaluation)

Self-talk: definition; functions (instructional, motivational); positive versus negative; why self-talk is effective; optimising self-talk; developing an effective self-talk programme; other uses of self-talk eg improving concentration, controlling arousal

Other methods to promote motivation: developing a motivational climate; performance profiling; decision balance sheet; offering rewards; contracting; prompts

3 Be able to carry out techniques to control arousal and anxiety

Relaxation: definition; benefits; uses of techniques; methods eg progressive muscular relaxation, breathing techniques, biofeedback, autogenic training, use of music

Imagery: definition; why imagery is effective; use of all senses to create images; imagery for relaxation (use of relaxation place, relaxation room); when to use imagery; other uses of imagery eg mental rehearsal, building confidence, enhancing motivation

Psyching up techniques: definition; when to use psyching up techniques; techniques eg psych-up breathing; energising imagery, acting energised, using music, mood words and positive statements

4 Be able to employ techniques to produce attentional focus

Concentration: definition; attentional focuses (broad, narrow, internal, external); attentional problems eg internal distracters, attending to past and future events, choking, paralysis by analysis

Methods to influence concentration: methods eg use of cue words, establish pre-performance routines, associative/dissociative techniques, self-talk

Exercises to improve concentration: exercises eg shifting attention, parking thoughts, maintaining focus, searching for relevant cues, distraction training

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Be able to plan psychological skills training programmes	1.1 produce a psychological skills training programme for selected sport and exercise participants 1.2 demonstrate awareness of professional boundaries and ethical guidelines relating to sport and exercise participants
LO2 Be able to implement techniques to influence motivation	2.1 present a system of goal setting for selected sport and exercise participants 2.2 analyse methods of influencing motivation for selected sport and exercise participants 2.3 design a programme of self-talk for selected sport and exercise participants
LO3 Be able to carry out techniques to control arousal and anxiety	3.1 demonstrate relaxation techniques used by sport and exercise participants 3.2 demonstrate the use of imagery to reduce arousal 3.3 perform selected psyching up techniques
LO4 Be able to employ techniques to produce attentional focus	4.1 explain the application of different attentional focuses in sport and exercise 4.2 demonstrate methods used to influence concentration in sport and exercise

Guidance

Links

This unit has links to the following units in the BTEC Higher Nationals in Sport and in Sport and Exercise Sciences:

- *Unit 2: Sport and Exercise Psychology*
- *Unit 9: Principles of Sports Coaching*
- *Unit 10: Applied Sports Coaching*
- *Unit 21: Physical Activity, Lifestyle and Wellbeing*
- *Unit 22: Instructing Physical Activity and Exercise*
- *Unit 28: Sports Coaching.*

Essential requirements

Effective delivery of this unit requires access to appropriate texts, websites and journals as well as visual resources. There are many visual and audio resources available online through sport psychology websites.

Employer engagement and vocational contexts

This unit focuses on the background knowledge and skills of sport psychology that learners need to work in coaching or fitness instruction. Centres are encouraged to develop links with sports clubs who use sport psychologists or have coaches who implement psychological techniques. This could be done through inviting guest speakers.

Unit 37: Sport and Exercise Rehabilitation

Unit code: T/601/1882

Level: 5

Credit value: 15

- **Aim**

In this unit learners will develop the knowledge and practical skills required for sport and exercise rehabilitation, including the planning, delivery, and evaluation of rehabilitation programmes.

- **Unit abstract**

Why are some sports elite performers always getting injured? At any level of sport, whether it be the elite performers or recreational performers, there is a high incidence of sport-related injury. Depending on the type and severity of the injury, these sports performers may or may not receive effective rehabilitation. Ultimately ineffective sports rehabilitation can lead to further injury or even permanent damage such as a loss of function and mobility.

This unit offers a combination of both theoretical and practical learning contexts. Learners will develop clinical reasoning skills relevant to this level through assessment of clients and by applying key theory to practice. The unit also focuses on the key theory behind tissue healing and rehabilitation in order for learners to fully understand the science that underpins good rehabilitation practice. By planning, demonstrating, and evaluating a rehabilitation programme from the initial phase until the sports performer is ready to return to sport, learners will develop real world skills and knowledge that can be applied in a variety of settings. It is expected that alongside this applied learning environment, learners will start to adopt an evidence-based practice approach to their work which will help them to prepare for the rigours of further education and careers within sports therapy, sports rehabilitation, and other related areas.

The knowledge and skills gained through this unit will be useful for learners wishing to progress into further education in sport and healthcare-related programmes, or careers based around sports injury, sports therapy, sports rehabilitation, and other healthcare professions. This unit links with the professional body standards of The Society of Sports Therapists and the British Association of Sport Rehabilitators and Trainers (BASRaT).

- **Learning outcomes**

On successful completion of this unit a learner will:

- 1 Understand sport and exercise rehabilitation programmes
- 2 Understand the phases of sport and exercise rehabilitation
- 3 Be able to plan sport and exercise rehabilitation programmes
- 4 Be able to evaluate sport and exercise rehabilitation programmes.

Unit content

1 Understand sport and exercise rehabilitation programmes

Subjective/objective assessment: client details; history of the injury; posture; gait; bilateral comparison of strength and mobility; joint assessment eg shoulder, knee, hip, ankle, vertebrae; clinical reasoning

Individual factors: age; gender; previous injury history; psychology; level of performance; pressure from coaches; pre or post-surgery; medical history

Professionals involved in sports rehabilitation: sports therapist; sports massage therapist; physiotherapist; podiatrist; osteopath; chiropractor; general practitioner; surgeon; referral

2 Understand the phases of sport and exercise rehabilitation

Stages of soft tissue healing: inflammatory stage; proliferation stage; remodelling stage; acute; sub-acute; chronic

Phases of rehabilitation: surgical rehabilitation; conservative rehabilitation; initial phase; intermediate phase; advanced phase; return to sport phase; relapse

Forms of exercise: land-based rehabilitation eg muscle conditioning, proprioception, balance, stability, endurance, stretching, mobility, functional exercise, sport specific movements; aqua-based rehabilitation eg hydrotherapy, deep water running

Treatment modalities: cryotherapy; heat treatments; electrotherapy; the effect of medication; walking aids; sports massage

3 Be able to plan sport and exercise rehabilitation programmes

Aims: programme aims at each phase of rehabilitation; short-term; medium-term; long-term; client expectations; adherence; realistic time scales

Safe exercise: contra-indications to rehabilitation; correct technique; preparing the exercise environment eg ventilation, safety equipment, exercise equipment/accessories; preparing the client eg warm up, cool down, intensity, pain parameters

Devise a rehabilitation programme: for each phase of rehabilitation; for particular muscle groups; for particular joints; for particular sport-related injuries; utilising appropriate modalities

Demonstrate exercise: demonstration of correct technique; accurate teaching points; monitoring intensity/pain; effective communication

4 Be able to evaluate sport and exercise rehabilitation programmes

Benefits of the programme: physiological; mechanical; psychological; prevention of further injury

In session evaluation: function; mobility; flexibility; posture; verbal feedback to client

Programme evaluation: outcome measures; progression; criteria for return to sport; timescales; feedback to clients in appropriate format

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand sport and exercise rehabilitation programmes	1.1 discuss different factors that can affect sport and exercise rehabilitation 1.2 discuss the roles of the professionals working within sport and exercise rehabilitation 1.3 demonstrate effective client assessments
LO2 Understand the phases of sport and exercise rehabilitation	2.1 discuss the stages of soft tissue healing 2.2 discuss the phases of sport and exercise rehabilitation 2.3 discuss activities that can be used at each phase of sport and exercise rehabilitation 2.4 explain the role of treatment modalities at each phase of sport and exercise rehabilitation
LO3 Be able to plan sport and exercise rehabilitation programmes	3.1 design sport and exercise rehabilitation programmes for different clients 3.2 justify the design of sport and exercise rehabilitation programmes 3.3 conduct rehabilitation sessions that are part of a sport and exercise rehabilitation programme
LO4 Be able to evaluate sport and exercise rehabilitation programmes	4.1 evaluate the progress of clients whilst conducting rehabilitation sessions 4.2 explain the benefits of rehabilitation programmes to clients 4.3 give feedback to clients regarding progress

Guidance

Links

This unit has links to the following units in the BTEC Higher Nationals in Sport and in Sport and Exercise Sciences:

- *Unit 1: Anatomy and Physiology for Sport and Exercise*
- *Unit 2: Sport and Exercise Psychology*
- *Unit 4: Biomechanics for Sport*
- *Unit 7: Training and Fitness for Sport and Exercise*
- *Unit 26: Injury Prevention and Treatment in Sport and Exercise*
- *Unit 30: Sport and Exercise Massage*
- *Unit 33: Functional Exercise Physiology.*

It also has links to the requirements of British Association of Sports Rehabilitators and Trainers and The Society of Sports Therapists.

Essential requirements

Tutors must allow learners to experience a range of remedial exercise and use treatment modalities to support their understanding of rehabilitation, therefore the appropriate resources need to be available. It is envisaged learners will have access to a clinic-type environment throughout this unit to conduct client assessments and treatment. Specialist resources such as massage couches, therabands, ice treatments, heat treatments, electrotherapy, and wobble boards will enhance the teaching of this unit. Learners should have the opportunity to work in a fitness suite setting using resistance machines, free weights, stability balls, and CV equipment. External visits can be arranged so that learners can experience hydrotherapy and deep water running in addition to learning about it in the classroom.

Employer engagement and vocational contexts

A selection of guest speakers from different rehabilitations will ideally be used to enhance learners' knowledge of their role, treatment they offer, and limitations of practice. Visits to external facilities will also enhance the learning experience in this unit and give a context to learning.

Unit 38: Law and Sport and Leisure Operations

Unit code: D/601/1889

Level: 4

Credit value: 15

- Aim

This unit will develop learners' understanding of the relationship between sport and leisure operations and the law and legislation, including consumer protection legislation, contract and tort law.

- Unit abstract

This unit provides an introduction to the basic principles of law relating to sport and leisure operations. Learners will develop understanding of the essential components of contract law, the general principles of contract law and the more specific statutory provisions relating to consumer protection as well as the effects of legislation relating to consumer protection. The unit also develops learners' understanding of legal provisions within the industry. The learner is encouraged to analyse and evaluate legal provisions and to adopt a practical approach to problem solving.

- Learning outcomes

On successful completion of this unit a learner will:

- 1 Understand principles of law relating to sport and leisure operations
- 2 Understand consumer protection legislation in sport and leisure
- 3 Understand the legal provisions concerned with the formation, management and dissolution of sport and leisure operations.

Unit content

1 Understand principles of law relating to sport and leisure operations

Contracts: definition; validity; essential components; invitation to treat; rules of offer/acceptance; misrepresentation; specialist terms eg exclusion, price variation; classification of terms eg express, implied, conditions, warranties; discharge of contract eg performance, agreement, breach, frustration

Analysing contracts: practical application of the principles; specialist terms eg exclusion, price variation; significance of specialist terms

Tort: negligence; liability (occupier's, vicarious); nuisance; slander; defamation; damages; non-monetary remedies; disputes eg resolution

2 Understand consumer protection legislation in sport and leisure

Legislation: legislation relating to consumer protection eg Sale of Goods Act 1979, Supply of Goods and Services Act 1982, Unfair Contract Terms Act 1977, Consumer Credit Act 1974, Consumer Protection Act 1987, Data Protection Act 1998, Unfair Trading Regulations 2008; relevant European Directives and domestic regulations; effects of legislation relating to consumer protection on sport and leisure operations eg data protection; regulatory agencies eg Ombudsman, Office of Fair Trading; role of the main regulatory agencies concerned with consumer protection; application of legislation

3 Understand the legal provisions concerned with the formation, management and dissolution of sport and leisure operations

Formation: types of operation eg sole trader, partnerships, registered companies; legal considerations influencing choice of operation; legal requirements relating to the formation of different types of operation

Management: regulatory controls eg statutory and common-law rights/duties of partners; shareholders; directors; creditors

Dissolution: types (voluntary, compulsory); procedures eg shareholders, committee meetings

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand principles of law relating to sport and leisure operations	1.1 discuss principles of law relating to the formation of contracts 1.2 analyse specimen contracts from selected sport and leisure operations 1.3 analyse the impact of the law of tort on sport and leisure operations
LO2 Understand consumer protection legislation in sport and leisure	2.1 discuss different legislation relating to consumer protection in the context of sport and leisure operations 2.2 apply legislation relating to consumer protection to a selected case study in the context of sport and leisure
LO3 Understand the legal provisions concerned with the formation, management and dissolution of sport and leisure operations	3.1 discuss legal provisions that should be considered in the formation of sport and leisure operations 3.2 discuss legal provisions that affect the management of sport and leisure operations 3.3 discuss procedures involved in the dissolution of sport and leisure operations

Guidance

Links

This unit has links to the following units in the BTEC Higher Nationals in Sport and in Sport and Exercise Sciences:

- *Unit 15: Operating and Managing a Sport and Leisure Facility*
- *Unit 16: Managing in the Health and Fitness Industry*
- *Unit 17: Customer Service*
- *Unit 43: Small Business Enterprise*
- *Unit 46: The Developing Manager*
- *Unit 47: Employment Law.*

Essential requirements

Learners need access to a specialist law library for key texts, case studies and law reports. The use of texts should be supported by reference to broadsheet newspapers, relevant journals, specialist publications and electronic databases.

Employer engagement and vocational contexts

Presentations and talks from the industry should be included in order to bring realism and relevance to the unit. Centres should be encouraged to invite guest speakers from specialist areas such as consumer protection and specialists in contract law. Presentations from Companies House should also be encouraged to enable learners to further understand the legal provisions concerned with the formation, management and dissolution of sport and leisure operations.

Unit 39: The Entertainment Industry and Venue Management

Unit code: H/601/1828

Level: 5

Credit value: 15

● Aim

This unit enables learners to gain an understanding of the entertainment industry, the activities offered, the management and operation of venues and trends in the industry.

● Unit abstract

This unit is designed to give an over-arching view of the entertainment industry with a particular emphasis on venue management, operation and funding of live performance, conference/banqueting and on-licensed trade.

The unit explores the industry's dynamic structure through an identification of trends in the public, private and voluntary sectors' involvement in the world of entertainment.

A range of activities and venues and the corresponding levels of public usage and support are explored. This will provide learners with an insight into the management and operation of a range of activities and venues; the influence of contrasting financial practices and the underlying trends within the entertainment industry.

The impact of large-scale venues needs to be considered in the wider context of leisure management given the vast range of possible entertainment opportunities offered by multipurpose arena and stadia offering venues for major sporting events, popular music concerts, opera, ice shows, televised events and the attendant venue management problems relating to licensing, health, safety and security.

Learners must ensure that their evidence relates to the sport and leisure industry.

● Learning outcomes

On successful completion of this unit a learner will:

- 1 Understand the contribution of the entertainment industry to the economy
- 2 Understand types of activities offered by the entertainment industry
- 3 Understand the management and operation of different types of venues
- 4 Understand trends in the entertainment and venue industries.

Unit content

1 Understand the contribution of the entertainment industry to the economy

Data: analysis of data from the entertainment and venue industry eg Department for Culture Media and Sport (DCMS) Annual Reports, Leisure Tracking Survey; the Henley Centre; Target Group Index; General Household Survey

Economy: ways the entertainment and venue industries have contributed to the national economy; the development and distribution of different activities

Agencies: comparison of funding agencies (local, regional, national); their impact on the entertainment and venue industries

2 Understand types of activities offered by the entertainment industry

Activity: by performers eg professional, semi-professional, amateur; by venue eg venue-specific, touring, festivals; by art forms eg live music, opera, theatre, dance, cabaret, comedy, visual arts (exhibitions, film, video)

Audiences: national data usage figures; age and socio-economic breakdown; spectator and participatory activity; widening choice

Venues: major entertainment venues eg arenas, stadia, exhibition centres; dedicated spaces eg theatres, concert halls, arts centres, clubs, cinemas, galleries; non-dedicated spaces eg streets, schools, pubs, homes, outdoor spaces, community halls; urban/rural provision

For-profit sector: provision eg concerts, festivals, cinema, theatre, popular music and recording industry, bingo, television, clubs; opportunity-led provision; ‘space to sell’ concept; commercial sponsorship

Not-for-profit sector: public and voluntary sectors; role of Government and funding agencies; non statutory provision; Arts Council; regional arts boards; local authorities; voluntary organisations eg ‘Friends’; principles of revenue and capital subsidy; National Lottery; arts sponsorship; direct and indirect economic benefits

3 Understand the management and operation of different types of venues

Strategies: management and operational strategies of organisations within the industry

Income generation: revenue generation and procedures within the industry; front of house operations; box office

Influences: status eg for-profit, not-for-profit; direction eg programming, scheduling; administration eg licensing, staffing, budgeting, resource planning

Audience and performance needs: health, safety and security; cleaning and maintenance; catering and bars; technical and production staff; performers

Marketing needs: publicity; promotion; merchandising and point-of-sale; media relations

Employment: managerial and supervisory levels in each sector

Staffing: work and responsibilities for selected venues commenting on current practices; deployment of staff to ensure a smooth and effective organisation

4 Understand trends in the entertainment and venue industries

Opportunities: current opportunities in the entertainment industry

Future trends: trends eg purpose built, multi-purpose facilities, partnership funding, commercial approach to management, cultural provision as part of major international sports events

Technological influences: technical; production; new technologies; effect of technological changes

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand the contribution of the entertainment industry to the economy	1.1 analyse the contribution of the entertainment industry to the economy and the development and distribution of different activities 1.2 compare local, regional and national funding agencies and their impact on the entertainment and venue industry
LO2 Understand types of activities offered by the entertainment industry	2.1 compare the scope of the entertainment and venue industry and the range of activities offered 2.2 classify entertainment activities using audience profiles and venues
LO3 Understand the management and operation of different types of venues	3.1 compare management and operational strategies for selected venues, commenting on their revenue generation and procedures 3.2 evaluate different areas of work and responsibilities for selected venues, commenting on current practices, deployment of staff to ensure a smooth and effective organisation
LO4 Understand trends in the entertainment and venue industries	4.1 analyse current trends in the entertainment and venue industries 4.2 discuss the effect of current funding arrangements in the entertainment industry and future potential developments 4.3 analyse the impact of technological changes in the management and operation of entertainment activities and venues

Guidance

Links

This unit has links to the following units in the BTEC Higher Nationals in Sport and in Sport and Exercise Sciences:

- *Unit 14: Marketing Principles*
- *Unit 15: Operating and Managing a Sport and Leisure Facility*
- *Unit 16: Managing in the Health and Fitness Industry*
- *Unit 17: Customer Service*
- *Unit 38: Law and Sport and Leisure Operations*
- *Unit 40: Event Management in Sport and Leisure.*

Essential requirements

Learners must be given access to a wide range of publications to reflect the diverse nature of this subject area.

Employer engagement and vocational contexts

Employer engagement should be encouraged. Presentations and talks from the industry including from event managers should be included in this unit.

Unit 40: Event Management in Sport and Leisure

Unit code: D/601/1892

Level: 5

Credit value: 15

● Aim

This unit allows learners to explore the events industry and acquire the knowledge, understanding and skills that event organisers regularly use to manage different events.

● Unit abstract

In recent years, events have taken on a significant role in four major areas – sport and leisure, business and entertainment. You could say they have become ‘big business’. Many events have humble and historic origins, but their growth, when properly managed, can create potential for many host organisations.

Events have also become valuable in terms of their social and cultural contributions, their educational and artistic dimensions, and above all their economic value, through inward investment, jobs, income and status.

This unit introduces learners to a range of strategic roles which events can play, such as in destination development. It will also classify events and explore the range of participants and their motives, which is key to good event organisation.

The organisation and running of all kinds of events has many planning dimensions so the unit will take time to allow learners to explore these. Part of the assessment of the unit will involve learners in planning and staging their own event. They will have to develop a set of transferable skills for this purpose, so the value and application of these skills will be appreciated.

Events are often held in cyclical calendar, run by organisers of all types, who sit down after one event and review their performance prior to planning the next one. The unit will try to instil this process in learners too. This phase is important for gathering feedback, reviewing performance building in new ideas and themes for next time, and developing better technology too. This will be the concluding activity of the unit.

● Learning outcomes

On successful completion of this unit a learner will:

- 1 Understand the development, growth and professionalisation of the events industry
- 2 Understand different types of events and their providers in sport and leisure
- 3 Be able to plan and organise sport and leisure events
- 4 Be able to manage and review sport and leisure events.

Unit content

1 Understand the development, growth and professionalisation of the events industry

Development: origins; festivals; traditions; competitions; trade; performance; strategic and growth roles; issues of authenticity

Growth: factors eg improved transport and technology, disposable income, stakeholder synergies and partnerships, hedonism, economic, social, cultural, environmental, financial value

Professionalisation: business-to-business needs; attention to detail and quality; diversity and transferability of skills; stress relief; resourcing; expertise; market knowledge; technical skills; health, safety and security; networks; etiquette and protocol

2 Understand different types of events and their providers in sport and leisure

Classification: mega; hallmark; special; major; local; family

Types: competitions; celebration; tradition; entertainment; arts; education; business; cultural; conference and exhibition; protest; charity fundraisers.

Providers: businesses; clubs; agents; local authorities; educational institutions; tourist organisations; charities; stately homes; commercial venues; stadia; arenas

3 Be able to plan and organise sport and leisure events

Planning techniques: idea generation; vision and purpose; identifying resources; creating a staffing structure; estimating finance; costings; profit margin; feasibility assessment; theme; SMART objectives (specific, measurable, achievable, realistic, time-bound); critical path analysis; budgets; Gantt charts; Key Performance Indicators (KPI); checklists, survey and tasks sheets; ethics and sustainability; audience/crowd flow diagrams; supply chain logistics and points of sale locations; technical requirements; resources inventory; administration systems; professional advice and guidance eg fire, safety, insurance coverage; quality assurance procedures and standards; contingency plans; data collection; adding value or secondary spend or dwell time

Organisational factors: ticketing; dealing with money; risk assessments eg finance, health, security, safety; crowd management eg information, queuing, speed of access/egress, monitoring; staff eg structure, types and number, training, qualifications; communication eg marketing – pre-event, during and post-event publicity, press liaison, customer care, VIPs; venue eg layout, theme, sound and light checks, catering, hospitality, merchandising and sale points, cleaning and take down; performer needs eg greeting, changing, post-event hosting; transport needs; sponsors; contracts and service agreements; copyright issues; advertising; legislation eg child protection, disability access; licensing

4 Be able to manage and review sport and leisure events

Manage: pre-event checks eg technology, hospitality and protocol checks; opening ceremony; guest and participant welcome and briefing; playing, seating and viewing area stewardship; ticket and incident control point; atmospheric conditions; customer surveys and complaints; effective closure; following plans and guidelines

Review: overall success and performance eg the event, the team, customer satisfaction; evaluation eg targets, objectives, Key Performance Indicators (KPI), other expected outcomes; use of resources; effectiveness eg of the venue, suppliers, planning, organisation and communications during the event; contingency plans

Improve: key areas eg logistics, objectives, staffing, finance, resources, theme, venue, customisation

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand the development, growth and professionalisation of the events industry	1.1 discuss the development of the events industry 1.2 discuss the growth of the events industry 1.3 discuss methods used to professionalise the events industry
LO2 Understand different types of events and their providers in sport and leisure	2.1 explain the classification of events 2.2 discuss different types of events 2.3 discuss the diversity of providers of events
LO3 Be able to plan and organise sport and leisure events	3.1 plan an event in a sport and leisure context 3.2 organise an event in a sport and leisure context
LO4 Be able to manage and review sport and leisure events	4.1 manage an event in a sport and leisure context 4.2 review the planning, organisation and management of an event in a sport and leisure context 4.3 make recommendations regarding improving the planning, organisation and management of future events in sport and leisure contexts

Guidance

Links

This unit has links to the following units in the BTEC Higher Nationals in Sport and in Sport and Exercise Sciences:

- *Unit 13: The Sport and Leisure Industry*
- *Unit 14: Marketing Principles*
- *Unit 15: Operating and Managing a Sport and Leisure Facility*
- *Unit 16: Managing in the Health and Fitness Industry*
- *Unit 17: Customer Service*
- *Unit 38: Law and Sport and Leisure Operations*
- *Unit 39: The Entertainment Industry and Venue Management.*

Essential requirements

There are no essential requirements for this unit.

Employer engagement and vocational contexts

Employer engagement should be encouraged. Presentations and talks from the industry including event managers should be included in this unit. Arenas, exhibition halls and national exhibition centres may co-operate with tutors to provide first hand knowledge of larger events.

Unit 41: Health Promotion

Unit code: A/601/1883

Level: 4

Credit value: 15

● Aim

The aim of this unit is to give learners an understanding of health promotion and the skills and knowledge required to plan a health promotion campaign.

● Unit abstract

Health promotion has emerged as an important force for improving both the quantity and quality of people's lives. The aim of this unit is to give learners an understanding of health and fitness promotion at local and national level. It is particularly relevant for learners wanting to work in the health and fitness industry and within organisations involved in health promotion.

Learners start by exploring the nature of health promotion. This covers organisations and agents involved in health promotion, national and local policy, factors affecting health and the characteristics and patterns of health problems.

Learners are required to examine models and approaches to health promotion and analyse three health promotion campaigns that have been carried out either in the workplace or in the community.

Learners are expected to understand the framework for the establishment of health promotion within a selected locality. This involves analysing the health issues in a local area or business and identifying a suitable health promotion campaign as a solution to one or more problems. It also involves developing an understanding of the methods, techniques and skills needed to develop, implement and evaluate a health promotion campaign.

Learners are required to develop their own health promotion campaign. They must set appropriate aims and objectives, produce a fully costed campaign and promote the activities and services using appropriate media.

● Learning outcomes

On successful completion of this unit a learner will:

- 1 Understand the nature of health promotion at local and national level
- 2 Understand national and local health promotion campaigns and their effect on the population
- 3 Understand the framework for the establishment of health promotion within a selected locality
- 4 Be able to plan a fully costed health promotion campaign.

Unit content

1 Understand the nature of health promotion at local and national level

Health promotion: dimensions of health promotion eg health education, health protection, disease prevention, curative strategies, concepts of need and theory and practice, health gains for physical activity; factors influencing health eg age, gender, socio-economic group, poverty, ethnic background, lifestyles and behaviour patterns, genetics, sexual practices, geographical location, environmental issues, disability

Health problems: health problems eg cardiovascular, muscular-skeletal, respiratory, psychological, addictions, obesity, cancer; research data (primary and secondary); trends (local level, national level)

Organisations involved in health promotion: organisations eg World Health Organisation, national government, local government, Primary Care Trusts (PCT), local authorities, private sector organisations, professional associations, community and voluntary groups, employers and educational establishments, Sport England, County Sport Partnerships; roles of organisations involved in health promotion

Policy: local and national policies eg Government White Papers, Health Improvement Modernisation Plans (HiMP), National Service Frameworks (NSF), Health Action Zones (HAZ), Sports Action Zones (SAZ)

2 Understand national and local health promotion campaigns and their effect on the population

Models and approaches: models and approaches eg medical and preventative, behavioural, educational, social change, planning models, psychological, empowerment

Campaigns: contributing disciplines eg medicine, epidemiology, psychology, nutrition, sport and exercise sciences, marketing; success and achievement eg for individuals (school children, those with specific needs); for the economy (reduced staff absences, increased productivity, wealth creation); for the community (improved health and fitness facilities, achievement of targets and outcomes, the health of the nation)

3 Understand the framework for the establishment of health promotion within a selected locality

Health issues: health problems eg cardiovascular, muscular-skeletal, respiratory, psychological, addictions, obesity, cancer

Develop and implement health promotion campaign: techniques and skills eg planning, data gathering and research, education, working in teams, establishing partnerships, contingency plans, problem solving, communication, consultation, marketing; method eg target group, associated health problems, needs assessment and priorities, aims and objectives, resource allocation, implementation, monitoring and evaluation

Promote activities and services: activities and services eg posters, leaflets, presentations, company newsletters and email, staff meetings, local media (radio, newspapers)

4 Be able to plan a fully costed health promotion campaign

Aims and objectives: relevant to target group and identified needs; balanced; equal opportunities

Produce a plan: target group eg elderly, children/teenagers, ethnic groups, socio-economic groups, disabled; location eg community, workplace; activities and support material eg exercise classes, workshops, handouts, lectures, smoking policy, catering; resources eg staff, venue, financial, equipment; staff eg nurse, physiotherapist, sports instructor, fitness specialist; management activities; resources; lines of management; sources of funding eg employer, grant, local authority, PCT

Implement a plan: implement eg promotion activities (using appropriate media), working in teams, problem solving, communication

Evaluation: evaluation eg questionnaires, focus groups, anecdotal evidence

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand the nature of health promotion at local and national level	1.1 discuss health promotion and factors that influence it 1.2 examine health problems at local and national level 1.3 discuss the roles of organisations involved in health promotion 1.4 evaluate local and national health promotion policy
LO2 Understand national and local health promotion campaigns and their effect on the population	2.1 discuss models and approaches to health promotion 2.2 analyse selected health promotion campaigns 2.3 evaluate the success and achievement of the selected campaigns
LO3 Understand the framework for the establishment of health promotion within a selected locality	3.1 analyse the health issues in a selected area 3.2 discuss the methods, techniques and skills to develop and implement a health promotion campaign 3.3 devise a suitable health promotion campaign
LO4 Be able to plan a fully costed health promotion campaign	4.1 propose aims and objectives for a health promotion campaign 4.2 produce a fully costed plan for a health promotion campaign for a selected area 4.3 implement a health promotion campaign

Guidance

Links

This unit has links to the following units in the BTEC Higher Nationals in Sport and in Sport and Exercise Sciences:

- *Unit 11: The Evolution of Sports Development*
- *Unit 12: Managing Sports Development*
- *Unit 13: The Sport and Leisure Industry*
- *Unit 14: Marketing Principles*
- *Unit 21: Physical Activity, Lifestyle and Wellbeing*
- *Unit 35: Sport and Exercise for Specific Groups.*

The unit also has links to the National Occupational Standards (NOS) for Active Leisure and Learning.

Essential requirements

The Health Development Agency produces a range of videos, books, booklets and questionnaires which would assist delivery. Primary Care Trusts and NHS walk-in centres have a range of useful resources.

Employer engagement and vocational contexts

Visits to, and visiting speakers from health promotion organisations would make a valuable contribution to the delivery of this unit.

Unit 42: Managing Human Resources

Unit code: F/601/1268

Level: 4

Credit value: 15

● Aim

The aim of this unit is to develop an understanding of the theory and practice of human resource management focussing on current human resources practice and the impact of topical issues and legislation.

● Unit abstract

This unit sets the scene by looking at the different theoretical perspectives of human resource management and exploring the differences in these approaches. A variety of changes in the labour market, and the increasing demand from employees for a more manageable work-life balance, has seen the development of much more flexible working practices. This has been the case in all sectors of the economy and in all organisations irrespective of their size or the nature of their business.

Some workers have a statutory right to flexible hours and all workers can ask their employer to accommodate their needs in terms of a more flexible pattern of working. This unit examines a variety of flexible working models and looks at practical methods that have evolved in many organisations to meet the needs of employers and employees.

Some elements of the unit require an awareness of the legislative framework which determines the nature and scope of human resources policies and practices. However, the unit does not require detailed knowledge of health and safety or equal opportunities legislation. It examines the practical impact of this legislation on human resources policies and practices. New approaches are explored, including the implications for human resources management of the shift from equal opportunities to managing diversity in the workplace.

The unit explores the different methods of performance management. It examines issues that may affect performance at work, such as ill health and absenteeism and will develop learner understanding of counselling and human resources practices that support employee welfare in the workplace.

● Learning outcomes

On successful completion of this unit a learner will:

- 1 Understand the different perspectives of human resource management
- 2 Understand ways of developing flexibility within the workplace
- 3 Understand the impact of equal opportunities in the workplace
- 4 Understand approaches to human resources practices in organisations.

Unit content

1 Understand the different perspectives of human resource management

The different perspectives of human resource management (HRM): ‘soft’ and ‘hard’ human resource management, ‘loose’ and ‘tight’ human resource management; models of Guest and Storey; differences between HRM and IR and personnel practices; strategic approaches to HRM

2 Understand ways of developing flexibility within the workplace

Flexible working models: the core and periphery workforce model (Atkinson 1984); Handy’s (1989) Shamrock Organisation

Types of flexibility: flexibility eg numerical, functional, temporal, locational, financial

Flexible working methods: methods eg employment of part-time and temporary staff, teleworking, homeworking, job sharing, zero hours contracts, annual hours, staggered hours, compressed hours

Labour market and the need for flexibility: labour market demographics, employment statistics, local, regional and national labour markets and the growing recognition of the importance of work-life balance

3 Understand the impact of equal opportunities within the workplace

Discrimination in employment: forms of discrimination, eg gender, ethnicity, religion, disability, age, sexual orientation, education

The legislative framework: direct and indirect discrimination; current legislation and proposed changes to the law eg age

Equal opportunities in employment: equal opportunities practices and initiatives in the workplace including initiatives such as Opportunity 2000 and positive action approaches, codes of practice, implementing policy, training within the law and monitoring; the move from equal opportunities to managing diversity

4 Understand approaches to human resources practices in organisations

Performance management: the role, purpose and types of appraisal, 360 degree feedback, the skills of carrying out appraisals and giving feedback, the link of appraisals to reward management

Counselling and employee welfare: the traditional welfare function – occupational health practices and policies, the management of ill health at work, costs and absenteeism, accidents at work (statistics), ergonomics, alcohol and drug abuse, HIV and AIDS, stress and stress management, workplace counseling

Health and safety legislation: Health and Safety at Work Act (1974) and the role of the Health and Safety Commission, European Community Directives eg Working Time Regulations (1998), Parental Leave (2009)

Other topical issues: e-recruitment, e-learning, flexible benefits, work-life balance, employee voice, changes to pension schemes

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand the different perspectives of human resource management	1.1 explain Guest's model of hard-soft, loose-tight dimensions of HRM 1.2 compare the differences between Storey's definitions of HRM and Personnel and IR practices 1.3 assess the implications for line managers and employees of developing a strategic approach to HRM
LO2 Understand ways of developing flexibility within the workplace	2.1 explain how a model of flexibility might be applied in practice 2.2 discuss the types of flexibility which may be developed by an organisation 2.3 assess the use of flexible working practices from both the employee and the employer perspective 2.4 discuss the impact that changes in the labour market have had on flexible working practices
LO3 Understand the impact of equal opportunities in the workplace	3.1 explain the forms of discrimination that can take place in the workplace 3.2 discuss the practical implications of equal opportunities legislation for an organisation 3.3 compare the approaches to managing equal opportunities and managing diversity
LO4 Understand approaches to human resources practices in organisations.	4.1 compare different methods of performance management 4.2 assess the approaches to the practice of managing employee welfare in a selected organisation 4.3 discuss the implications of Health and Safety legislation on human resources practices 4.4 evaluate the impact of one topical issue on human resources practices

Guidance

Links

This unit has links to the following units in the BTEC Higher Nationals in Sport and in Sport and Exercise Sciences:

- *Unit 15: Operating and Managing a Sport and Leisure Facility*
- *Unit 16: Managing in the Health and Fitness Industry*
- *Unit 38: Law and Sport and Leisure Operations*
- *Unit 44: Managing Resources in Sport and Leisure Management*
- *Unit 46: The Developing Manager*
- *Unit 47: Employment Law.*

Essential requirements

Access to relevant theories, practices, models and legislation will be required.

Employer engagement and vocational contexts

Centres should develop links with local businesses as learners will need to carry out research into human resources practices in two local organisations. Many businesses and chambers of commerce want to promote local business and are often willing to provide guest speakers, visits opportunities and information about how their businesses operate.

Unit 43: Small Business Enterprise

Unit code: H/601/1098

Level: 5

Credit value: 15

● Aim

The aim of this unit is to give learners the opportunity to focus on the processes involved through change management, of reviewing and improving the performance of a small business enterprise.

● Unit abstract

This unit is designed primarily for learners who are interested in small business enterprises and looks at the development and expansion of these businesses. The unit will be particularly appropriate for learners currently working in a small business enterprise. The unit is also appropriate for learners who have had work placements or work experience in small businesses and for learners who wish to pursue careers in the small business sector of the economy.

The government's vision is for more people in the UK to have the opportunity, aspiration and motivation to use their talent and initiative to be enterprising, and to have an increased proportion of people starting a business. The Department for Business, Innovation and Skills is responsible for small business and enterprise policy. Statistics from the Federation of Small Businesses website show that there are almost 5 million small businesses in the UK, almost 14 million people are employed in small- and medium-sized enterprises and over half a million people start up their own businesses every year. The small business sector provides employment and career opportunities which may appeal to many learners not attracted to a career in large organisations.

The unit draws together many of the topics covered in other units and allows learners to practise the business skills needed in reviewing and managing the performance of a small enterprise.

● Learning outcomes

On successful completion of this unit a learner will:

- 1 Be able to investigate the performance of a selected small business enterprise
- 2 Be able to propose changes to improve management and business performance
- 3 Be able to revise business objectives and plans to incorporate proposed changes
- 4 Be able to examine the impact of change management on the operations of the business.

Unit content

1 Be able to investigate the performance of a selected small business enterprise

Business profile: components of the business, objectives of the business, internal and external factors affecting business performance, performance measures, constraints and restrictions on business, responsibilities and liabilities of owner-manager

Comparative measures of performance: comparisons with other similar-sized businesses in same geographical area, comparisons with businesses in same or similar industry, comparisons with industry averages; comparisons should cover all areas – financial, production, marketing, sales, human resources, use of technology

Analysis of business information: analysis of past and current business information – financial, marketing information, sales, production, human resource efficiency, management effectiveness – using ratios, budget information, market research results, SWOT analysis (strengths, weaknesses, opportunities, threats), business reports eg production efficiency

2 Be able to propose changes to improve management and business performance

Overcoming weaknesses: problem-solving strategies, sources and availability of professional advice in appropriate areas, finding solutions and alternatives, availability and use of outsourcing for specific functions eg payroll, debt collection

Maintaining and strengthening existing business: maintaining appropriate performance records, building on business strengths, maintaining market share/position, importance of good customer/supplier/adviser relationships

New opportunities: identifying areas for expansion eg niche markets and export opportunities where appropriate, research techniques, evaluating projects, assessing project requirements, costing and finding finance for new projects, risk assessment

Evaluation of management and personnel: skills audit, self-evaluation, development of self and associated personnel, assessing costs and benefits of self and staff development

3 Be able to revise business objectives and plans to incorporate proposed changes

Business objectives: structure of business objectives, assessment of business objectives in the light of current performance, making changes to business objectives, impact of changes on business plans

Business plans: structure of integrated business plans (financial, sales and marketing, production/output, personnel), use of business plans, evaluation of plans against business objectives, incorporating changes to plans, budgeting for changes, preparation of business forecasts

Action plans: plans to implement changes, systems to manage, monitor and evaluate changes, performance measures, milestones, setting deadlines

4 **Be able to examine the impact of change management on the operations of the business.**

Impact of change: effects of change on all areas of business – finance, workloads, morale, job roles, physical aspects eg office space, production methods; use of technology, anticipating possible obstacles/problems

Management of change: monitoring effects of change, maintaining systems and records to evaluate impact of change, appropriate revision of plans in response to actual results

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Be able to investigate the performance of a selected small business enterprise	1.1 produce a profile of a selected small business identifying its strengths and weaknesses 1.2 carry out an analysis of the business using comparative measures of performance
LO2 Be able to propose changes to improve management and business performance	2.1 recommend with justification, appropriate actions to overcome the identified weaknesses in the business 2.2 analyse ways in which existing performance could be maintained and strengthened 2.3 recommend with justification, new areas in which the business could be expanded
LO3 Be able to revise business objectives and plans to incorporate proposed changes	3.1 produce an assessment of existing business objectives and plans 3.2 revise business plans to incorporate appropriate changes 3.3 prepare an action plan to implement the changes
LO4 Be able to examine the impact of change management on the operations of the business	4.1 report on the impact of the proposed changes on the business and its personnel 4.2 plan how the changes will be managed in the business 4.3 monitor improvements in the performance of the business over a given timescale

Guidance

Links

This unit has links to the following units in the BTEC Higher Nationals in Sport and in Sport and Exercise Sciences:

- *Unit 10: Applied Sports Coaching*
- *Unit 13: The Sports Industry*
- *Unit 14: Marketing Principles*
- *Unit 16: Managing in the Health and Fitness Industry*
- *Unit 22: Instructing Physical Activity and Exercise.*

This unit also links with the Management and Leadership National Occupational Standards (NOS).

Essential requirements

Some learners may be able to use their own experience of small business as a basis for their work in this unit. Other learners will need to be given realistic case studies.

Local government reports and statistics relating to small businesses are available in most public libraries.

The Open University Business School Small Business Programme publications provide a series of titles covering accounting and finance, product development and marketing, and human resource management and recruitment. Each publication provides knowledge and case study examples. In some cases a video or audio tape is also available. Contact the Open University for details.

There are a few open learning packages that have been written to support the NVQs in small Business Management and Development. Contact the Small Firms Lead Body for details of current approved publications.

Employer engagement and vocational contexts

Learners will be encouraged to use their own organisation for research. Learners will also require access to research facilities and the internet. Guest speakers with experience of small business management can provide a valuable input to support the underpinning knowledge and understanding of the unit.

Unit 44: Managing Resources in Sport and Leisure Management

Unit code: H/601/1893

Level: 4

Credit value: 15

● Aim

The aim of this unit is to provide learners with specialist knowledge and understanding relating to resource management, including human resources.

● Unit abstract

Entrepreneurs wishing to set themselves up to operate in any sector of the sport and leisure industry need to know where they will get their capital from, and like local authority managers they need to be able to forecast and control the cash flow to secure their funding and keep their organisation viable. The study of finance in this unit concentrates on sources of funding available and the financial processes that must be managed from a national and local perspective, as well as the risks associated with committing revenue for sports facilities.

Managers in sport and leisure facilities have to manage their staff just as effectively as their financial dimensions. In this unit Organisational Behaviour theory provides a good background for the investigation of practical human resources issues and current employment issues.

● Learning outcomes

On successful completion of this unit a learner will:

- 1 Know about the main sources of funding available to sport and leisure managers for business planning
- 2 Understand the management of financial processes relating to operations
- 3 Understand organisational theories and their application in the context of sport and leisure management
- 4 Understand issues relating to the application of effective human resource practices.

Unit content

1 Know about the main sources of funding available to sport and leisure managers for business planning

Local Authority sources: capital grants, credit arrangements, capital receipts, sale of assets, capital receipts; revenue contributions, Public Finance Initiatives

Commercial sources: loans eg bank, private investors; shares, sale of assets, revenue, credit

Business plans: defining financial aims and objectives, use of performance indicators, benchmarking, forecasting, tracking projected performance against targets throughout the year, maximising income, marketing, pricing eg special offers, discounts, peak/off-peak.

2 Understand the management of financial processes relating to operations

Revenue costs: budgeting; breakdown into logical cost centres eg salaries, premises, services, running costs (examples of each from a sport or leisure context); apportioning and monitoring expenditure, charging; reflecting aims of organisation, profit motive (price mark-up) or subsidised, new activities; effects greater usage will have eg on wear and tear, staffing, consumption of consumables, equipment

Savings on: staffing, energy, consumables, repairs, maintenance and the impacts such savings will have on budgets

Contingencies: downturn in performance, unforeseen expenditure eg repairs, lost income from closures and cancellations; facility and equipment breakdowns, excessive expenditure eg spending income not yet received

3 Understand organisational theories and their application in the context of sport and leisure management

Organisational structure theory: simple; flat; hierarchical; matrix; centralised; decentralised; autonomous; market or service orientation; functions/divisions.

Organisational culture: values; standards; quality dimensions; implementing change; customer-focused approaches; the socio-techno balance

Motivation theories: intrinsic/extrinsic; Maslow; Alderfer; Herzberg; McGregor; goal setting; SMART objectives (specific, measurable, achievable, realistic, time-bound), expectancy, performance measurement and reward

Leadership theory: traits; styles eg using Blake and Mouton and Tannebaum and Schmidt, the contingency approach; decision making and problem solving, resolving conflict, issues of power

4 Understand issues relating to the application of effective human resource practices

Job effectiveness: design; person spec; fit, tasks; roles and responsibilities; satisfaction

Employment: legislation; effects of The Employment Protection Act 1987; Discrimination Acts eg disability, sex, race, equal pay, European Union directives on working time; employment of young persons; rights regarding maternity / paternity leave and pay; minimum wage

Development: appraisal; promotion; career; commitment; professionalism; mentoring

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Know about the main sources of funding available to sport and leisure managers for business planning	1.1 discuss sources of funding available to sport and leisure managers 1.2 identify key elements of finance in business planning for sport and leisure managers
LO2 Understand the management of financial processes relating to operations	2.1 explain the importance and role of revenue budgets for sport and leisure operations 2.2 review options for making savings and increasing revenue income in the operation of a selected sport and leisure operation 2.3 discuss the impact of making savings and increasing revenue on sport and leisure operations 2.4 analyse contingencies for sport and leisure operations and explain their possible financial implications
LO3 Understand organisational theories and their application in the context of sport and leisure management	3.1 discuss the organisational structures of different sport and leisure operations 3.2 evaluate motivational theories used by managers with practical examples of when they might be applied 3.3 evaluate leadership approaches used by managers, giving appropriate scenarios for their use in sport and leisure contexts
LO4 Understand issues relating to the application of effective human resource practices	4.1 discuss key elements in achieving job effectiveness, evaluating the consequences of not achieving this 4.2 analyse the possible effects of employment legislation on employment conditions for staff working in the sport and leisure industry 4.3 review the importance and value of staff development, using examples of good practice in sport and leisure contexts

Guidance

Links

This unit has links to the following units in the BTEC Higher Nationals in Sport and in Sport and Exercise Sciences:

- *Unit 15: Operating and Managing a Sport and Leisure Facility*
- *Unit 16: Managing in the Health and Fitness Industry*
- *Unit 42: Managing Human Resources*
- *Unit 46: The Developing Manager*
- *Unit 47: Employment Law.*

This unit has links to occupational standards for professional qualifications promoted by the Institute of Sport and Recreation Management (ISRM) certificate and the Institute for Sport, Parks and Leisure (ISPAL)

Essential requirements

Documentary evidence provided by leisure providers, such as information contained in staff handbooks, is an invaluable resource to achieve this unit.

Learners must be given sufficient access to documentation to complete learning outcomes 1, 2 and 4.

Employer engagement and vocational contexts

Local enterprise centres may be willing to host visits or provide guest speakers to enhance the delivery of this unit.

Visits to centres with a good reputation for being eco-friendly would be invaluable in encouraging best practice eg in recycling.

Unit 45: The Organisation and Control of Sport, Exercise and Fitness

Unit code: K/601/1894

Level: 4

Credit value: 15

● Aim

This unit develops learners' understanding of government policy and governing bodies' organisation of sport, exercise and fitness, as well as the legal requirements for professional operators in the sector.

● Unit abstract

The unit begins by clarifying how government policy impacts on elements of the sport, exercise and fitness sector, such as schools, local authorities, governing bodies, associations and professionals. It then focuses further on the roles of governing bodies, which are less directed by policy, and more focused on developing their sport, though it is important to note they may be indirectly funded by the government.

The unit moves on to cover the supporting role that sports councils and national sporting bodies play in organising and developing sport throughout the UK.

The final focus brings us back to legal dimensions for the growing professional side of the sport, exercise and fitness sector. Increasingly this sector has to abide by governing body rules, government policy and legislation to avoid negative outcomes, some of which have given us horrendous sporting memories and landmark decisions with far-reaching consequences.

● Learning outcomes

On successful completion of this unit a learner will:

- 1 Understand the relationship between government policy and the organisation of sport, exercise and fitness
- 2 Understand governing bodies and their role in the organisation of sport, exercise and fitness
- 3 Understand sports councils and their role in supporting sport, exercise and fitness
- 4 Understand the influence of legislation on organisers of sport, exercise and fitness.

Unit content

1 Understand the relationship between government policy and the organisation of sport, exercise and fitness

The role of the government departments: Department for Culture Media and Sport (DCMS); regulation and policy development eg Planning Policy Guidance (PPG) for local authorities; other Government departments eg Department for Children Schools and Families (DCSF), Department of Communities and Local Government (DCLG), Department of Health, Department for Environment Food and Rural Affairs (DEFRA); Sports Councils of UK eg England, Scotland, Wales, Northern Ireland; public bodies eg British Waterways, The Countryside Agency

PE and sports policy: the curriculum in physical education and schools; the key stages of development; the Education Reform Act 1988; attainment targets for PE; special needs; school sports partnerships; sports colleges; Further Education and Higher Education developments; school and club links

Government's role in the health of the nation: campaigns eg change4life; links with the NHS; GP referral schemes; organisations in youth development eg Youth Sports Trust; sports councils campaigns; government support for obesity campaigns

2 Understand governing bodies and their role in the organisation of sport, exercise and fitness

Structures and roles: typical structure and networks; organisation; funding; purpose; rules and regulations; governance; management; qualification and development strategies; links to International bodies; key UK bodies and their historical development eg UK Sport, British Olympic Association (BOA), Central Council of Physical Recreation (CCPR), Federation Internationale de l'Automobile (FIA), English Institute of Sport (EIS)

Organisation: inter-relationships and infrastructure; membership; the influence of government policy; levels of autonomy; funding and sponsorship; media relations; amateur/professionalism; competitions and talent development; use of the sports development continuum and Long Term Athletic Development (LTAD); sustainability; current plans and any external and internal issues

3 Understand sports councils and their role in supporting sport, exercise and fitness

Sports Councils of the UK: Sport England; Sports Scotland; Sport Wales; Northern Ireland Sport; origins; locations; difference to previous sport councils; current structure and networks; current remit and strategy; aims; policies; links to eg Government, local authorities, National Governing Bodies (NGB), London Organising Committee of the Olympic Games and Paralympic Games (LOCOG), national centres, associations, institutes, clubs

Roles: advice; funding and the lottery; involvement in promoting; encouraging participation by eg minority groups, special needs, disabled; social inclusion; influence of the media

4 Understand the influence of legislation on organisers of sport, exercise and fitness

Influence of legislation: major acts of legislation eg fire, safety, disability, child protection, discrimination, risk assessment, EU regulations; changes made based on historical events eg Hillsborough, Taylor report, Bradford City fire (barriers, ID cards, evacuation, licences and certification, seating, CCTV); legal interference in the philosophy of sport eg Elliot versus Saunders, Watson case; compensation culture and liability

Impacts: impacts on professional organisers of sport eg meeting government agendas, standards for sports agents' dealings, compliance for administrators, ethical practices amongst promoters, policing drug abuse in sport; issues (boycotts, strikes, the Bosman ruling); impacts on coaches and tutors eg complying with legislation, conduct and duty of care, liability and its implications, health and safety at work, Criminal Records Bureau (CRB) checks; historical comparisons; red tape and constraints debate or realistic controls; implications of cases of negligence

Learning outcomes and assessment criteria

<p>Learning outcomes</p> <p>On successful completion of this unit a learner will:</p>	<p>Assessment criteria for pass</p> <p>The learner can:</p>
<p>LO1 Understand the relationship between government policy and the organisation of sport, exercise and fitness</p>	<p>1.1 discuss the influence of different government departments in the provision of sport, exercise and fitness</p> <p>1.2 assess the effects of changes in the National Curriculum on sport and physical education</p> <p>1.3 assess the contribution of government policy to the health of the nation</p>
<p>LO2 Understand governing bodies and their role in the organisation of sport, exercise and fitness</p>	<p>2.1 discuss the structure and role of selected national governing bodies</p> <p>2.2 review the historical development of a selected national governing body</p> <p>2.3 analyse the organisation of a selected national governing body, its current exercise and fitness or sport plans and associated issues</p>
<p>LO3 Understand sports councils and their role in supporting sport, exercise and fitness</p>	<p>3.1 review the development of sports councils</p> <p>3.2 discuss the policies and aims of a selected sports council</p> <p>3.3 discuss the current activities and challenges of a selected sports council</p>
<p>LO4 Understand the influence of legislation on organisers of sport, exercise and fitness</p>	<p>4.1 discuss the influence of legislation in the governance and control of sport, exercise and fitness</p> <p>4.2 discuss the impact of legislation on professional and elite level sport</p>

Guidance

Links

This unit has links to the following units in the BTEC Higher Nationals in Sport and in Sport and Exercise Sciences:

- *Unit 11: The Evolution of Sports Development*
- *Unit 12: Managing Sports Development*
- *Unit 13: The Sport and Leisure Industry*
- *Unit 15: Operating and Managing a Sport and Leisure Facility*
- *Unit 16: Managing in the Health and Fitness Industry*
- *Unit 18: Sport and Society*
- *Unit 31: Physical Education*
- *Unit 38: Law and Sport and Leisure Operations*
- *Unit 41: Health Promotion*
- *Unit 44: Managing Resources in Sport and Leisure Management.*

Essential requirements

Learners will require access to Government white papers, sports council publications, national newspapers and related journals.

Employer engagement and vocational contexts

Speakers from a governing body or a sports council would greatly enhance the delivery of this unit.

Unit 46: The Developing Manager

Unit code: L/601/1743

Level: 5

Credit value: 15

● Aim

This unit enables learners to gain understanding of behaviour management principles and gain skills to review their managerial potential, show managerial roles and responsibilities and create a career development plan.

● Unit abstract

This unit focuses on learners' personal development and their career in management. It explores a range of management behaviour principles and practices. Learners can then apply this knowledge to self-appraisal, examining their potential as a prospective manager.

Using the knowledge developed throughout this qualification, learners will have the opportunity to actively demonstrate the roles and responsibilities of a manager in an appropriate context. This may be through part-time work, a work placement or simulation. This experience will enable them to consider how the unit and the programme can contribute to their career development.

Learners must ensure that their evidence relates to the sport and leisure industry.

● Learning outcomes

On successful completion of this unit a learner will:

- 1 Understand principles and practices of management behaviour
- 2 Be able to review own potential as a prospective manager
- 3 Be able to show managerial skills within a business and services context
- 4 Be able to create a career development plan for employment within a business and services context.

Unit content

1 Understand principles and practices of management behaviour

Management theory and styles: assumptions and drawbacks, classical theories, main contributors, the influence of informal groups, hierarchy of needs, systems approach to management, contingency approach, leading authorities

Leadership characteristics: styles eg autocratic, democratic, laissez faire, action-orientated; motivation theories, factors affecting motivation and performance, motivation techniques, effectiveness; conflict resolution; the role of partnerships and stakeholders in the business

Communication: communications processes, verbal, written, non-verbal; lines of communication, linear, lateral, formal/informal; barriers to effective communication

Organisational culture and change: types of organisational structure and culture; factors influencing changes in culture; types of change eg demographic, economic, legislative; planned change theory; managing and measuring the effectiveness of change; sources and types of power; change drivers

2 Be able to review own potential as a prospective manager

Self-knowledge and appraisal: skills audit eg management skills, leadership skills, practical/technical skills, personal skills (eg interpersonal/motivational/communication skills), organising and planning skills cognitive and creative skills; qualifications (current/planned), strengths and weaknesses analysis; personal learning logs; personal development plans

Own potential: aims, objectives, targets, learning programme/activities, action plan, time management, work scheduling, SMART (specific, measurable, achievable, realistic, time-bound) objectives, action planning, delegation, decision making, problem solving, management/leadership styles, value awareness, conflict management, giving and receiving feedback, influencing skills, self-confidence, positive thinking, communication, presentation, team building and membership, mentoring, counselling, coaching, facilitation, learning cycle, learning styles, action learning sets, management learning contracts, learning log, review dates, achievement dates

3 Be able to show managerial skills within a business and services context

Roles: leading and motivating staff, communicating, team building, processes and stages in team development, group dynamics, effective/ineffective teams, goals/objectives

Responsibilities: customer service, product and service knowledge and development; decision making eg strategic, planning; managerial/operational control, problem solving; authority, delegation and empowerment; effective working relationships with subordinates, peers, managers and other stakeholders

Context: eg hospitality, travel, tourism, sports, leisure, recreational industries

4 **Be able to create a career development plan for employment within a business and services context**

Career: relevant managerial skills eg communication, thinking, learning; personal skills eg attitude, behaviour, responsibility, adaptability; aspirations, openings/opportunities

Development plan: career development, personal development, current performance, future needs

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand principles and practices of management behaviour	1.1 compare different management styles 1.2 discuss leadership characteristics 1.3 evaluate communication processes in selected businesses 1.4 analyse organisational culture and change in selected businesses
LO2 Be able to review own potential as a prospective manager	2.1 assess own management skills performance 2.2 analyse personal strengths, weaknesses, opportunities and threats 2.3 set and prioritise objectives and targets to develop own potential
LO3 Be able to show managerial skills within a business and services context	3.1 lead and motivate a team to achieve an agreed goal or objective 3.2 explain and rationalise managerial decisions made to support achievement of agreed goal or objective
LO4 Be able to create a career development plan for employment within a business and services context	4.1 explain how own managerial and personal skills will support career development 4.2 review career and personal development needs, current performance and future needs to enhance development plan

Guidance

Links

This unit addresses a wide range of issues relating to management and can be linked with all other units in the qualification. Tutors should seek to integrate this unit with others to underpin the relevance of the issues being studied.

This unit links with the following Management NVQ units:

- A1: Manage your own resources
- A2: Manage your own resources and professional development
- A3: Develop your personal networks
- B5: Provide leadership for your team
- B6: Provide leadership in your area of responsibility.

Essential requirements

A number of case studies and interviews (either written or audio-visual) should be used, particularly when looking at learning outcomes 1 and 2. There should be an emphasis on success, failure and risk so the learner can appreciate that this is intrinsic to many entrepreneurial people and enterprises.

It is important for learners to relate theory to observable practice in an appropriate business and services context. Learners should be encouraged to 'adopt' an appropriate business and use it as a context within which to assess current practice, apply theory and observe in a reflective way. These individual experiences can then be fed back in group-learning contexts.

Learners could also be faced with a variety of simulations where business propositions/solutions could be tackled in class discussions, debates and workshops.

Employer engagement and vocational contexts

A team of employers could be identified to support the different units. Employers could help tutors, for example, with the planning of programmes of learning, or provision of visits, guest speakers and mentors. They could also help to design assessment activities.

Unit 47: Employment Law

Unit code: A/601/1088

Level: 5

Credit value: 15

- **Aim**

The aim of this unit is to provide the learner with an understanding of the law on employment, and the skills to apply those legal provisions which are concerned with the employment relationship and individual employment rights.

- **Unit abstract**

In this unit learners will develop the understanding and skills required to analyse the law relating to employment relationships and individual employment rights.

Both UK and European sources of employment law are examined, along with the institutions and systems concerned with law enforcement. Learners will develop an understanding of the nature and scope of the employment relationship in its legal and business context. There will be a particular focus on the creation, content, application and termination of employment contracts.

The unit also considers the impact on the employment relationship of the developing law in the areas of discrimination, human rights and data protection.

- **Learning outcomes**

On successful completion of this unit a learner will:

- 1 Understand the sources, institutions and enforcement systems for individual employment rights
- 2 Understand the nature and scope of the employment relationship in its legal and business context
- 3 Be able to apply the legal provisions concerned with discrimination and health and safety in a legal and business context
- 4 Understand the impact on the employment relationship of the developing law in the areas of human rights and data protection legislation.

Unit content

1 Understand the sources, institutions and enforcement systems for individual employment rights

Sources of employment law: UK primary and secondary legislation; European Union (EU) directives and regulations; decided cases

Institutions and enforcement systems: courts and tribunals; ACAS (Advisory, Conciliation and Arbitration Service); Equality and Human Rights Commission (EHRC); available remedies for individuals to enforce their rights

2 Understand the nature and scope of the employment relationship in its legal and business context

Employees and independent contractors: tests used to make this distinction; vicarious liability, cases illustrating problem areas

The contract of service: content and layout; basic contractual principles and the difference between express and implied terms; the nature and scope of these terms for both employer and employee

Impact of EU legislation: working time; time off rights, and protection of wages; appropriate policies and procedures for employers

Termination: reasons other than dismissal; notice periods

Dismissal: wrongful, unfair and constructive; redundancy

3 Be able to apply the legal provisions concerned with discrimination and health and safety in a legal and business context

Discrimination: the continuing development of anti-discrimination law; groups who are protected by law and those who remain disadvantaged; direct and indirect discrimination; the issue of positive promotion of equal opportunities and diversity in the workplace

Health and safety: common law; statutory provisions

4 Understand the impact on the employment relationship of the developing law in the areas of human rights and data protection legislation

The impact of human rights issues on the employment relationship: respect for private life and freedom of belief and expression; data protection principles and the rights of data subjects

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand the sources, institutions and enforcement systems for individual employment rights	1.1 explain the sources of employment law 1.2 evaluate the institutions and enforcement systems for individual employment rights
LO2 Understand the nature and scope of the employment relationship in its legal and business context	2.1 differentiate between employees and independent contractors 2.2 explain the nature and scope of employment contracts 2.3 evaluate the effect of European Union legislation on the employment relationship 2.4 compare and contrast reasons and methods of terminating the relationship
LO3 Be able to apply the legal provisions concerned with discrimination and health and safety in a legal and business context	3.1 apply the legal provisions on discrimination to particular cases 3.2 produce an assessment of the relationship between the developing law on discrimination and human resource management practices 3.3 produce an evaluation of health and safety practice in a given organisation and compare to best practice
LO4 Understand the impact on the employment relationship of the developing law in the areas of human rights and data protection legislation.	4.1 discuss the impact on the employment relationship of the legal provisions on human rights 4.2 evaluate the application of the data protection principles and the rights of data subjects in a given organisation

Guidance

Links

This unit has links to the following units in the BTEC Higher Nationals in Sport and in Sport and Exercise Sciences:

- *Unit 15: Operating and Managing a Sport and Leisure Facility*
- *Unit 16: Managing in the Health and Fitness Industry*
- *Unit 38: Law and Sport and Leisure Operations*
- *Unit 42: Managing Human Resources*
- *Unit 43: Small Business Enterprise*
- *Unit 46: The Developing Manager.*

Essential requirements

Learners need access to a specialist law library for key texts and law reports. The use of texts should be supported by reference to broadsheet newspapers, relevant journals, specialist publications and electronic databases.

Information can also be obtained from institutions such as the Equality and Human Rights Commission and ACAS.

Employer engagement and vocational contexts

Centres should develop links with local businesses. Many businesses and chambers of commerce want to promote local business and are often willing to provide visit opportunities, visiting speakers or information about their business and the local business context.