BTEC HIGHER NATIONALS

Sport and Exercise Science



Higher National Diploma Lvl 5



Unit 15: Advanced Coaching

Unit code	J/616/1060
Unit level	5
Credit value	15

Introduction

Coaching is going through a process of professionalisation, challenging practitioners to examine what effective coaching practice is and how this can be developed and understood at high levels of performance. Coaches no longer rely on instinct to inform their programmes and decisions but are surrounded by theoretical frameworks from pedagogy, sports science, strength and conditioning, nutrition, performance analysis, biomechanics, psychology and other support services and technologies.

This unit is designed to challenge students to analyse the environment of performance coaching from a pedagogic and multi-disciplinary support service perspective, utilising theory and technology to improve performance in their chosen sports. The unit will critique definitions of effective performance coaching while challenging students to find solutions to real-world coaching scenarios. The unit will move beyond session-based planning to challenge students to plan for cycles of training and competition, creating programmes that identify various facets of performance that require development at different phases of training.

Students successfully completing the unit will be able to plan for macro, meso and micro cycles for their chosen sport, articulating the different aspects of performance that need development through player and sport profiling or needs analysis. Students will be challenged to create bespoke training programmes and specific coaching sessions to address the specific needs of an athlete(s) and demonstrate performance development through effective practical coaching sessions.

Students will be able to critically analyse the challenges of utilising sports science and technology to support performance development and understand the ethical issues created by technologies enabling athlete surveillance.

Learning Outcomes

By the end of this unit students will be able to:

- 1. Investigate the needs of a high-performance athlete or squad in their chosen sport
- 2. Develop a macro-cycle training programme and associated meso-cycle medium-term units for an athlete or squad in their chosen sport, considering appropriate sports science and technological support
- 3. Create a detailed micro-cycle for an athlete or squad in their chosen sport
- 4. Deliver a series of coaching sessions to address the aims of a micro-cycle plan targeting the needs of the chosen athlete or squad.

Essential content

LO1 Investigate the needs of a high-performance athlete or squad in their chosen sport

Athlete profiling methods and needs analysis:
Physiological, psychological, nutritional, technical and tactical aspects of performance
Testing protocols for assessing current levels of performance
Characteristics associated with expert performance:
Bio-psycho-social characteristics of expertise
Growth and fixed mindset
Resilience and grit

Issues surrounding the concept of 'talent'

LO2 Develop a macro-cycle training programme and associated meso-cycle medium term units for an athlete or squad in their chosen sport, considering appropriate sports science and technological support

Periodisation and planning:

Competition cycles Peaking, recovery and tapering Overload, specificity, reversibility

Goal setting and athlete-centred coaching:

Holistic development

Negotiated goals

Coaching for competence, confidence, connection and character

Multi-disciplinary sports science support:

Appropriate use of technology

Performance analysis

Strength and conditioning

Surveillance technologies

Lifestyle and nutrition monitoring

LO3 Create a detailed micro-cycle for an athlete or squad in their chosen sport

Effective coaching pedagogy: Linear and non-linear pedagogies Learning theories Motivational theory (self-determination theory)

Skill acquisition:

Organisation of practice (deliberate practice, massed, distributed, random/variable) (whole, part, whole-part-whole)

Classification of skill

LO4 Deliver a series of coaching sessions to address the aims of a micro-cycle plan targeting the needs of the chosen athlete or squad

Reflective practice:

Reflection in action, on action and retrospective reflection

Reflective models

Coaching principles:

Progression, differentiation, specificity, innovation, overload

Effective coaching pedagogy:

Constructivism, behaviourism, social learning theory, communities of practice (situated learning theory)

Learning Outcomes and Assessment Criteria

Pass	Merit	Distinction
LO1 Investigate the needs athlete or squad in their ch		
P1 Using an appropriate profiling tool to conduct an analysis of the needs of a high-performance athlete in their chosen sport	M1 Justify your analysis with relevant theoretical frameworks, including aspects such as physiology, technical and tactical and psychological traits	D1 Critically analyse the current performance characteristics of your chosen performer, using your profiling frameworks and comparing contemporary data from your chosen sport
LO2 Develop a macro-cycle associated meso-cycle med athlete or squad in their ch appropriate sports science support	D2 Discuss how	
P2 Design a macro-cycle training programme specific to your chosen performer and the sports competition calendar	M2 Justify which sports science support services will be required to effectively support athlete development	theoretical frameworks and principles have informed the design of your macro-, meso- and micro-cycles such as progression, overload, specificity, tapering, reversibility, and effective coaching pedagogy
P3 Illustrate how meso-cycle and micro-cycle segments of your plan contribute to the overall aims of the macro-cycle	within your training programme	
LO3 Create a detailed micro-cycle for an athlete or squad in their chosen sport		LO3 & LO4
P4 Construct a detailed, effective micro-cycle addressing the goals of your chosen squad/athlete, utilising appropriate coaching styles/approaches	M3 Justify your coaching approach utilising pertinent pedagogic theory	D3 Critically analyse the effectiveness of your chosen approach in developing performance in your chosen athlete/squad

Pass	Merit	Distinction
LO4 Deliver a series of coa the aims of a micro-cycle p the chosen athlete or squa		
 P5 Construct a detailed, progressive series of coaching session plans specific to your athlete's/squad's needs. P6 Deliver effective coaching sessions addressing the goals of your session plans. 	M4 Explore how reflective practice helps coaches adapt programmes to respond to developments in athletes/squads.	

Recommended resources

Textbooks

ARMOUR, K. (eds) (London) (2011) *Sports Pedagogy an introduction for teaching and coaching*. Prentice Hall.

GORDAN, D. (Exeter) (2009) Coaching Science. Learning Matters.

JONES, R. L. (Eds) (London) (2006) *The sports coach as Educator – reconceptualising sports coaching*. Routledge.

KIDMAN, L. & HANRAHAN, S. J. (London) (2011) *The Coaching Process – a practical guide to becoming an effective sports coach*. Routledge.

Websites

www.sportscoachuk.org	Sports Coach Uk
	Resource bank
	Research and tra
www.uksport.gov.uk	UK Sport

Resource bank Research and training. UK Sport Resources/Our Work Research/general reference

Links

This unit links to the following related units:

Unit 5: Coaching Practice & Skill Development

Unit 9: Biomechanics

Unit 12: Community Coaching

Unit 16: Performance Analysis

Unit 23: Physical Literacy

Unit 32: Psychology for Performance

Unit 33: Strength & Conditioning for Coaching